Deloitte. Insights

A report from the
Deloitte Center for Financial Services

2022 banking and capital markets outlook

Scaling new heights with purpose

About the Deloitte Center for Financial Services

The Deloitte Center for Financial Services, which supports the organization's US Financial Services practice, provides insight and research to assist senior-level decision-makers within banks, capital markets firms, investment managers, insurance carriers, and real estate organizations. The center is staffed by a group of professionals with a wide array of in-depth industry experiences as well as cutting-edge research and analytical skills. Through our research, roundtables, and other forms of engagement, we seek to be a trusted source for relevant, timely, and reliable insights. Read recent publications and learn more about the center on Deloitte.com.

Connect

To learn more about the vision of the DCFS, its solutions, thought leadership, and events, please visit **www.deloitte.com/us/cfs**.

Subscribe

To receive email communications, please register at **www.deloitte.com/us/cfs**.

Engage

Follow us on Twitter at: **@DeloitteFinSvcs**.

Deloitte US Banking & Capital Markets Services

Deloitte brings together professionals with diverse experience to provide customized solutions for clients across all segments of the banking and capital markets industries. We serve our clients locally, while drawing upon the firm's considerable global resources and industry expertise. To learn more, visit Deloitte.com

Contents

Foreword

Dear bank executive,

Banks are at a make-or-break moment.

The pandemic was the ultimate gut punch, testing banks' resilience in unforeseen ways. Yet, they are emerging stronger. And they now have a newfound conviction: They can overcome almost any challenge that comes their way.

But how can they channel this new energy to ***scale greater heights***?

Before embarking on this journey, banks should take account of the tectonic shifts reconfiguring the global financial system: *phenomenal growth in digitization, convergence of industries, fusion of technologies, proliferation of increasingly intertwined ecosystems*, and *the blurring of product constructs*.

Look no further than the explosive digital assets market. The new financial architecture created by digital assets will have profound consequences for banks by revolutionizing *how money is created, transferred, stored,* and *owned*.

Simultaneously, powerful undercurrents are forcing banking leaders to reckon with the never-before-seen challenge of **redefining the workplace and how work is done**. To complicate matters, they are grappling with several upheavals in the workforce, not least of which is the escalating war for talent. Employees, for the first time in decades, appear to have the upper hand, especially in sought-after positions.

Meanwhile, even though digital transformation is going ahead at full speed, these efforts tend to be incremental, localized, and fragmented, resulting in a pervasive and pernicious **"technology trap."** This is preventing many banks from realizing the full potential of their investments.

Bank executives also have a clear opportunity to lead the creation of an authentic, differentiated identity that embeds **higher purpose**. In addition, many banks have yet to turn their commitments to ESG into concrete action. They can alter the trajectory of climate change by taking the lead in climate finance innovation, something sorely needed to help transition companies, industries, and countries to a net-zero world. And then, there are gender and racial inequities, and gaps in financial inclusion where there is an opportunity for the industry to continue to step up to support the communities in which they operate.

Certainly, there are many other hurdles to overcome.

But the window for decisive action is closing soon. Now, more than ever, banks should be bold and aggressive in orchestrating change at the pace and scale that will drive results.

In the remainder of this report, we analyze various challenges and opportunities facing banks, as shown in figure 1.

We hope you feel inspired and emboldened to take action to ensure that institutions can thrive in the new, exciting financial system of tomorrow.

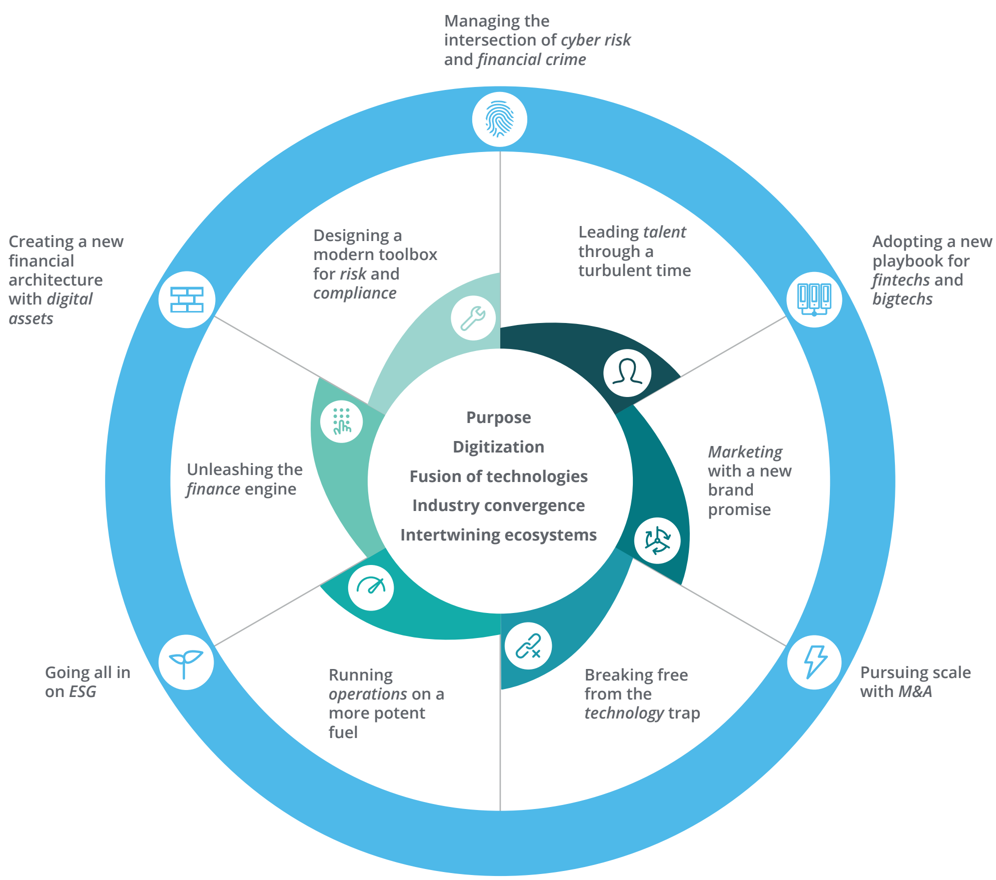
Sincerely,

Anna Celner
Vice chairman
Global Banking & Capital Markets leader
Deloitte AG

Mark Shilling
Vice chairman
US Banking & Capital Markets leader
Deloitte LLP

FIGURE 1

Scaling new heights with purpose: 2022 banking and capital markets outlook focus areas



Source: Deloitte analysis.

Global *macroeconomic* implications for the banking industry

THE GLOBAL ECONOMY is poised to stage the strongest postrecession growth in 80 years. According to the International Monetary Fund, global GDP is expected to grow by 4.9% in 2022.[1] The United States leads the way in the speed of its recovery, with Europe also expected to post strong GDP growth rates. But many developing economies will fall behind.[2]

Concurrently, inflation has reared its head, after years of dormancy. However, price increases will likely be temporary and remain in target range for most countries.[3] Meanwhile, most countries' interest rates are expected to pick up in 2022. For example, the Federal Reserve has indicated it may increase rates sooner than originally expected, and the quantitative easing program that has been so pivotal to US economic stability and growth may end sooner.[4]

Where does the banking industry stand?

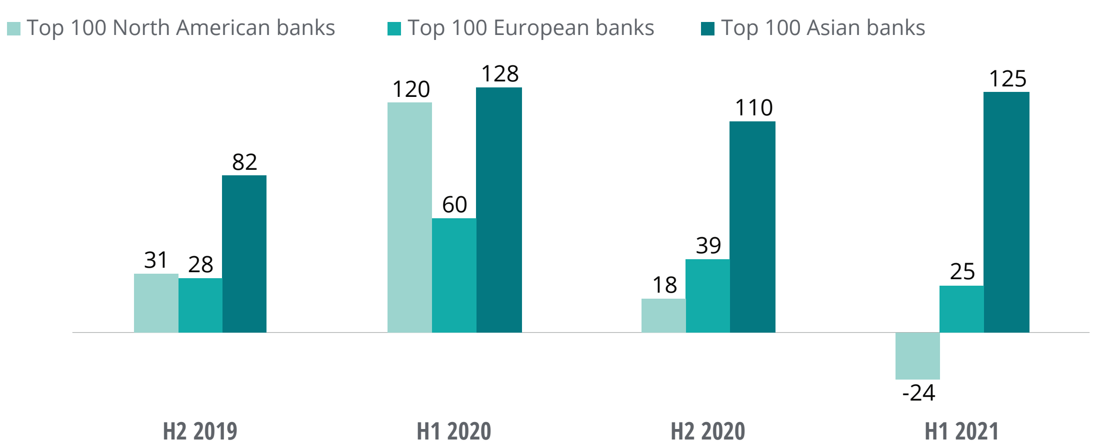
Recovery in the global banking industry is expected to be uneven across regions. US banks had built up substantial reserves in 2020. But buoyed by government stimulus programs and a strong recovery, the top 100 US banks released US$24 billion in loan loss reserves in H1 2021 alone, and their counterparts in Canada are doing the same. Unlike European and Asia Pacific (APAC) banks, which continued to add to their reserves, the top 100 European banks have added US$25 billion to their reserves. And those in APAC have provisioned for US$125 billion worth of credit losses in the same period (figure 2).[5]

The brighter outlook for loan loss provisions is helping drive profitability for US and Canadian banks. But sluggish loan growth and modest interest

FIGURE 2

Net loan loss provisions vary widely across regions and point to an uneven recovery

Loan loss reserves (US$B)



Source: Deloitte analysis of top 100 banks in each region based on Thomson Reuters Eikon data.

income are likely to dampen growth in both countries. In contrast, because of overexposure to the sectors hardest hit by the pandemic, most European banks have yet to recover to prepandemic profitability levels. And they continue to face other challenges: negative rates, fragmentation of the regulatory system, high levels of inefficiency, and the less robust capital markets in Europe. Continued strengthening of Chinese banks are a bright spot in Asia, and banks in Singapore and Australia also remain relatively sound. Otherwise, the region is beset with a k-shaped recovery since many Southeast Asian banks are dealing with asset quality concerns.[6]

