Banks' Emerging Technology Priorities and Progress by Use Case

Published 29 November 2023 - ID G00801869 - 14 min read

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Initiatives: Financial Services Technology Modernization and Transformation; Financial Services Digital Business Strategy and Innovation

Banking CIOs face multiple competing technology demands every day. CIOs must gauge their priorities against how peers are investing in key technologies like AI, data analytics, APIs and cloud migration.

Overview

Key Findings

- Seventy-four percent of senior banking technology and business executives surveyed rate open/external APIs for distribution, customer experience, and new business models as very important for meeting their enterprises' overall goals. That is a higher percentage than for any other technology use case they were polled about.
- APIs for distribution, customer experience and new business models are, in fact, the second most deployed technology use case, tied with platform engineering. Seventy-three percent of senior executives report having fully deployed it or being in deployment. The most deployed technology use case, at 75%, is actually migration to public cloud for agility, scalability and resilience.
- AI to support customer engagement is cited as very important by 66% of banking leaders, but it is, overall, one of the least deployed technology use cases.
- AI for combating transaction fraud boasts higher deployment rates and is cited as very important by 69% of banking leaders.

Recommendations

Banking CIOs advancing technology modernization and transformation should:

- Determine areas of potential competitive disadvantage by coordinating with business leaders to reassess technology use cases not as highly prioritized by their banks as by the banks in this benchmark.
- Consider accelerating deployment of technology use cases that have lagging deployment relative to this benchmark. Review budget priorities for the coming 12 to 18 months.
- Assess how to best deploy technologies such as open/external APIs, data and analytics, and AI to improve bank performance on top priorities. Such priorities include customer experience; environmental, social and governance (ESG)-aligned lending and investing; and transaction fraud mitigation.
- Work with business leaders to reevaluate deployment or planned deployment of technology use cases with relatively low prioritization in this benchmark. These include request-to-pay technology for commercial and consumer clients, platform engineering to optimize the developer experience and accelerate product teams' delivery of customer value, and AI for complex staff tasks.

Survey Objective

The 2023 Gartner Business Outcomes of Technology by Use Case Survey was conducted online from June through August 2023. Gartner surveyed 624 business and IT function leaders representing 10 industries, primarily from companies based in North America, Western Europe and Asia/Pacific whose reported annual revenue was at least $50 million. Among the total respondents surveyed, 69 respondents came from the banking industry. The survey's purpose was to investigate how organizations leverage industry-specific technologies, including generative AI, for particular use cases. [1]

Data Insights

Banking CIOs can face an overwhelming array of potential use cases for deploying multiple evolving technologies. Options have only expanded in recent years, with technologies such as APIs, AI, public cloud, and ever more advanced data and analytics. Such technologies underpin most IT-related decisions and are generating tangible business results. Gartner conducted a survey to help CIOs understand which technologies and use cases are seeing the most investments, as well as the potential gains that business teams can reap from new technology when it comes to meeting enterprise goals. [1]

The Most Prioritized Technology Use Cases Are Open/External APIs for Distribution, CX and New Business Models

