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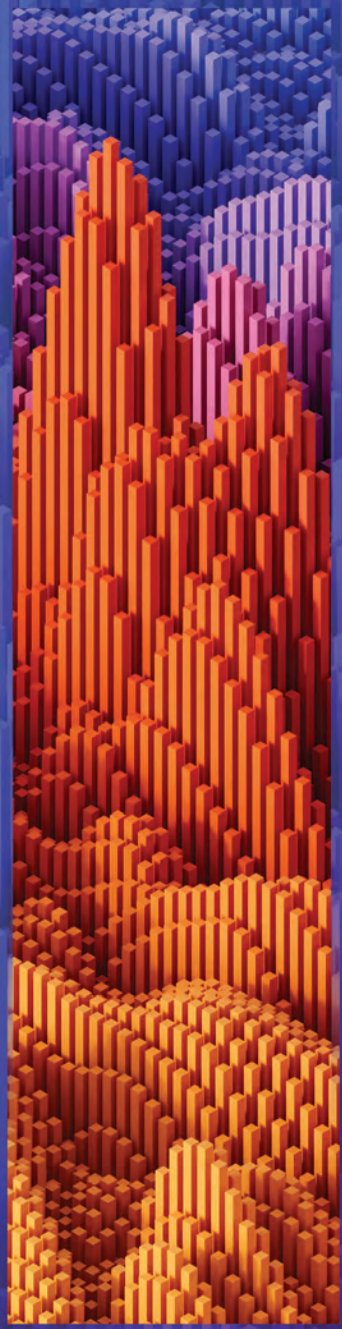
INFOSYS BANK TECH INDEX

VOLUME 5 – MAY 2025



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Contents

Introduction

Introduction

Dennis Gada
EVP, Global Head, Banking & Financial Services

Since the start of 2025, the impact of artificial intelligence in banking has shifted from promise to reality. Conversations with our clients — banks at the forefront of next-generation transformation and customer experience — are now dominated by one question: how can AI help us stay ahead, manage risk, and serve our customers better?

Our latest research confirms what we see in practice. Financial institutions are deploying AI across their organizations, from fraud detection to customer service, with tangible results. Banks are using AI to streamline compliance, reduce operational costs, and deliver faster, more personalized service to clients. Yet, despite these advances, nearly half of all AI projects remain in early stages, with data management and regulatory complexity as the primary hurdles.

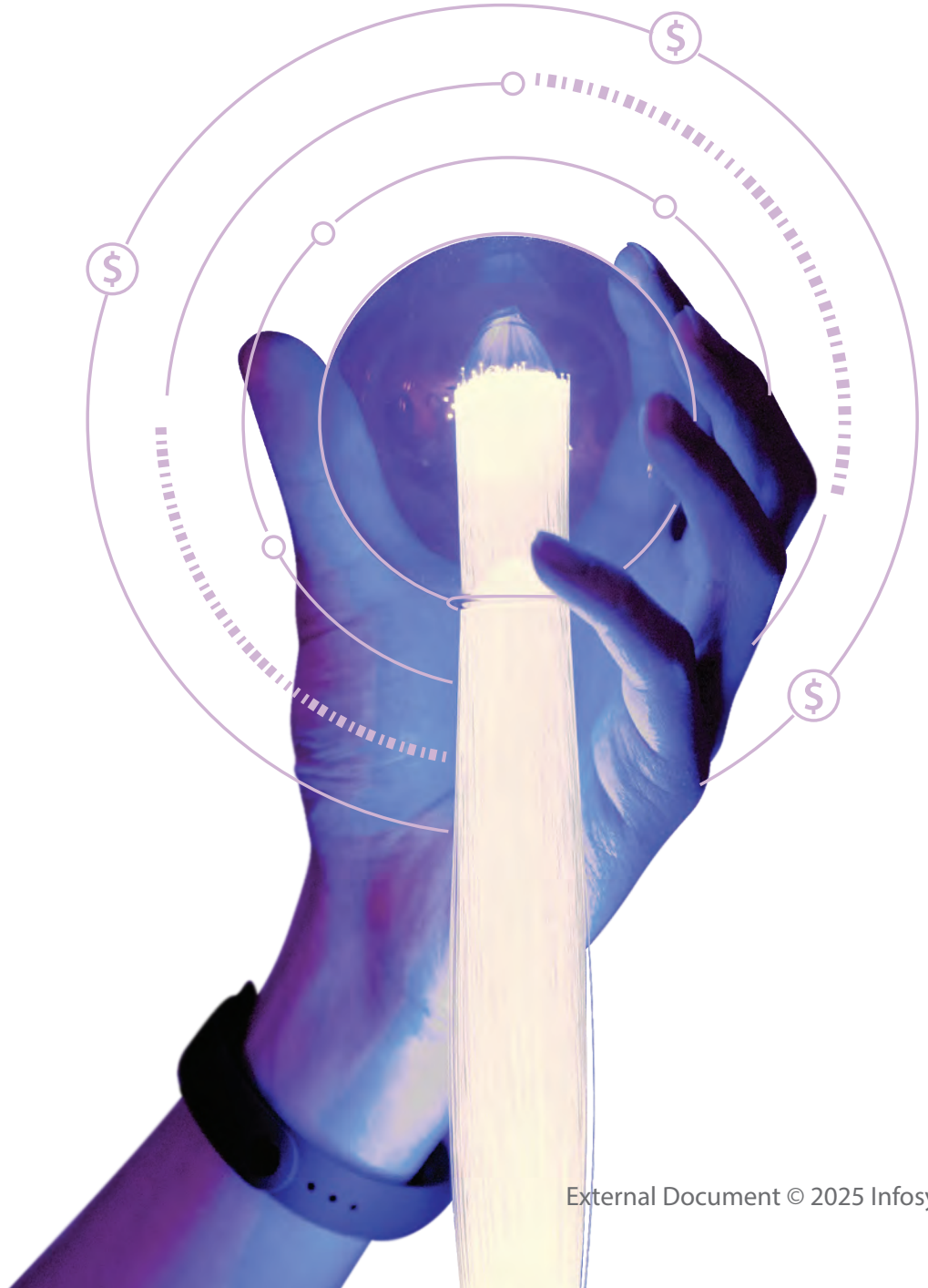
What stands out in this year's findings is a decisive shift in priorities. Banks are placing innovation and growth at the top of the agenda. Even with economic uncertainty, the focus has moved beyond cost reduction to building for the future — investing in new technologies, scaling AI and cloud capabilities, and accelerating the pace of change. The demand for tech talent has never been higher, reflecting the industry's recognition that the next wave of growth will be powered by digital expertise.

Cloud adoption is evolving as well. With data security and compliance under greater scrutiny, more banks are exploring private cloud solutions and hybrid models to balance innovation with risk management. While some hesitation remains about moving sensitive data to the cloud, the industry is actively addressing these concerns through robust governance and new architectures.

This Index captures the reality on the ground: technology priorities are shifting, AI journeys are maturing, and banks are navigating the challenges of scaling innovation. For today's banking leaders, the questions are clear — how to allocate budgets, build the right teams, and adopt the right technologies to drive sustainable growth.

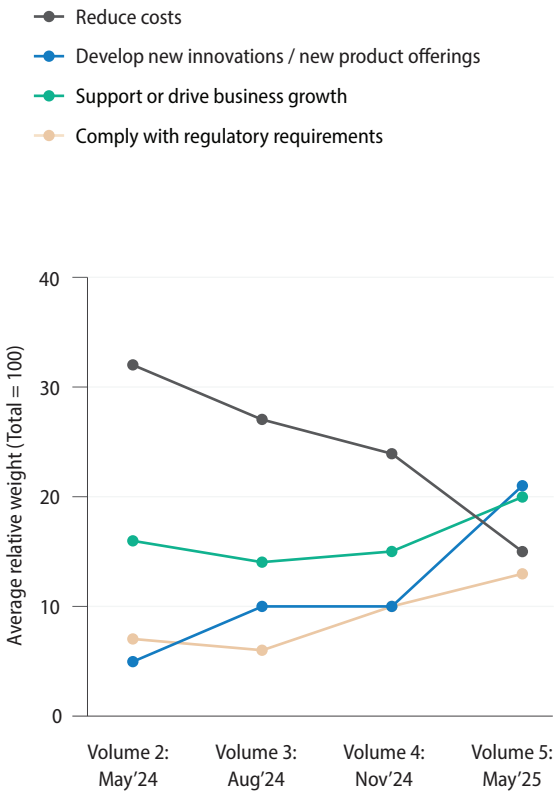
We will continue to track these trends and provide insights in the quarters ahead. If you wish to discuss these findings or explore how your organization can accelerate its AI journey, we invite you to connect with us.

Key findings — summary



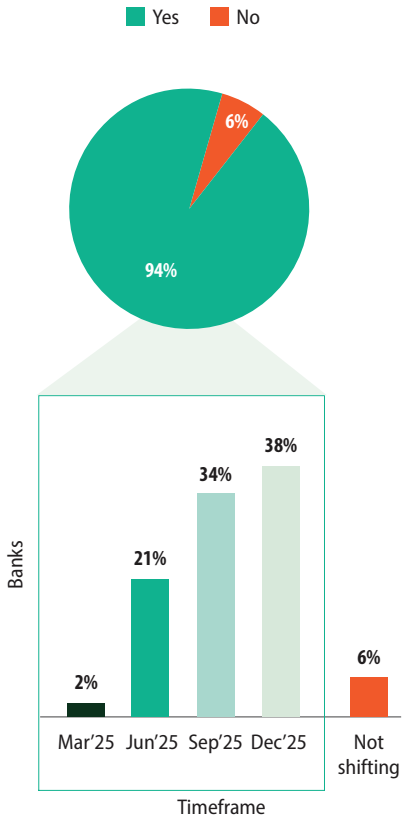
Banks focused on innovation and growth

Innovation and growth are top priorities



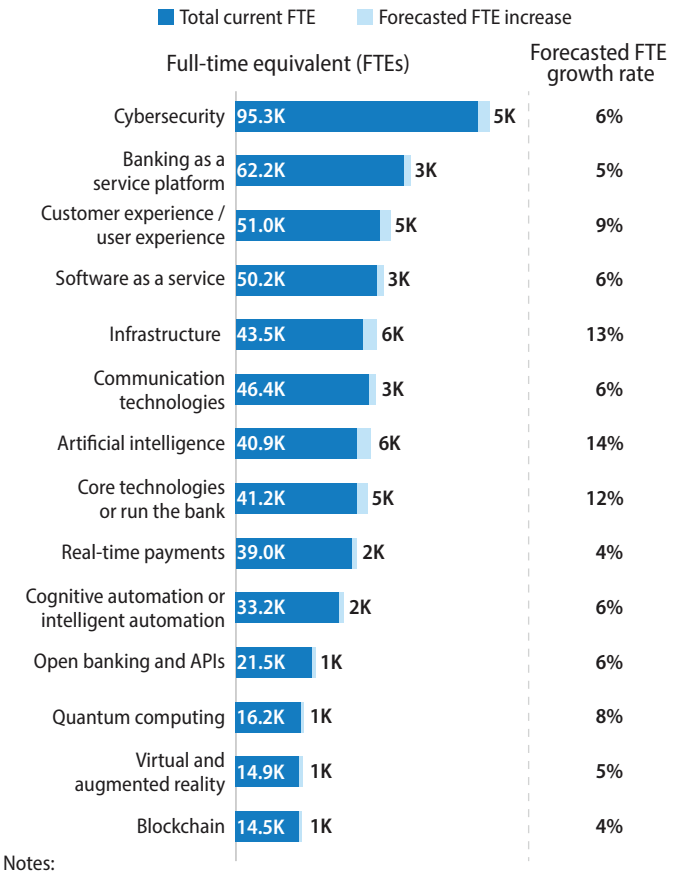
Notes:
1. Chart shows only four of seven priorities surveyed.
2. Refer to page 9 for further details.
3. N = 400, where N is the number of banks surveyed in Volume 5.

Growth investments expected in late 2025



Notes:
1. Refer to page 10 for further details.
2. N = 400, where N is the number of banks surveyed in Volume 5.

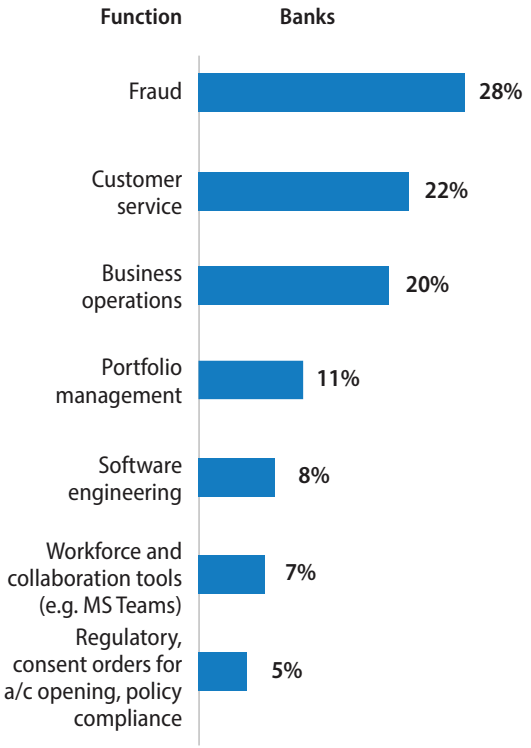
Hiring in AI and cloud expected to rise fastest



Notes:
1. Refer to page 13 for further details.
2. FTE means full-time equivalent employed in the company.
3. Communication technologies includes conversational AI, IVR, chatbots.
4. Virtual and augmented reality includes humanoids.

Banks see most value from AI in fraud detection and customer service

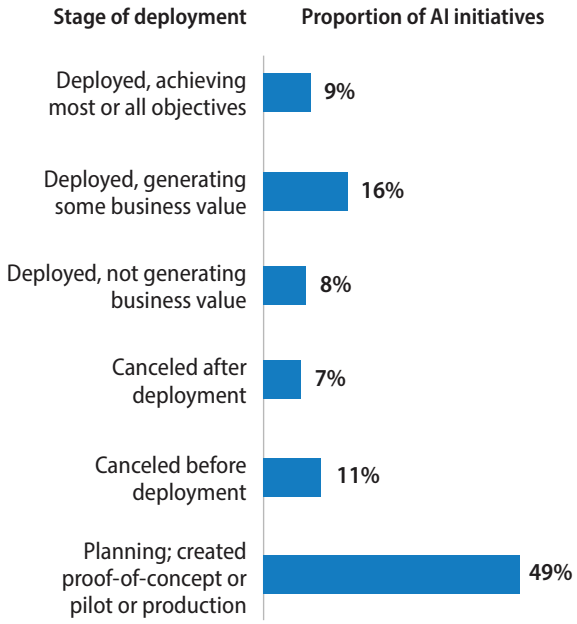
More mature AI initiatives in fraud detection



Notes:

1. Refer to page 21 for further details.
2. Software engineering includes back end, middle office, front end.
3. Regulatory includes KYC, customer complaints, summarize and improve.