What to expect from the banking industry in 2022 and beyond

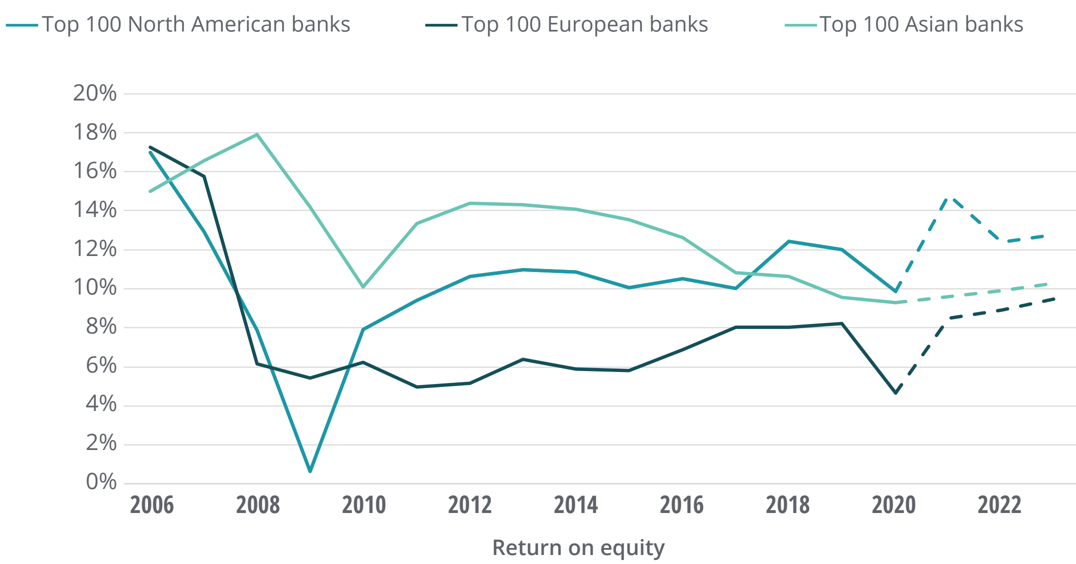
Despite a possible uptick in interest rates in 2022, low rates in the short term should keep interest income/net interest margins (NIMs) suppressed. However, the rebound in noninterest income from higher trading revenues and growth in fee-based businesses could be more pronounced and lead to overall top-line growth. In a Deloitte survey of banking executives across nine major markets, 88% of respondents expect banks' top-line revenue to improve in 2022.

A greater focus on cost management may also help efficiency ratios improve. Meanwhile, banks are expected to accelerate capital distribution plans in the form of share buybacks and higher dividends—in fact, three quarters of our survey respondents expect to increase dividends in the coming year.

In line with recent performance, US and Canadian banks should exhibit faster growth in profitability than other major markets, while many European banks may not see increases in profitability until after 2022 (figure 3).

FIGURE 3

Banks across the globe are expected to recover in tandem with the global economic recovery



Note: Broker forecasts are based on top 100 largest banks per region as of September 29, 2021.
Source: Deloitte analysis of top 100 banks in each region based on Thomson Reuters Eikon broker forecasts.

A closer look at US banks suggests a strong recovery from meaningful reserve releases, positive operating leverage, improving loan growth in certain sectors, and potential net interest margin expansion. According to the Deloitte Center for Financial Services forecast, average return on equity (ROE) in the US banking industry[7] could improve to 10.1% in 2021, tapering down a bit in 2022 and then normalizing to 10.4% in 2025.

While uncertainty about the pandemic continues, overall financial prospects are generally positive for the global banking industry in 2022.

Leading *talent* through a turbulent time

BANKING LEADERS ARE reckoning with the never-before-seen challenge of redefining the workplace and how work is done. Leaders are also under enormous pressure to develop an agile and modernized workforce that can support a product-driven and customer-centric operating model. To complicate matters, they are grappling with several upheavals in the workforce, not least of which is the escalating war for talent. For the first time in decades, employees appear to have the upper hand, especially in sought-after positions.[8]

Navigating these and other uncertainties through turbulence could require radically different talent strategies. Of course, banks need to be more creative in attracting new types of talent and competitive in retaining the talent they want to keep. Banking executives also should embrace a unique blend of leadership traits. Not only do they need to be more adaptable than ever, but they should also be unapologetically bold while making empathy the foundation of their reinvigorated culture.

The return-to-the-workplace dilemma

Worried that remote work might stifle learning, creativity, and collaboration, some banks now expect employees to be in the office. But nearly 70% of respondents in our survey say they expect their organization to pivot to hybrid work. How well leaders execute this transition could make a fundamental difference in the values and culture of the new work environment. Leaders must also balance worker needs with client and market demands. Banks may also have to reassess rewards, including compensation, in light of their pivot to hybrid/remote work models.

In balancing multiple demands, financial institutions should reassess the rationale for getting together more explicitly by creating meaningful experiences.

Regardless of which model institutions choose, leaders should be adaptive, deliberate, and communicative.

Fostering fairness in a hybrid work environment

To prevent hybrid work from creating inequalities among employees, banks should continue to foster a sense of belonging for all, rather than only those who spend the most time within their four walls each day. Institutions should use office returns as an opportunity to "re-onboard" the entire workforce to the new institutional culture, and remind employees of their shared knowledge and goals.[9]

Banks should also consider training leaders on how best to manage a distributed workforce so that existing inequities are eliminated, and new inequities do not emerge. Managers may also need to learn how to recognize "unseen" work, and restructure days to be task-based instead of simply tracking time employees spend in front of a screen.

Refreshing talent strategies to accelerate a massive skill shift

These pandemic-related challenges only add to the pressure of developing and embracing a more modernized workforce. Four in 10 financial services executives surveyed report that their workforce was not ready to adapt, reskill, or take on new roles during the pandemic.[10] Restructuring work to improve agility will likely require a massive skill shift that can only be possible if banks retool traditional strategies.

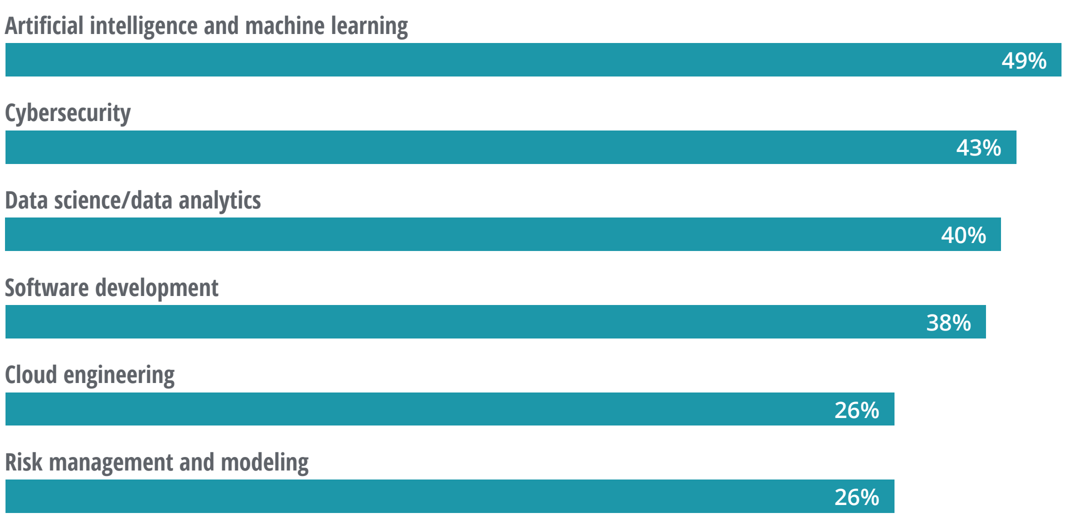
Attracting talent: The bank of the future will require new skill sets for higher-order work—ranging from purely technical to essential human skills, such as empathy, judgment, and creativity. That said, candidates in niche technical areas, such as cybersecurity or machine learning, are in short supply (figure 4). Many banks are also using alternative talent models to augment their workforce. They expect to hire more gig-based employees and contractors to provide specialized capabilities in areas such as cybersecurity, cloud, climate science, and risk modeling.

Most banks have been quite aggressive in attracting these candidates, but they may need to go even further. They can give jobs more meaning and purpose beyond commercial outcomes by expanding them into areas such as social equity or climate change. Expanding talent pools to new geographies or focusing on parents reentering the workforce are other worthwhile strategies.

FIGURE 4

Finding skilled candidates in niche technical areas is a challenge for many banks

Most difficult capabilities to acquire



Source: The Deloitte Center for Financial Services Global Outlook Survey 2021.

Retention: The banking industry has not been immune to the "turnover tsunami" that is disrupting workforce dynamics.[11] Junior bankers, for example, are in particularly short supply, prompting many large banks to increase annual compensation and expand recruiting from nontraditional sources. In the United States, older workers are also dropping out of the labor force in record numbers.[12]

Some firms plan to develop talent marketplace platforms that can show employees opportunities for growth within the organization. Institutions must accept that some workers are going to continuously crave new experiences and give them opportunities to grow. Leaders should also learn more about employees' motivations, values, and goals, and ensure they are addressing matters that resonate most deeply with them, including diversity and inclusion and purpose.

Learning and development: Training and upskilling programs should be revamped to address how and where work gets done. Employee experience and augmenting digital skills should be priorities, but improving tech fluency requires more than just training.

Upskilling programs should include technical proficiencies such as coding, which can help business groups better understand how to utilize tech tools when making financial decisions. Banks should also train employees to work with new technologies such as machine learning and artificial intelligence (AI). In particular, workers could immensely benefit from knowing how to apply capabilities like contextual reasoning, problem-solving, and product knowledge to machine-generated insights.

Supervisors should instill a mindset that encourages trial and error while recognizing that self-learning styles are not uniform. Online coursework that employees can complete at their own pace can be effective learning tools, as are simulations that test how workers will respond to feedback provided in real time. Collaboration is also critical since employees often learn most quickly from each other.

Experiential learning should be a key consideration when determining pay raises and promotions.

Leadership: Leaders also need to focus on enhancing their own skills; they will need to constantly evolve to keep pace with new demands placed on the organization. For example, many stakeholders are calling on executives to give underrepresented voices more influence within the organization and make their businesses more diverse.[13]

Marketing with a new brand promise

MARKETING FINANCIAL SERVICES has always required great conviction, in the understanding of customer needs, and in the ability of the institutions to meet those needs. But increasingly, this conviction is being put to the test.