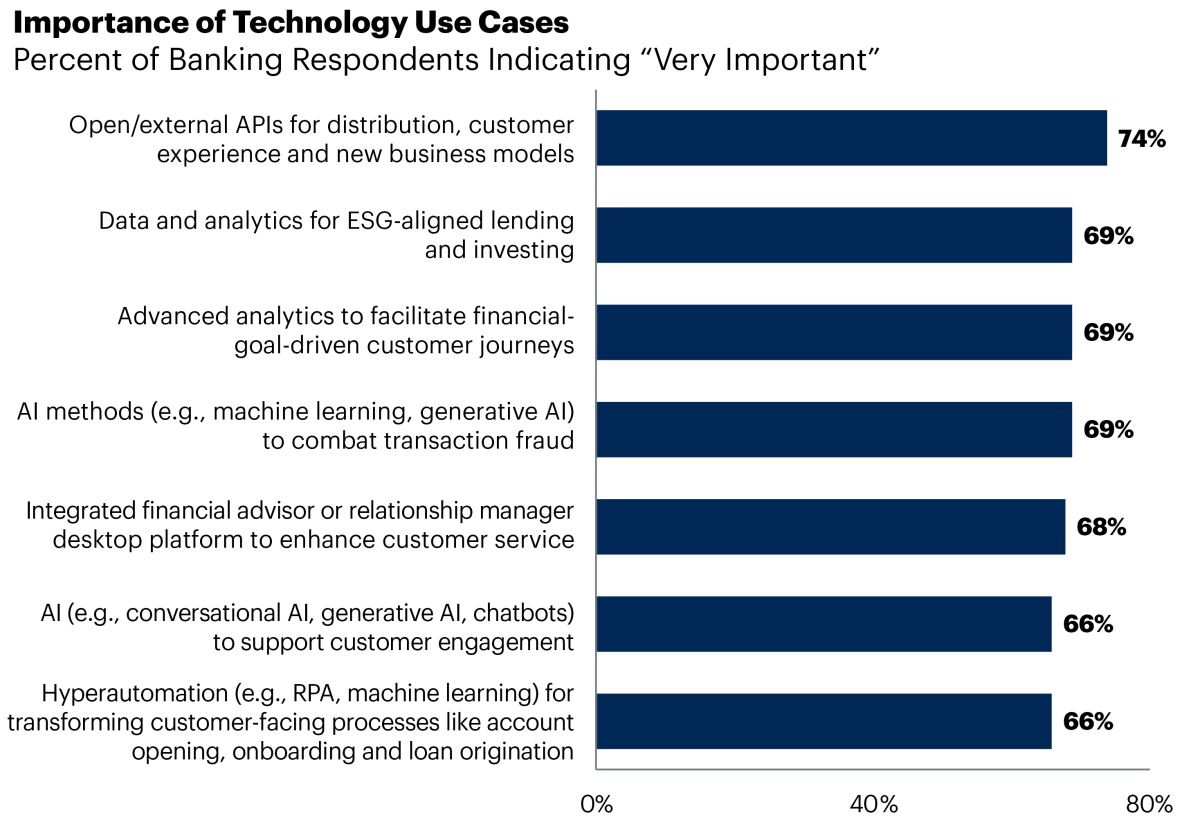
Figures 1 and 2 show the technology use cases that banking technology and business leaders most frequently cite as very important for achieving enterprise goals and objectives, according to Gartner's survey. [1] Seventy-four percent of surveyed senior banking executives rate open/external APIs for distribution, customer experience (CX) and new business models as very important for meeting their enterprises' overall objectives. That is a higher percentage than for any other technology use case.

On the face of it, this might seem somewhat perplexing, given all the attention being paid to AI. The reality is, though, that APIs help deliver on the need to share and integrate data essential for understanding customers, designing and delivering products and services, and improving processes. Many of those tasks, of course, are increasingly supported by AI, so AI is, in fact, becoming omnipresent.

Partner ecosystems and APIs are indeed growing in importance. Many commercial banking cash management and treasury platforms, for instance, use APIs to integrate real-time client accounting data, and APIs give customers access to ecosystem partner support for nonbanking needs, ranging from electricity and telecom to transportation and legal.

Open/external APIs are especially important in open banking environments, where customers must be allowed to have data held in one bank or fintech easily shared with others in order to access their services. For more information on APIs for open banking and ecosystems, see Emerging Use Cases That Validate the Business Value of Open Banking and How Banks Can Take On Super-Apps.

Figure 1: Importance of Technology Use Cases for IT and Business Leaders in Banking



n = 67-69 senior banking technology and business leaders, excluding "not sure"

Q: How important is each of these to meeting your enterprise's overall goals and objectives?