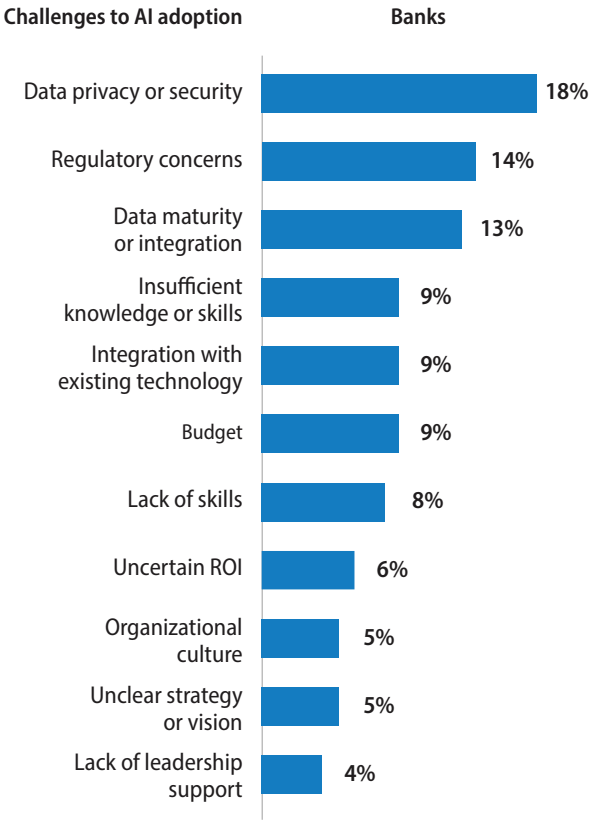
But half of all initiatives are in pre-deployment



Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Refer to page 20 for further details.

Data challenges hold back AI adoption

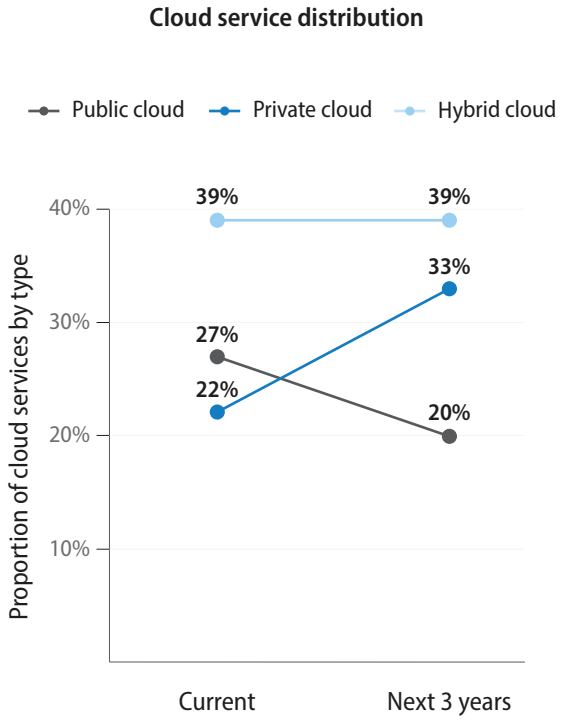


Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Refer to page 30 for further details.

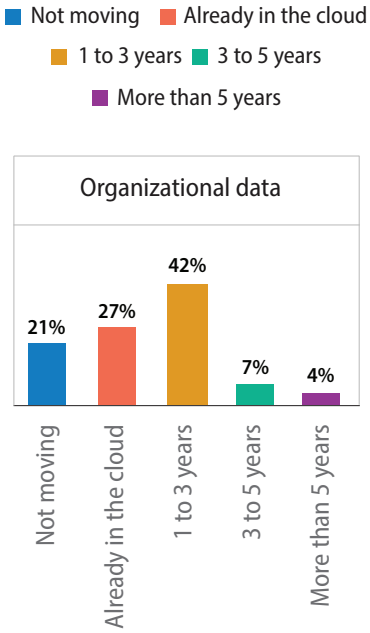
Cloud repatriation is a big theme among banks over the next three years

Banks will pivot from public to private cloud



Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Refer to page 37 for further details.

But hesitant to migrate organizational data



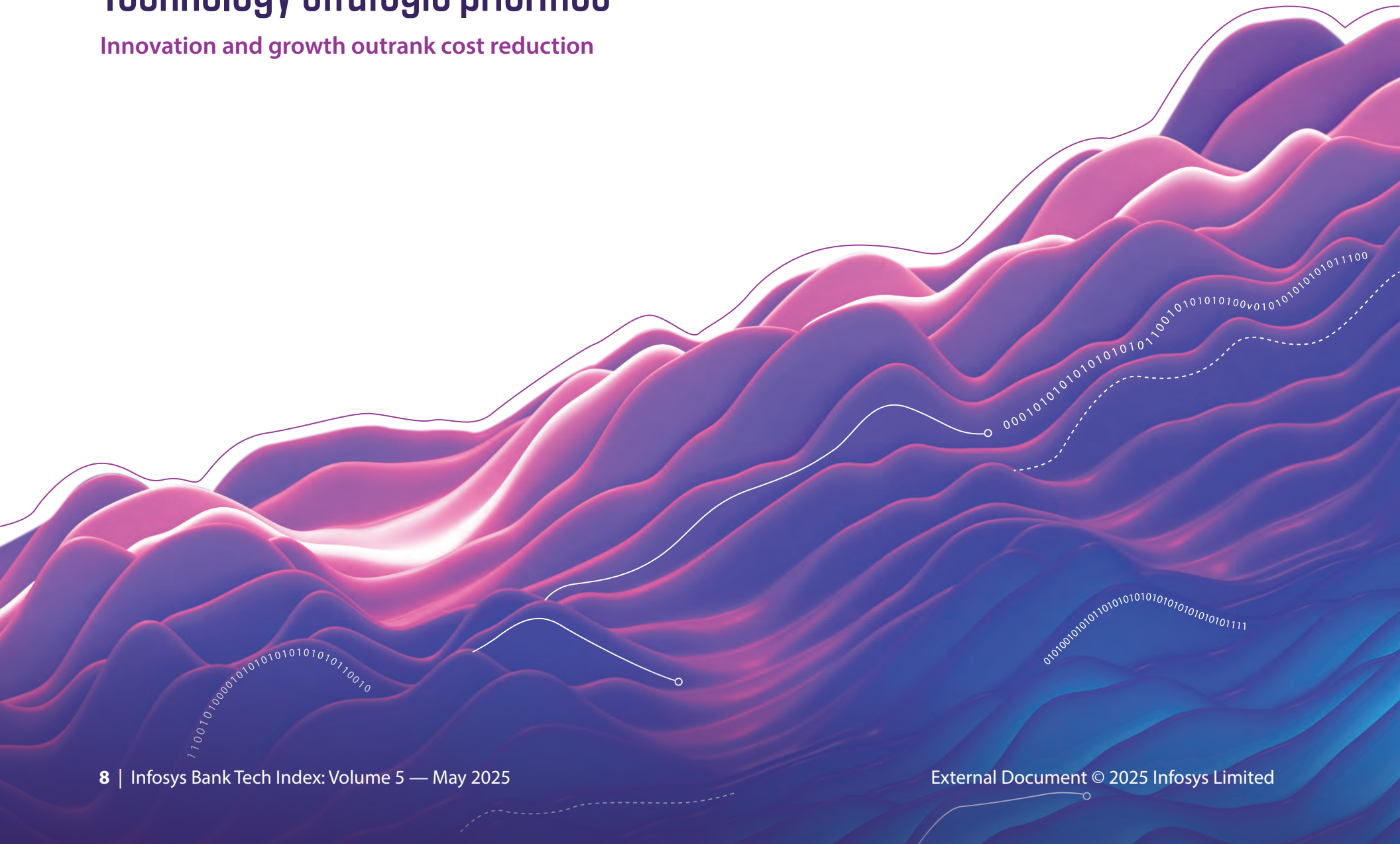
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Organizational data includes, intellectual property, material nonpublic information, and financial information.
3. Refer to page 38 for further details.

Cloud migration concerns include data security

Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Refer to page 40 for further details.

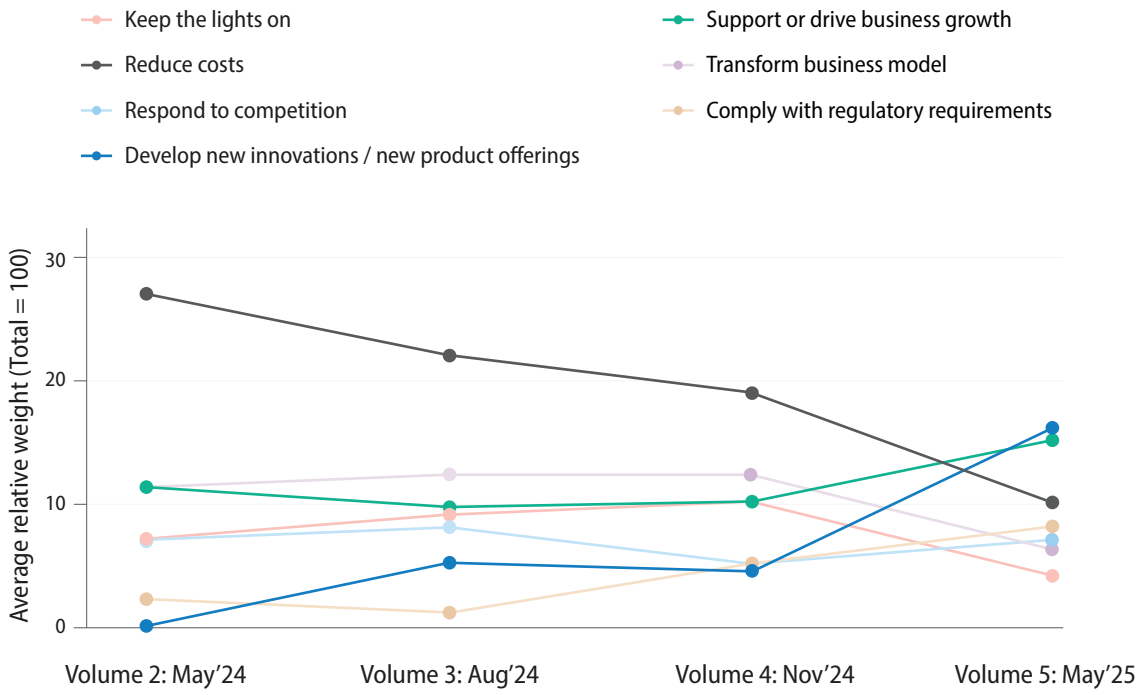
Technology strategic priorities

Innovation and growth outrank cost reduction



Innovation and growth overtake reducing costs

Technology strategic priorities comparison across volumes



Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. N = 379, where N is the number of banks surveyed in Volume 4.
3. N = 396, where N is the number of banks surveyed in Volume 3.
4. N = 324, where N is the number of banks surveyed in Volume 2.

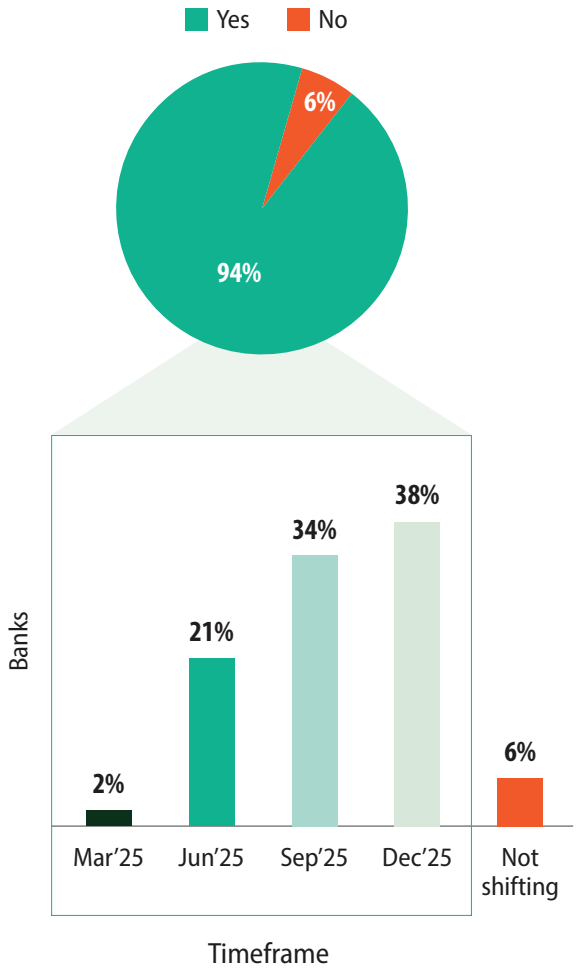
Banks decrease focus on reducing costs — Cost reduction as a strategic priority for banks decreased in importance by nearly half from last year to 15 percentage points.

Innovation is now the top strategic priority for banks — The focus on innovation has doubled since a year ago to 21 percentage points. This is closely followed by driving business growth.

Banks are actively investing in technology and digital transformation to drive sustainable growth and improve efficiency. That ultimately enhance customer and employee experience, rather than solely focusing on cutting costs.

