

# RETAIL BANKING

TOP TRENDS 2023



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# FOREWORD

The world economy and banking industry are heading toward uncharted water in 2023 against a backdrop of macroeconomic volatility, inflation, cooling demand, and supply-chain disruptions. However, these disruptions will likely spark a focus on resilience and innovation.

The impact of inflation and the rising cost of living presents an opportunity for banks to demonstrate customer care by leveraging data and offering appropriate, well-timed financial wellness support. Meanwhile, branches are transforming into phygital centers by digitalizing routine services so staff can focus on customer engagement and high-value products. As the world comes to grips with climate change, banks have the power and position to play a crucial role in creating an environmentally sustainable world. Last year, we also recognized widening environmental, social, and corporate governance (ESG) obligations as a key strategic trend.

While 2022 market volatility dulled the luster of some FinTechs, let's not write them off. Agile FinTechs are likely to bounce back vigorously with digital-, cloud-, and customer-centric approaches. Further, incumbents need the expertise of mature FinTechs for technological collaboration, acquisition, and incubation, as they reciprocate with institutional scale and stability.

Given the threat landscape, we emphasized cybersecurity as a prerequisite for banks. And now, digital IDs are incrementally becoming the norm as banks explore ways to protect customer identities online. On the customer-centricity front, the chief marketing officer's role is evolving into that of a chief customer strategist – owning and driving the customer engagement journey.

Speed bumps and fresh prospects are on the 2023 radar screen, with banks facing strategic decisions around rates, modernization, security, and the potential for innovative business models and products.

Our Top Retail Banking Trends 2023 offers insights and next-step examples.



**Anirban Bose**

Financial Services Strategic Business Unit CEO  
& Group Executive Board Member, Capgemini

# INTRODUCTION

The global banking industry is in flux, marked by operational optimization initiatives, digital transformation, and significant macroeconomic headwinds.

## MARKET DYNAMICS

Foreseeable headwinds signal risks and present opportunities as inflation stokes the cost of living worldwide and may necessitate governmental policy actions.

- In Q2 2022, earnings for some of the biggest US banks declined sequentially, both quarter over quarter and year over year, from 2021.<sup>1</sup>
- As equity valuations decreased, market activity (including M&A and IPOs) slowed. Additionally, geopolitical uncertainty inflamed markets to fuel a surge in commodity prices.
- According to a World Bank study, the world seems headed toward a global recession in 2023 as central banks try to control inflation through interest rate hikes.<sup>2</sup>
- In Europe, rising interest rates and a subsequent increase in net interest income, topping 12%, drove robust H1 2022 growth for EU banks.<sup>3</sup> However, recessionary trends may portend weakened credit demand: the net income of the top 20 European banks fell by 9% year over year, primarily due to a 40% hike in loan losses. Additionally, operational costs grew by more than 8.5%.<sup>4</sup>
- Oxford Economics suggests UK inflation may peak at 10.5% in January 2023 and average 5.4% over the year.<sup>5</sup>

## CUSTOMER ENGAGEMENT AND EXPERIENCE

With a continued focus on customer centricity, experiential banking is gaining ground.

- Although many banks continue to optimize branch network size, they are also transforming brick-and-mortar facilities into “experience centers” – to help the shift from transactional relationships to digital connectedness that creates truly meaningful customer engagement.
- Financial institutions (FIs) are retaining physical distribution to stay competitive. As a result, banks continue to modernize existing locations selectively.
- Retail banks and FinTechs will continue to collaborate to overcome business model gaps while competing in areas of mutual strength, which may encourage incumbents to make strategic acquisitions and invest in mature FinTechs.

## LOOKING BACK AT 2022

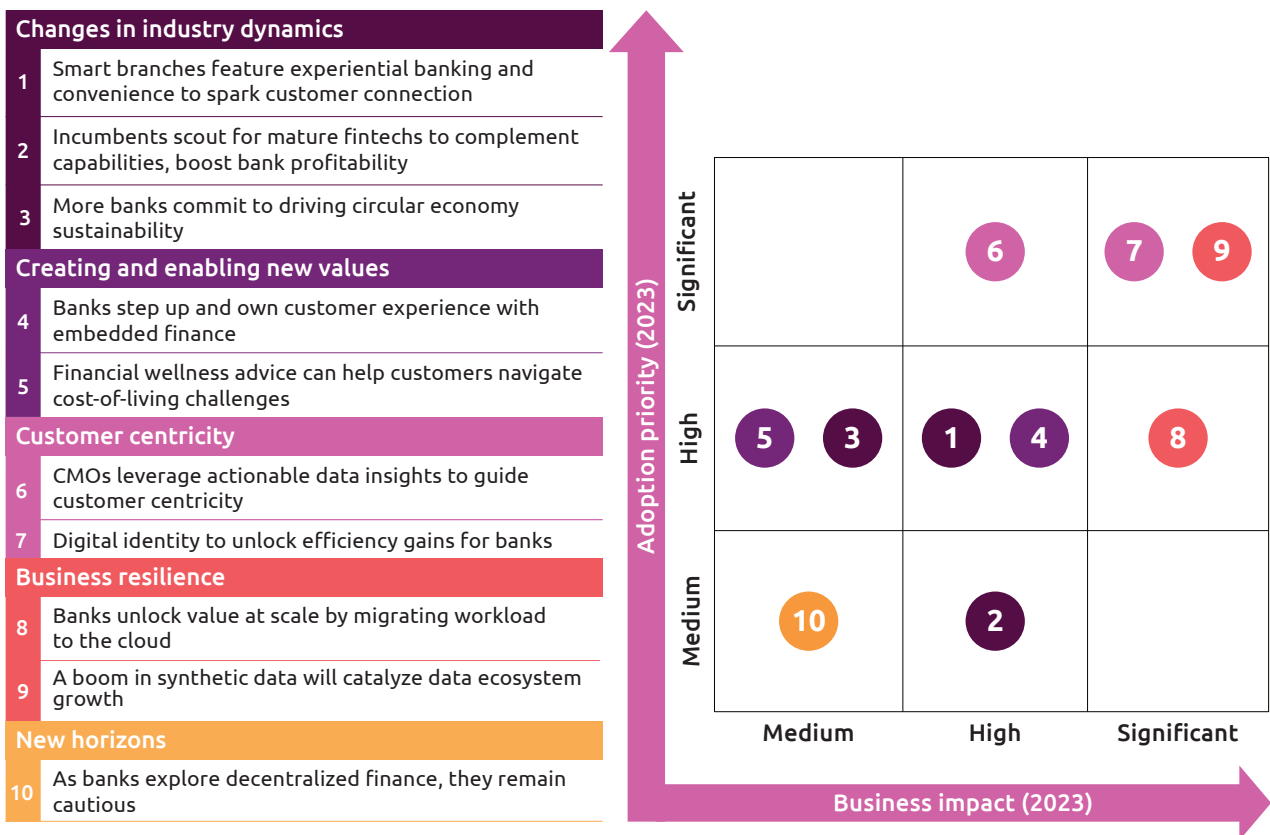
- Let’s quickly recap our Retail Banking trends for 2022 and review our projections. A year ago, we said cloud computing initiatives were here to stay. And now, banks are carefully migrating mission-critical data to the cloud to reap its full benefits. We were also right about the trajectory of decentralized finance (DeFi) in 2022: We are witnessing cautious but strategic move towards institutional DeFi solutions. Meanwhile, new-age FinTechs are reeling under due to persistent funding winter and falling valuations. We expect incumbents to step-up their chase for attractive FinTechs to plug their business model and product gaps.
- All in all, we expect 40% of the trends that we discussed last year to remain prominent in 2023 as well, while another 60% new trends that will shape the banking landscape in immediate short-term.
- Significant macroeconomic headwinds, specialized talent searches, and ongoing operational optimization and digital transformation set the stage for 2023 trends. As a result, we believe continuing focus on reimagining brick-and-mortar branches for experiential banking, tackle new revenue initiatives, and guide customers through financial wellness guidance and education.

## TOP TRENDS FOR 2023

We based our 2023 retail banking trends on analysis across five broad themes.

- **Changes in industry dynamics** examines how smart branches offer customer convenience and connectedness via experiential banking, and retail banks’ pursuit of FinTech acquisition opportunities to bolster capabilities.
- **Creating and enabling new values** includes retail banks spearheading green and sustainable practices, and how banks that offer financial wellness advice can help customers handle cost-of-living challenges and boost loyalty.
- **Customer centricity** covers how bank chief marketing officers (CMOs) orchestrate customer experience (CX), supported by advanced data analytics that offer access to actionable insights to improve customer engagement.
- **Business resilience** delves into Digital ID’s evolution into a universal, multi-purpose identification system, and how banks benefit from migrating data to the cloud.
- **New horizons** looks at the role of retail banks in stabilizing the high-risk decentralized finance (DeFi) market.

Exhibit: Top trends in retail banking 2023 – Priority matrix



Source: Capgemini Research Institute for Financial Services Analysis, 2022

The matrix represents Capgemini's view of a retail banking operating environment coping with:

- Rising inflation and interest rates coupled with stagflation trends
- Operational disruption due to geopolitical instability
- Brisk competition and increased focus on customer centricity to hedge against advances from new-age players
- Operational cost overruns and high capital lock-in
- Dynamic regulations and compliance mandates.

**Priority of adoption** refers to the urgency of adopting a particular trend to maximize value creation in 2023 due to its importance to the sector.

**Business impact** represents the effect of a trend on retail banking business in 2023 concerning customer experience (CX), operational excellence, regulatory compliance, or profitability.

Circumstances vary for each firm depending on business priorities, geographical locations, and several other factors. For further information, please don't hesitate to reach out to us at [banking@capgemini.com](mailto:banking@capgemini.com).



## TREND 1

# SMART BRANCHES FEATURE EXPERIENTIAL BANKING AND CONVENIENCE TO SPARK CUSTOMER CONNECTION

Transforming branches to experience centers helps banks shift from transactional relationships to digital connectedness that creates meaningful customer engagement.