RPA = robotic process automation

Source: 2023 Gartner Business Outcomes of Technology Survey

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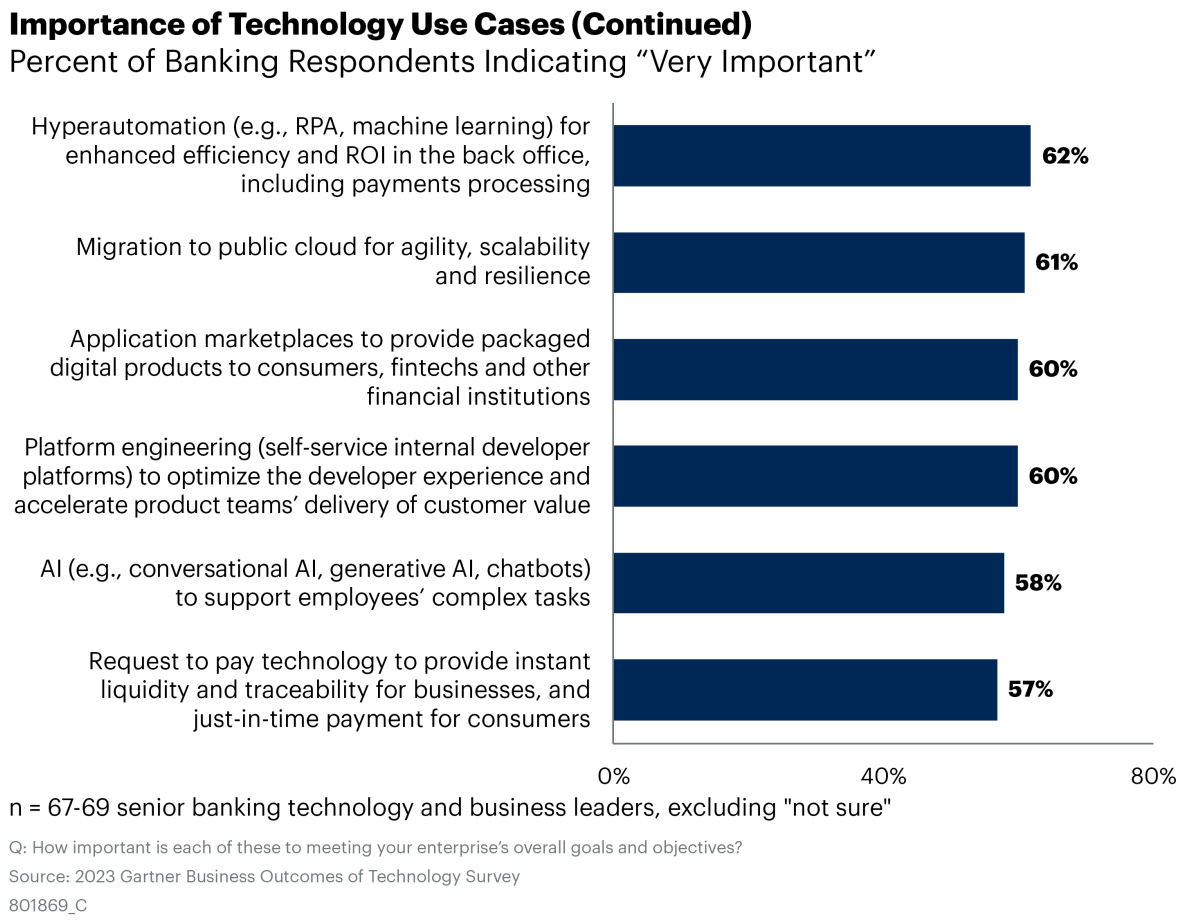
Figure 2: Importance of Technology Use Cases for IT and Business Leaders in Banking (Continued)



Three other technology use cases are tied for second place as being very important to achieving goals, each cited by 69% of the banking leaders surveyed. They are data and analytics for ESG-aligned lending and investing, advanced analytics for facilitating financial-goal-driven customer journeys, and AI methods for combating transaction fraud.

The importance of data and analytics for ESG-aligned finance and investments will increase even further, particularly given public pressure, regulatory requirements such as the European Union's Corporate Sustainability Reporting Directive (CSRD — see Note 1), and demand for green financing. Measuring bank-financed Scope 3 emissions in commercial loan portfolios, for instance, requires integrating internal systems containing exposure and client financial data with relevant external emissions data. In fact, Gartner predicts that, by year-end 2024, 60% of global banks will proactively stress-test lending portfolios for climate change risk because of pressure from regulators in multiple countries (see Note 2).

Advanced data and analytics also help banks better understand the context and underlying objectives of customer interactions. That, in turn, ensures that customer-facing insights and solutions offered through digital platforms support customer journeys and align with customer goals.