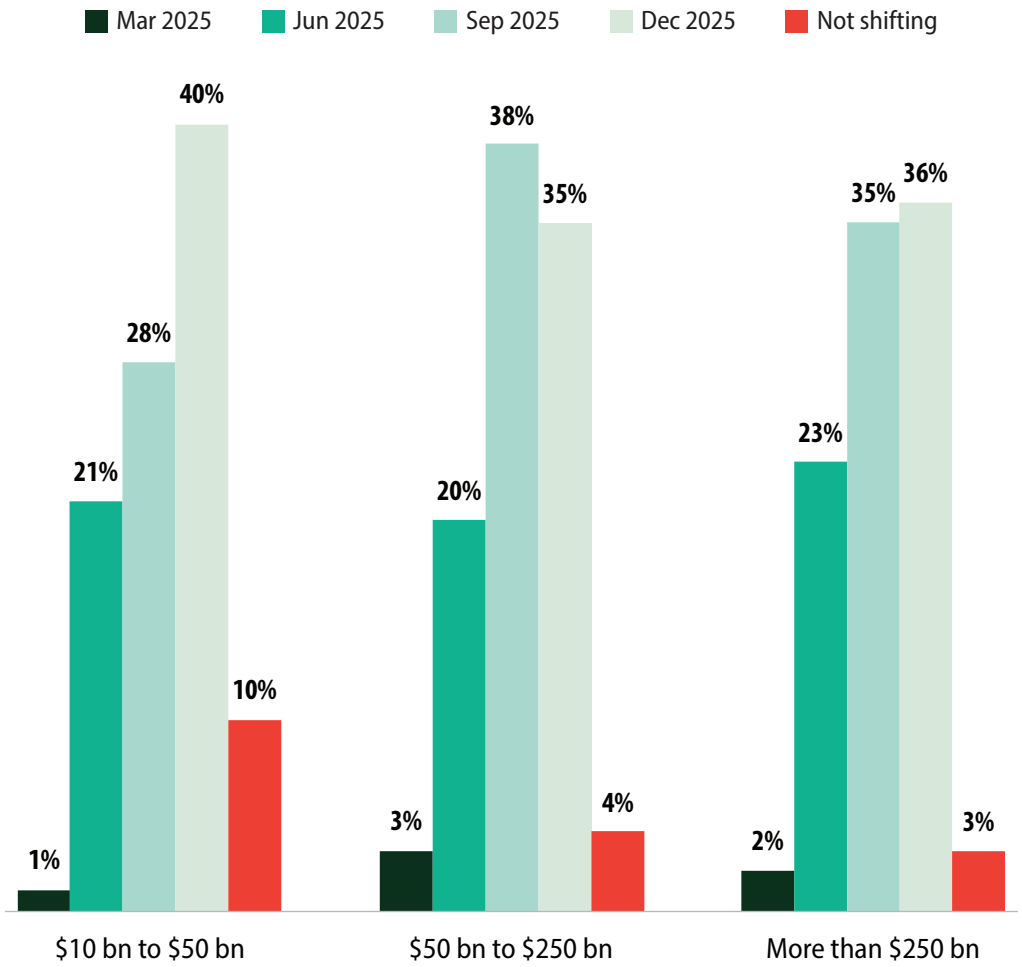
Banks expect growth to be in focus for 2025

Timeline for shift in investments toward growth



Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Timeline for shift in investments toward growth by total asset category



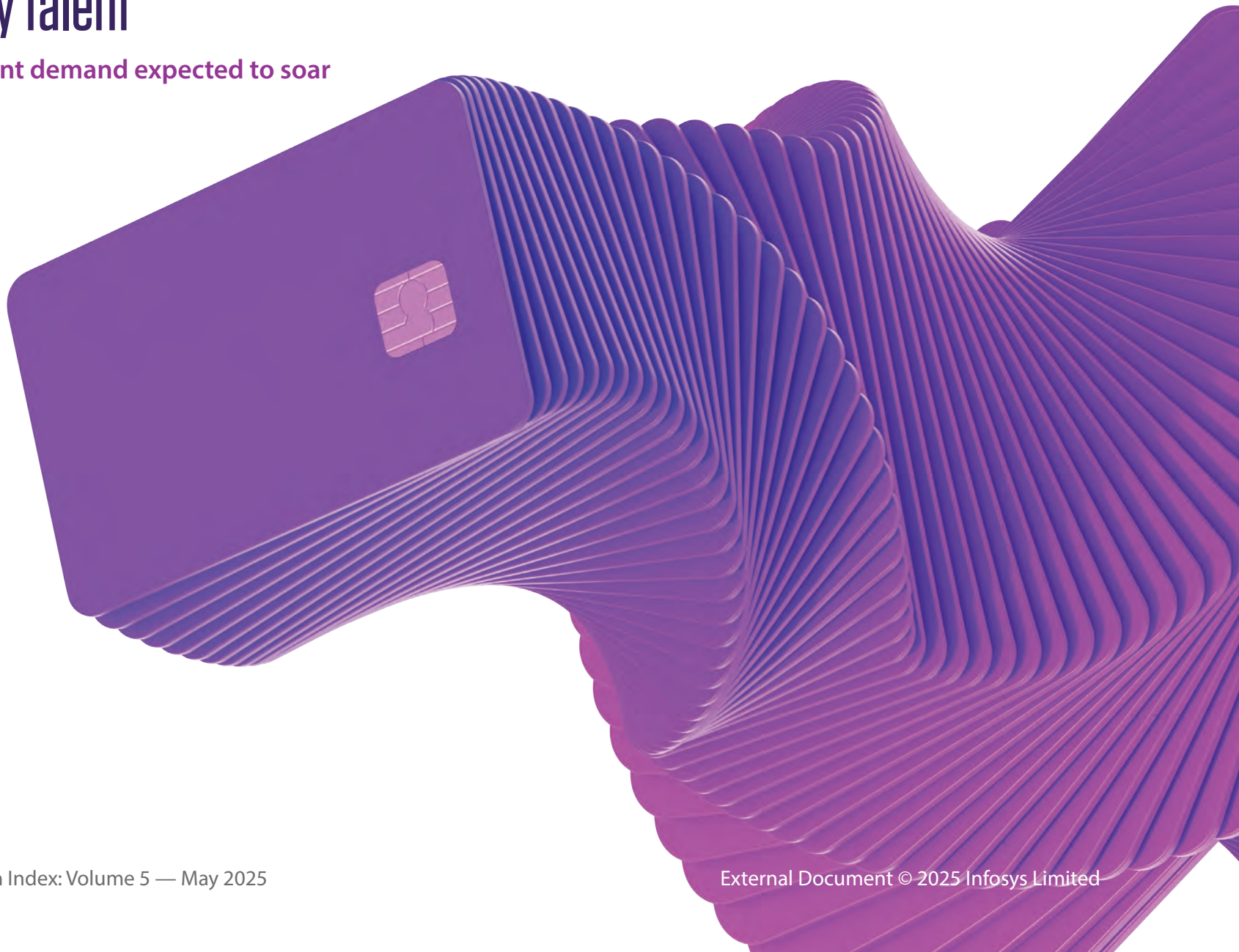
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Nearly all banks expect a shift to growth from regulatory in the latter half of the year — Banks expect to shift priorities to new products and driving business growth in the second half of the year. However, given the underlying economic uncertainty at play, this could change banks decisions.

Smaller banks have lower growth expectations — 10% of banks with assets between $10 billion to $50 billion do not expect a shift in investment from regulatory to growth. Among those that do, 40% don't expect it until December of this year.

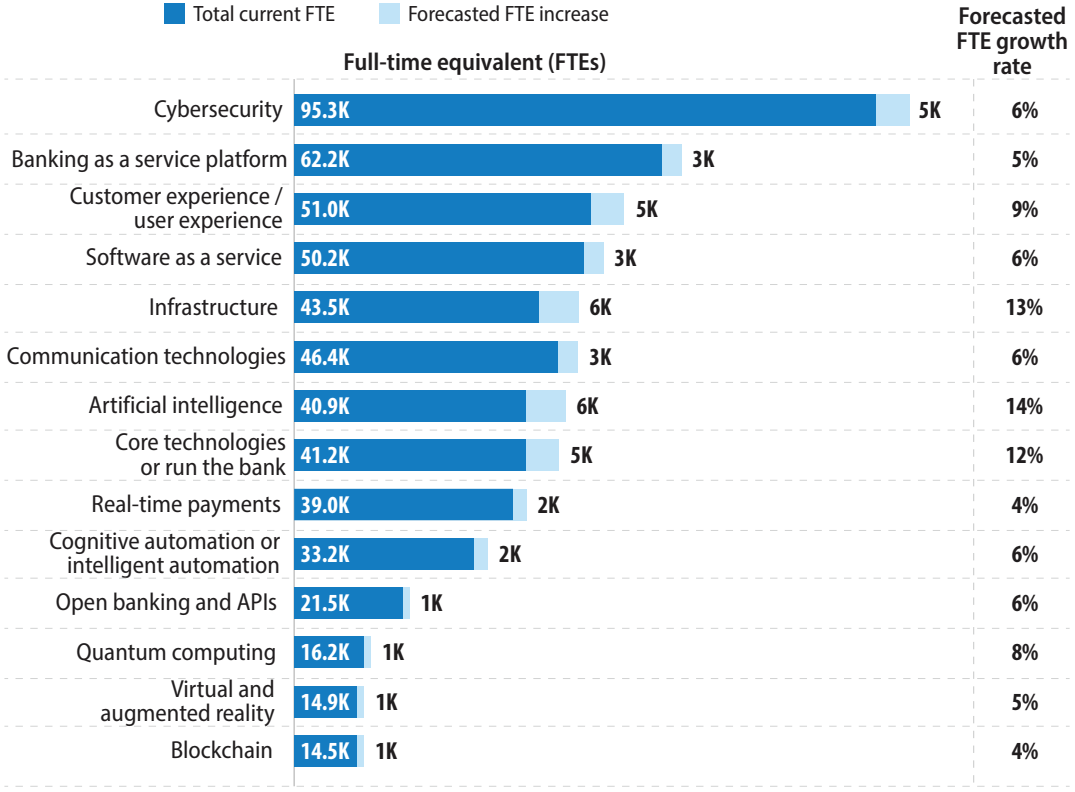
Technology talent

AI and cloud talent demand expected to soar



Cybersecurity dominates total employment, but AI leads expected hiring growth

Total full-time equivalent employees per technology



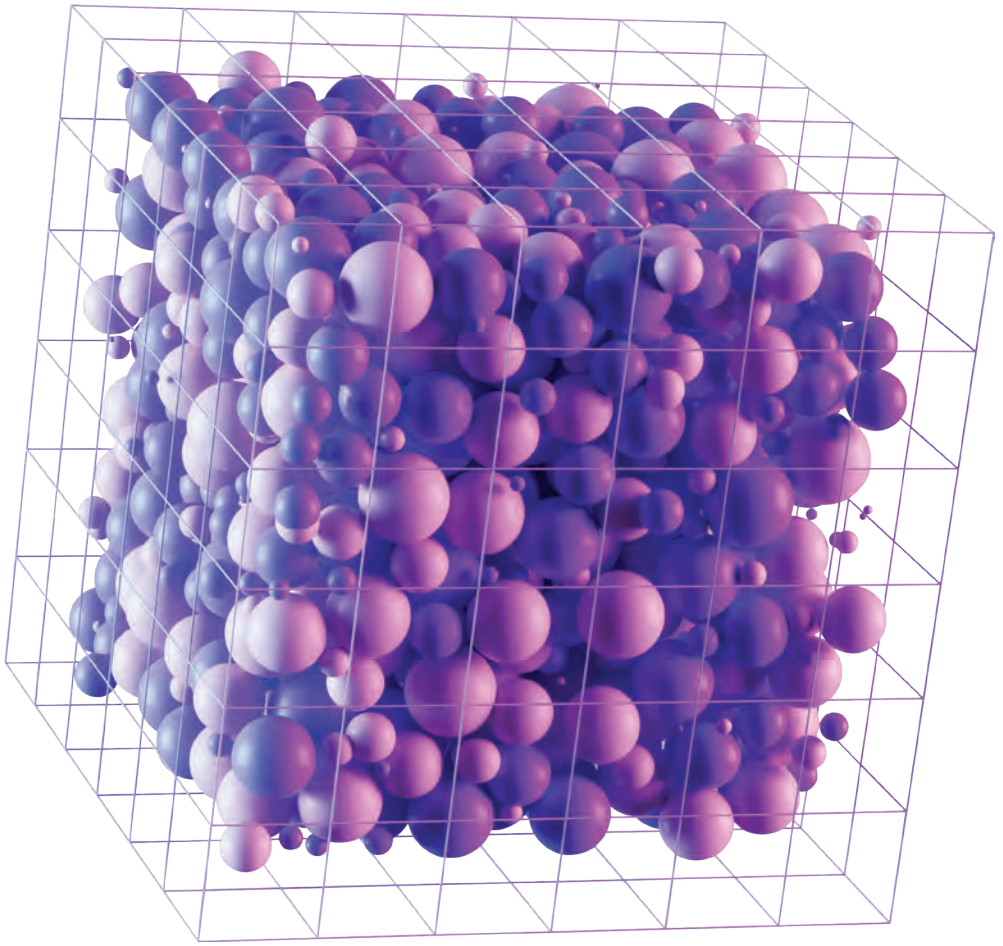
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. FTE means full-time equivalent employed in the company.
3. Communication technologies includes conversational AI, IVR, chatbots.
4. Virtual and augmented reality includes humanoids.

Cybersecurity commands the lion's share of bank tech talent — As of December 2024, nearly 17% of all technology professionals in banking are dedicated to defending digital frontiers, making cybersecurity the single largest area of tech employment in the sector.

AI and cloud infrastructure workforce growth is rapid — Banks plan to increase their cybersecurity workforce by 6% between January and June 2025. However, AI and cloud infrastructure roles are expected to grow the fastest at 14% and 13%, respectively. This hiring trend mirrors banking's refocus on growth for 2025.