## CONTEXT

Historically, retail banks created a robust network of branches to extend reach and brand strength. However, digital adoption increased exponentially as the pandemic triggered demand for contactless services, and digital-first FinTech firms rose to the occasion by offering customers and staff convenience and safety.

- Although branch closures are not new, they surged as consumers switched to online channels during COVID-19, and banks faced mounting pressure to reduce operational costs.
- Closures can affect vulnerable populations – a concern that governments and regulators share.
  - » In the United States, the Federal Reserve’s Community Reinvestment Act (CRA) beefed up scrutiny of planned branch closures in 2022 to ensure at-risk communities maintained access to banking.<sup>6</sup>
  - » The Spanish Senate is investigating complaints and reports about the declining presence of bank branches and ATMs in rural areas of Spain. In 2022, more than half (54.5%) of municipalities in Spain no longer had a bank branch, according to Banco de España.<sup>7</sup> Similar trends exist across numerous global markets.
- Banks are steadily strategizing smart branch networks to optimize customer relationships and costs, while ensuring convenient access to in-person banking in all neighborhoods.

## CATALYSTS

The European Central Bank reported that European banks’ cost-to-income ratio (CIR) in H1 2022 hovered above 60%.<sup>8</sup> Meanwhile, US banks J. P. Morgan, Citibank, Morgan Stanley, Goldman Sachs, and Wells Fargo – also reported CIR above that same benchmark.<sup>9</sup> A lower CIR indicates that a bank is spending less to generate every dollar of income.

- Branches are among banks’ most significant expenses. According to a Nasdaq report, setting up a full-service office facility (excluding land) can cost upwards of USD1.5 million in the United States, with an annual operating cost of almost USD1 million per branch. Most struggle to break even or turn a profit.<sup>10</sup>
- As labor costs across Europe and the United States rise, branch operations will remain pricey for banks. Moreover, overhead incurred by moving cash between branch networks and other maintenance activities further erode margins.
- While customer attitudes about banking are changing, branches are still relevant. The [World Retail Banking Report 2022](#) found that 75% of customers believe branches are an important channel.
  - » As part of the report’s customer survey, consumers said they want more than transactional deposits and withdrawals from their branch experience. For example, 64% said they want self-service options, 44% seek an extended workplace at their branch, and 31% expressed interest in a more immersive (AR/VR) experience.
  - » In addition, almost half of the surveyed customers said they want lifestyle products and offerings available at their branch.
- Meeting customer demands will require banks to transform branches while balancing business volume with value delivered.

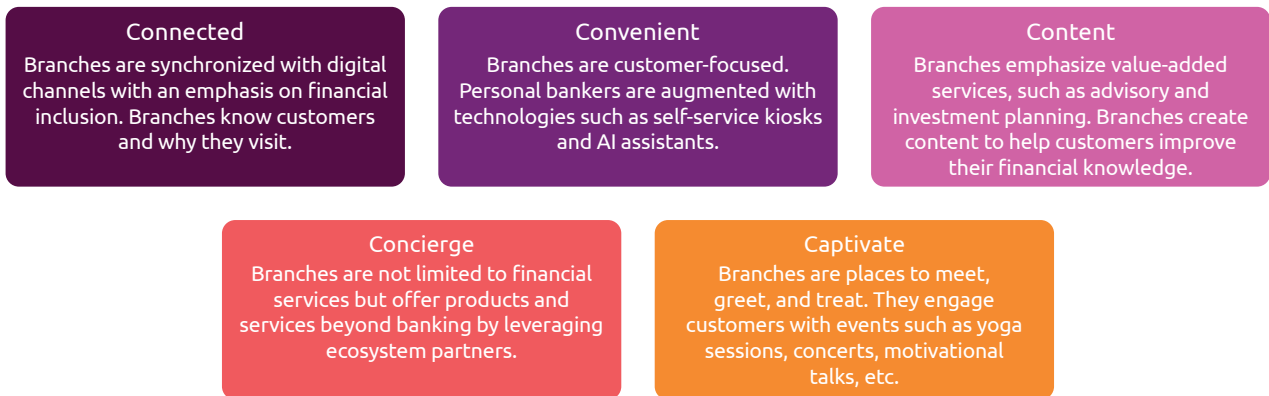
## IN A NUTSHELL

[World Retail Banking Report 2022](#) analysis also found that customers already access banking services through a wide range of channels – from branches, websites, and mobile apps to voice assistants and wearables. Yet almost half of customers say they face friction when interacting with their bank.



- Why? Without an omnichannel strategy, bank channels may operate within silos and not share information. While websites, mobile apps, voice assistants, and wearables are digital and can remain connected, branches are often out of the loop. Strategically developed smart branches can offer customers a comprehensive omnichannel experience.
- Branches that feature integrated customer relationship management platforms can sync with other digital channels and back-office operations to provide instant customer insights and personalized service. Actionable insights can spark faster customer acquisition and product origination, improving banks' overall service-to-sales conversion.
- Smart branches act as experience centers, creating an interactive space to connect with customers. BBVA, Bank of Montreal (BMO), and Capital One have all launched smart branch formats over the last five to seven years.
  - » Capital One launched *Banking Café*, its first smart branch, in 2015, and by 2022 had opened 50.<sup>11</sup> The cafés offer Wi-Fi, discounted refreshments, workspaces, and financial wellness advice.<sup>12</sup>
  - » UnionBank of the Philippines launched the country's first fully digital bank branch, where customers can access the internet or chat with the staff over a cup of coffee. The bank aims to transform its branches from transactional to interactional spaces.<sup>13</sup>
  - » In Italy, Banca Carige launched three smart branches in 2021. Staff underwent training to transition from selling banking products to advising customers about value-added services. Banca Carige's smart branches feature 24/7 self-service options, a reception area for assisted services, a self-service area for value-added services, and a space to use video conferencing and other tools. The smart branch format helped the bank reduce operating costs by 40%.<sup>14</sup>
  - » Bank of America is redesigning 50% of its branch network to meet changing customer expectations. And JPMorgan Chase plans to open 400 community center branches to cover nearly 93% of the US population through its Chase footprint.<sup>15</sup>

Figure 1. The five Cs of a superior smart branch experience



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

In light of the push to customer centricity and omnichannel experiences, more banks will continue and evolve the trend to transform branches from transaction centers to experience centers. Smart branches can generate long-term strategic value by building brand awareness among digital customers while creating a market presence in the real world. Redesigned branches will feature streamlined layouts, more digital and self-service tools, and rationalized human-driven (teller) activities to boost effectiveness through cost savings and increased sales. Smart branches can attract, activate, engage, and retain customers to bolster lifetime value.

With opportunities to cross-sell, up-sell, and cultivate a hybrid customer base (baby boomers, GenX, millennials, and Gen Z), branches can improve intermediation efficiency\* and turn profitable faster – a significant win considering that traditional full-service branches can take up to 10 years to break even.



***As we move into the future, striking the right balance between physical presence in branch offices and digital channels is essential for acquiring customers or selling products. With physical footfall declining, branches as advisory centers, will cater to those customer needs where personalized interaction is required and valued.”***

**Markus J. Locher**

Managing Director, Head Digital Banking,  
Credit Suisse, Zürich

\***Intermediation efficiency** is measured by a branch’s ability to leverage input (labor, operational costs) to generate output (loans, deposits).



## TREND 2

# INCUMBENTS SCOUT FOR MATURE FINTECHS TO COMPLEMENT CAPABILITIES AND BOOST BANK PROFITABILITY

Declining FinTech valuations make them attractive candidates for banks seeking purpose-driven acquisitions and partnerships.

## CONTEXT

Diminishing venture capital funding and market disruption are creating challenges for FinTech firms. As a result, challengers and digital banks exited key markets while investors grew skittish.<sup>16</sup>

- Over the last decade, startups received USD1.3 trillion in funding. However, in Q1 2022, VC investment in consumer finance and financial services FinTechs declined by nearly 41% and 73%, respectively.<sup>17</sup>
- Affirm, which debuted at USD49.00 per share, traded at USD22.30 in September 2022.<sup>18</sup> In another example, Swedish FinTech Klarna said it raised USD800 million in fresh funding from investors at a USD6.7 billion valuation — down sharply from the USD45.6 billion value it secured in a 2021 cash injection led by Japan's SoftBank.<sup>19</sup>

## CATALYSTS

The 2018-2021 FinTech wave forced incumbents to enhance their digital capabilities. As a result, traditional banks are investing in multi-year digital transformation to offer FinTech-like services.

- Italian bank Intesa Sanpaolo provisioned EUR1-1.5 billion for IT infrastructure. HSBC, J.P. Morgan, Bank of America, Morgan Stanley, and Royal Bank of Canada have also made significant digital commitments to gain competitive advantage.<sup>20</sup> Truist Financial built a 100,000-square-foot, state-of-the-art US Innovation & Technology Center in North Carolina, and Toronto's TD Bank launched the TD Workshop in Philadelphia to test new ideas.<sup>21</sup>
  - » Banks are learning that lengthy, drawn-out transformations can negatively impact speed to market—and accommodating change during this time may lead to delays and budget overruns.
  - » However, as FinTech valuations dip, a pipeline of programmatic M&A\* becomes available. As a result, banks can strategically plan FinTech mergers, acquisitions, and partnerships to systematically build new business models, services, or capabilities that align with their current and long-term vision.