Detecting transaction fraud is a constant challenge (see Top Technology Payment Trends Driving Change for Banking CIOs for 2023). The complexity and speed of fraud are increasing, together with the number of systems required to combat fraud. Banks are looking to advanced AI methods, including knowledge graphs and composite AI, for help with proactively tracking fraud before a damaging incident can occur.

Meanwhile, some technologies and use cases are seen as very important for achieving enterprise goals by much lower percentages of banking leaders. For example, request to pay (R2P) technology for businesses and consumers is rated as very important by 57% of banking leaders surveyed, a seemingly high number, but lower compared with the other use cases surveyed.

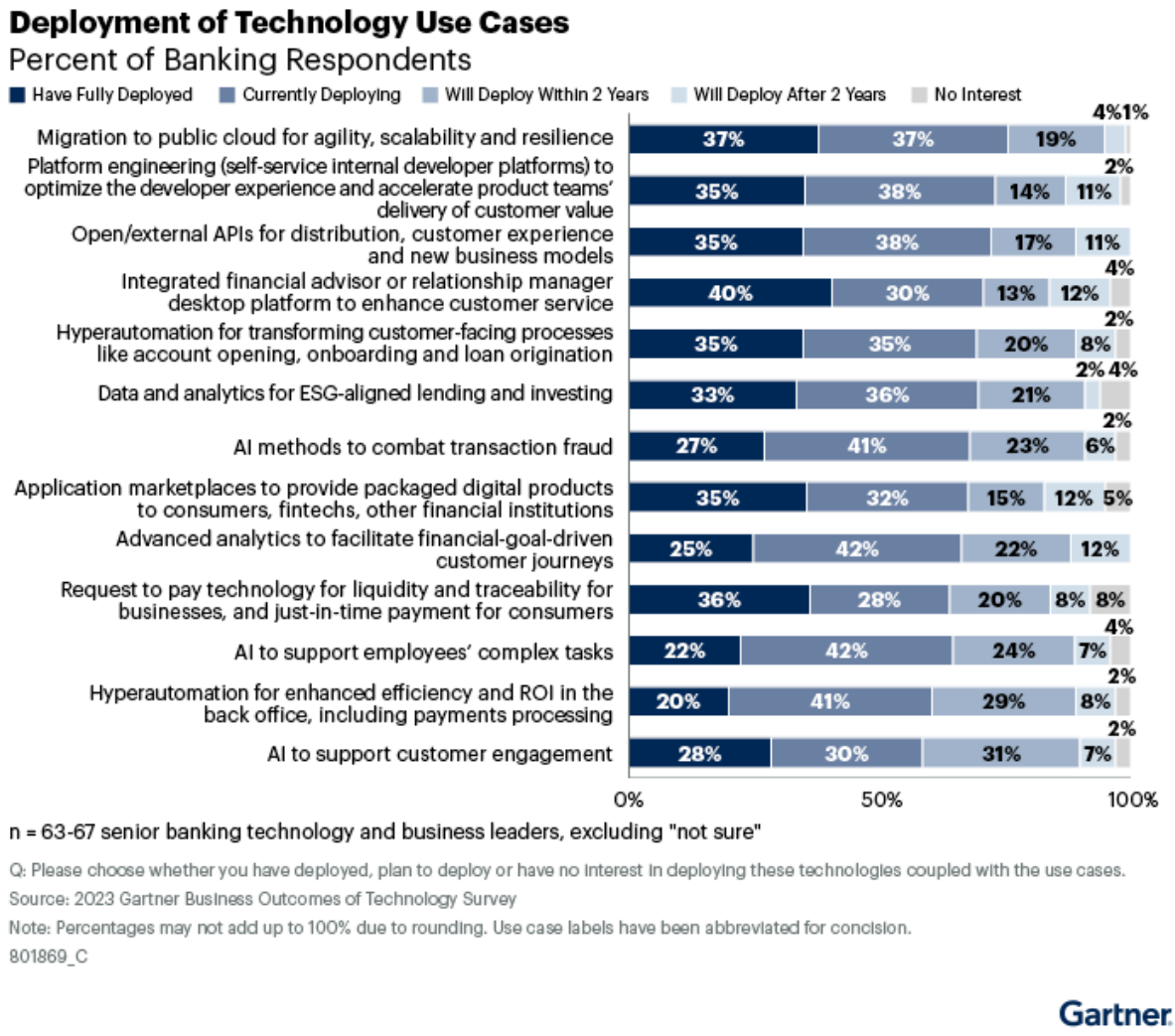
R2P has yet to fully come into its own. In the U.S., for instance, most banks offering real-time payments provide only real-time receiving, but R2P requires real-time sending and receiving. Still, it has been introduced in different markets where real-time payments have increased in popularity, such as Australia, the U.K., the European Union and India, and R2P does have limited availability in the U.S. Launching it, though, requires that banks modernize their existing payment infrastructure or adopt new infrastructure.