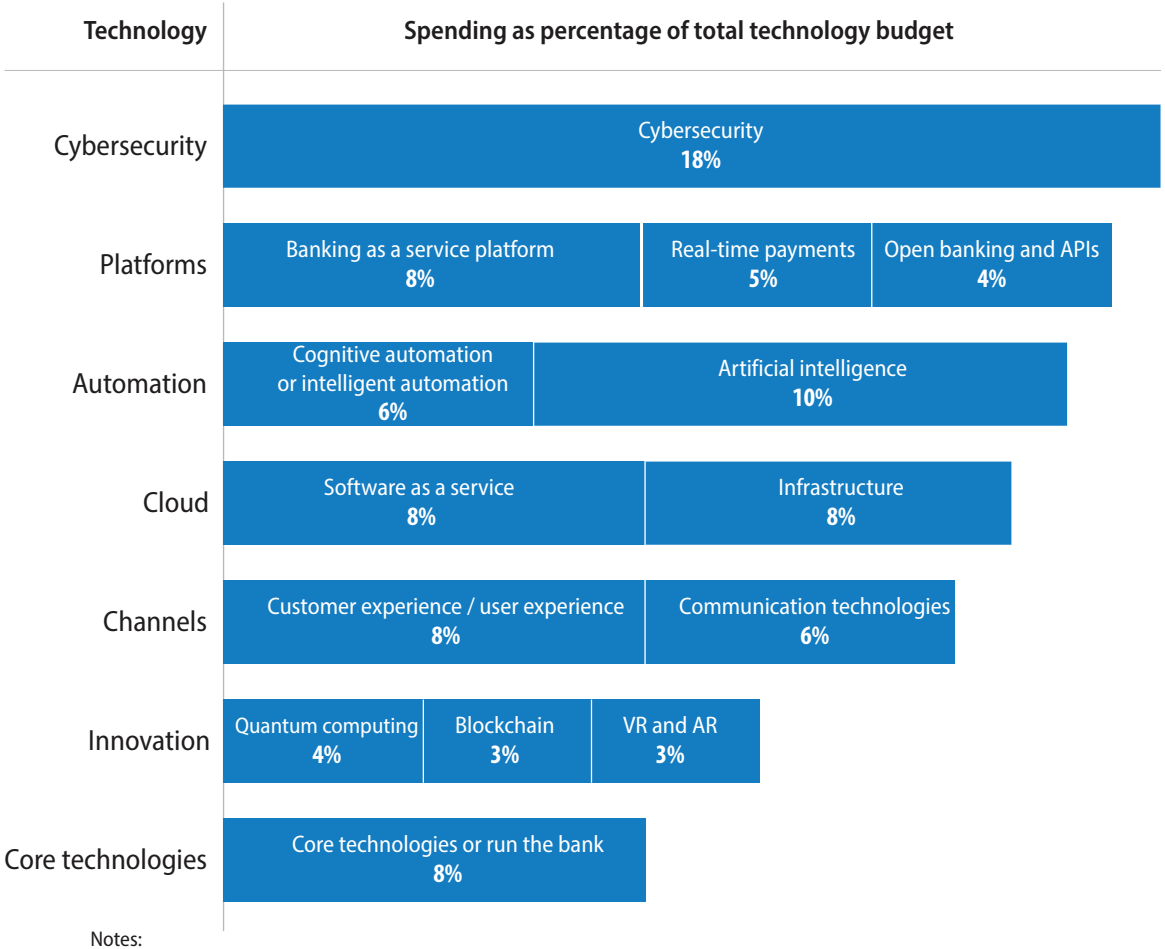
TECHNOLOGY BUDGET ANALYSIS

Cybersecurity dominates budget allocation, but AI spend is fastest growing



Cybersecurity leads technology budget allocation

Technology budget distribution



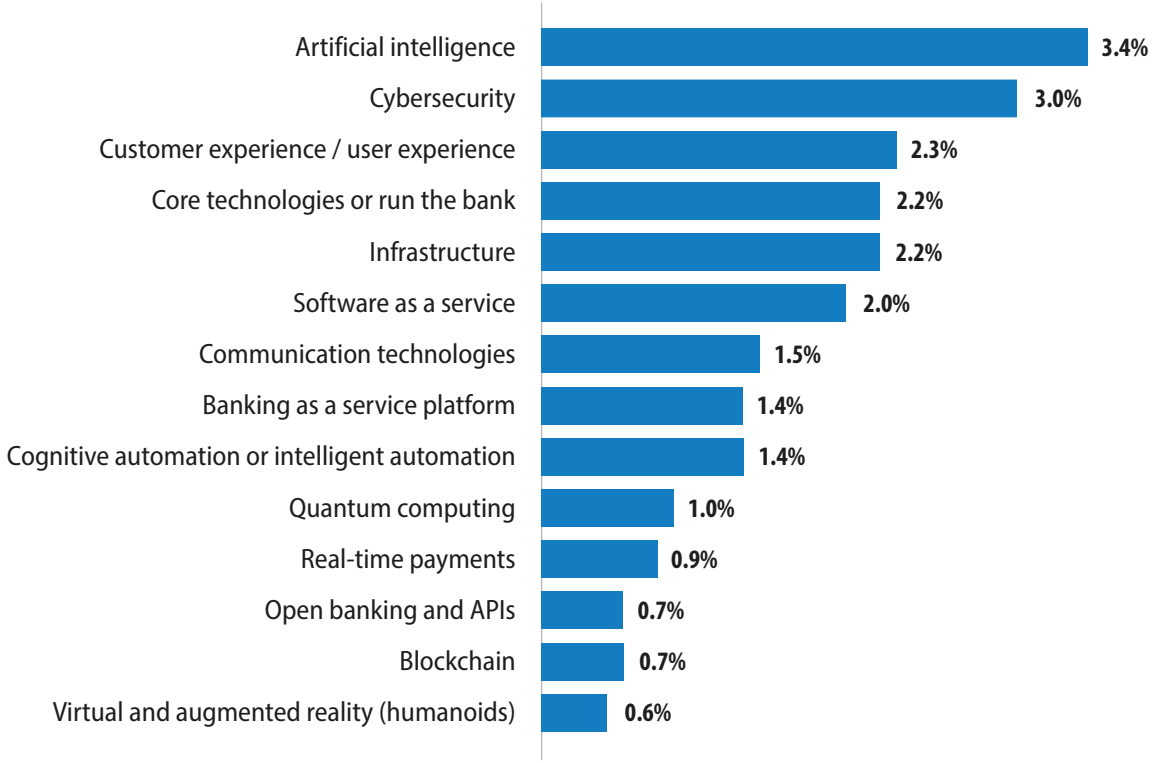
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Cybersecurity's share of budget is nearly twice as big as the next largest category, AI — On average banks allocate 18% of budgets to cybersecurity. In fact, this trend hold true regardless of bank size. Automation, cloud, and platforms budgets follow close behind.

With a rise in the frequency and sophistication of cyberattacks (for example the CrowdStrike outage, the Ally Bank data breach, JP Morgan Chase's data breach) targeting financial institutions, banks are turning cautious. The movement of banking operations to the cloud and the adoption of technologies, such as AI, have expanded the attack frontier, requiring more robust and sophisticated cybersecurity solutions, pushing cybersecurity budgets higher.

AI spending growth leads all other technologies

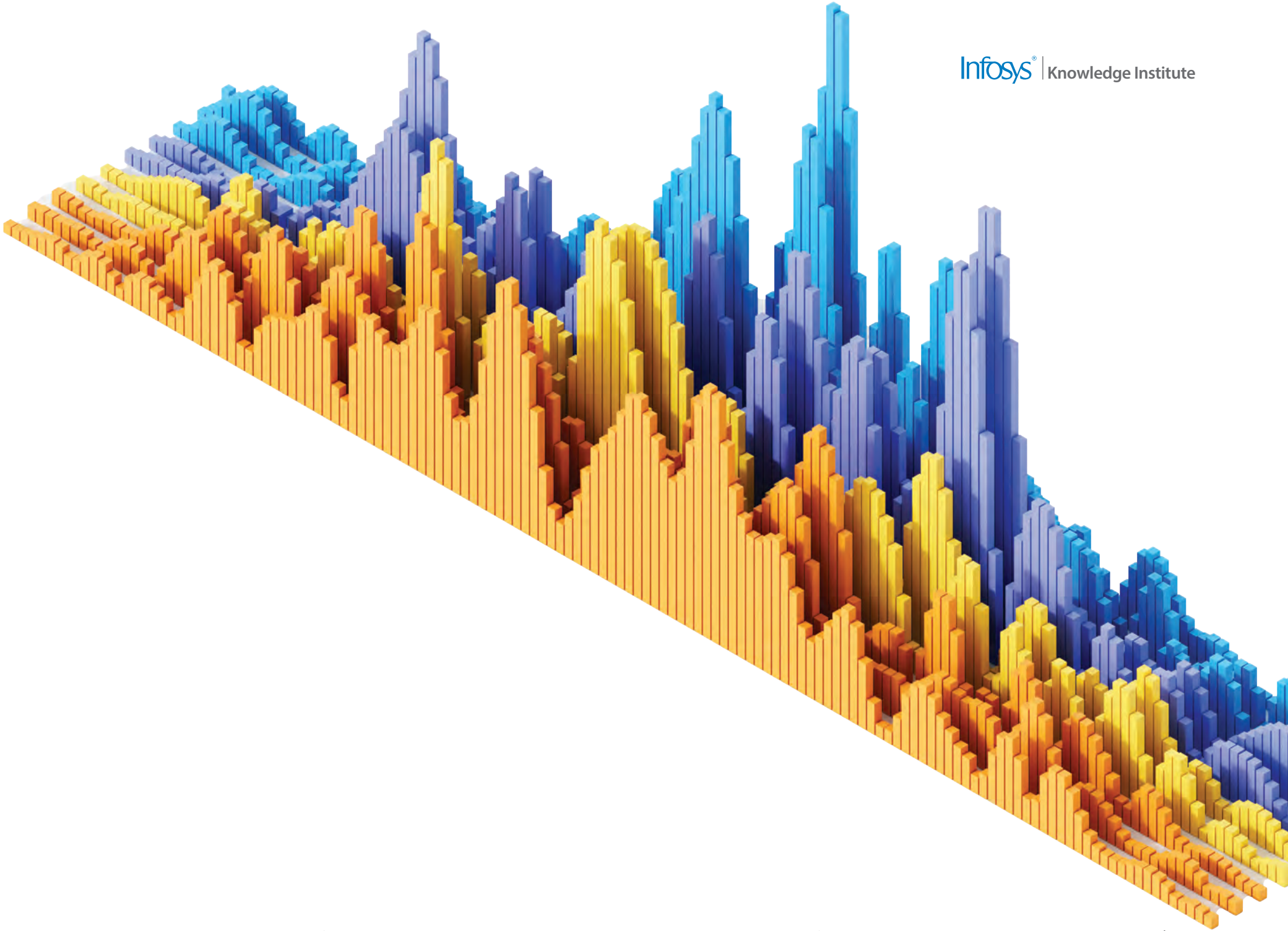
Projected spending growth during January to June 2025



Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Artificial intelligence includes classical or traditional AI, generative AI, agentic AI.
3. Cybersecurity includes controls, management, and protection of infrastructure.
4. Communication technologies includes conversational AI, IVR, chatbots.

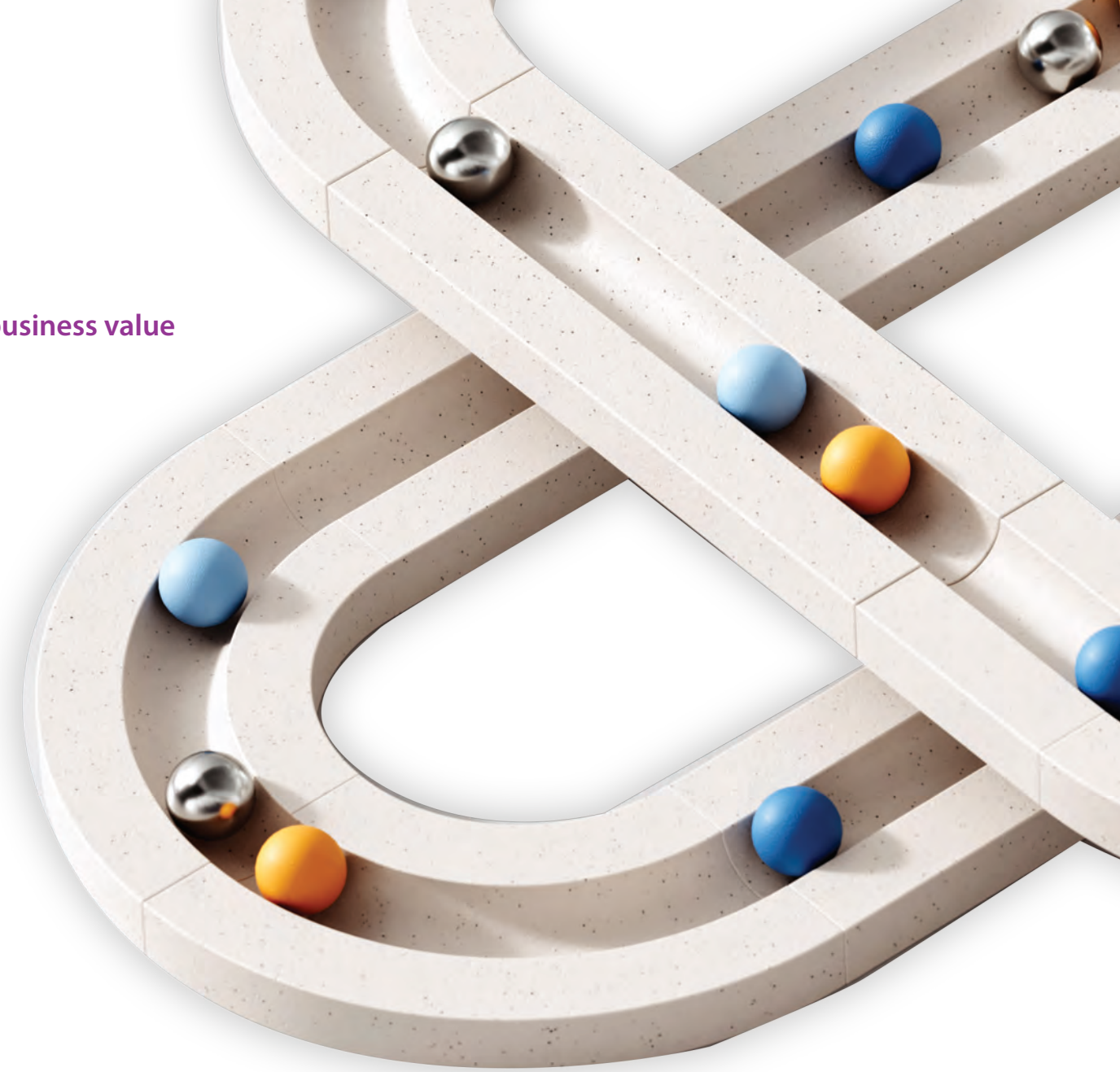
AI leads spending growth — Growth in AI spending is expected to increase by 3.4% during January to June 2025, edging out cybersecurity (3%).