## IN A NUTSHELL

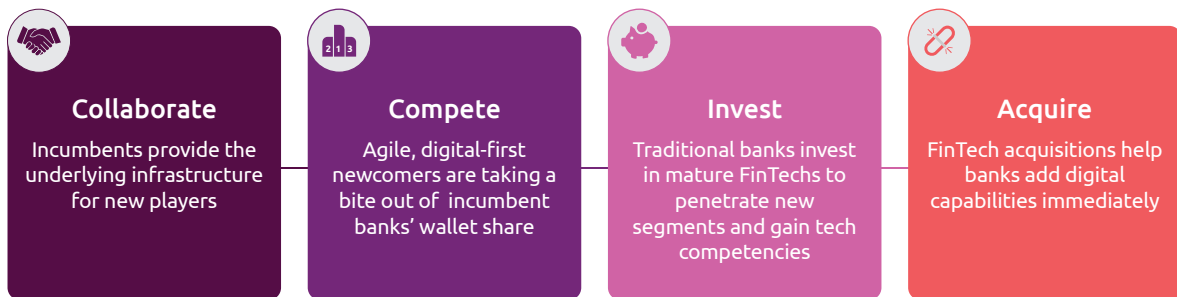
Retail banks and FinTechs collaborate to overcome business model gaps while competing in areas of mutual strength, which may encourage banks to make strategic acquisitions. Incumbents also invest in mature FinTechs to explore uncharted markets.

- In 2022 seven bank/FinTech M&As were made. BNP Paribas, UBS, Veritex, and Western Alliance Bancorp were among the acquirers according to a report from S&P Global Market Intelligence. One of the most high-profile acquisitions was UBS's USD1.4-billion all-cash deal for automated wealth management provider Wealthfront: the acquisition helps UBS accelerate its US growth, broaden its reach among affluent investors, and expand its distribution capabilities.<sup>22</sup>
- Banks contribute a small but significant percentage of overall FinTech M&A activity. For example, in 2021, there were eight buy-side bank deals. Deal values are often low because most banks shop primarily to fill gaps in offerings.<sup>23</sup> In July 2022, the Lloyds Banking Group CEO hinted that the bank would continue to look for potential FinTech acquisitions and partnerships that offer robust bolt-on features.<sup>24</sup>

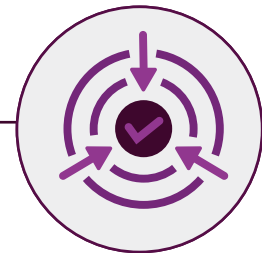
\* **Programmatic M&As** are a succession of small to mid-size deals made in pursuit of a distinctive capability or business model expansion.

- FinTechs with a healthy customer base and niche market position – that struggle to generate favorable (or profitable) unit economics – are potential acquisition targets because they can help incumbents build new value propositions, develop cross-sell opportunities, and provide an active customer base. In the United States, Fifth Third Bank acquired FinTechs, Provide in 2021 (healthcare), and Dividend Finance (sustainability) in 2022. Both new-age players help the bank boost lending volumes in fast-growing niche segments.<sup>25, 26</sup>
- Retail banks are also getting involved as investors and incubators.
  - » Spain's BBVA bank invested USD300 million in Brazilian bank Neon. It also invested in Atom Bank in the UK and Solarisbank in Germany to accelerate its digital journey. In addition, US banking holding company Truist invests in FinTechs such as Veem, a payment network startup, through its VC company Truist Ventures.<sup>27</sup>
  - » Lloyds Bank entered a strategic partnership with FinTech Bink, a loyalty specialist, to offer retail banking customers loyalty programs.<sup>28</sup> In addition, BNP Paribas partnered with SuperTech and Bruntwood SciTech to create an incubator to fast-track FinTech startups.<sup>29</sup>

Figure 2. Dimensions and dynamics of traditional bank and FinTech relationships



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

We anticipate that higher interest rates and bank exits from non-core markets and product lines will provide additional earnings and a capital buffer that firms can funnel toward programmatic M&A in 2023. Moreover, FinTech deals offer access to talent, technology, new product segments, and active customer bases. Bank-to-bank mergers and acquisitions are often time-consuming because of complex regulatory reviews; but FinTech deals are relatively quick and pose fewer post-acquisition challenges (such as tech integration). Therefore, as the global economy remains volatile, FinTech deals can bolster resilience and long-term growth for retail banks.

## TREND 3

# MORE BANKS COMMIT TO DRIVING CIRCULAR ECONOMY SUSTAINABILITY

More and more retail banks are building a high-profile sustainability presence by promoting green business practices, processes, and digital finance.

## CONTEXT

With an eye on reducing environmental damage, pollution, and waste – and with a commitment to building climate change resilience – banks are steadily positioning themselves as a strategic lever that can make a significant impact in accelerating the transition to a circular economy.\* According to the World Bank Group, there is an urgent need to move from a take, use, and waste linear economy to a regenerative reduce, reuse, and recycle circular economy.<sup>30</sup>

- The World Economic Forum reports that linear production and consumption of goods and services is a climate change root cause. Therefore, transitioning to a circular economy is critical to long-term sustainability. A circular economy reduces greenhouse gas emissions, reduces environmental pressures, improves raw material security, stimulates innovation, and boosts economic growth – an opportunity to unlock USD4.5 trillion in additional economic output by 2030.<sup>31</sup>
- Rising waste levels go hand in hand with rapid consumption: ultimately, >90% of all materials extracted and used are wasted. Conversely, only 8.6% make it back into the global economy. Global circularity shrank from 9.1% in 2018 to 8.6% in 2020, the Circularity Gap Report found.<sup>32</sup>

## CATALYSTS

For many banks, mounting pressure from customers, shareholders, climate activists, and regulators drives climate initiatives. As a result, numerous financial institutions have committed to green initiatives to control their business-process carbon footprints.

- According to the United Nations' environmental 2021 Collective Progress Report, 94% of banks said sustainability was a strategic priority.<sup>33</sup> Additionally, banks publish ESG reports in which they outline their green initiatives and banking business practices.
- The US Securities and Exchange Commission requires disclosure of the carbon emissions of projects that are to be financed. Therefore, US banks must consider credit and climate risks before granting a loan.<sup>34</sup>
- Demand is up for sustainable practices and products as green consumerism and consciousness rise. More than half of global consumers rank sustainability as a top purchase decision factor, according to estimates from a Simon Kucher & Partners study.<sup>35</sup> The study also suggests that 39% of Generation Z and 42% of millennials are willing to pay a premium for sustainable products and services.

## IN A NUTSHELL

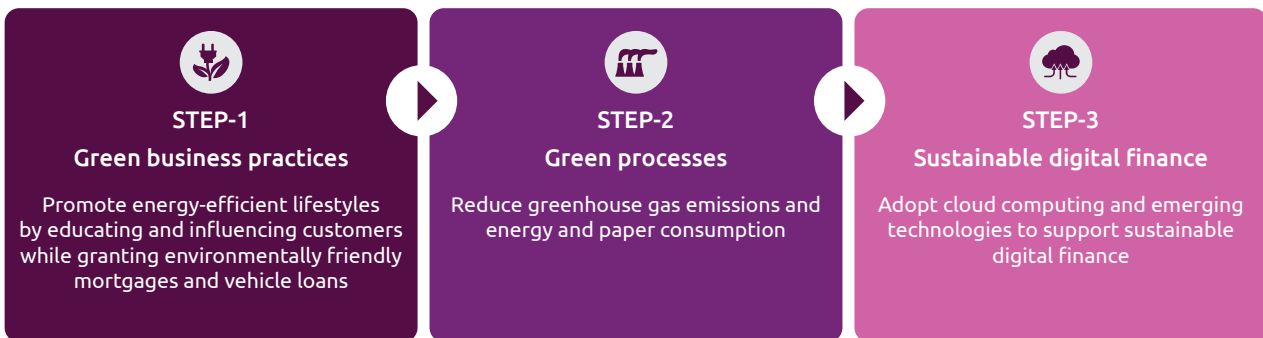
Banks that pivot to eco-friendly products and practices can help to enable sustainable consumer lifestyles.

- Recent success stories include:
  - » Lloyds Bank's auto loan division, Lex Autolease, and UK motor finance company Black Horse have underwritten more than a million e-vehicles in the United Kingdom.<sup>36</sup> Similarly, in Spain, BBVA launched long-duration, low-interest rate green car vehicle loans (covering electric and hybrid vehicles) with zero processing fees.<sup>37</sup>
  - » HSBC offers green mortgage loans in the UAE with fixed and variable interest rates; the green loans are available to customers who purchase property built according to energy efficiency and eco-friendly standards.<sup>38</sup>
  - » Italy's Intesa Sanpaolo focuses on innovating financial products, credit policies, and lending strategies while exploring the integration of circular economy practices into risk assessment models.<sup>39</sup>
  - » DBS launched LiveBetter, a one-stop digital platform to help consumers access eco-friendly tips, donate to green causes, and invest in sustainable funds.<sup>40</sup>

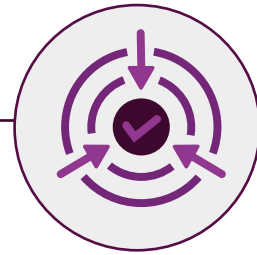
\***Circular economy** is a production and consumption model that involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

- Banks are also reducing their organizational carbon footprint by revamping business processes:
  - » In 2021, British bank NatWest reduced its direct operational emissions by 46% against a 2019 baseline that included COVID-19-related impact. It further reduced paper consumption by 65% and carbon emissions by 46%, against a 2019 baseline.<sup>41</sup>
  - » Barclays registered an 86% greenhouse gas (GHG) emission reduction in 2021 and shifted to a 94% renewable electricity model. It also reported carbon-neutral business travel emissions since 2020.<sup>42</sup>
- Banks are pursuing green IT initiatives to realize potential benefits:
  - » Cloud computing helps reduce energy consumption and CO2 emissions. For example, Spanish multinational bank Santander reported that its cloud program reduced IT energy consumption by 70%.<sup>43</sup>
  - » Artificial intelligence (AI), blockchain, and Internet of Things (IoT) technologies are crucial in promoting sustainable finance. For example, AI can help automate resource recycling, 3D printing can save materials, and IoT offers real-time data on assets' carbon footprints.
- Banks are also forging partnerships and acquiring FinTechs to bolster green banking efforts:
  - » Estimates say more than 90 active green FinTechs operate in Europe alone.<sup>44</sup> Therefore, banks can make purpose-driven acquisitions and nurture partnerships to build green portfolios.
  - » The trend is not limited to large banks. Sustainability-focused credit unions are acquiring or partnering with FinTechs to offer eco-friendly products in the United States. Frontrunners include Climate First Bancorp, Clean Energy Credit Union, Fifth Third Bancorp, and Teachers Federal Credit Union.<sup>45</sup>
  - » NatWest partnered with the open banking platform Tink and sustainability FinTech CoGo to provide customers with personalized carbon footprint tracking analysis. Using CoGo's sustainability data and behavioral science and Tink's money management data, the bank's more than eight million customers can receive a personalized carbon footprint analysis.<sup>46</sup>