Digitization is rapidly changing customer expectations and behavior. It is also lowering barriers to entry and blurring industry lines. Institutions from adjacent industries are embedding banking products into their core offerings. But banks are not sitting idle—they are using technology innovation to get a better grasp of customers' end-to-end needs. And they are translating these insights to aggressively expand their product shelves and curate experiences.

These pervasive trends are presenting a serious dilemma for the marketing function, and it seems the role of the CMO at banks is at an inflection point. How do they convey a brand promise that is consistent with the ethos and aspirations of their heterogeneous customer base? And how does marketing build a purpose-driven identity and communicate new sources of value creation without compromising privacy and security?

Leading with purpose

Across industries, customers are increasingly expecting companies to articulate *"why they exist, what problems they are here to solve, and who they want to be."*[14] Their expectations of banks are no different.

To heed this call, bank CMOs should set the enterprise agenda on shared values and lead the creation of an authentic, differentiated identity—and action—that embeds higher purpose. The marketing function at ANZ has spent the last few years bringing the bank's purpose of *"helping shape a world where people and communities thrive"* to life by not only altering its products and services but also realigning businesses around financial well-being.[15]

There is also a parallel trend to embrace inclusive design—where products, services, and experiences are set up to include underserved customers. In remodeling its branches, Commonwealth Bank of Australia has made inclusion one of the key tenets, adding braille signage, video and audio emergency alarms, and space for wheelchair parking, among other features.[16]

Humanizing the banking experience

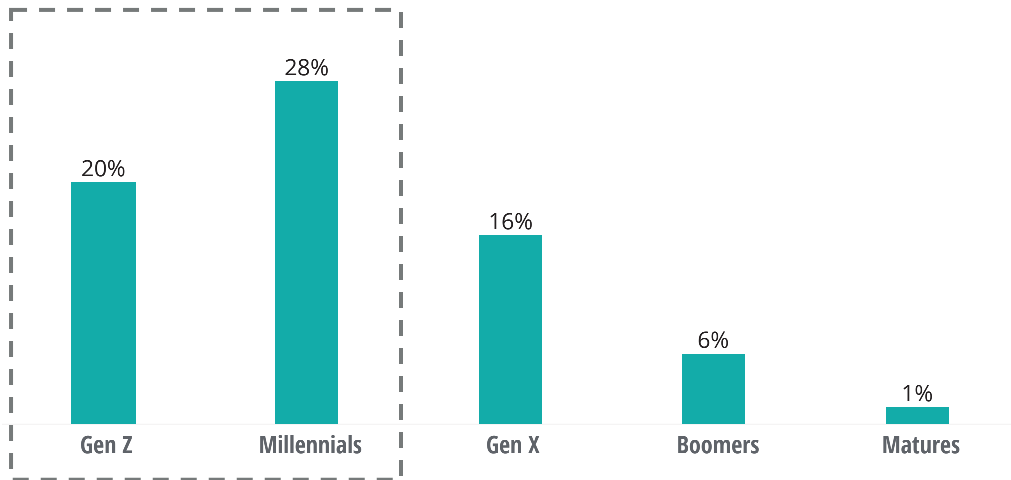
Digital interactions, while easy and convenient, fail to forge emotional connections. And younger generations, who tend to use digital channels the most, typically have less brand loyalty. Our US digital banking consumer survey revealed millennial and Generation Z respondents were much more likely to switch their primary bank compared to older consumers (figure 5). So while branches should remain the primary channel to forge deeper relationships, making digital banking channels, such as chatbots, more responsive and empathetic like humans could differentiate in a crowded digital world.

In banking, customer experience is typically owned by the lines of business (LOBs), digital, and customer service functions. Marketing should work with these functions to provide insights on the human/emotional aspects of customer behavior and the market relevance of those insights.

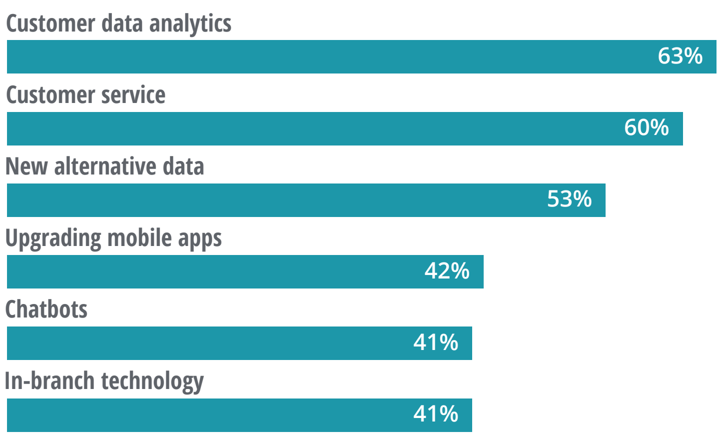
FIGURE 5

Elevating the customer experience to minimize flight risk

5a. Likelihood of retail banking respondents to switch their primary bank



5b. Enhancements banks plan to make to improve retail and institutional customers' banking experience



Note: Percentages in 5a. represent respondents who are "very likely," "likely," or "somewhat likely" to switch their primary banks.

Sources: Deloitte's 2021 Digital Banking Consumer Survey; The Deloitte Center for Financial Services Global Outlook Survey 2021.

Empowering customers

Empowering customers to make the right choices and chart their own financial destiny must be intentional. Banks should give customers access to data, financial tools and advice, and embedded finance options that are personalized and actionable. In fact, to engender greater trust, differentiate the brand, and maximize retention, banks should also extend this notion of empowerment to their institutional customers.

Customers expect institutions to give them access to data about their own transactions and behaviors. But a 2020 Deloitte survey of financial services consumers revealed that only 22% of respondents felt they are "in complete control of their personal data."[17] And banking executives acknowledge it: One-half of marketing executives in our 2021 outlook survey say their institution is not doing enough to make customers feel they are in control of their data. Open banking trends in many parts of the world can be a catalyst for improvement—pushing banks to give customers more control over who can access their data in exchange for something of value in return, such as better pricing or higher rewards.

At the same time, the CMO can take the lead in protecting customers' privacy and security. To personalize offerings and experiences, CMOs should also work with the heads of privacy to provide transparency and get customer buy-in to use their data.

Furthermore, banks should empower customers with tools and resources to help them meet their financial goals, as well as provide access to financial education in simple, digestible formats. Capital One offers three free one-on-one mentoring sessions to anyone interested in learning about responsible financial behaviors, regardless of whether or not they are customers.[18]

Another way to empower customers is to aggregate products and services to meet their diverse financial needs, such as tax filing, spend tracking, and buying insurance in a one-stop platform. This may require banks to share their share of customer wallet with third parties (and vice versa). But a holistic solution such as this would help banks become more deeply embedded in customers' lives.

Breaking free from the *technology* trap

ASK ANY BANK CEO what they need to do to have a leg up in the marketplace, and the answer, most likely, will be about modernizing their technology infrastructure. Banks across the globe spend hundreds of billions of US dollars—more so than most industries—on their technology programs. But how concerted are these digital transformation efforts to have a true organizationwide impact? And do they realize the ROI from these initiatives?

Banking technology leaders may struggle to answer these questions … because, to begin with, there is no common, strategically linked, business-first language for digital transformation across the institution. Also, the impulse is to think about discrete technologies, resulting in "tech-first," one-off investments.[19]

Together, these approaches result in *a pervasive and pernicious technology trap,* which can prevent banks from realizing the full potential of their investments.

Since digital transformation is never-ending, and the window for change is getting shorter, leaders need to escape this technology trap mindset. Having a clear, actionable plan for *execution* is paramount.

Scaling beyond a few pockets of greatness

The pandemic put many banks on an IT modernization overdrive. These efforts, however, are often incremental, localized, and fragmented. No wonder the success of these investments is uneven at best. Take the much-desired goal of core system modernization, which has eluded many banks for years. The costs and complexities are overbearing and can stymie action. Only 11% of survey respondents say their organization has fully modernized core systems to the point where they can easily incorporate emerging digital technologies.

While there are some pockets of greatness, for banks to scale technology in an integrated, holistic way, having a *clear, business-first* road map is crucial; it can serve as a guide for end-to-end implementation. Getting a better handle on KPIs, reporting, and accounting is also important.

From platform stacks to solution sets

Until now, banks and technology vendors have focused on building platform stacks for various applications, with a technology-first orientation. But addressing banking business topics such as KYC, AML, or regulatory reporting requires a shift from platform stacks (tech-enabled development environment) to solution sets (development of industry-specific applications). Banking technology leaders should evaluate the end-to-end business value chain to create an *integrated solution architecture built on modern platform stacks*, possibly from multiple vendors.

But agreeing on what is the right platform stack and which solutions are priorities may create friction between the lines of business and corporate technology groups. This is where a business-first road map can provide clarity.

Cloud at the heart of business

Banks should place cloud at the heart of the business. Meaningful cloud adoption requires buy-in from the CEO and in the C-suite. Without clear, cohesive messaging from the top, achieving the desired results can be difficult.

To date, banks have adopted different approaches to cloud deployment: federated, centralized, country-specific, or by the LOB. But given the complexity in decision-making models and platforms, consistency in approach and accountability are paramount.

The business, not always central IT, is having a greater influence in the organizational cloud journey. But there should be a clear governance model in place. Business units can have more autonomy if companies first embed guardrails and controls to make the secure and compliant transformation a success. Here is where a Cloud Center of Excellence (CCOE) can be of great value.

Cloud economics are also changing. As these budgets balloon if left unmonitored, who funds what can become increasingly contentious. Businesses need clear guidance on budgeting responsibilities and ongoing financial monitoring with established controls in place.

Finally, every business executive could benefit from becoming cloud-fluent. Cloud is where all technologies will converge and where many business products and services will be reimagined and built to future-proof the organization.

Delivering on the AI promise

To date, most AI investments have been limited to small-scale pilots and niche use cases and have centered around cost and efficiency. Eighty-four percent of our survey respondents say their organizations faced challenges adopting AI, more than with other technologies (figure 6).[20]

FIGURE 6

Banks need new approaches to realize the full potential of their technology investments

Percentage of respondents whose firms faced challenges adopting these technologies

Source: The Deloitte Center for Financial Services Global Outlook Survey 2021.

The near-term priority for banks should be to **deploy AI *at scale***, which for many banks can only happen in the cloud. This makes the cloud strategy all the more critical.