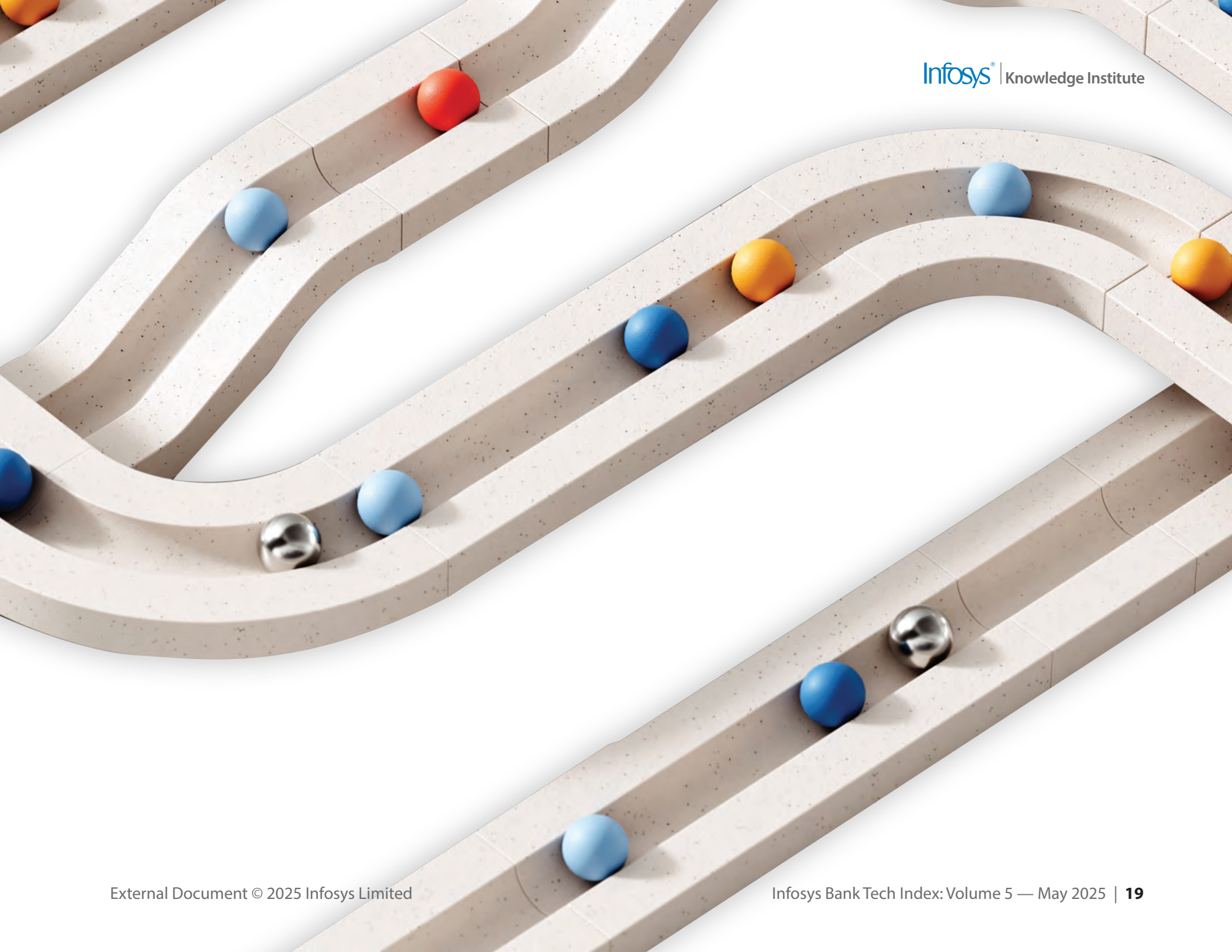
AI and cybersecurity spending growth set to greatly outpace inflation — Global inflation is expected to moderate at 4.1% for 2025, as per Euromonitor International and inflation in the U.S. is expected to be 3.5% for the year. Given that the expected increases in budget are for January to June 2025, if inflation and the expected bank tech budget growth remain constant, only AI, cybersecurity, customer experience, core technologies, and infrastructure are set to outpace global inflation.



AI insights

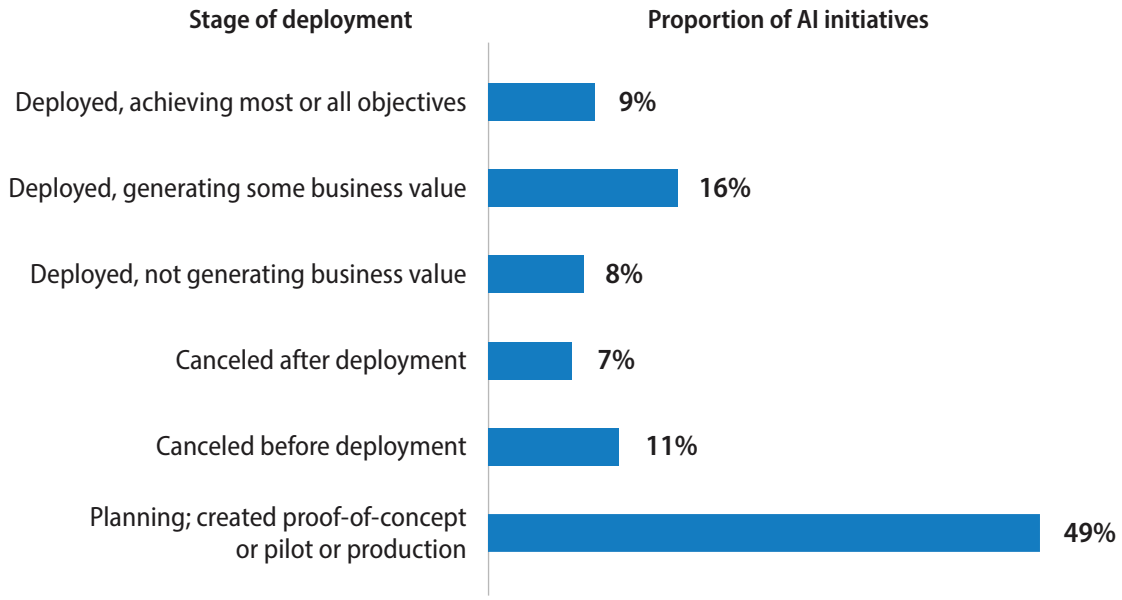
One-quarter of AI initiatives create business value





AI initiatives generate business value in banking but room for improvement

Percentage of AI initiatives in each stage



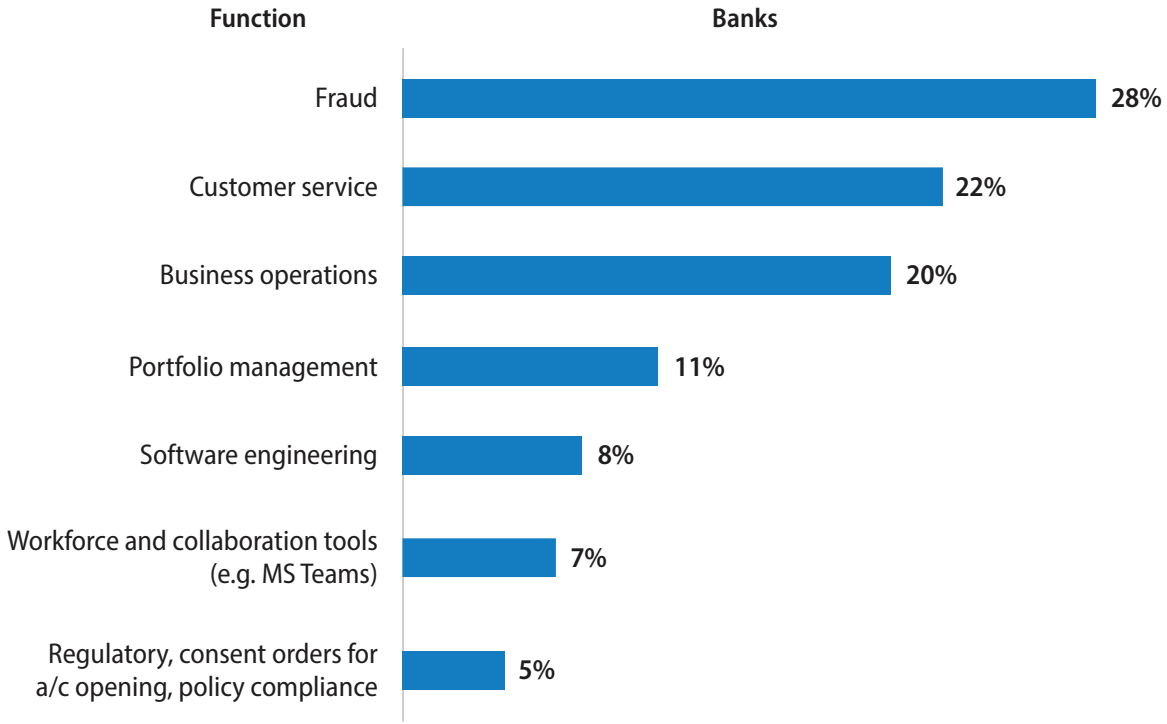
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

One-quarter of banks AI initiatives generate business value — This trend is constant across regions and bank sizes.

However, banking's AI initiatives are still held-up by proof-of-concepts and pilots — Nearly 50% of banks AI initiatives are in the proof-of-concept and pilot phase, indicating a great deal of experimentation. Banks face a significant challenges in balancing regulatory compliance with the need to modernize technology infrastructure. Coupled with legacy systems that hinder integration and innovation, make its difficult to progress AI initiatives quicker.

AI generates the most value in fraud detection

Functions where AI generates the most business value



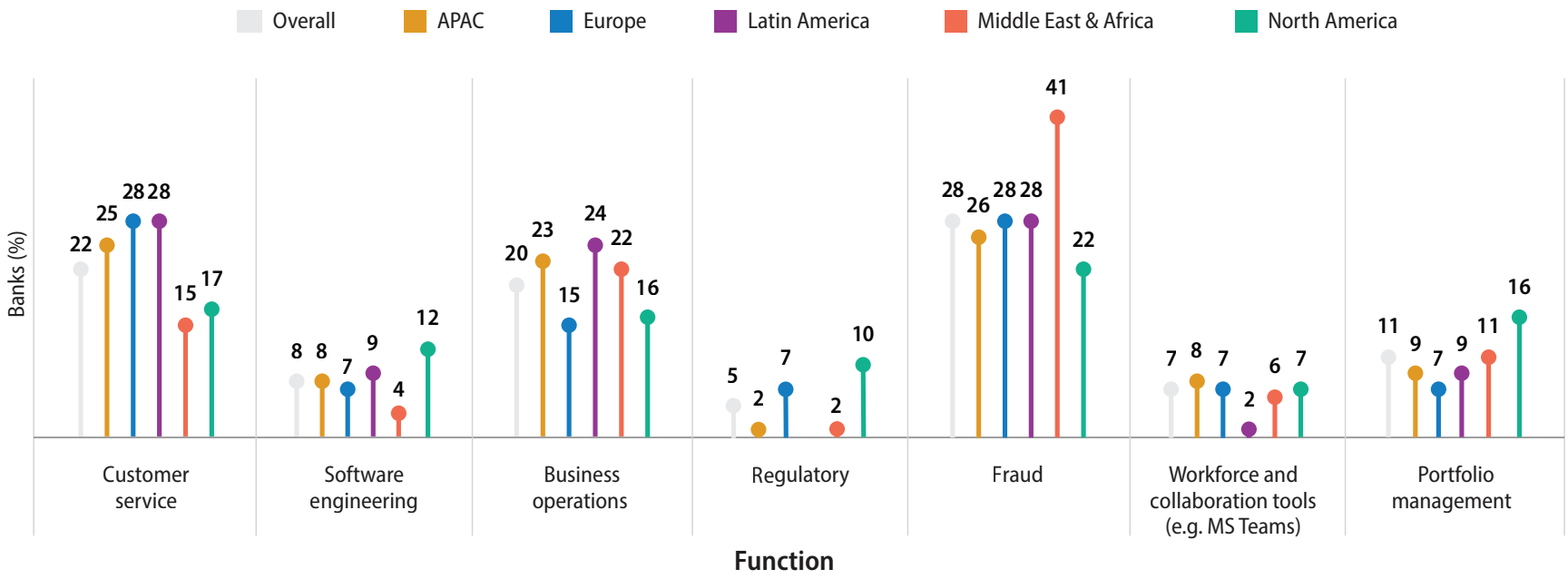
Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Software engineering includes back end, middle office, front end.
3. Regulatory includes KYC, customer complaints, summarize and improve.

Fraud detection leads in generating AI business value — Banks see most value in fraud detection (28%) followed by customer service (22%). In other research, AI Business Value Radar, we found that these were two of the most popular use cases for AI as well. The success seen in these two areas is likely due to more mature initiatives where banks have more experience.

Regional differences in AI value

Functions where AI generates the most business value by region



Notes:

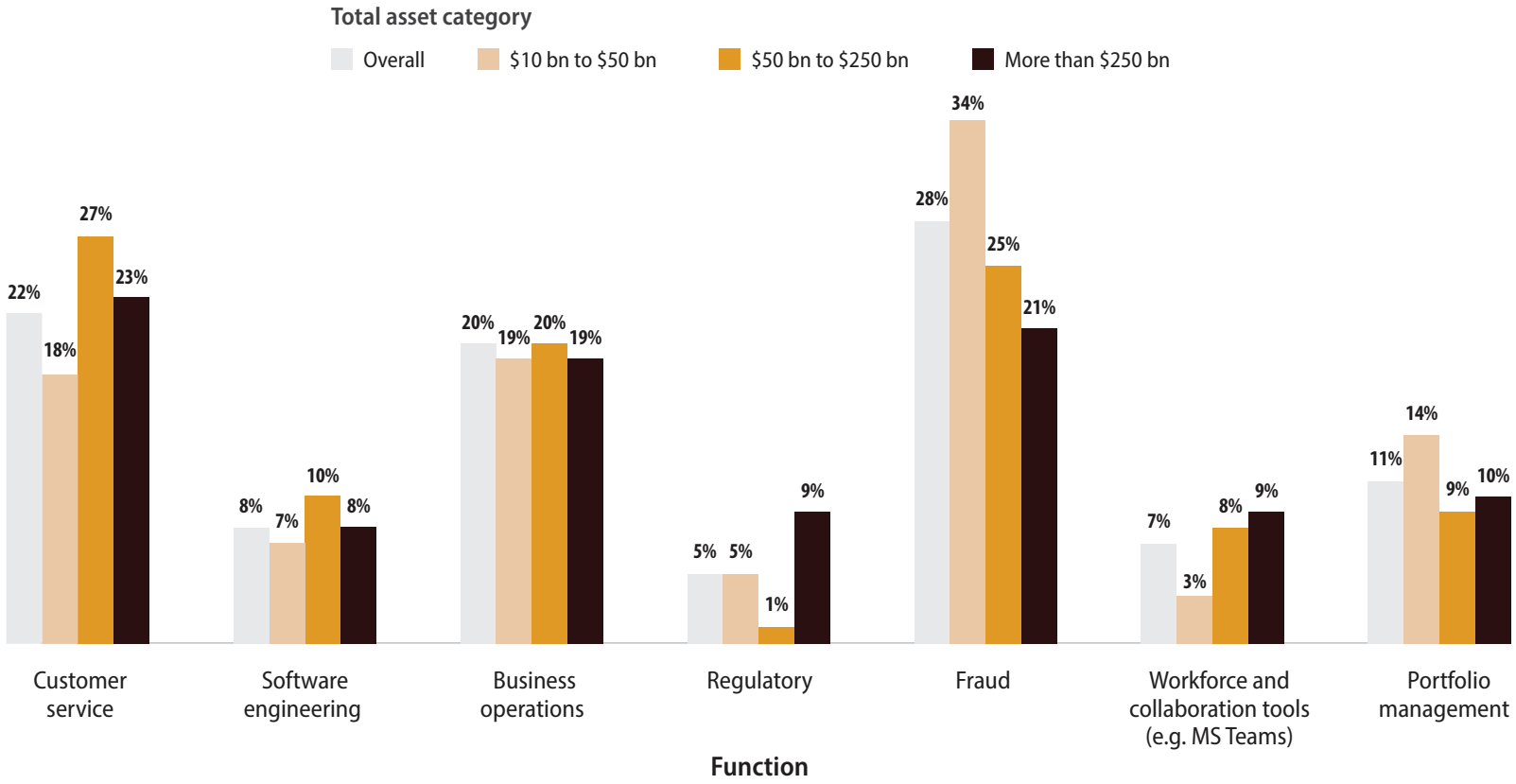
1. N = 400, where N is the number of banks surveyed in Volume 5.