**Figure 3. Three ways banks can assess climate impact**



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

Banks active in enabling the circular economy will underpin global decarbonization. Why? Households, corporations, small-to-medium businesses, and governments aiming for net-zero carbon emissions require green financial products and services. For example, the United States passed the Inflation Reduction Act in 2022 to create a USD27 billion Green Bank fund to support national and local financial institutions dedicated to sustainable practices and clean energy.<sup>47</sup>

Green banking stimulates innovation and helps create new value streams: for instance, the range of sustainability-linked debt products grew more than 300% between 2017 and 2020 across sectors. Moreover, green banking limits banks' ESG-risk exposure. In the EU alone, 15% of bank balance sheets are at risk due to climate change; green banking initiatives reduce non-performing asset (NPA) volume and boost bank profitability.<sup>48</sup>

In response to rising green consumerism, banks will work to maintain their market reputation in 2023 and beyond by sponsoring and building effective ESG strategies. Anything less may risk reputational damage and reduced public trust.





## TREND 4

# BANKS STEP UP AND OWN CUSTOMER EXPERIENCE WITH EMBEDDED FINANCE

Bank-owned BaaS platforms help put incumbents in the driver's seat and establish relationships with end customers through embedded finance

## CONTEXT

In a traditional embedded finance value chain, banks are the service providers, dependent on a FinTech to access the BaaS platform (called BaaS enablers), and a distributor (FinTech or non-banking firm) that is consumer-facing. The value chain could become even longer if the distributor FinTech further uses its platform to offer embedded finance to third parties.

- A long value chain keeps banks distant from the end consumer, with less access to valuable consumer data and little to no ownership of CX. At the same time, banks are responsible for risk management (financial, third-party, and conduct risks) arising from a long chain of partnerships. Although this model helps to diversify banking revenues, in the long term banks may become an invisible rail with commoditized offerings.
- Jupiter Intelligence expects BaaS revenue to increase by USD27 billion by 2027 – up 240% from USD11 billion in 2022.<sup>49</sup> Therefore, it is in banks' best interests to increasingly penetrate the embedded finance market by building in-house BaaS capabilities.

## CATALYSTS

Incumbent banks struggle with legacy systems and data silos, forcing them to rely on third parties for platforms. However, rising cloud maturity and improving data capabilities are helping banks steadily build in-house platform capabilities. Moreover, purpose-driven acquisitions (as discussed in previous trends) can further bolster the tech readiness of incumbents, along with the growing availability of APIs.

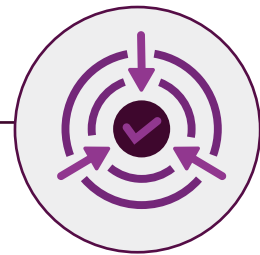
- Traditionally, banks have invested heavily in building internal APIs to improve their systems. However, the focus is shifting to external APIs that can embed banking in third-party ecosystems.
- Increasing cloud adoption and external APIs give banks the flexibility to build composable architecture, which allows them to quickly assemble and re-assemble products and services to meet the expectations of non-FS firms.

## IN A NUTSHELL

Banks are stepping into the role of BaaS enablers (FinTechs that provide platform infrastructure) and getting closer to end consumers. Examples are proliferating worldwide.

- European BaaS provider and enabler Raisin Bank leveraged the cloud to significantly increase its development speed for new products, services, and features. The new cloud-native composable BaaS platform will help Raisin automate complex processes, increase onboarding efficiency, improve credit decision engines, and enable real-time notifications.<sup>50</sup>
- HSBC rolled out its own BaaS platform, NetSuite, to offer embedded services that allow clients to embed international payments and automate accounts payables, receivables, and reconciliation processes.<sup>51</sup>
- Goldman Sachs initially launched its Transaction Banking (TxB) platform in 2020. Since then, the US bank has bolstered its in-house tech capabilities to scale its BaaS platform reach to the UK and Europe. TxB provides a cloud-based global platform to serve clients' treasury needs, including deposits and payments, in more than 160 countries and 120 currencies, offering account visibility, payments, and liquidity positions.<sup>52</sup>
- Standard Chartered launched its BaaS platform, Nexus, in 2021 and partnered with Indonesian e-commerce company Bukalapak to deliver embedded banking solutions to 6.8 million merchants. In September 2022, the partners launched BukaTabungan, a digital banking service that leverages the reach of Bukalapak's all-commerce platform and Nexus BaaS technology. BukaTabungan is offered as a service within Bukalapak's platform to provide banking services that are inclusive, easy, and secure to Bukalapak's ecosystem of over 110 million users and 20 million business owners, enhanced by a completely digital, non-face-to-face onboarding experience.<sup>53</sup>

- Swedish SEB Bank launched an in-house BaaS platform, SEBx, to provide embedded banking services to clients. The bank's first client, Sweden's Axel Johnson Group, will embed payment and loyalty offerings within its retail space.<sup>54</sup>
- Building in-house BaaS capabilities will also help banks embed financial services in customers' life journeys, including mobility, home purchases, small business ecosystems, and more. For instance, Santander launched My Home Manager, a home ecosystem proposition for customers seeking to purchase a home. The app offers embedded insurance and financial services and a partner ecosystem that offers various home-related services. The app operates in nearly 10 markets.<sup>55</sup>



## IMPACT

We anticipate that more banks will add BaaS capabilities to their balance sheets. As the World Retail Banking Report 2021 mentioned, 38% of banks used in-house BaaS capabilities, while another 16% were developing BaaS capabilities for market launch. By owning a BaaS platform, banks can directly connect with end clients – leading to faster and higher revenue recognition and more cross-industry data access. Moreover, in-house BaaS capabilities allow banks to monetize their IT assets (core banking functionalities) through revenue-sharing partnerships with non-FS firms.

It won't be long before non-FS firms embed financial products within their value propositions. However, the trend will require greater bank resilience and the capability to provide secure financial services anytime, anywhere. In addition, a more direct partnership between banks as BaaS providers and enablers will ensure robust operational stability with a higher degree of flexibility to personalize banking products for the needs of end consumers.



***The key question incumbents must ask themselves is whether banking is a destination or an enabler. As an enabler, banks can go beyond their products/services and embed themselves within customer lives, paving the way for ecosystem banking."***

**Christopher Young**

Director, Financial Services Industry Strategy, Adobe, US

## TREND 5

# FINANCIAL WELLNESS ADVICE CAN HELP CUSTOMERS NAVIGATE COST-OF-LIVING CHALLENGES

Bank customers worldwide seek advice and support tools to help ride out inflation and cost-of-living challenges.

## CONTEXT

Rising inflation and a volatile global economy create overall cost-of-living obstacles for individuals, corporations, and governments.

- As more US families live paycheck to paycheck, US credit card balances increased USD46 billion in Q2 2022, up 5.5% from the first quarter, and new credit card accounts ticked upward, too. The 13% year-over-year increase was the most significant jump in more than 20 years.<sup>56</sup>
- Similarly, nearly half of the 19 eurozone countries recorded double-digit annual inflation in mid-2022. Overall, eurozone inflation was at 8.6%.<sup>57</sup>
- In the UK, the poorest households risk spending almost half of their disposable income on gas and electricity bills this winter (2022/2023) despite a governmental energy price guarantee, according to The Progressive Economy Forum (PEF).<sup>58</sup> Meanwhile, Oxford Economics suggests inflation in the United Kingdom may peak at 10.5% in January 2023 and average 5.4% over the year.<sup>59</sup>
- The International Monetary Fund (IMF) expects 3.2% world economic growth in 2022, slowing to 2.9% in 2023. A July 2022 IMF forecast estimated annual inflation to reach 6.6% in advanced economies and 9.5% in emerging markets and developing economies.<sup>60</sup>
- A large segment of the global population lacks money management skills and knowledge about personal finances. Banks can provide personalized financial assistance to help customers navigate uncertain times.

## CATALYSTS

Cost of living challenges drive demand for contextual financial wellness advice integrated into customers' everyday financial lives, yet banks struggle to deliver.

- A study of 5,000 banking customers worldwide by financial services data specialist Personetics found that cost-of-living hikes affected 93% of respondents. And more than 63% said their banks did not offer money management advice during the last three months; as a result, customers said they might switch to competitive FIs.
- The 2022 J.D. Power Retail Banking Satisfaction survey revealed that 44% of US banks support customers during financial hardship. Meanwhile, about 63% of US customers said they would switch banks if they were not supported, while 78% said they would stay if they received support.<sup>61</sup>

## IN A NUTSHELL

Thanks to the increased availability of customer data, banks can use it to develop hyper-personalized financial wellness products. Many leading firms leverage data analytics and AI to boost customer loyalty and lifetime value.

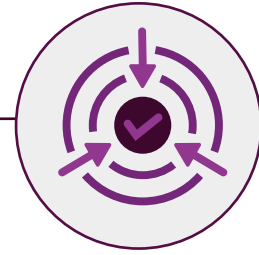
- Spanish multinational financial services company BBVA leverages data analytics to provide personalized insights and offer customized solutions. BBVA reported that between January and November 2021, it generated 12% of its digital channel sales in Spain from its financial health tools.<sup>62</sup> Further, BBVA's mobile app facilitates customers to analyze their spending and reach their financial goals. It offers alerts, personalized guidance, and automatic transfer of savings to their accounts.<sup>63</sup>
- Banks are gradually positioning themselves to promote customers' financial wellness. From awareness programs to calculators and planning budgets, loans, savings, and retirement, banks can help in multiple ways.