Optimizing the development process is also important. To this end, banks should embrace the MLOps (Machine Learning Ops) methodology—applying DevOps principles to ML operations.

This will enable rapid innovation and deployment, effective monitoring, and maintenance.

Further, no AI model can be powerful without having a robust data infrastructure in place. While some efforts have been made in the past, most banks are lagging in this area.

PLACING THE QUANTUM BETS NOW

Quantum computing has vast potential for the banking industry. It can help enable fraud detection, credit scoring, derivative pricing, and even forecast financial crashes. While it is debatable when it will become mainstream—whether the next five or 10 years, or longer—leaders should not underestimate the pace of development. It could happen sooner than expected, so banks should act now. They can use the next two years to determine where quantum computing may have the most disruptive influence and strategize accordingly.

On the flipside, quantum can also be used by cybercriminals to target banks, so investments in a quantum-safe cryptography infrastructure may be needed.

The good news is some of the large banks, including Barclays, Citi, and Wells Fargo, have already set up R&D teams and forged alliances with quantum providers.[21] But industrywide action is important to respond to quantum developments, both good and bad.

Running *operations* on a more potent fuel

A BANK'S OPERATIONS ARE like a car's engine—under the hood and unnoticed until something goes wrong, or when the going gets tough. Banks' operations groups worked tirelessly during the pandemic to ensure the smooth functioning of their institutions.

In addition, banks have been modernizing their operating model to adapt and scale to the growing demands of clients and the market developments. The shift from T+2 to T+1 trade settlement cycle in the United States, for instance, would require fundamental changes to brokers' operating models, from batch-oriented cycles to straight-through processing.

Regulators are also pushing banks to further bolster operational resilience. For instance, regulators in the United Kingdom and the Basel Committee on Banking Supervision (BCBS) are focusing on the resilience of banks' critical operations necessary to deliver business services.[22]

Resilience has been the defining characteristic of the operations function, so how should banks build on this foundation to prepare for a future that requires greater agility?

The twin forces of operational modernization and regulatory demands should inspire banks to adopt a *resilience-by-design* mindset in their operating models. In principle, resilience-by-design is "when an organization has built diversity, redundancy and resourcefulness into its operating model in such a way that allows it to respond, adapt and ultimately thrive in conditions of adversity."[23] But to operationalize this construct, institutions need execution-focused leadership, agile processes, scalable technology systems, and strong controls. This approach can help banks withstand future black swan events and also bolster their agility in responding to market forces.

Save-to-grow philosophy

A robust cost discipline is central to efficient operating models. It's no surprise, then, that cost optimization is cited as a high priority by 61% of finance executives in our survey. But 80% of respondents also expect their institutions' expenses to increase in 2022, driven by technology investments to scale businesses and compensation budgets to win the war for talent, among other factors.

Indeed, costs have been ballooning across the industry. For instance, total expenses of the top 100 North American banks rose 14% year over year, to US$744 billion in 2020.[24] After a series of expense cuts in 2020, banks are expected to continue the momentum on cost management through digital transformation, divestitures of noncore units, and branch rationalization. Citigroup, for instance, is exiting 13 non-US retail banking markets to double down on its focus on global institutional banking and wealth management in the United States and Asia.[25] HSBC plans to reduce 40% of the head office space in the long term and one-half of corporate travel budgets.[26]

But investing in digital transformation takes money and time. So a more strategic view of cost transformation requires a laser-focused approach, clear accountability, and relentless execution discipline. Operations and technology leaders should embrace a save-to-grow mindset and channel savings from their cost transformation initiatives to invest in growth priorities. Further, LOB leaders—whether in branch banking or fixed income trading—should take greater ownership of driving efficiencies and minimizing costs. Automation can go a long way, of course. But it isn't so much about machines performing human tasks; it's about rethinking processes across the value chain and digitizing these activities to remove friction, handovers, errors, and duplications to achieve greater efficiency and impact.

Managed services: Demand should meet supply

Third-party managed services have existed for a while, but their scope, scale, and sophistication have expanded rapidly. These services are not only in the noncore areas with little differentiation. Increasingly, they're being used in domains that require more technical sophistication and a rapid response to change, such as tax compliance, fund accounting, and cyber defense. In fact, they could potentially encompass a range of services: data-as-a-service, insights-as-a-service, and security-as-a-service, among others.

Banks, however, have been conservative in making use of third-party managed services, perhaps because they view them purely as a cost play. They should also look at them as a way to offload their technical debt. When considering managed services, though, banks should ensure that a provider bolsters agility, scale, and overall operational resilience alongside improved economics.

Unleashing the *finance* engine

SIGNIFICANT INVESTMENTS HAVE already been made in digitizing core finance activities, whether through new enterprise resource planning (ERP) systems, building out shared services, or automating manual tasks using robotic process automation (RPA).

However, finance transformation has been narrow, incremental, and generally focused on operational activities. It has also not kept pace with overall digital transformation, in part due to underinvestment in data and technology infrastructure. Only one quarter of finance professionals in our survey say finance has transformed as much as the overall bank. Rather than following, finance executives should lead the bank's efforts to identify new sources of value unleashed by digitization. But this task will be difficult without a common data architecture.

Turning the dials harder

Finance leaders want to maximize the impact of their investments with a more modern data and technology architecture. This should enable the finance function to be more forward-looking and become an effective strategic advisor to the businesses.

The finance executives we surveyed noted a number of challenges that can limit the finance function's ability to achieve its full potential (figure 7). Fragmented and narrowly focused change initiatives have combined with rigid organizational structures, complex reporting lines, and turf battles over data ownership and decision-making authority. Together, these factors can stymie efforts to create a modern finance function.

Regionally, there are some differences in how finance executives view the challenges. Respondents from North America seem more concerned about getting the right talent, offering foresight, and digital transformation. Executives surveyed from Europe and APAC, meanwhile, were focused primarily on data ineffectiveness and operating model challenges.

FIGURE 7

Respondents say the road to the finance function of the future can be bumpy

Percentage of respondents who agreed with these statements

Source: The Deloitte Center for Financial Services Global Outlook Survey 2021.

Data: Fuel for analytical engines

Fragmented data that resides in disparate systems is another vexing problem. In fact, nearly half of our survey respondents confirmed this to be the case. Even regulators have noted shortcomings with reported data of some banks.

To overcome this fragmentation, finance should seamlessly integrate with functions such as accounting, risk, and compliance that may use the same data in different ways. An assimilation of data between risk and finance, for example, can yield benefits such as real-time monitoring of financial position and market risk. Using this common source can enable transformation at scale, and eliminate errors, duplications, and the need for massive reconciliation.

Squeezing more out of the analytical engines

To squeeze more out of the finance function, the maturity gap in existing analytical and reporting engines underpinning core activities should be addressed through further augmentation.

For instance, advanced predictive analytics has not been fully implemented. Techniques such as Natural Language Processing for unstructured data and neural networks for pattern recognition can be used to enhance forecasting and scenario analysis. Banks such as Standard Chartered and BMO are combining data with machine learning to better predict risk and consumer behavior, and to add a layer of sophistication in balance sheet management.[27]

However, the promise of AI and predictive analytics can be stymied by outdated core technology infrastructure. Legacy ERP and other back-office systems move too slowly to produce real-time insights that are essential for strategic actions. Our survey found that more than three quarters of respondents are in favor of expanding the use of third parties to *accelerate digital transformation for reduced cost, productivity,* and *agility*. Future cloud-based ERP solutions could be an important element of finance modernization. Executives should review current processes and consider customization versus prepackaged solutions to fill the gaps.

New talent models

Human judgment and expertise are also critical in deriving value from machine-generated intelligence. Machines are not capable of understanding context, making causal inferences, or driving action. More than half of our finance survey respondents feel that hiring tech talent is a major challenge and 65% regard *upskilling talent* as a topmost priority for 2022. This requires transforming the talent model to attract employees who are digitally savvy and have a sound business acumen.

Multiple specialized skill sets such as data science, cloud, and business analytics can be combined with softer skills—framing, collaboration, and communication—to support cross-functional operations. Finance executives should also be able to think holistically and strategically, and not get bogged down in details.

Designing a modern toolbox for *risk* and *compliance*

BANKS ARE RACING to contend with a rapidly evolving risk landscape that is more complex, dynamic, and interconnected than ever before. New risks are arising from cloud, AI, climate change, distributed ledger technology, digital assets, and ecosystems. In addition, cyber risk and financial crime, while not new, are taking on a new dimension. (*See the chapter on cyber risk and financial crime.*)

To keep rapidly developing risks at bay, banks should design a modern toolbox for risk and compliance to better manage risks within and across silos and empower the first line of defense.

Coming to grips with nascent risk domains

Many emerging risk disciplines are still nascent within banks. As a result, risk methodologies may not be robust yet and data may be lacking. Talent could also be in short supply, and the control framework may only be partially established. In addition, there may only be a superficial understanding of the interconnections among risk domains.

Take *digital assets and cryptocurrency*, for instance. These new forms of value exchange are often subject to high degrees of volatility and market risk. Operational concerns such as custody constraints as well as financial crime and sanctions compliance are also important considerations, due to the anonymity and cross-border nature of public ledgers.

Climate risk is another example. Banks are embedding climate risks—both physical and transition risk—into each stage of the credit life cycle. Even quantifying the degree to which their portfolios are contributing to greenhouse gas emissions has proved difficult. It may take years before they fully embed climate scenarios into credit strategy, underwriting, and other parts of the credit risk management life cycle.

Banks should apply the same scrutiny to these emerging risks as they do to more mature risk domains. And they should get ahead in managing these risks before regulators enforce new rules or the threats become too complex.

Empowering the first line of defense

More needs to be done to truly empower the businesses to own and manage risk with more robust and real-time data and advanced analytical tools to flag unusual or suspicious patterns.

Businesses should take responsibility for designing and implementing controls for emerging risks. This will embed controls into the engineering processes of new applications and platforms from the get-go. This will shift the risk managers' responsibility to testing whether the controls, for example, for alternative LIBOR benchmarks or crypto assets, meet key performance metrics and are being conformed with as expected.

MANAGING THE TRANSITION TO T+1

In the United States, there is a new push to shorten the equities settlement cycle from two days (T+2) to one (T+1).[28] However, individual banks could be on the hook for margin and balance sheet exposure if counterparties fail to uphold their obligations overnight. Many banks could also take on more technology and operations risks, including the potential for trades to fail as a result of erroneous instructions or breakdowns in counterparty data flows. A shorter settlement cycle can also make it harder to plan for volatility and may leave banks vulnerable if short-term funding obligations trip up models or require more derivatives to manage exposures. This will likely require a massive overhaul of technology, procedures, and behaviors to shift from manual to automated trade exception management.