Meanwhile, despite all the interest in AI, only 58% of surveyed banking leaders regard its use for supporting employees' complex tasks as very important for achieving goals. That doesn't mean, though, that AI is losing steam. The hype is just being converted into the hard, day-to-day work of applying it to a growing set of use cases. For supporting complex tasks, AI (as well as more traditional automation technologies) is, in a sense, already taken as a given. After all, machine learning and "traditional" AI have long been deployed to automate tasks and streamline processes, for instance, via bots, optical character recognition (OCR), graph analytics and natural language processing (NLP).

The Most Deployed Use-Case Technology Is Migration to Public Cloud

Figure 3 shows the deployment of technology use cases by the banks surveyed. The most deployed technology use case — either having been fully deployed or currently being deployed — is migration to public cloud for agility, scalability and resilience, with 75% of banking leaders indicating one or the other (see Note 3). Tied for second place are platform engineering and APIs, each having been fully deployed by 35% and currently in deployment by 38%. The third most frequently deployed use case is an integrated financial advisor or relationship manager (RM) desktop platform to enhance customer service. Forty percent of banking leaders' organizations have fully deployed it, with another 30% currently in deployment.

Figure 3: Reported Technology Use-Case Deployment by Banks



Widespread cloud migration is helping banks achieve better stability and resilience, improve their ability to launch new products and experiences, and attain greater operational efficiency. Still, many of the cloud's promises, such as significant cost savings, or improvements in data and insights, have not yet been realized as hoped. Gartner nevertheless believes that, by 2027, about one in five banks adopting commercial off-the-shelf core banking system installations will have its core delivered from the cloud, and 12% of them will use the public cloud. For more information on the expectations and benefits of cloud migration in banking, see Clouds Deliver Resilience, but Banking Leaders Expect Much More.