- » Bank of America built an omnichannel platform for its 67 million customers to help them set goals, track progress, and get financial answers. It offers customers simple and transparent products, high levels of personalization, financial education, and staff support.<sup>64</sup>
- » In the northeast United States, Berkshire Bank's MyBanker app helps customers achieve short and long-term goals. Berkshire partner GreenPath Financial Wellness offers debt management, foreclosure prevention, and student loan repayment tips. Moreover, Berkshire provides customers with mortgage and loan calculators, retirement planners, and savings calculators.<sup>65</sup>
- » Barclays introduced the "Money Worries Hub," which offers mentoring sessions and publishes money management articles on its dedicated cost-of-living site.<sup>66</sup>
- » Australian FinTech Douough offers a subscription-based financial wellness platform that helps customers manage money, pay off debt, save, and manage wealth by linking bank/investment accounts with their debit card(s). Features include automatic spending categorization that can help in budgeting and virtual "jars" that allocate money to savings, bills, or a personal or rainy day fund.<sup>67</sup>
- » UK-based Pockit offers pre-paid spending cards allowing customers to make transfers and pay bills. It focuses on the unbanked, underserved, and low-income communities and serves over 700,000 customers.<sup>68</sup>
- Retail banks are also exploring FinTech partnerships to augment their financial wellness offerings.
  - » Sunrise Banks caters to low-to-moderate-income communities surrounding St. Paul, Minnesota, in the United States, and positions financial wellness and inclusivity at the heart of its operation. Through FinTech partnerships, Sunrise provides banking and regulatory infrastructure while FinTech specialists complement the effort with digital capabilities. The US Treasury allocated USD45million to Sunrise Banks to support economic development in low-income communities in Minnesota.<sup>69</sup>
  - » US-based Truist Financial Corporation acquired gamified finance mobile app Long Game, which uses prize-linked savings and casual gaming to encourage savings. Truist will leverage the new capabilities for customer acquisition and cross-selling opportunities.<sup>70</sup>
  - » NatWest acquired London-based FinTech RoosterMoney in 2021 as part of its strategy to help families and children, aged four to 17, efficiently manage finances. NatWest aims to help young people develop money management skills – earning, saving, giving, and spending.<sup>71</sup>

**Figure 4. Banks can play a critical advisory role in financial wellness**



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

As inflation and cost-of-living pressures push more consumers to seek financial wellness advice in 2023, banks will play a critical role by leveraging technology and customer insights to offer advice and education. As a result, the financial wellness advisory trend is on its way to becoming a differentiator for retail banks. Firms that personalize customer journeys to focus on monetary well-being will cultivate meaningful engagements, spark cross-sell and up-sell opportunities, and reduce customer churn.



## TREND 6

# CMOs LEVERAGE ACTIONABLE DATA INSIGHTS TO GUIDE CUSTOMER CENTRICITY

Today's Chief Marketing Officers and bank stakeholders mine digital customer data to gain actionable insights and create superior customer experience (CX) that fuels new revenue opportunities and strategic growth.

## CONTEXT

Marketing is no longer considered a standalone function. Instead, today's marketing executives connect with all bank departments and business units to create an integrated strategy and deliver exceptional CX while driving value.

- Retail banks entrust marketers to design innovative, personalized CX. Often masters of multiple disciplines, CMO personas manage numerous streams, including budgets, ROI, product development, and martech oversight.
- The CMO's focus is shifting from supporting transactional banking to creating interactional and experiential journeys.

## CATALYSTS

Large banks organized within functional silos can face process and data redundancies that interrupt customer journeys and marginalize customer experience. An intra-functional command center can guide customer journeys 24/7 with precision.

- The [World Retail Banking Report 2022](#) found that more than 80% of banks globally do not identify new customer segments. And nearly one in two firms struggles to offer seamless onboarding and personalized CX: banks may consider onboarding and personalization as two disparate activities managed by two separate units. However, for customers, it is part of their overall journey, and so banks need a custodian of end-to-end CX.
- As banks task marketing executives with managing customer experience, they need to arm marketers with the power of advanced analytics and technology. Successful CMOs collaborate with internal C-level stakeholders to orchestrate end-to-end customer journeys.

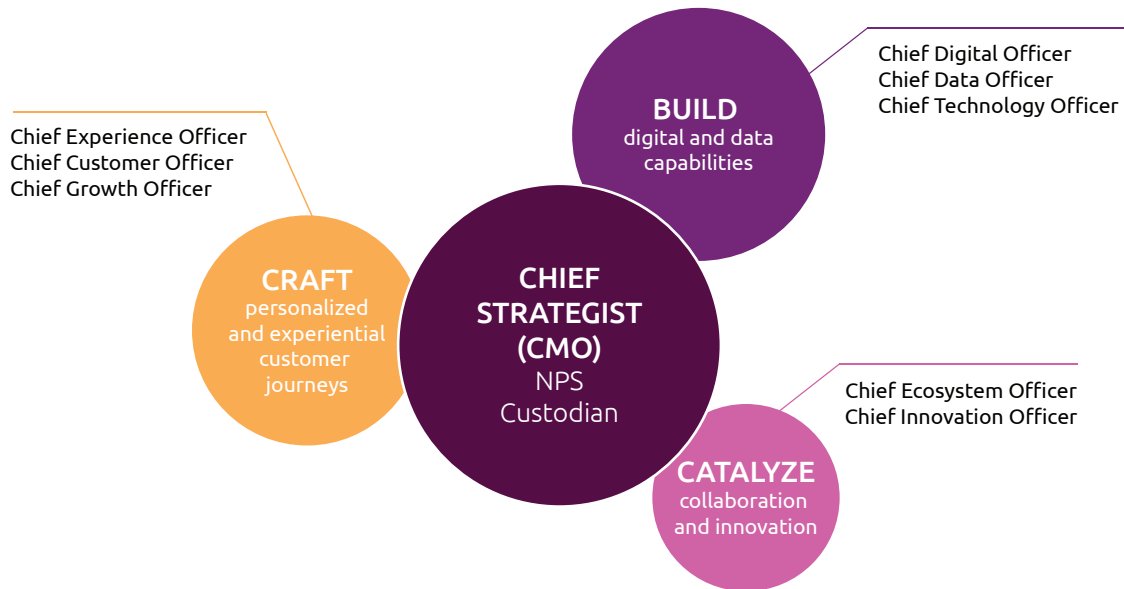
## IN A NUTSHELL

Marketing leadership roles are evolving with additional assigned responsibilities, and today's bank CMO persona may be known as Chief Digital Officer, Chief Experience Officer, Chief Growth Officer, or Chief Commercial Officer. Among CMOs surveyed for the [World Retail Banking Report 2022](#), 34% said they directly manage marketing analytics, and 26% said they oversee digital partnerships. In addition, about 74% said they have direct responsibility for innovative marketing strategies and planning, and 22% directly manage end-to-end customer experiences or have access to complete customer profiles.

- Bank of America moved marketing responsibilities to its Chief Digital Officer to facilitate seamless digital customer experiences better. Similarly, Wells Fargo retired its CMO position and appointed individual marketing leads for each division.
- Australia's BankWest eliminated the CMO role, shifting marketing and journey creation duties to a dedicated new chief customer officer. Swiss bank BEKB divides the CMO role into marketing and communications, innovation, and business management. Whatever the title, the CMO's role in managing the customer journey is growing.



Figure 5. CMO role emerges as ecosystem orchestrator



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

As banks beef up data strategies in 2023, customer information volume and velocity will increase exponentially. The Chief Marketing Officer persona will be pivotal to leveraging this data through artificial intelligence and analytics tools.

In turn, we anticipate retail banks will create customer profiles and match personalized products and services with omnichannel visibility; this trend will help CMOs identify recurring customer interactions, generate more user-level data, and drive deeper customer engagement. The result will be a flywheel effect, uplifting revenue recognition and significantly reducing customer acquisition costs to create lifetime value and sustainable bottom-line growth.



**Marketing is not necessarily about communicating but delivering fluid experiences to customers, shifting from monolithic broadcasting to engaging interactive media planning and delivery. CMOs are now taking centralized roles, moving from brand custodians to brand experience custodians."**

**Ravi Santhanam**

CMO, HDFC, Mumbai, India

## TREND 7

# DIGITAL IDENTITY TO UNLOCK EFFICIENCY GAINS FOR BANKS

Digital IDs will boost productivity and improve risk management to make customer journeys seamless, secure, and inclusive.

## CONTEXT

COVID-19 fast-tracked customers' transition from physical to digital channels: the pandemic drove pervasive digital behavior. However, digital journeys do not always evoke superior customer experiences. FIs launched several automated Know Your Customer initiatives (eKYC) during 2020-2021, yet their effectiveness relies on a widely accepted and robust digital ID infrastructure.

- Unbanked communities worldwide remain excluded from the financial ecosystem because they do not have a registered identity: according to the World Bank, 1.4 billion people were unbanked in 2021.<sup>72</sup> Remedying the dilemma requires governments and banks collaboratively build an identity framework that provides citizens with digital IDs that can be verified and authenticated with a high degree of assurance remotely while ensuring data privacy and security.
- The World Economic Forum has previously emphasized that banks and financial institutions should spearhead digital identity schemes because they are heavily regulated and already own robust cybersecurity infrastructure to enable scalability.

## CATALYSTS

As retail banks evolve from standalone enterprises to expanding ecosystems comprised of financial and non-financial services, precise customer identification is critical. Increasingly, bank functions are becoming embedded in customer lifestyles, which means firms can serve customers indirectly through third parties.