Applying the risk lens across the product life cycle

Some banks are also considering risk across the end-to-end product life cycle, motivated, in part, by more stringent regulatory expectations. Risk executives are expected to monitor risks of each product from cradle to grave, while continuously evaluating their impacts on key product risk indicators across a multitude of risk stripes. This approach also monitors whether customers are receiving what they were promised, and any other potential issues that could arise when sunsetting a product.

The product-driven model of risk management should incorporate risk scoring and assumption testing across product design, customer prospecting, origination, marketing, servicing, and termination. To do so, banks should inventory products using a standardized global product taxonomy, with information on data lineage, back-end workflows, authorized approvals, and control history. In addition, risk teams should adapt downstream processes impacted by the new product taxonomy, such as the ways in which information is submitted to the general ledger or collected for regulatory reporting.

Banks must also manage product risk against desired commercial outcomes and the overall benefit to the customer. Nonrisk metrics such as speed-to-market, market penetration, profitability, capital allocation, and lower operating costs all depend upon effective and efficient product management. Data collected on existing products can also inform the business case for new products by highlighting potential risks associated with their launch.

Managing the intersection of *cyber risk* and *financial crime*

CYBERSECURITY TEAMS AT banks are facing enormous pressure, and many are scrambling to keep up. Not only are they having to contend with the expansion in volume, velocity, and variability of cyberthreats, but they are also required to respond to new demands from the businesses and heightened regulatory expectations.

Security in the cloud

The digital economy is broadening the attack surface. In particular, the rapid deployment of cloud, the explosive growth of APIs, and the diverse array of entry points from third parties are increasing banks' vulnerabilities.

Many banks also are seeing cloud as an efficacious way to offload their technical debt, and better compete in the future. As a result, the scale and pace of cloud migration efforts at many banks are straining the resources and expertise of cyber teams. Boosting resiliency and agility while embedding security can be achieved through *security by design*, where cybersecurity engineers install controls early in the DevOps process or continuous delivery (CD) pipeline, instead of as an afterthought, where cyber professionals are asked to assist late in the deployment cycle.

The second challenge is that each business line often wants to retain ownership of their cloud solutions, especially at larger banks. Few institutions have the governance needed to oversee all units and their operations.

To meet these and other needs, banks should design security controls that can be readily, consistently used by development teams. Many institutions will also need more cyber and cloud security specialists. Collaboration is key, and so is adaptability. Since cloud is where multiple technologies and applications are converging, cyber professionals need to speak multiple business languages. Experience with change management is also valuable, given the multitude of projects, migrations, and refinements that happen in the cloud.

Zero Trust in third parties

Banks are increasingly vulnerable to cyberattacks from third parties and even fourth parties; with greater interlinkages come larger attack surfaces. Regulators are also paying more attention to vendor and broader supply chain risks.

No one is iron clad against threats through third parties. But adopting a *Zero Trust* approach—assuming that all network traffic may be malicious—can serve as an effective shield. Zero Trust limits network access and continuously validates identities and credentials. It shifts cybersecurity away from the notion of trusted parties and secure external perimeters. In particular, it offers a step up in capability against the risks associated with multivendor supply chains. "Never trust, always verify" should be the organization's philosophy. It's a new age in cybersecurity.

Boosting operational resilience

Strengthening operational resilience should also be top-of-mind for banks. Cyber risk teams should quickly respond to breach and incident notifications, while the rest of the organization needs to know how to recover critical business processes quickly. In real or simulated intrusions, cyber risk departments need to quickly produce detailed reports of assets and data that may have been compromised in a breach. As a result, firms should have confidence that they can quickly detect instances where data was corrupted, locked, or destroyed, and reconstruct data that may be distributed across the cloud and on-premises devices.

Financial crime

TOWARD AN OUTCOME-BASED APPROACH IN AML

Banks are working with regulators, financial intelligence units, and law enforcement to focus more on anti–money laundering outcomes rather than check-the-box type compliance examinations and sharing information about bad actors and financial crime typologies. Regulators are generally supportive of this approach, but banks should work with them to show they are being productive and not just shirking their compliance obligations. To do so, they should be prepared to respond quickly to anomalies in data traffic or other signs of unusual transactions. Banks should also continue to innovate on methods to monitor and report on financial crime.

A COLLABORATIVE MODEL TO FIGHT FINANCIAL CRIME

Public-private partnerships for information-sharing can be paramount to tackling illicit financing as well. Banks, regulators, and law enforcement should step up efforts to share data with each other in formal and informal settings and explore how to use new technologies to facilitate information and data exchange. Combating money launderers typically requires multiple and diverse sources of information to track suspicious activity and fund flows, including those generated by crypto ransom demands.

Some regions have made good progress along these lines. In the Netherlands, for example, a consortium of banks created a transaction monitoring utility that can aggregate anonymized transaction data for collective monitoring to detect suspicious activity. The United Kingdom has also developed a task force in which the police and law enforcement agencies partner with banks, technology, and communication firms to share information and track and investigate suspicious activity.[29]

Blockchain technology can be an effective way to boost collaboration and validate transactions. Banks and their partners can keep an up-to-date record of risk typologies and identify new techniques that malicious actors are using to conceal or launder money, and develop plans to monitor for those trends jointly.

CRYPTO FUELING THE CHANGING NATURE AND SCALE OF FINANCIAL CRIME

Lately, crypto-related fraud seems to be growing and presenting a new challenge to banks, especially through ransomware attacks.

Regulators in some jurisdictions are trying to clamp down on crypto-related illicit financing by proposing rules that would make intermediaries disclose identity information and limiting crypto transactions to traceable currencies. Banks can play a critical role in flagging suspicious transactions since criminals often use these intermediaries to exchange cryptocurrencies for fiat currencies, or deposit ill-gotten gains into traditional accounts.

INCREASING INTERSECTION BETWEEN CYBER RISK AND FINANCIAL CRIME

Cyber risk groups are also increasingly understanding and working on the growing overlap with financial crime. While these domains may seem distinct, some banks are beginning to take a collaborative approach to managing them. Fraud teams, in particular, may not have visibility into cross-channel transactions, and can learn from cybersecurity professionals who have long monitored risks from an enterprisewide point of view.

Cyber incidents, fraud, and money laundering are increasingly becoming intertwined as sophisticated criminals exploit tech vulnerabilities. For example, they may steal someone's identity to breach a security checkpoint, then proceed to engage in data extortion, or commit other crimes. These malicious actors are increasingly part of sophisticated global crime syndicates that are starting to use next-gen technologies such as AI and quantum computing as well.

Banks can take several steps to improve their processes for overseeing cyber and financial crime internally. For example, they should consider ways to share and track data collected by each unit and create analytics that try to follow transaction flows even when counterparties' identities may be concealed.

Adopting a new playbook for *fintechs* and *bigtechs*

ECOSYSTEMS ARE CONTINUOUSLY expanding in scope and reach, blurring industry lines. While banks are not new to ecosystem relationships, the most vibrant players—fintechs and bigtechs—continue to exert profound influence on how banking is done, especially in the digital assets/crypto space.

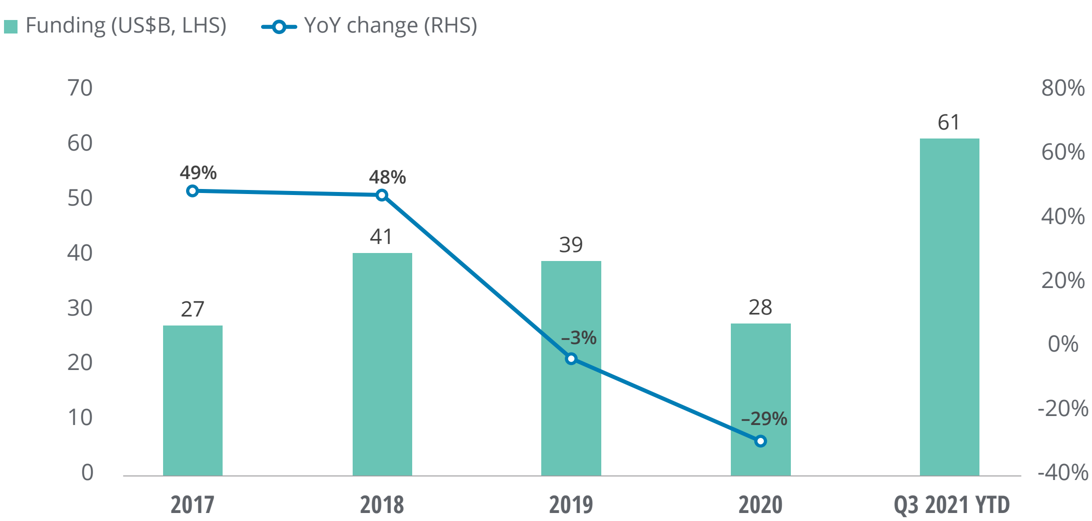
Mainstreaming of fintechs

Fintechs have become more mature and mainstream; they have firmly established themselves while growing their influence in unforeseen ways. They continue to attract record levels of investments (US$61 billion in 2021 year to date with 186 deals of US$100 million or more—see figure 8) including from nontraditional investors.[30] The volume of fintech IPOs and SPAC deals is also remarkable.

Another notable shift is the increase in M&A activity, both among fintechs (for example, Better's acquisition of online mortgage broker Trussle)[31] and between banks and fintechs (Visa's acquisition of Tink).[32] This phenomenon is global: Consider Square's acquisition of Australian buy now, pay later firm Afterpay.[33]

FIGURE 8

Growth in fintech funding in the banking and capital markets sector



Source: Deloitte analysis of Venture Scanner database.

As fintechs mature, banks should look at fintech partnerships with a fresh lens. The bigger fintechs may have evolved their market aspirations, and may have less of a need to partner, but many smaller fintechs are at the forefront of innovation and may have stronger appetite for collaboration.