Fraud detection leads AI business value across regions — Nearly 41% of Middle East and African banks see AI generating most value in fraud detection, while only 22% of North American banks see AI generating most value in detecting fraud. The Middle East and African banks experience higher levels of financial crimes than other regions making AI for fraud detection highly valuable.

Banks across regions view AI in customer service differently — While 28% of European and Latin American banks perceive AI to generate most value in customer service, only 15% of Middle East and African banks see AI generating most value in customer service.

Value delivered by AI differs across total asset categories of banks

Functions where AI generates the most value by total asset category



Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.

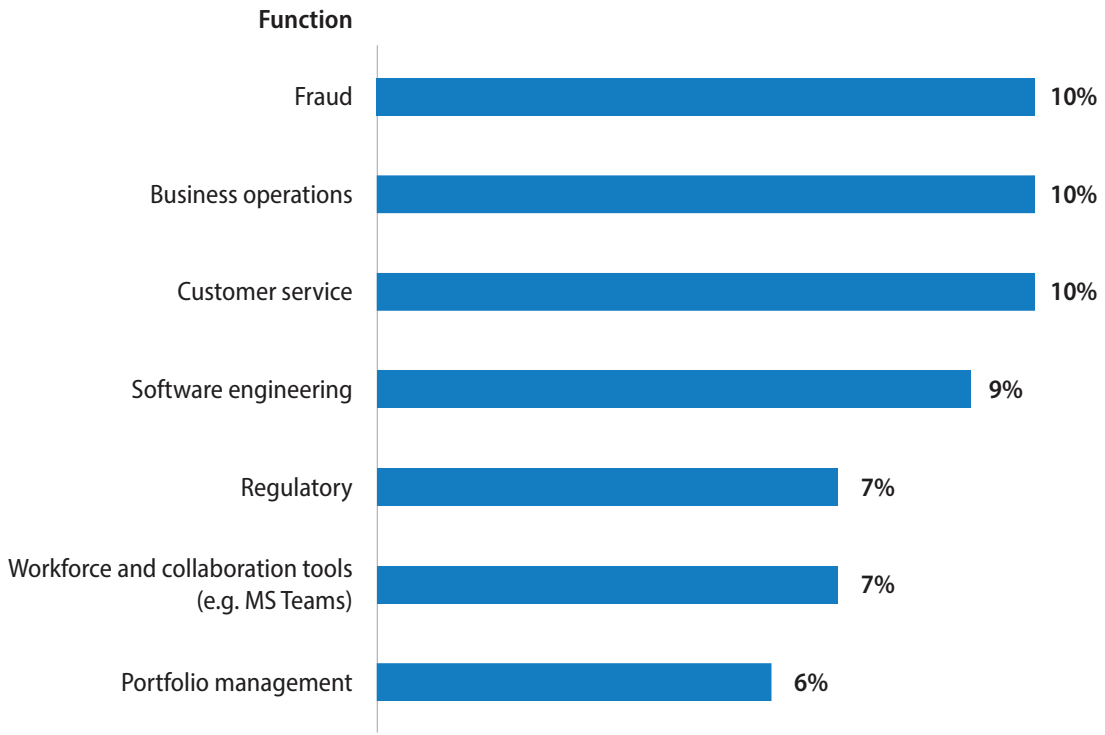
Smaller sized banks view AI generating most value for fraud detection — Nearly 34% of banks with assets between $10 billion to $50 billion said they got most value from AI when used to detect fraud. However, only 21% of banks with assets over $250 billion see AI generating most value in fraud detection.

Mid to large sized banks view AI generating most value for customer service — Nearly 27% of banks with assets between $50 billion to $250 billion and 23% of banks with assets over $250 billion see most value from AI in customer service. However, only 18% of banks with assets between $10 billion to $50 billion see AI generating most value in this function.

Large banks also believe that AI will generate high value in regulatory compared to other sized banks — About 9% of banks with assets over $250 billion see AI generating value in regulatory versus 1% of banks with assets between $50 billion to $250 billion.

Fraud, business ops and customer service are where AI will reduce costs most

Expected reduction in costs across functions using AI



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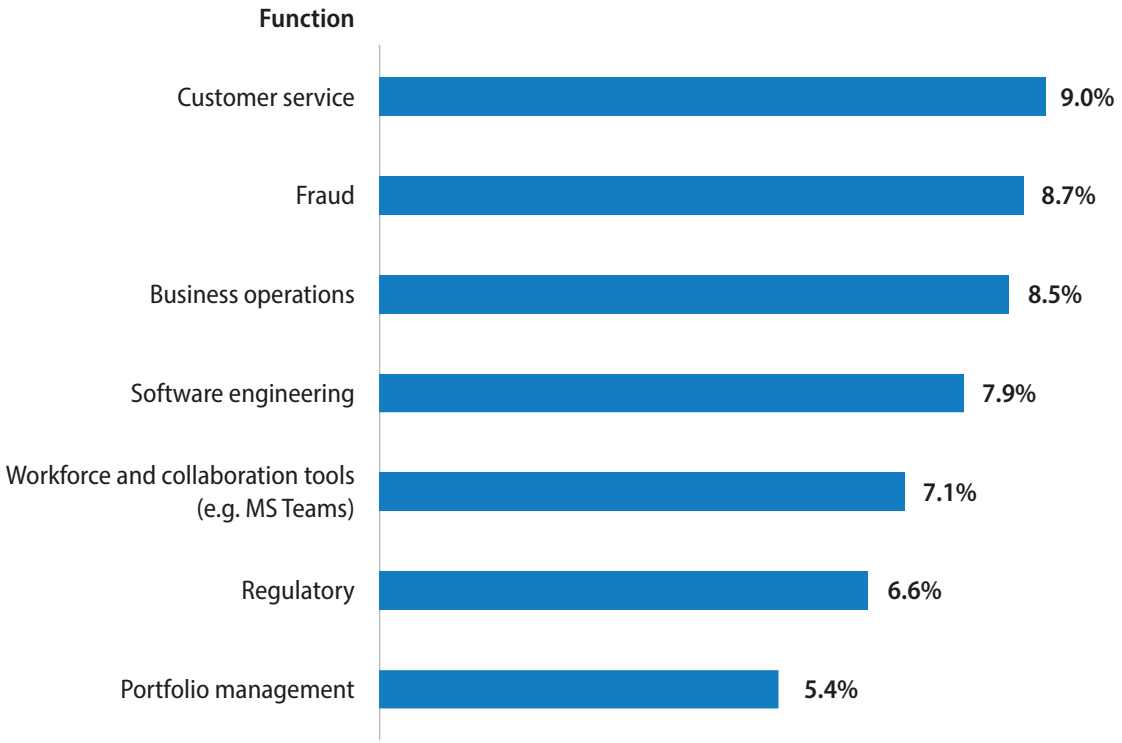
2. Software engineering includes back end, middle office, and front end.
3. Regulatory includes KYC, customer complaints, summarize, and improve.

Cost reduction is predicted to be highest where banks generate the most value with AI — Banks are most optimistic about AI's ability to reduce costs in fraud detection, business operations, and customer service. These areas are also where banks see the most value from AI already.

Banks see an even productivity increase from AI across business areas

Expected rise in productivity across functions using AI



Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.
2. Software engineering includes back end, middle office, and front end.
3. Regulatory includes KYC, customer complaints, summarize, and improve.

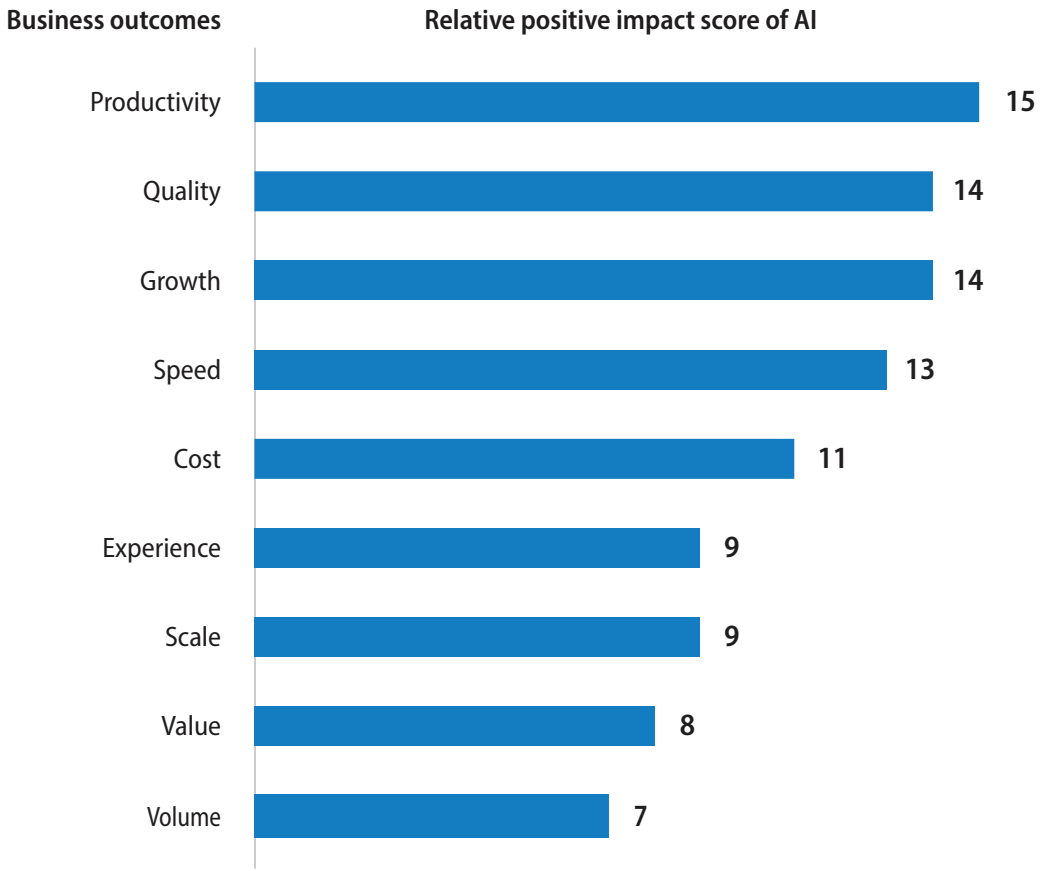
Expected rise in productivity across functions using AI aligns with where banks see most value using AI — Customer service, fraud detection, and business operations are expected to see the highest productivity increase from AI (9% on average). This may indicate that most of the expected cost savings are coming from productivity increases.

In customer-service contact centres, AI-powered auto-summarisation can help customer care professionals become 25% more productive. For example, ABN Amro uses generative AI at its contact centres to auto-summarize customer calls and improve productivity of customer care professionals.

AI is widely used to detect fraud as well. JP Morgan, for example, has reduced account validation rejection rates by 15-20% using AI-powered large language models for payment validation screening, resulting in lower levels of fraud.

Banks hopeful for operational efficiencies with AI

Expected most positive impact of AI



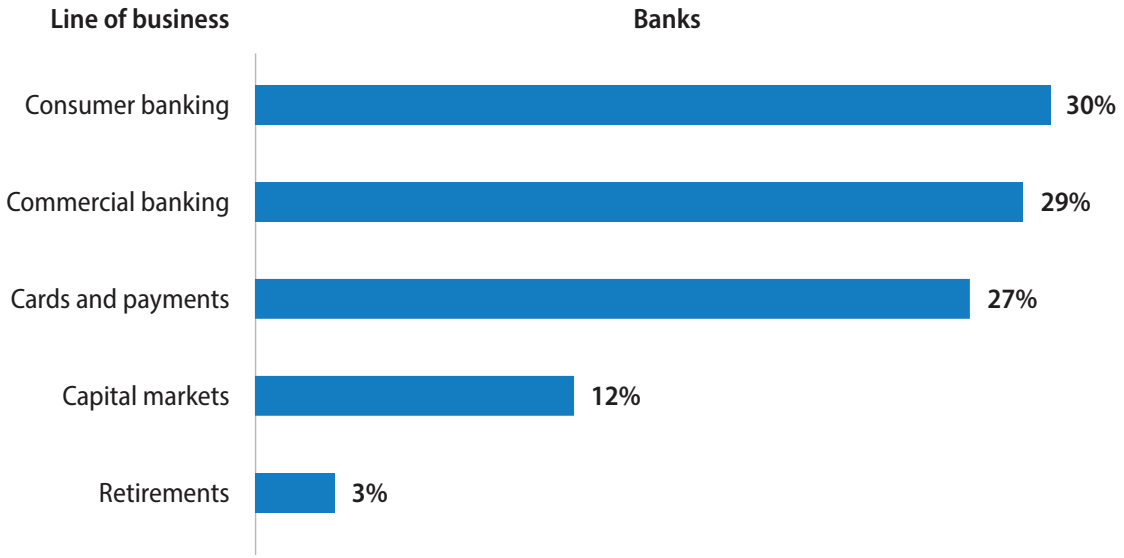
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Most positive impact of AI for improving internal operations and capabilities — Banks expect that AI is more likely to have the most positive impact in areas that improve operational efficiencies such as productivity, quality, growth and speed. While fewer expect AI to have the most positive impact in areas that lead to market expansion such as experience, scale, value, and volume.

Generative AI alone could inject between $200 billion and $340 billion annually into the banking sector, according to McKinsey, primarily from productivity gains.