- Third-party relationships unlock new value streams for banks, but they can also create vulnerabilities such as synthetic identity fraud.
  - » Cybercriminals often combine legitimate and fake personal data to create an entirely new synthetic identity that's nearly untraceable – making it ideal for fraud.
  - » In the United States, synthetic identity can begin with a Social Security number stolen from a person who does not use credit – a child, a transient person, or a deceased individual.<sup>73</sup>
- More than 100 central banks explored central bank digital currency (CBDC) in 2022. The International Monetary Fund (IMF) has urged central banks to link CBDC with digital IDs to make digital currency more inclusive and accessible.<sup>74</sup>
  - » Similarly, in 2022, the US Federal Reserve and the European Central Bank signaled that CBDC would no longer be anonymous, which makes linkage with digital ID schemes imperative.<sup>75</sup>
  - » As a result, governments and banks will have no choice but to implement digital IDs to scale and secure CBDC.
- Customer journeys are multi-dimensional with unpredictable starting and endpoints. Cognitive, emotional, sensory, behavioral, and relational factors are influencers. And inadequate KYC capabilities often spark friction.
  - » Proof of identity remains a cumbersome, inefficient, and fragmented process; moreover, complexity increases during cross-border transactions.
  - » In 2022, 68% of European customers abandoned onboarding – up from 40% in 2020 – for an annual loss of over EUR5.7 billion for banks, according to research from Signicat, a Norwegian digital identity solutions provider.<sup>76</sup>

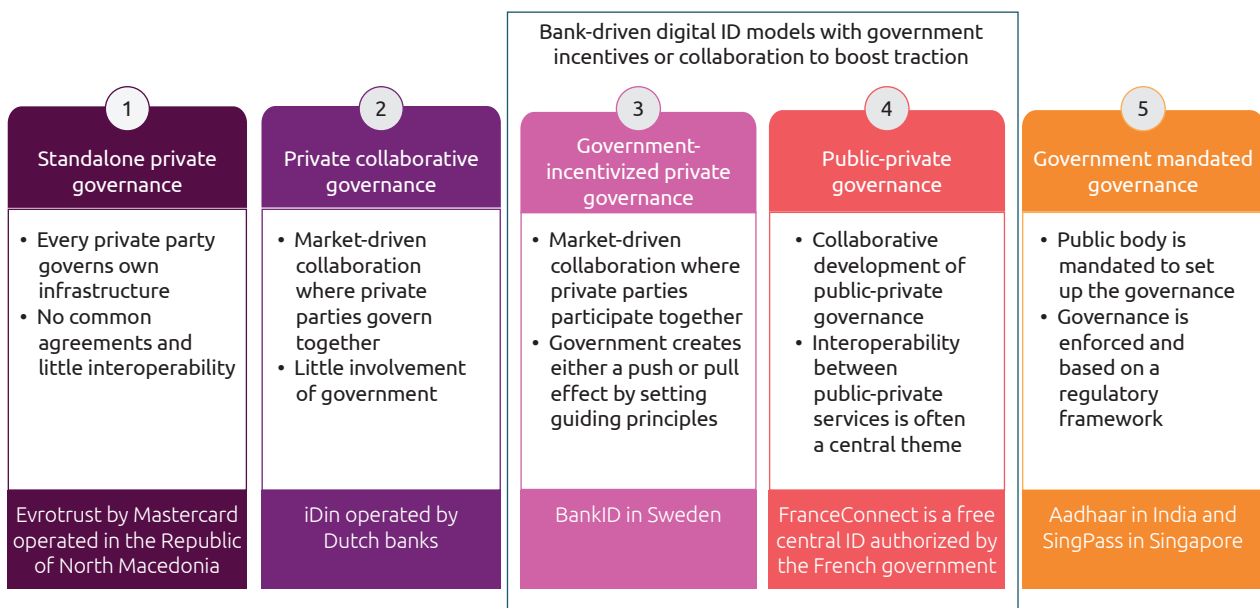
## IN A NUTSHELL

Digital ID is gaining prominence as the cornerstone of end-to-end, seamless CX. Several nation-states are digital ID supporters and Nordic markets and banks are leading the way, having widely adopted digital identity systems.

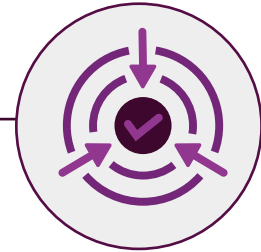
- Denmark's national ID, NemID, provides users with digital signatures for various transactions, with 90% adoption rates. Sweden's digital ID solution BankID has a roughly 75% adoption rate. In the Netherlands, the national ID, iDIN, helps users authenticate their identity securely.<sup>77</sup>

- The EU Digital Identity Wallet in Europe is on track to launch a pilot program in late 2023.<sup>78</sup> A consortium of countries, banks, and tech firms developed the Wallet to unify European digital identification.<sup>79</sup> The EU Digital Identity Wallet will complement other initiatives, including international payments, real-time rails, European Payment Initiatives, and Digital Euro (a CBDC).
- In the United States, legislators reviewed the Improving Digital Identity Act in July 2022 and set up a task force on digital identity to support interoperable identity credentialing systems at the state and local levels. However, a final report and next steps may not come until 2025.<sup>80</sup>
- Similarly, the Australian Payments Plus (AP+), the body running Australia's digital ID initiative, has garnered support from banks ANZ, CBA, NAB, and Westpac to build a national identity infrastructure ConnectID, which is expected to launch in 2023.<sup>81</sup>
- The Canadian Bankers Association advocates a federated digital identity scheme.<sup>82</sup> Throughout 2022, the Bank of Montreal, Scotiabank, the National Bank of Canada, the Canadian Imperial Bank of Commerce, and the Royal Bank of Canada were developing a centralized KYC offering for capital markets.<sup>83</sup> Digital ID is critical in Canada, considering the scheduled launch of a real-time rail instant payment service in 2023, followed by open banking (which is not yet broadly available).

**Figure 6. Emphasis will shift to a digital ID framework with strong governance**



Source: Monetary Authority of Singapore; Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

A Juniper Research study suggests that digital ID app users will jump from about one billion in 2020 to more than 6.2 billion by 2025 – a six-fold increase:<sup>84</sup> digital ID is critical to building trust in digital infrastructures to enable interoperable and seamless data exchange. For example, it will allow financial institutions to quickly develop integrated value-added services using secured API connectivity. It also ensures a paperless and presence-less customer experience managed remotely across all digital channels.

An example of digital ID scheme is Singpass from Singapore. Initially launched 20 years back as username and password login for government services, has evolved into an app by 2021 with 97% market penetration (among eligible population). Use of digital ID has led to average reduction of 80% in time taken to apply for financial products, with 15% higher approval rates. It is also expected to save USD36 per application with about 200,000 transactions happening per day, including with international banks. Moreover, this has simplified the onboarding process. By an estimate, using Digital ID, Singpass, customers can now open bank account with almost 20 clicks, compared with nearly 100 clicks required by banks elsewhere.<sup>85</sup>



## TREND 8

# BANKS UNLOCK VALUE AT SCALE BY MIGRATING WORKLOADS TO THE CLOUD

During COVID-19, banks enthusiastically considered cloud adoption to maintain business operations. Yet today they face obstacles in transitioning core workloads from legacy systems to multi-cloud infrastructure.

## CONTEXT

Throughout 2019 and 2020, the financial services industry, which had previously lagged in cloud adoption, moved with unprecedented speed to adopt cloud computing.

- For large banks, however, inherent complexities bring cloud migration challenges. For example, only 20% said their operations were cloud-optimized in 2021.<sup>86</sup> The hold up is that many big banks have invested in scaling their legacy systems and built custom apps that they would have to refactor for cloud transition.
  - » Particularly cautious banks may abstract core functionalities (deposits, payments, lending) from their legacy system and refactor them into microservices. Then, they migrate piecemeal functions to the cloud, which slows overall adoption.
  - » Independent research suggests that on average, bank cloud migration ranges from less than 10% of the firm's total workload to almost 50%. Google Cloud says that on average only one in three banks has migrated more than 30 applications.<sup>87</sup>
  - » Non-core functions – such as regulatory compliance, fraud detection, and transaction monitoring – are being migrated first, which inhibits banks from unlocking the true potential of cloud computing beyond cost reduction.

## CATALYSTS

Cloud migration became necessary to ensure business continuity and disaster management for banks, coupled with opportunities to reduce costs and improve productivity. Now, more than two years later, banks are also focusing on innovation and agility beyond cost benefits.

- Cloud computing is critical to leveraging new technologies such as artificial intelligence, blockchain, robotic process automation, super-fast network protocols like 5G, and edge computing. Moreover, cloud infrastructure is required to build the digital foundation for banking platforms. In addition, the growing banking trend to transform brick-and-mortar sites to experience centers may further speed up cloud migration prioritization.
- The tech talent war across all industries impeded banking cloud transitions. Migrating enterprise applications and data to the cloud requires experienced IT talent, which has recently been scarce to source and expensive. As but one example, forced to compete with BigTechs for resources, the Royal Bank of Canada increased its workforce by 2% in 2021 to bolster its tech talent, which led to an 8.4% increase in human resource costs – the highest since 2013.<sup>88</sup>
- While the tech talent dilemma may ease in 2023, some banks are adopting internal training programs, such as coding boot camps, to hire and train prospects and current staff desiring career growth. As banks augment their IT talent base, they will enhance their cloud capabilities.