In the institutional space, where banks have a bigger moat, fintechs are less likely to compete directly with banks for institutional clients and may be more eager to engage as enablers. For example, PNC Bank recently acquired Tempus Technologies to strengthen its treasury management services.[34]

This phenomenon extends beyond financial services, too. Industry lines are blurring and there are increasingly new sources of value creation at the convergence of financial services and health care, energy, education, and other industries. There are more and more opportunities to work with a growing number of "*Xtechs*" (such as healthtechs, edtechs, and agtechs). These intersections offer almost limitless potential for innovation. For example, Agrihive, an Australian startup, collects farms' financial data to create live reports that inform farmers about the financial health of their crops/enterprises.[35] Using this data, banks may be able to provide lending and other services to the farming community.

SO, YOU WANT TO BE A BANK?[36]

Fintechs' interest in joining the formal, regulated banking sector is growing globally (for example, Grab in Singapore),[37] and is driven by stable funding, access to payment rails, and the ability to offer a full suite of banking services. This phenomenon is extending beyond deposit taking and lending to the crypto/digital asset space as well. While compliance requirements continue to be a major factor, the cost-benefit calculus may be changing in favor of obtaining a license or acquiring a bank.

However, some fintechs seem to be underestimating the cost, skill sets, and complexities associated with applying for and maintaining a banking charter. Before deciding to obtain a banking license in any jurisdiction, fintechs should assess long-term goals and answer some fundamental questions. Is acquiring a licensed bank a better option than getting a direct license? Is cost of funding important for their stability and success? Are there other partnership or buying opportunities, such as Banking-as-a-Service (BaaS), that are more attractive? Is acting as a fiduciary vital to their business model? The answers to these questions may lead fintech leaders to a different path than they originally intended.

The dilemma posed by bigtechs

Bigtechs have the unique distinction of inspiring both awe and anxiety among banks, which complicates the decision on when to compete and when to collaborate.

Take payments: Bigtechs not only offer digital wallets; they have partnered with some large card-issuing banks and have offered crypto-related services through their payment platforms. Google, for instance, added support for the Coinbase Card, a crypto-backed debit card.[38] Here, co-opetition may be the optimal approach for banks. But in other areas, where the moat is bigger and the margins are highly attractive, such as mid-market cash management or treasury services or securities trading, banks may want to go head-to-head.

Collaboration may be the best approach in purpose-driven opportunities, such as financial inclusion initiatives. Bigtechs' reach, unique access to alternative customer data, and enhanced ability to generate insights, powered by cloud and advanced analytics, can help banks develop customized financial services to underserved market segments. These could include the unbanked, underbanked, or small businesses that lack collateral or strong credit histories.

Orchestrating new ecosystems

Climate change will have a profound impact on how banks do business over the next few decades. Transitioning to a green economy will take enormous, concerted efforts across industries. Innovations in carbon capture technologies or new battery storage devices will be critical to deal with global warming. We are seeing the emergence of a new ecosystem of players, including "*carbontechs*." This is an area where banks could take a leading role in orchestrating partnerships through incubating, early-stage funding, capital raising, and trading of carbon credits.

Pursuing scale with *M&A*

M&A ACTIVITY IN the banking sector should remain vibrant in 2022 with a focus on operational scale and technology prowess as competitive plays. Indeed, four in five surveyed executives said their institution is likely to increase its M&A activity in the year ahead.

In the United States, deal activity in 2022 should surpass the prepandemic volume (figure 9). Low interest rates, excess liquidity, and competition from fintechs, digital-only banks, and bigtechs will likely pressure profitability, creating a sense of urgency among sellers.[39] Meanwhile, attractive stock multiples and healthy capital levels could fuel buyers' appetites.

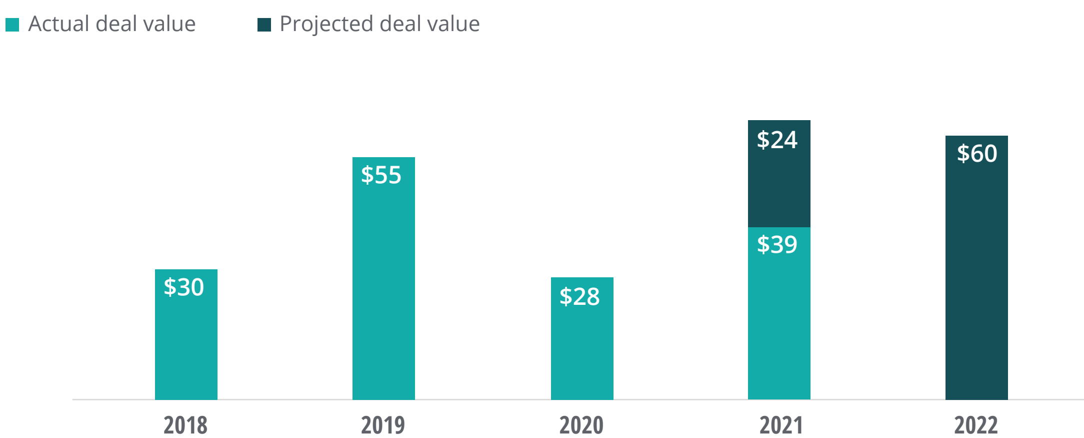
Although small banks with assets under US$10 billion may continue to be targets, increased merger-of-equals (MoEs) are expected in the US$10 billion and US$50 billion midsize bank category. Larger midsize banks with US$50 billion to US$100 billion in assets could look at acquisitions of smaller banks to grow specialized businesses, expand into new geographies, and add new customer portfolios. Given the focus on growing scale, becoming a US$100 billion bank appears to be the new aspiration in the midsize banking segment.

While banks with US$100 billion to US$250 billion in assets could also explore MoE opportunities, the Biden administration's focus on assessing the competitive impact of bank mergers could slow down the approval process for larger deals in the United States.[40]

In the European Union, regulators' support for large domestic deals could be one of the important tailwinds fueling M&A in the region. Overcapacity, high industry fragmentation, low margins, cost rationalization, and the need to bolster digital investments will likely push European banks to strengthen their domestic positions and divest noncore portfolios. However, cross-border deal activity remains a challenge due to a lack of regulatory harmonization.

FIGURE 9

US bank M&A is expected to maintain the momentum in 2022



Notes: The actual data for 2021; projected data is for the remainder of the year. All figures are in billions of US dollars.
Source: S&P Global Market Intelligence.

Meanwhile, the digitization boom and thriving fintech sector in Southeast Asia, India, and China could prompt banks in the APAC region to sell noncore assets and acquire digital capabilities.

Fintechs adding to the M&A action

The shift to digital-first models has also whet the appetite for M&A in the fintech space. While deal activity between fintechs is not uncommon, some fintechs are being bold and acquiring banks, believing that the growth potential from having a banking license outweighs the regulatory costs. For instance, SoFi announced the acquisition of Golden Pacific Bancorp in March, facilitating its journey to become a national bank.[41]

Banks have also remained active in fintech acquisition; however, the rising valuations of some of the digital-only banks could discourage many prospective buyers. This would leave only a select group of balance sheet-heavy large banks as potential suitors.[42]

Technology due diligence is critical

As banks and fintechs pursue M&A deals, technology due diligence—such as core banking compatibility, network infrastructure, information security, application environment, data centers, cybersecurity, and data governance—is paramount. Banks should also carefully assess third-party technology contracts and review specific terms dealing with modifications and exits; increasingly, most postmerger cost synergies come from technology integration. Reviewing the potential for BaaS capabilities and ecosystem partnerships should become part of the due diligence.

Going all-in on *ESG*

MANY BANKS ARE at the forefront of some of the pressing issues of our time, but most have yet to turn their ambitions into concrete action. As global crises in public health, social justice, and climate change escalate and collide, now is the time for banks to deliver on their ESG initiatives.

Small steps in the right direction

Many banks have been participating in industry bodies that are perpetually refining climate risk accounting and reporting standards, including the Task Force on Climate-Related Financial Disclosures (TFCD), the Partnership for Carbon Accounting Financials (PCAF), and the newly created Net-Zero Banking Alliance, formed ahead of the United Nations Climate Change Conference (COP26) in Glasgow, Scotland. Many are hoping that more consistent standards will produce an immediate, tangible impact.

In the next year, large banks should establish tangible criteria to achieve their emission–reduction goals. They are also expected to solidify their stress testing and credit risk modeling procedures; amplify efforts to help clients manage physical and transition risks; and enhance their disclosures on climate-related risks and opportunities.

Another priority should be embedding climate risk into the bank's operations and creating new performance metrics to measure progress. By holding themselves accountable to these standards, banks should be able to reiterate their purpose to customers, employees, and society.

Beyond climate risk, banks can contribute to a nature-positive economy by minimizing degradation of biodiversity, soil erosion, and water pollution. The Sustainable Finance Disclosure Regulation (SFDR) in Europe is already pushing firms to consider their broader impact on elements such as marine resources and biodiversity degradation.[43]

Seeing green: Finding and capturing new sources of value

Globally, most banks have vowed to direct capital flows to green projects and reduce their portfolio exposure to carbon emissions. But while many are facing mounting legal, regulatory, and ethical pressure to wind down fossil fuel financing on a quicker timeline than their current trajectories, climate-friendly banking can also unlock new sources of value and opportunities for revenue growth. In Southeast Asia alone, reducing carbon emissions could generate up to US$12.5 trillion in economic benefits.[44]

The explosive demand for green products and investments globally across all sectors of the economy could create ample opportunities for banks—from lending to trading.

THE CARBON MARKET OPPORTUNITY

According to some estimates, the global carbon trading market could be worth US$22 trillion by 2050.[45] Banks can play a fundamental role in expanding these markets through their expertise as market makers, commodities traders, and operators of back-end services and infrastructure. Some financial institutions are exploring buying and selling carbon credits through the blockchain. They could also be tokenized for easier tracking and verification of carbon offsetting activities. Banks could then facilitate trading and settlement of these carbon tokens, both in the primary and secondary markets, and participate in issuing traceable green bonds and developing new securitization instruments based on cash flows of future electricity sales.

Banks should also play a leading role in continuing to innovate on climate finance through products, such as target-linked bonds, sustainability-linked derivatives, and exchange-traded instruments. They may also invest in climate-tech startups/SPACs that are working to commercialize hydrogen energy, waste-to-energy, and carbon capture, utilization, and storage (CCUS).

Finally, banks could help developing economies that may not have easy options to switch to renewable energy. Global banks should work together to co-finance projects and share the risk in upgrading and rebuilding these nations' infrastructures—even if, at first, there's limited potential for returns.