Banks want to use AI for consumer and commercial banking

Average ranking of business lines where banks use AI the most



Notes:

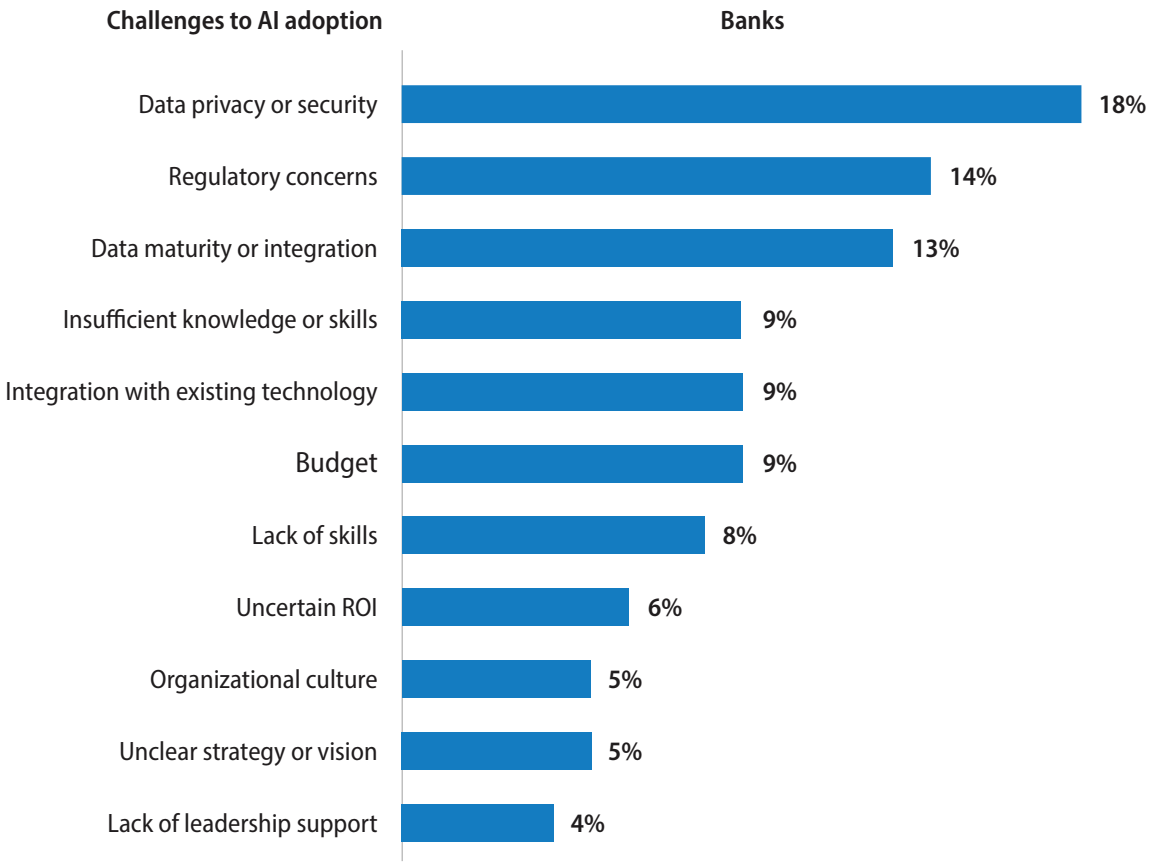
1. N = 400, where N is the number of banks surveyed in Volume 5.

Banking is the top area where AI most used — Consumer banking and commercial banking are the top two lines of business where AI is used the most. Over half of respondents ranked retirement plans as the least priority area for AI use. For retirement, the risk hallucinations or limitations of AI to look forward outweigh the possible benefits.

One reason banks see more most use of AI in banking could be due to our skewed sample toward banks rather than capital market and retirement institutions.

Data privacy and security hold back AI adoption

Average score of biggest challenges to AI adoption



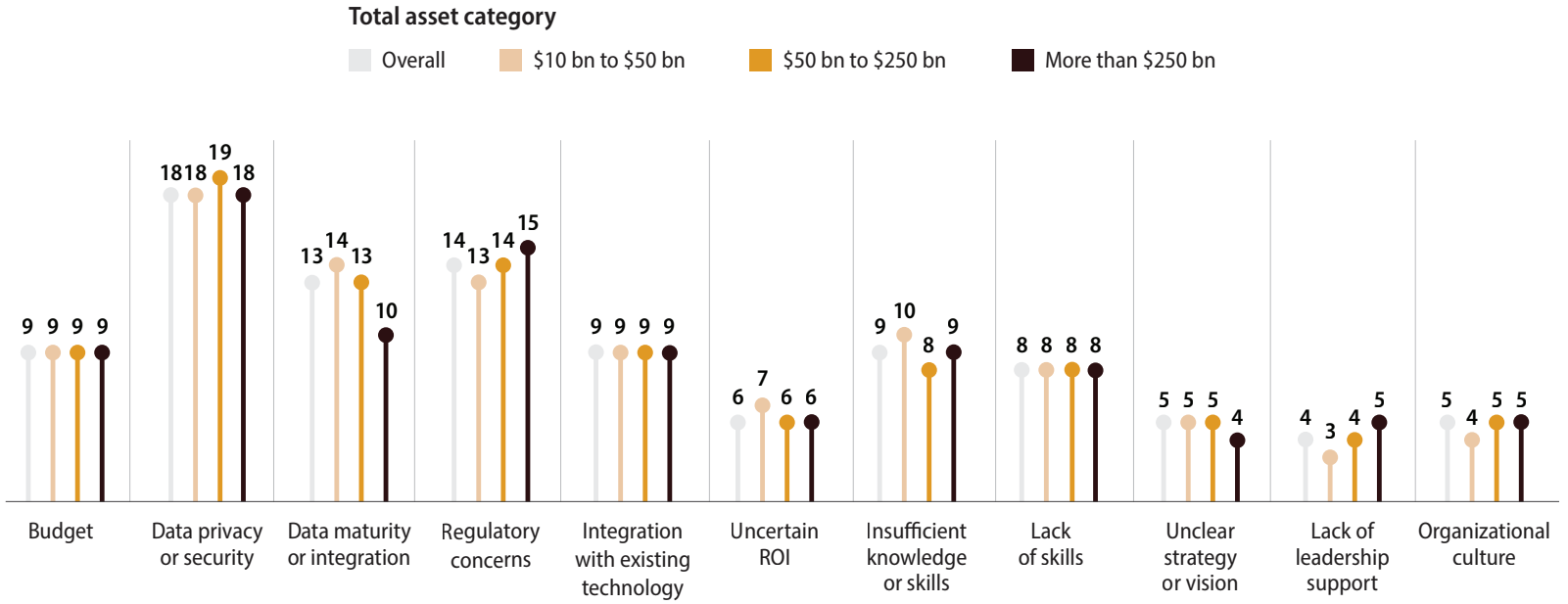
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Data and regulatory challenges persist — As seen across other industries, banks face substantial hurdles in AI adoption, with data privacy and security emerging as the dominant concerns. These challenges outweigh regulatory issues (by 25%) and leadership support gaps (by 4 times), highlighting the urgent need for robust data protection strategies to facilitate AI integration.

The case for AI has been made — Overcoming data and regulatory challenges is hard, and banks are trying actively to resolve them. Beyond these, little stand in the way of AI adoption. Lack of leadership support, unclear strategy, and uncertain ROI rank low as adoption challenges.

AI adoption challenges are consistent across bank size

Average score of biggest challenges to AI adoption by total asset category



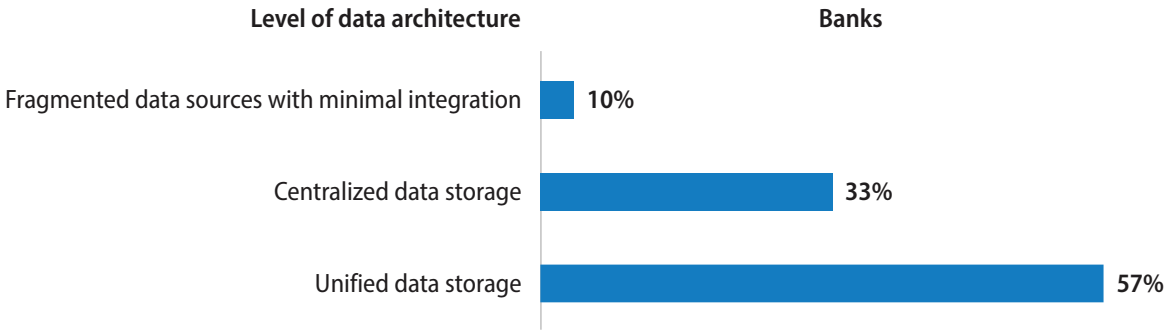
Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.

Banks rate challenges to AI adoption similarly irrespective of size — While banks across total asset categories rate their challenges to AI adoption in the same manner, the larger the bank, data maturity and integration is lesser of a challenge. One reason is larger banks have have more resources to invest and are more likely to have holistic data strategies and the organizational capacity to implement modern integration solutions.

Banks' view of data readiness at odds with reported challenges

Percentage of banks that indicated their data architecture to support AI



Notes:

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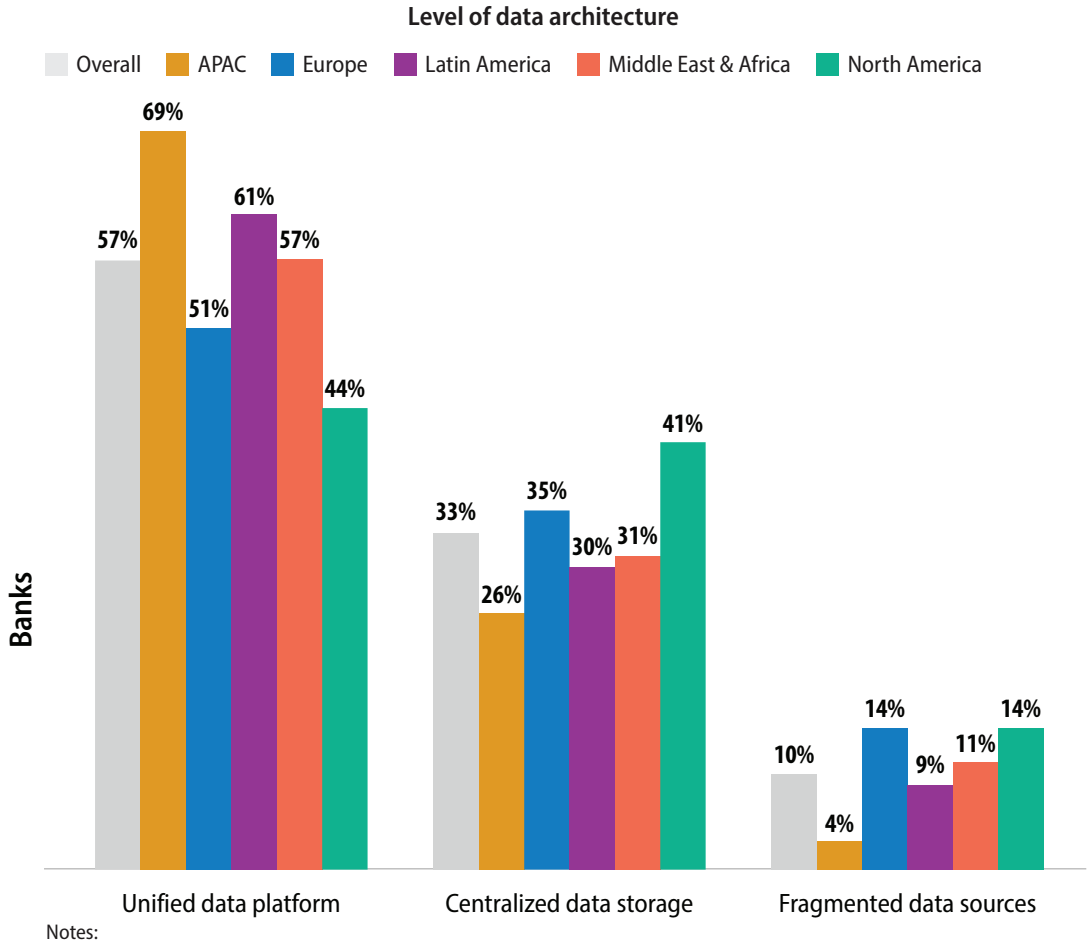
Over half of banks feel their data architecture is AI-ready — Nearly 60% of banks indicate that their data architecture is at an advanced and integrated stage and is equipped for AI use cases. However, this trend runs counter to the fact that banks indicated that data maturity and integration are a significant challenge to AI adoption.