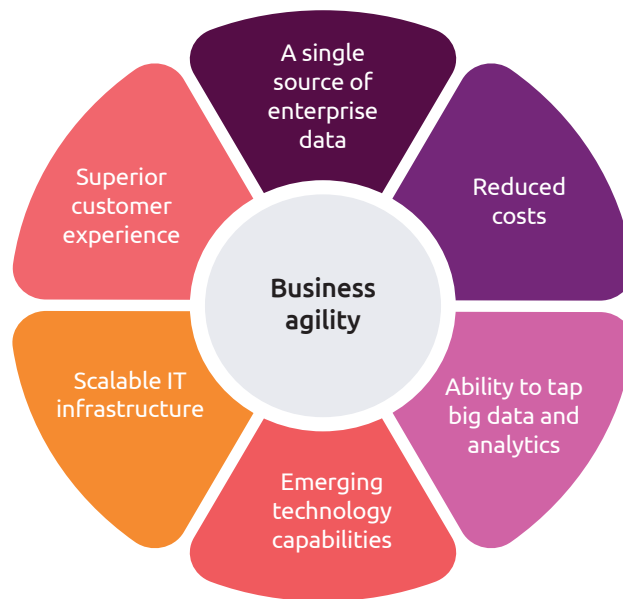
## IN A NUTSHELL

Despite various obstacles, banks – large and small – are making inroads in migrating their infrastructure to the cloud.

- Spanish multinational FS firm Santander reported migrating 80% of its IT infrastructure to the cloud in 2022, and the bank aims to migrate 100% by 2023.<sup>89</sup> Moreover, the bank is digitalizing its core banking system with cloud technology to improve service and efficiency.<sup>90</sup>
- Beyond cost benefits, cloud transformation is helping banks accelerate sustainability goals, innovation cycles, and speed to market for new products. Santander also reported a 70% reduction in energy consumption, boosting its responsible banking targets.<sup>91</sup>

- In late 2021, US-based Wells Fargo announced a 10-year hybrid multi-cloud architecture initiative. Activity began in Q1 2022 by migrating some advanced applications to the public cloud – the first for Wells Fargo.<sup>92</sup> The bank took a containerized approach to migration that makes it easy for business units to migrate workloads from private to the public cloud. In addition, Wells Fargo says it will write cloud-native applications wherever necessary.
- Infrastructure migration is not limited to Europe and North America. Almost nine in 10 Asia Pacific region banks are beefing up 2023 cloud architecture budgets. While the focus remains on horizontal applications, finance applications, back-office, contact centers, ERPs, and core applications (loan origination, digital channels, and branches) are also under consideration.<sup>93</sup>
- Banks use cloud-based data lakes and warehouses to store cold data generated through everyday banking activities tightly integrated with core banking systems. However, this data may be inadequate for analytics that yield actionable insights; but with AI and automation tools, banks can meet consumer demand for personalization via hot data analytics.
  - » On-premise systems are not necessary to support hot data analytics, which requires real-time streaming, low latency rates, and high computing resources. Instead, cloud computing fits the requirement.
  - » To improve data operations quality, the Bank of England plans to migrate its data analytics platform to the cloud to efficiently capture and use unconventional data to build high-efficacy economic models.<sup>94</sup> Similarly, Capital One, HSBC, and Standard Chartered have migrated data analytics to the cloud or are involved in transformation efforts.

**Figure 7. Cloud migration offers banks high-impact agility benefits**



Source: Capgemini Research Institute for Financial Services Analysis, 2022



## IMPACT

The cost-income ratio (CIR) of most banks hovers above 60%. So, unlocking new value pools and quick revenue recognition is as equally essential as is rationalizing the cost base to deliver profitable CIR. Therefore, banks must build a dynamic operating model while adapting to emerging and innovative opportunities such as embedded finance. A rapid shift to an agile cloud computing environment is the path forward for 2023 and beyond.

The cloud significantly improves processing rates within high-volume operations like payments and data reconciliations. In addition, it offers faster turnaround time for new customer onboarding and reduced time to market for new products, which saves cost by optimizing cycle time and boosts existing business revenues. In parallel, a cloud environment ensures low application downtime, decreases instances of false positives and fraud, and so improves customer experience.

As banks migrate to the cloud, they can quickly build new service layers and securely integrate third parties leading to quick value creation. The cloud offers banks opportunities to redirect cost savings to profits from existing and innovative value propositions.





## TREND 9

# A BOOM IN SYNTHETIC DATA WILL CATALYZE DATA ECOSYSTEM GROWTH

A mature cloud infrastructure, coupled with a rising inflow of synthetic datasets, will democratize artificial intelligence and pave the way for intelligent digital transformation.

## CONTEXT

Despite being banks' most significant asset, data has largely remained unmonetized and underutilized.

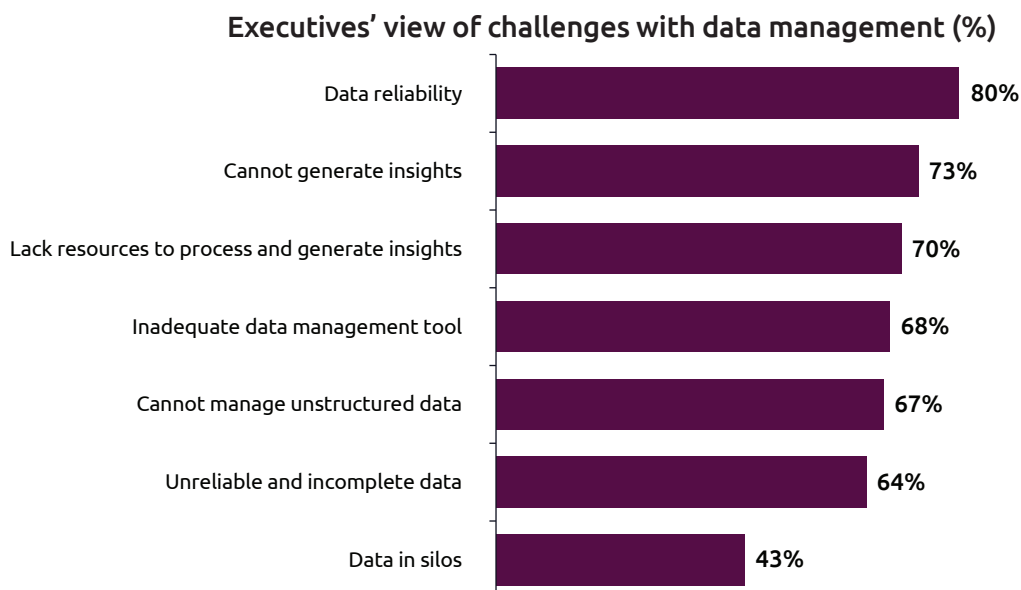
- Legacy systems and functional silos marginalize potential benefits. Open banking and alternative data types are expanding data ecosystems, yet leveraging them to transform operations and boost customer experience often remains aspirational.
- Now, however, synthetic data is becoming a significant asset for banks. When real-world information is out of reach, artificial intelligence (AI) can generate synthetic datasets that are statistically identical to real-world data without breaching privacy and security regulations.

## CATALYSTS

Across geographies, scores of regulations restrict how banks can collect, use, and share data. For instance, in Europe, multiple mandates – GDPR, the Data Governance Act, the AI Act, E-privacy regulations, the Digital Markets Act, the Data Act, the Cybersecurity Act, and the Database Directive – make real-world data challenging to harvest and use.

- Synthetic data enables banks to use, test, and develop data-centric products and services while complying with regulations and maintaining customer privacy.
- Data quality is another challenge for banks. Real-world data and alternative data sourced from several channels are incomplete, unstructured, and less reliable. In the [World Retail Banking Report 2022](#), 81% of the banking executives said their data could be unreliable, 74% said it is difficult to generate insights, 64% said incomplete data is a challenge, and 67% said they could not manage unstructured data.
- Synthetic data analyzes real-world data and replicates its statistical properties along with parameters and constraints using machine learning to ensure that data quality is intact and further improved for production and testing.

Figure 8. Data challenges impede customer engagement



## IN A NUTSHELL

The creation and use of synthetic data sets is gaining momentum.

- In early 2021, Austrian FS provider Erste Bank Group tasked its in-house FinTech lab to leverage synthetic datasets to test products and services using real-life scenarios. The bank now uses synthetic data because it provides a GDPR-compliant method for using analytics to gain actionable customer insights.<sup>95</sup>
- In 2021, JPMorgan also participated and won the SWIFT innovation hackathon to generate synthetic data without compromising privacy. The global bank has also published a synthetic data framework, FedSyn, and created a synthetic data sandbox to speed up the PoC process and save costs.<sup>96</sup> The bank may integrate FedSyn with its blockchain platform to advance its data capabilities.
- In another instance, a large European retail bank wanted to stress test its newly developed mobile app in real-life scenarios to deliver a high-quality post-launch customer experience. So the bank reached out to FinTech specialists to generate smart synthetic datasets to test its mobile app for real-life use cases.<sup>97</sup>
- Many banks are partnering and investing in FinTechs that offer capabilities to generate synthetic datasets.
  - » For instance, in 2022, Wells Fargo invested in Hazy, a synthetic dataset provider, through its startup accelerator program.<sup>98</sup>
  - » Deutsche Bank invested in Synthesized, a data generation platform to access synthetic data and help the bank leverage real-world-like data to accelerate tests of data-driven products and services.<sup>99</sup>
  - » BBVA selected Dedomena, a data generation platform startup, to carry out a synthetic data-generation project.<sup>100</sup>
  - » And Citibank, through Citi ventures, invested in MOSTLY AI, an Austrian synthetic data startup, in early 2022.<sup>101</sup>
- The trend is not limited to large banks. For example, in the United States, Facticeus, an alternative data platform with synthetic data production capabilities, raised USD10 million in funding in March 2022 from Curql, an investment arm for more than 75 credit unions.<sup>102</sup>
- Market regulators are also catching on to the synthetic data trend. The UK Financial Conduct Authority (FCA) is consulting with several stakeholders on using synthetic data to boost financial services innovation potential. FCA is considering a central hosting platform through which synthetic data can be regulated, generated, stored, and shared.<sup>103</sup>



## IMPACT

Gartner estimates that almost 60% of data used in AI and analytics will be synthetic by 2024.<sup>104</sup> The ever-increasing appeal of synthetic data in the financial services industry will significantly improve AI, machine learning, and analytics capabilities. A large volume of high-quality data with realistic parameters can enhance the efficacy of banks' AI models by reducing decision-making time and costs, while accelerating innovation cycle time.