Fighting the good fight

Banks should do more to address racial equity, gender disparity, financial inclusion, and other issues to have a long-lasting impact. These efforts must be backed with resources and investments.

Key priorities include improving outcomes in underserved communities through targeted investments and partnerships that may benefit low-income households. Some institutions may conduct a *racial equity audit* that examines where they may have underserved diverse communities in the past and learn how they can address those disparities now.[46] These gaps could represent a systemic risk that can impede community resiliency, since some groups could be left behind during times of economic expansion.

While fintechs have often led the way on these initiatives, in part because they have more experience serving customers with "low and volatile incomes," banks can also drive real change given their vast balance sheet capacity, expertise, and network connections. For example, Goldman Sachs played a large role helping minority-owned businesses in the Deep South by partnering with a Black-led, women-owned credit union that specialized in lending to communities hit hardest by COVID-19.[47]

Financial institutions should also address inclusive lending and remove racial proxies that may increase the cost of capital or create disparities in application approvals. To avert criticism of bias in AI underwriting models, banks should be able to explain how these models work, or limit their use to testing assumptions in a hypothetical context.

By advancing gender and racial equity, expanding financial inclusion, and mitigating climate change, banks can lead the way in creating new sources of value by bringing about a better tomorrow.

Creating a new financial architecture with *digital assets*

DIGITAL ASSETS ARE shaking the foundations of the current global financial system. By shifting power from a few gatekeepers of capital to a globally distributed network of empowered individuals and neo-entities, digital assets could upend centuries-old constructs about money and banking.

This money revolution may be just getting started.

Consumer demand for cryptocurrencies and other digital assets has grown dramatically. More than one in 10 Americans either bought or traded cryptocurrencies between June 2020 and June 2021.[48] In the not-too-distant future, digital wallets could become the preferred vehicle to exchange money and store assets.

The tens of billions of dollars' worth of investments have spawned a remarkable range of innovations—from hundreds of altcoins and dozens of stable coins to programmable money and nonfungible tokens (NFTs)—all supported by a fast-growing, diverse ecosystem of players working in tandem to democratize finance. And three out of four global executives in a recent Deloitte survey believe digital assets will rival or take the place of physical money within the next decade.[49]

The explosive growth of the cryptocurrency market—which now exceeds US$2 trillion in total value[50]—has compelled banks to explore extending their underlying infrastructure to introduce new services for trading and custody. For example, Bank of New York Mellon plans to administer and custody digital assets alongside traditional holdings like treasury bonds and equities.[51] Many other legacy firms are expanding traditional businesses to accommodate cryptocurrencies as well, signaling a watershed moment wherein banks legitimize digital assets for institutional services and investment portfolios.

These structural improvements could accelerate the ripple effects that digital assets have on banking services and the architecture that enables them. If the current trajectory holds, innovations in digital assets could revolutionize *how money is created, transferred, stored,* and *owned.*

Other applications of digital asset technology could also have far-reaching implications for financial services and beyond. For example, new capabilities in smart contracts could transform the execution of multiparty agreements, insurance claim processing, supply chain management, tax collections, work compensation and rewards, and the distribution of company ownership rights.

One of the biggest sources of new value could stem from tokenized assets, or assets that have rights of ownership transferred onto digital tokens that reside on a blockchain. These tokens can represent both tangible and intangible items, such as real estate, art, patents, or carbon credits. Tokenization may create entirely new markets by establishing liquidity for otherwise illiquid assets and expanding the ease with which they can be transacted and owned.

So far, banks' engagement with digital asset space has been sporadic. Some are working with Central Banks on CBDC (Central Bank Digital Currencies) innovation; others are offering cryptocurrency products to their wealth management client base. Banks that are merely "cryptocurious" are dabbling in blockchain technology as pilot programs. And some institutions are using digital ledgers to settle trades near-instantaneously by connecting investors directly and eliminating the need for counterparties.

Even small banks are trying to get in on the action. For example, Vast Bank, an Oklahoma-based bank with less than US$1 billion in assets, is offering both crypto and fiat currencies in customers' bank accounts and looking at cryptos as lending collateral.[52] In late 2020, New York–based Quontic Bank started offering checking accounts that allow users to earn up to 1.5% in Bitcoin rewards.[53]

Although early adoption of cryptocurrency seems promising, there are some significant hurdles to mainstream adoption. These include trade-offs between public and private blockchain networks, AML/KYC regulations, inadequate custody infrastructure, and the perceived association with nefarious activities. In addition, heightened levels of market volatility, lack of scale and interoperability, and digital identity issues pose further challenges.

Although the lack of a globally consistent regulatory framework could hinder progress, new rules solidifying expectations would likely add credibility to crypto endeavors. But as several prominent trade groups recently pointed out, "overly conservative" rule proposals would effectively preclude banks from entering crypto markets at a time when there is a "certain measure of urgency" to participate in them.[54]

Nevertheless, banks should accelerate their engagement with the digital asset space, even though regulatory clarity is lacking at this time. For example, they could either build or plug into the developing ecosystems. This decision may depend on a variety of factors, including the level of client demand, the urgency for transformation, and the core capabilities of the institution.

They could also choose to lead by creating an internal business unit to explore and prototype new operational processes, or by spinning off a banking business dedicated to digital asset markets. The internal option provides access to capital and banking expertise, but innovation may be hamstrung by disruption to the legacy bank's business model. Or they might be a fast-follower of innovation, and let more enterprising and nimble entities do the leg work. They can then decide if they want to partner, acquire, or mimic their applications.

Regardless, executives must also consider the pace and scale with which they integrate crypto into traditional banking processes, as building a digital assets business "block-by-block" would entail multiple strategies. But the first step is scenario planning how digital assets may impact business models, and give rise to new opportunities for value creation.

Engaging with regulators in ongoing policy debates and crafting short-term response plans could be key to adapting to rapid change while preserving options for the future.

SURVEY METHODOLOGY

The Deloitte Center for Financial Services conducted a global survey among 400 senior banking and capital markets (B&CM) executives in finance, operations, talent, and technology.

Survey respondents were asked to share their opinions on how their organizations have adapted to the varied impacts of the pandemic on their workforce, operations, technology, and culture. We also asked about their investment priorities and anticipated structural changes in the year ahead, as they pivot from recovery to future success.

Respondents were equally distributed among three regions—North America (the United States and Canada), Europe (the United Kingdom, France, Germany, and Switzerland), and Asia-Pacific (Australia, China and Japan).

The survey included B&CM companies with revenues over US$1 billion, and was fielded in July and August 2021.

Endnotes

1. International Monetary Fund, *World economic outlook: Recovery during a pandemic—health concerns, supply disruptions, price pressures*, October 2021.
2. Ibid.
3. Ibid.
4. Federal Reserve, "Federal Reserve issues FOMC statement," press release, September 22, 2021.
5. Thomson Reuters Eikon data and Deloitte analysis.
6. Fitch Ratings, "Singapore banks – Sector outlook revised to improving," March 29, 2021; Fitch Ratings, "Improved environment supports stable outlook for large Australian banks," April 12, 2021.
7. For baseline economic scenario based on S&P Capital IQ database.
8. Neil Irwin, "Workers are gaining leverage over employers right before our eyes," *New York Times*, June 5, 2021.
9. Liz Fosslien, "It's time to re-onboard everyone," *Harvard Business Review*, August 16, 2021.
10. Erica Volini et al., *2021 Deloitte Global Human Capital Trends*, Deloitte Insights, 2021.
11. Roy Maurer, "Turnover 'Tsunami' expected once pandemic ends," Society for Human Resource Management, March 12, 2021.
12. Ibid.
13. Volini et al., *The worker-employer relationship disrupte: If we are not a family, what are we?*, Deloitte Insights, July 21, 2021.
14. Diana O'Brien et al., *Purpose is everything: How brands that authentically lead with purpose are changing the nature of business today*, Deloitte Insights, October 15, 2019.
15. Nadia Cameron, "How ANZ's CMO has brought financial well-being brand purpose to life," CMO – IDG Communications, May 12, 2021.
16. Australian Network on Disability, "Designing for dignity," accessed September 28, 2021.
17. Timothy F. Cercelle and Omer Sohail, *Redesigning customer privacy programs to enable value exchange: How financial services firms can make privacy a competitive differentiator*, Deloitte Insights, November 9, 2020.
18. Capital One, "The Money & Life Program," accessed September 28, 2021.
19. Rich Nanda et al., *A new language for digital transformation*, Deloitte Insights, September 23, 2021.
20. The Deloitte Center for Financial Services Global Outlook Survey 2021.
21. James Dargan, "11 global banks probing the wonderful world of quantum technologies," *Quantum Daily*, June 23, 2021.

22. David Strachan et al., *Resilience by design: Financial services operating models and operational resilience*, Deloitte Centre for Regulatory Strategy EMEA, June 23, 2021.

23. To learn more about the principles of integrating an operational resilience mindset, refer to Strachan et al., *Resilience by design*.

24. S&P Global Market Intelligence data; Deloitte analysis.

25. Hugh Son, "Citigroup CEO Jane Fraser says of moves to shrink retail banking footprint," *CNBC*, April 20, 2021.

26. Silla Brush and Harry Wilson, "HSBC to cut office space 20%, reduce business travel by half," Bloomberg, April 27, 2021.

27. Standard Chartered, *2020 Annual report*, accessed October 4, 2021; BMO, "BMO launches new, AI driven insight to help customers with everyday monetary decisions," news release, November 5, 2020.

28. DTCC, "DTCC proposes approach to shortening U.S. settlement cycle to T+1 within 2 years," press release, February 24, 2021.