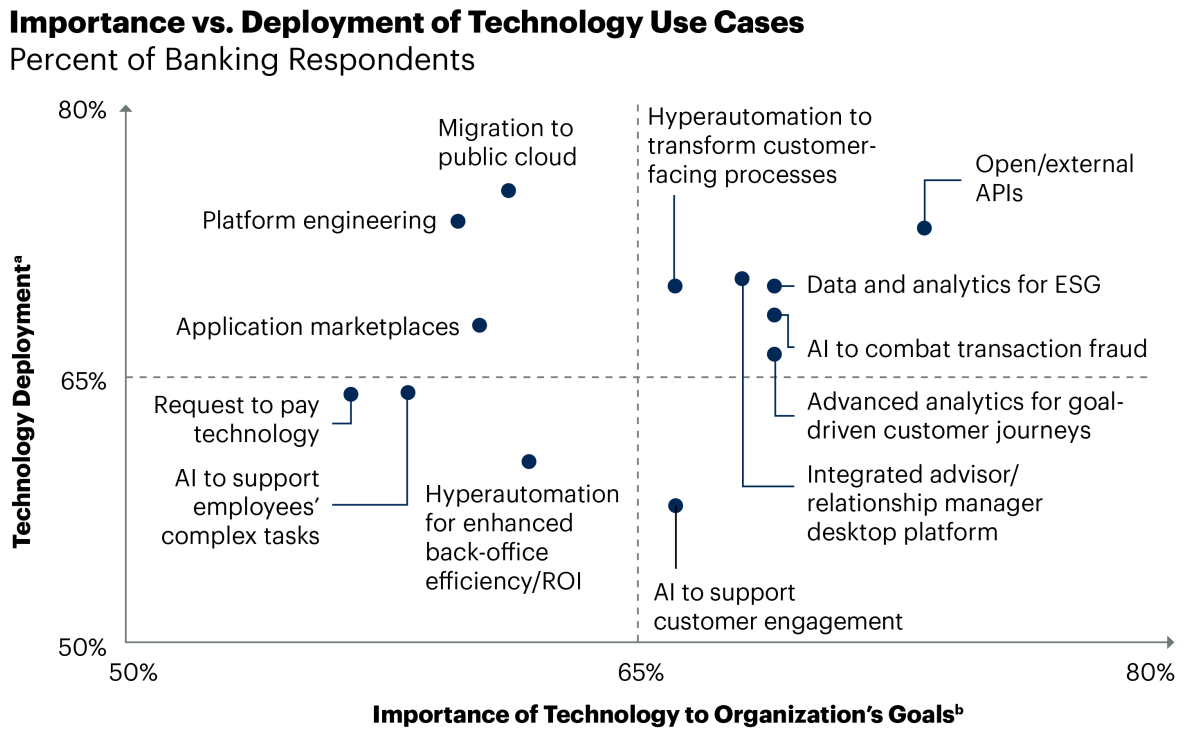
Platform engineering to optimize the developer experience and accelerate product teams' delivery of customer value is tied with APIs (discussed above) as the second most frequently deployed technology use case (see Note 4). Platform engineering aims to help users navigate complex architecture, tools and services through curated self-service platforms. The adoption of agile methodologies empowers teams to choose their own tools and architectures, but that leads to increased risks. Building requirements into platforms for addressing issues like cybersecurity, data residency and compliance can empower teams, while reducing the overall risk. This is particularly relevant for banking, given the growing prevalence of trends such as banking as a service (BaaS), composable core banking, and API developer portals in banking. For more information on such trends, see Hype Cycle for Digital Banking Transformation, 2023.

Integrated desktop platforms include most, if not all, of the individual technologies that financial advisors and RMs use daily. These platforms help automate the advisor workflow in a single application experience. They provide a 360-degree view of a client relationship and remove the swivel-chair approach required to access multiple applications. Their widespread deployment is testimony to the support they provide for bankers' increased productivity and ability to serve more clients, as well as their role in reducing manual errors and ensuring compliance.

The Most Prioritized and Deployed Use-Case Technologies Are AI, Data and Analytics, Open/External APIs, and Integrated Desktop Platforms

Figure 4 summarizes the technology use cases by importance to organizational goals and frequency of deployment, with the top right quadrant signaling high prioritization and high deployment. Open/external APIs for distribution, customer experience, and new business models have some of the highest levels of deployment, and are cited as very important by the largest percentage of executives, as noted above. Meanwhile, the data and analytics use case for ESG-aligned lending and investing also stands out in this quadrant, as do integrated desktop platforms and AI for combating transaction fraud.

Figure 4: Importance vs. Deployment of Technology Use Cases for IT and Business Leaders in Banking



n = 63-69 senior banking technology and business leaders, excluding "not sure"

Q: How important is each of these to meeting your enterprise's overall goals and objectives?

Q: Please choose whether you have deployed, plan to deploy or have no interest in deploying these technologies coupled with the use cases.

[a] Percent indicating fully deployed or currently deploying.

[b] Percent rating 6 or 7 on a scale of 1 to 7, in which 1 stands for "not at all important" and 7 "extremely important."

Note: Technology use cases have been abbreviated for concision. For complete descriptions, see Figures 1 or 2.

Source: 2023 Gartner Business Outcomes of Technology Survey

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In the lower-right-hand quadrant, the use of AI to support customer engagement is cited as very important by a fairly large percentage of banking leaders (66%), but it is, overall, the least deployed technology use case. That shouldn't be surprising, given the caution being exercised with the deployment of generative AI (GenAI) for customer-facing activities. Still, it is only a matter of time before GenAI use cases that Gartner already deems to have high feasibility achieve wider adoption, such as customer-facing banking product recommendation assistants, banking contact center assistants and personalized marketing content.