Some banks already use synthetic data for fraud detection, risk management, credit scoring, and testing new customer-facing platforms in extreme conditions (use cases). However, as synthetic data proliferates, we expect the trend to gain momentum as banks cross-pollinate their datasets with other industries (such as retail and hospitality) to unlock new customer insights. Such data ecosystems will ensure that banks can deliver financial services anywhere, anytime, and through any channel – with a high degree of personalization.



***Data is critical to identifying target customers, personalizing their experience, and nurturing customer relationships. However, banks wrestle with data quality, structure, availability, etc., to unlock its full potential."***

**Alexandra Scriba**

Head Direct Bank, Zurich Cantonal Bank, Switzerland



## TREND 10

# AS BANKS EXPLORE DECENTRALIZED FINANCE, THEY REMAIN CAUTIOUS

Financial services firms, including banks, are strategically considering DeFi use-case pilots, yet sector instability and 2022 losses cast long shadows.

## CONTEXT

Widespread digitalization and market rallies sparked decentralized finance (DeFi) momentum in 2020 and 2021, with total value locked (TVL) increasing from USD1.5 billion (in Q3 2020) to its USD303.8 billion peak in December 2021. However, the tables turned in 2022.<sup>105</sup>

- Recorded DeFi TVL stood at USD96.3 billion in September 2022 – a loss of 68.3%, according to data aggregation and analytics platform CryptoRank.<sup>106</sup> What's more, leading cryptocurrencies, Bitcoin and Ethereum, lost three-quarters of their value in 2022. Finally, what was called "crypto winter" in early 2022 turned into a Q4 blizzard with the collapse of FTX, which plummeted from a USD32 billion valuation to bankruptcy as liquidity dried up and customers demanded withdrawals. In addition, rival exchange Binance reneged on its nonbinding agreement to buy the company.<sup>107</sup>
- Lack of sustainable business practices and inadequate risk management strategies inflame crypto market volatility. These conditions also trigger increasingly intense regulatory scrutiny, which may eventually stabilize the DeFi ecosystem.
- As the DeFi market undergoes a correction, more regulatory clarity may follow in light of the institutions (including banks and investment firms) that have ramped up their DeFi sector exposure.

## CATALYSTS

Failures and significant crypto market volatility spurred G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) to call for a Financial Stability Board for crypto regulations. Moreover, the European Commission ratified Markets in Crypto Assets (MiCA) to address crypto assets not governed by existing rules, such as e-money tokens, utility tokens, or asset-referenced tokens. MiCA aims to create a harmonized legal framework for digital assets.<sup>108</sup>

- MiCA covers several aspects of the DeFi market, including stablecoins, consumer protection, and the prevention of money laundering. Additionally, it will require stablecoin operators to maintain an adequate capital buffer to meet mass redemptions. MiCA implementation is slated for early 2024.<sup>109</sup> As regulatory bodies begin to wield decisive power, more FS firms may dip their toes in DeFi-sector waters.
- Additionally, rising inflation is driving FS firms to explore investment alternatives with potentially lucrative returns. Compared with traditional financial instruments, crypto markets and DeFi lending protocols can deliver attractive risk-adjusted returns.
- Lending has been one of the fastest-growing DeFi segments. TVL in DeFi lending platforms increased from nearly zero in 2020 to almost USD50 billion in 2022.<sup>110</sup> While ongoing volatility and liquidity crises will inhibit growth, the segment may keep attracting capital on account of rising regulatory clarity.

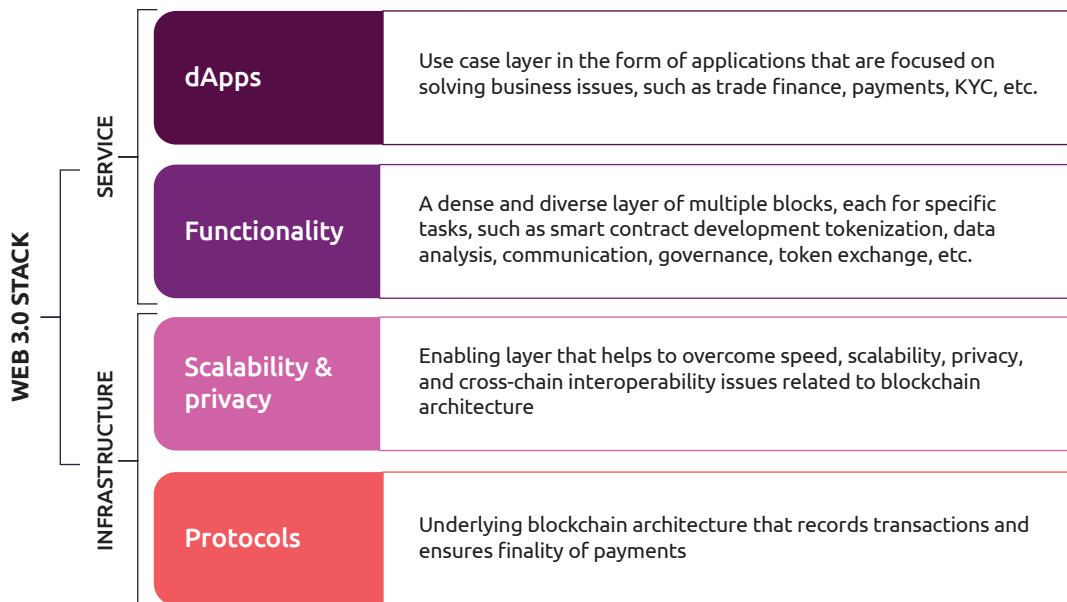
## IN A NUTSHELL

DeFi offers great potential, but volatility, fledgling regulation, governance risks, and irreversible and opaque contracts require caution. More than 60 banks had invested at least once in this space as of May 2022. Therefore, the proportion of banks that stay invested in the ecosystem and the gradual entry of new investors may drive more investment participation from banks, according to Blockdata, a Dutch market intelligence platform.

- Most investments were in DeFi and Web3 infrastructure (protocol staking, middleware, applications). Aside from infrastructure, tokenization, crypto data providers, and blockchain security firms attracted capital.<sup>111</sup>
  - » From August 2021 to May 2022, Morgan Stanley, Wells Fargo Capital, BNY Mellon, Citi Ventures, J.P. Morgan, and Goldman Sachs invested in DeFi infrastructure startups.<sup>112</sup>
  - » Credit Agricole Italia invested seed funding in the Italian asset tokenization startup BlockInvest. In addition, Goldman Sachs, BNY Mellon, and Citigroup invested in data startups that provide market intelligence, network data, indexes, DeFi, and network risk solutions.<sup>113</sup>

- » Goldman Sachs invested in blockchain security startup CertiK in Q2 2022 to help the New York FinTech raise another USD88 million, bringing its total capital to USD230 million and a valuation topping USD2 billion. CertiK monitors blockchain protocols and smart contracts.<sup>114</sup>
- Increasing DeFi readiness has led to steady growth of institutional DeFi\* protocols, such as payments, data security, cross-chain transactions, insurance services, KYC, AML, and lending. If FS firms and VCs fund startups and equip them to address DeFi challenges, institutional DeFi may retain momentum.
- In Q1 2021, 64% of Coinbase online platform transactions were from institutions. Moreover, nearly 60% of these transactions surpassed USD10 million in value, which suggests rising FI awareness and interest around DeFi.<sup>115</sup>

Figure 9. FS firms are increasing investments in DeFi infrastructure and functionalities



Source: Capgemini Research Institute for Financial Services Analysis, 2022

\***Institutional DeFi** refers to blockchain-based financial products that have been tailored to the requirements of institutions with strict compliance requirements, such as banks, investment firms, insurance firms, etc.



## IMPACT

Mainstream adoption of DeFi protocols remains an aspirational and long journey. Before FS firms can integrate smoothly within the DeFi ecosystem, they will need institutional DeFi solutions to tackle persistent and inherent risks. To illustrate, [Capgemini's World Payments Report 2022](#) found that 90% of banking executives expressed DeFi security concerns, 87% noted a lack of regulations, and 95% said more bank technology preparedness is necessary for DeFi scalability.

However, as crypto sector regulations mature in 2023 and beyond, we expect the acceptance and volume of institutional DeFi solutions to pick up. Increased FS firm participation will boost liquidity and capital levels within the DeFi ecosystem. FS firms will also bring much-needed regulatory oversight, which is critical for long-term growth. As the DeFi market matures, the trend for leading banks and FinTechs will be to build scalable use cases, and while FIs can choose to play or to sit out, awareness of use-case applicability will be essential.





## CONCLUSION

In 2023, the potential exists for banks to reinvent themselves to become sounder and more resilient. However, uncertainties are bound to test banking system fortitude as FIs and customers face macroeconomic storms.

If retail banks take a walk in their customers' shoes – and understand more authentically their needs and motivations – they boost their chances of becoming trusted partners. Today, customers have numerous financial services alternatives, but expected 2023 market volatility offers banks an opportunity to power up their game by leveraging their scale, assets, broad customer base, and regulatory knowledge.

Whether digitalizing customer journeys, migrating to cloud platforms, or understanding customers through synthetic data analytics and AI/ML technologies, the most challenging and exciting phenomenon for 2023 will be the digital makeover that incumbents need undergo to remain competitively relevant.

Big banks are positioning themselves as technology companies with a banking license; however, the drive to enhance CX to acquire and retain customers is at the heart of tech transformation. Success is contingent upon banks modernizing their core systems. Leveraging emerging technologies, combined with the power of data, will help firms offer a seamless, personalized, and superior omnichannel experience.

Indeed, the stakes are high as firms fight for trillions of dollars in assets. Overall, 2023 should be a challenging yet opportune time for retail banking organizations worldwide.



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