29. Samuel Rubenfeld, "UK launches task force to tackle financial crime," *Wall Street Journal*, January 14, 2019.

30. Based on DCFS analysis of the Venture Scanner data.

31. Martin Whybrow, "Better acquires UK digital mortgage broker Trussle," FinTech Futures, July 14, 2021.

32. Tink, "Visa signs agreement to acquire Tink," press release, June 24, 2021.

33. Pavithra R., "FinTech mergers & acquisitions (America): July 2021," IBS Intelligence, August 3, 2021.

34. PYMNTS, "FIs embrace FinTech options to bolster business banking," Pymnts.com, February 2, 2021.

35. Agrihive, "Solutions," accessed October 7, 2021.

36. Irena Gecas-McCarthy et al., *So, you want to be a bank … now what?*, Deloitte, January 2021.

37. Claudia Chong, "Four ride-hailing firms bag operating licences from LTA," *Business Times*, October 30, 2020.

38. Daniel Phillips, "Google Pay adds support for Coinbase's Bitcoin card," Decrypt, March 17, 2020.

39. Nathan Stovall, "Record bank M&A activity in sight," S&P Global Market Intelligence, August 30, 2021.

40. The White House, "Executive order on promoting competition in the American economy," press release, July 9, 2021.

41. Ryan Lawler, "Why fintechs are buying up legacy financial services companies," TechCrunch, August 17, 2021.

42. Yizhu Wang and Zuhaib Gull, "US bank acquisitions of large fintechs still rare as startups scale quickly," S&P Global Market Intelligence, August 20, 2021.

43. David H. Doyle, "What is the impact of the EU Sustainable Finance Disclosure Regulation (SFDR)?," S&P Market Intelligence, April 1, 2021.

44. Cedric Hodges et al., "Southeast Asia's turning point," Deloitte, August 2021.

45. Amy Bowe, "COP26: Make or break for global emissions," Wood Mackenzie, August 11, 2021.

46. US House Committee on Financial services, "Holding megabanks accountable: An update on banking practices, programs and policies," May 27, 2021.

47. Federal Reserve Bank of San Francisco, *Innovation review: Fintech, racial equity, and an inclusive financial system*, August 2021.

48. NORC at the University of Chicago, "More than one in ten Americans surveyed invest in cryptocurrencies," press release, July 22, 2021.

49. Linda Pawczuk, Richard Walker, and Claudina C. Tanco, *Deloitte's 2021 global blockchain survey*, Deloitte Insights, 2021.

50. Benjamin Fearnow, "Cryptocurrency market surpasses $2 trillion for first time ever," *Newsweek*, April 5, 2021.

51. BNY Mellon, "BNY Mellon forms new digital assets unit to build industry's first multi-asset digital platform," February 11, 2021.

52. Steve Cocheo, "Are cryptocurrencies coming to everybody's checking account," Financial Brand, September 9, 2021.

53. Quontic, "Quontic – The easiest way to earn bitcoin," April 7, 2021.

54. Joshua Oliver and Philip Stafford, "Finance industry warns against 'unnecessarily restrictive' crypto capital rules," *Financial Times*, September 21, 2021.

Acknowledgments

Coauthors **Val Srinivas**, **Jill Gregorie**, **Richa Wadhwani**, **Samia Hazuria**, **Abhinav Chauhan**, **Rob Bradley** and contributing analyst **Shivalik Srivastav** wish to thank the following Deloitte client services professionals for their insights and contributions:

Zach Aron, principal, Deloitte Consulting LLP
Scott Baret, partner, Deloitte & Touche LLP
Robert Contri, principal, Global Financial Services Industry leader, Deloitte Services LP
Peter Firth, managing director, Deloitte Touche Tohmatsu
Rob Galaski, vice chair & managing partner, Financial Services, Deloitte Canada
Sylvia Gentzsch, senior manager, Deloitte GmbH
Edna Kamara, managing director, Deloitte Services LP
Howard Kaplan, partner, Deloitte & Touche LLP
Jean-Francois Lagasse, managing partner & Financial Services industry leader, Deloitte Switzerland
Taryn Mason, senior consultant, Deloitte Canada
David Myers, partner, Deloitte Touche Tohmatsu
Raman Rai, partner, Deloitte Canada
Michael Tang, partner and head, global digital transformation for Financial Services, Deloitte Canada
Neil Tomlinson, partner, Deloitte MCS Limited
Aaron Turenshine, partner, Deloitte Tax LLP

Economics

Daniel Bachman, US economic forecaster, Deloitte Services LP

Talent

Susan Hogan, senior manager, Deloitte Services LP
Margaret Painter, principal, Deloitte Consulting LLP

Customer and marketing

Ryan Alderman, principal, Deloitte Consulting LLP
Gina Primeaux, principal, Deloitte & Touche LLP
Jonathan Valenti, principal, Deloitte Consulting LLP

Technology

Gys Hyman, principal, Deloitte Consulting LLP
David Jarvis, senior manager, Deloitte Services LP
Diana Kearns-Manolatos, senior manager, Deloitte Services LP
Jeff Loucks, managing director, Deloitte Services LP
David Schatsky, managing director, Deloitte LLP
Chris Thomas, principal, Deloitte Consulting LLP

Finance

Bradley Niedzielski, partner, Deloitte & Touche LLP

Risk and Compliance

Alex Brady, principal, Deloitte & Touche LLP
Thomas Nicolosi, principal, Deloitte & Touche LLP
Bob Walley, principal, Deloitte & Touche LLP

Cyber Risk and Financial Crime

Julie Bernard, principal, Deloitte & Touche LLP
Mark Nicholson, principal, Deloitte & Touche LLP
Michael Shepard, principal, Deloitte DTBA
Sir Rob Wainwright, partner, Deloitte Risk Advisory BV

Fintechs and Bigtechs

Irena Gecas-McCarthy, principal, Deloitte & Touche LLP
Monica Lalani, principal, Deloitte & Touche LLP
Richard Rosenthal, principal, Deloitte & Touche LLP

M&A

Maximiliano Bercum, principal, Deloitte Consulting LLP
Liz Fennessey, principal, Deloitte Consulting LLP
Corey Goldblum, principal, Deloitte DTBA
Matt Hutton, partner, Deloitte & Touche LLP
Jason Langan, partner, Deloitte & Touche LLP
Nadia Orawski, principal, Deloitte Consulting LLP

Sustainable Finance

Ricardo Martinez, principal, Deloitte & Touche LLP
Kristen Sullivan, partner, Deloitte & Touche LLP
Hans-Juergen Walter, partner, Deloitte Consulting GmbH

Digital Assets

Linda Pawczuk, principal, Deloitte Consulting LLP
Richard Walker, principal, Deloitte Consulting LLP

About the authors

Mark Shilling | mshilling@deloitte.com

Mark Shilling is a Deloitte vice chairman and leads the Banking & Capital Markets practice in the United States. He is responsible for all industry services, solutions, resources, and ecosystem alliances across Deloitte's business groups. Previously, he was a member of the US and Global Finance Transformation leadership team focused on delivering and advising on large-scale change agenda for the CFO, CRO, and CDO within Financial Services.

Anna Celner | acelner@deloitte.ch

Anna Celner is the Global Banking & Capital Markets practice leader for Deloitte, responsible for setting and executing the global banking strategy. In this role, she leads strategic client portfolio, go-to-market strategy, and the coordination of Deloitte's global network to help banking clients address their strategic priorities and respond to regulatory, technology, and growth challenges.

Contact us

Our insights can help you take advantage of change. If you're looking for fresh ideas to address your challenges, we should talk.

Industry leadership

Mark Shilling
Vice chairman | US Banking & Capital Markets leader | Deloitte LLP
+1 973 602 5218 | mshilling@deloitte.com

Mark Shilling is a Deloitte vice chairman and leads the Banking & Capital Markets practice in the United States.

Anna Celner
Vice chairman and partner | Global Banking & Capital Markets leader | Deloitte AG
+41 (0)58 279 6850 | acelner@deloitte.ch

Anna Celner is the Global Banking & Capital Markets practice leader for Deloitte, responsible for setting and executing the global banking strategy.

US business leaders

Vikram Bhat
Principal | US Banking & Capital Markets Risk & Financial Advisory leader | Deloitte & Touche LLP
+1 973 602 4270 | vbhat@deloitte.com

Vikram Bhat is the US Banking & Capital Markets Risk & Financial Advisory leader and serves as our global financial services industry leader for cybersecurity, technology risk, and governance risk and compliance.

Jason Marmo
Principal | US and Global Banking & Capital Markets Tax leader | Deloitte Tax LLP
+1 212 436 6570 | jmarmo@deloitte.com

Jason Marmo is a principal in the Financial Services practice of Deloitte Tax LLP. He focuses on providing consulting, compliance, and tax accounting services to multinational clients in the financial services industry.

Louis Romeo
Partner | US Audit Banking leader | Deloitte & Touche LLP
+1 212 436 3632 | lromeo@deloitte.com

Louis Romeo has more than 22 years' experience serving clients in banking and capital markets. His experience includes domestic and international banks, broker-dealers, payment processing companies, leasing companies, fintech, and asset securitization vehicles.

Larry Rosenberg
Partner | US Audit & Assurance Capital Markets leader | Deloitte & Touche LLP
+1 212 436 4869 | lrosenberg@deloitte.com

Larry Rosenberg is a partner in Deloitte & Touche LLP's Audit & Assurance practice. He has extensive experience leading global audit engagements for multinational SEC registrants.

Deron Weston
Principal | US Banking & Capital Markets Consulting leader | Deloitte Consulting LLP
+1 404 631 3519 | dweston@deloitte.com

Deron Weston is a principal in the Financial Services Banking & Capital Markets practice with 28 years of retail and commercial banking experience.

The Deloitte Center for Financial Services

Jim Eckenrode
Managing director | Deloitte Center for Financial Services | Deloitte Services LP
+1 617 585 4877 | jeckenrode@deloitte.com

Jim Eckenrode is managing director at the Deloitte Center for Financial Services, responsible for developing and executing Deloitte's research agenda, while providing insights to leading financial institutions on business and technology strategy.

Research leader

Val Srinivas, PhD
Research leader | Deloitte Center for Financial Services | Deloitte Services LP
+1 212 436 3384 | vsrinivas@deloitte.com

Val Srinivas is the banking and capital markets research leader at the Deloitte Center for Financial Services. He leads the development of Deloitte's thought leadership initiatives in the industry, coordinating the various research efforts, and helping to differentiate Deloitte in the marketplace.

Sign up for Deloitte Insights updates at www.deloitte.com/insights.

Follow @DeloitteInsight

Deloitte Insights contributors

Editorial: Karen Edelman, Hannah Bachman, Dilip Poddar, and Rupesh Bhat

Creative: Molly Woodworth, Hazel Raj, and Anoushriya S Rao

Audience development: Hannah Rapp and Nikita Garia

Cover artwork: Willy Sion

About Deloitte Insights

Deloitte Insights publishes original articles, reports and periodicals that provide insights for businesses, the public sector and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders.

Deloitte Insights is an imprint of Deloitte Development LLC.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.