Meanwhile, AI to support employees' complex tasks, as noted earlier, garners a relatively modest percentage of banking leaders who cite it as very important for achieving enterprise goals. Still, it appears poised on the brink of more widespread adoption, given specific potential use cases, such as frontline AI copilots, loan processing, code conversion and generation, anti-money-laundering compliance and reporting, and workflow copilots. For more information on GenAI use cases for banking, see Use-Case Prism: Generative AI for Banking.

As noted earlier, there are high deployment levels of both migration to public cloud for agility, scalability and resilience, as well as platform engineering for optimizing the developer experience and accelerating product teams' delivery of customer value. However, these technology use cases are regarded by relatively lower percentages of banking leaders as very important for achieving enterprise goals. That doesn't mean they are seen as unimportant. Still, where enterprise goals are concerned, the use-case technologies in the upper-right-hand quadrant take precedence over public cloud migration and platform engineering despite their high deployment.

Moreover, 32% of banking technology and business leaders cite creating a business case as an obstacle for cloud migration, according to the Gartner Financial Services Business Priority Tracker Survey. [2] Twenty-one percent expect it to be an obstacle in the future. These leaders acknowledge difficulty in articulating a business justification for a technology that has become a de facto way of deploying IT and delivering services to customers. This may also help explain the relatively low percentage of banking leaders citing it as very important for achieving goals, even as it enjoys high levels of deployment.

As the deployment of technologies like AI, data and analytics, and APIs increases, banking leaders must benchmark themselves against their peers and look toward adopting the most transformative technologies and use cases. Use cases for technologies like public cloud migration, open/external APIs, platform engineering, and integrated banker desktop platforms have high deployment rates today. Nevertheless, banks will have diverse priorities in the near term and beyond as they navigate economic uncertainty. Therefore, CIOs will likely have to reprioritize technology investments to keep pace with the evolution of their organizations' most critical use cases for achieving enterprise goals.

Evidence

[1] **2023 Gartner Business Outcomes of Technology by Use Case Survey.** This survey investigated how organizations leverage industry-specific technologies, including generative AI, for particular use cases. Business outcomes were explored utilizing a "fundamental five" stakeholder framework to show the impact of technology investments on customers, employees, partners, funders and society. Factors influencing positive and negative business outcomes were also assessed. The survey was conducted online from June through August 2023. In total, 624 respondents participated who were at the director level or above and represented 10 industries (about 60 per industry). Qualified respondents were associated with a business function or IT function (about 50% each) and influenced or had the final say in technology investment decision making for their organizations. Qualifying organizations were from North America, Western Europe and Asia/Pacific, and reported enterprisewide annual revenue of at least $50 million or the equivalent. Disclaimer: The results of this survey do not represent global findings or the market as a whole, but are a simple average of results for the targeted countries, industries and company size segments covered in this survey.

[2] **2Q23 Gartner Financial Services Business Priority Tracker Survey.** The survey aimed to understand the most pressing priorities of financial services business and technology leaders in the short term, as well as their views on the importance and impact of future economic and social trends. The survey also asked respondents about benefits, outcomes and obstacles realized and expected from moving to the cloud, as well as the status of their industry cloud capabilities. This online survey was fielded from 1 June through 21 June 2023. The survey included 112 respondents who were senior business and technology leaders from banks around the world. Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents surveyed.

Note 1: Corporate Sustainability Reporting Directive

See the European Commission's site on corporate sustainability reporting.

Note 2: Sustainability Stress Testing of Lending Portfolios

See Predicts 2023: Ability to Quantify ESG Initiatives Will Make or Break Banks' Success With Them.

Note 3: Rounded Percentages Sum Up to 75

The 37% of respondents listed as having fully deployed public cloud, and the 37% listed as currently deploying it, are rounded percentages. The sum of both is thus closer to 75%.

Note 4: Definition of “Platform Engineering”

Platform engineering is the discipline of building and operating self-service developer platforms for software development and delivery. A platform is a layer of tools, automations and information maintained as products by a dedicated platform team, designed to support software developers or other engineers by abstracting underlying complexity. The goal of platform engineering is to optimize the developer experience and accelerate the delivery of customer value.

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