APAC banks lead in AI-ready data architecture

Percentage of banks that indicated their data architecture to support AI by region

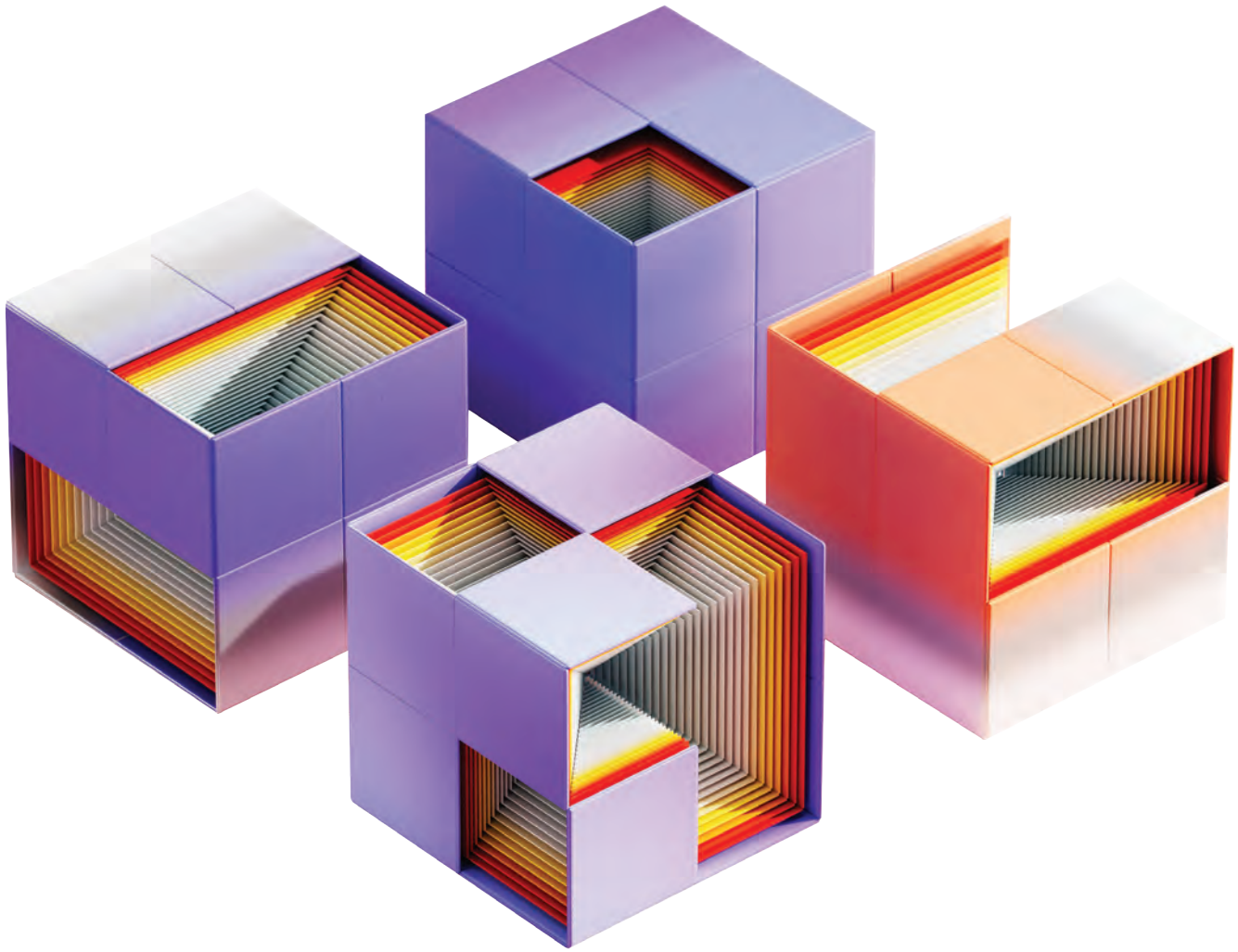


Notes:

1. N = 400, where N is the number of banks surveyed in Volume 5.

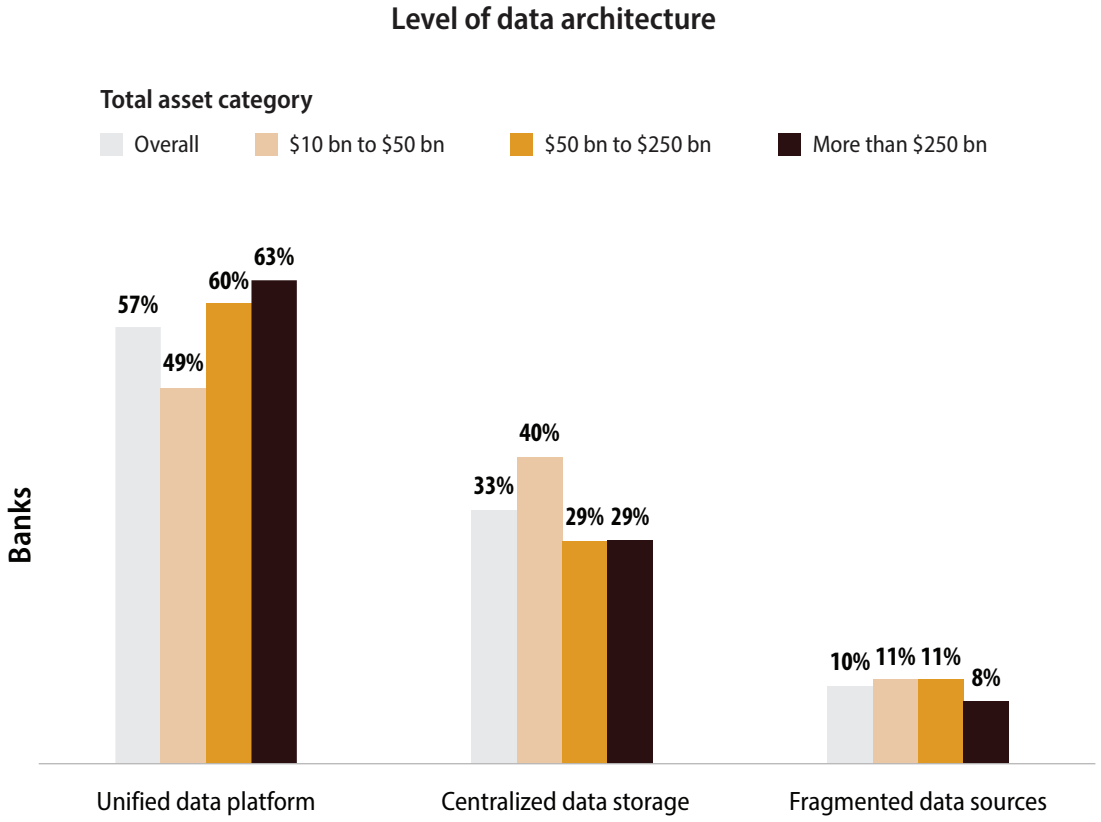
Banks in emerging or developing economies lead on AI-ready data architecture — Nearly 70% of APAC banks have advanced and integrated architecture to support AI, more than banks across other regions. Latin America, Middle East and Africa also show higher proportions. These regions conventionally benefit from a late-mover advantage, meaning they may not have to as many issues with legacy technology compared to others.

Europe and North America face more challenges with data —14% of North American and European banks are facing challenges in implementing AI in their data architecture. This could perhaps be attributed to their aging legacy estate.



Large sized banks have more data architecture that is AI-ready

Percentage of banks that indicated their data architecture to support AI by size



Fewer large size banks face issues with data architecture — Only 8% of banks with assets over $250 billion have challenges with AI-ready data architecture against 11% each for banks with assets between $10 billion to $50 billion and those with assets between $50 billion to $250 billion.

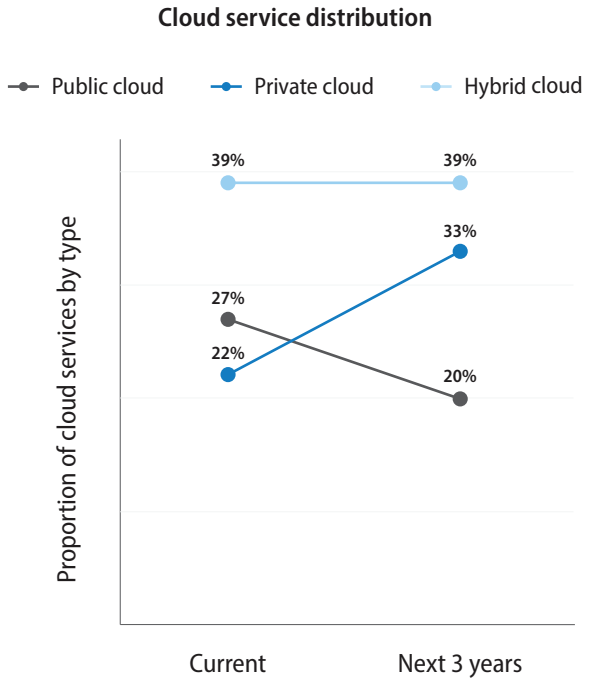
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Cloud insights

Cloud repatriation likely over the next three years

Bank cloud strategies are shuffling

Percentage of banks that use public, private and hybrid cloud today and in three years



Notes:

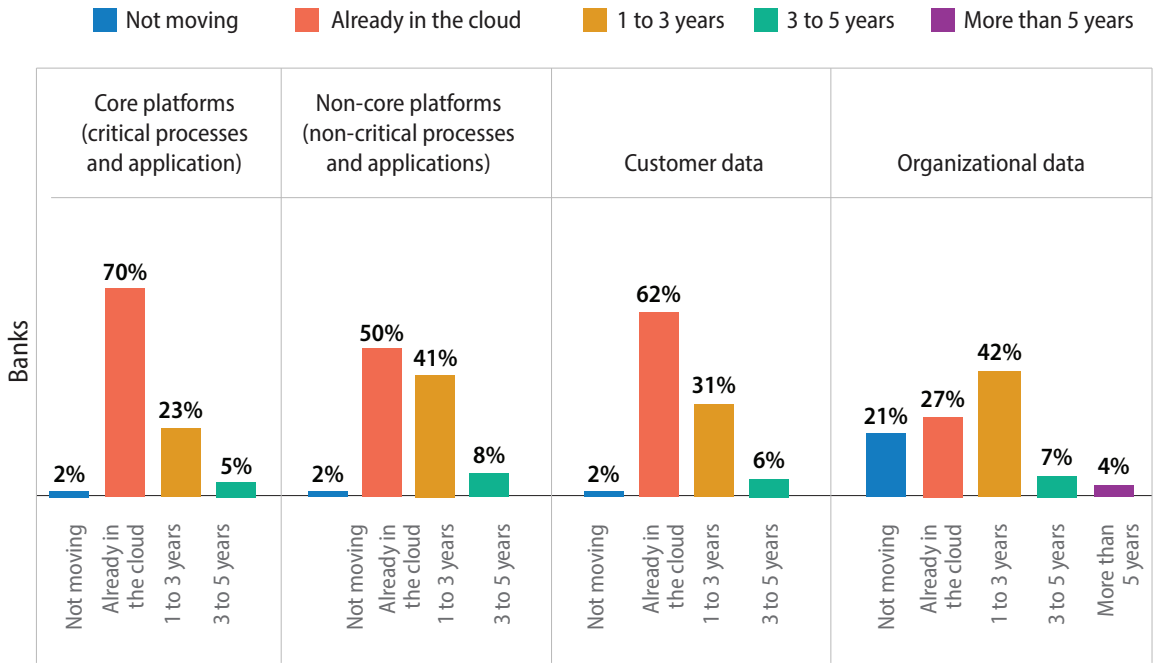
1. N = 400, where N is the number of banks surveyed in Volume 5.

Cloud usage to move up — Nearly 88% of banks indicated that they have a cloud strategy. While there is a current trend of cloud repatriation the percentage of banks using cloud (across public, private and hybrid) is expected to rise to 92% in three years.

Private cloud to see a rise — Banks, irrespective of size or region, indicated that they will increase their consumption of private cloud while reducing public cloud over the next three years. This perhaps stems from the need to balance scalability and flexibility with enhanced security and regulatory compliance. It also mirrors the trend of cloud repatriation seen in other industries. Sensitive data and critical workloads are hosted on private clouds to address data privacy and control concerns, while public clouds are used for less sensitive, scalable operations.

Organizational data stays in-house, while customer data moves to the cloud

Percentage of banks that plan to migrate to cloud or use a cloud service platform



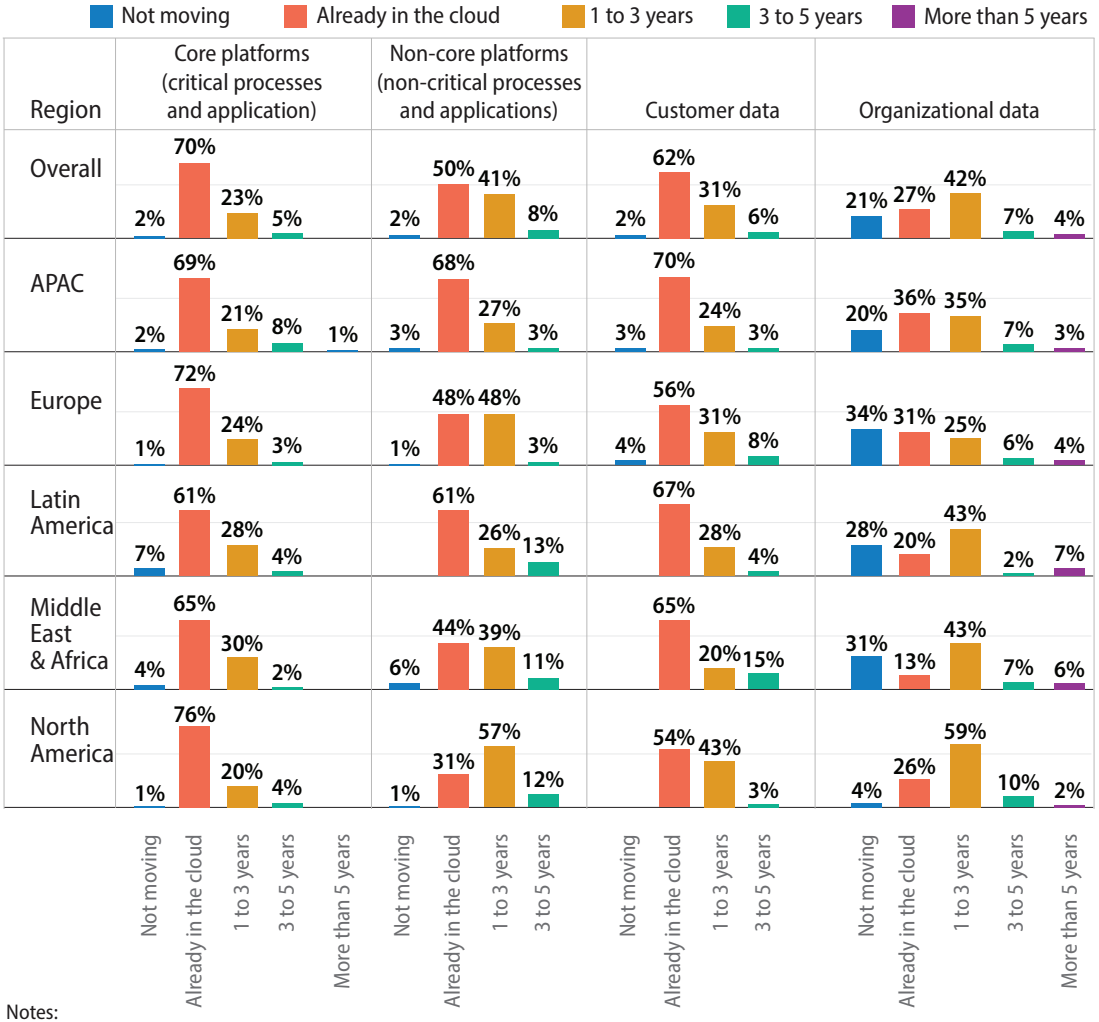
Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Banks are reluctant to move organizational data to the cloud

— Over 20% of banks indicated that organizational data will not move to the cloud, compared to only 2% for other processes and data. While it seems innocuous, most companies, beyond banks, are less likely to move their organizational data to the cloud. Organizational data often includes company financials and intellectual property – sensitive data that could cause irreparable damage to a company if compromised.

North American banks are more open to migrate organizational data to the cloud

Percentage of banks that plan to migrate to cloud or use a cloud service platform by region



Notes:

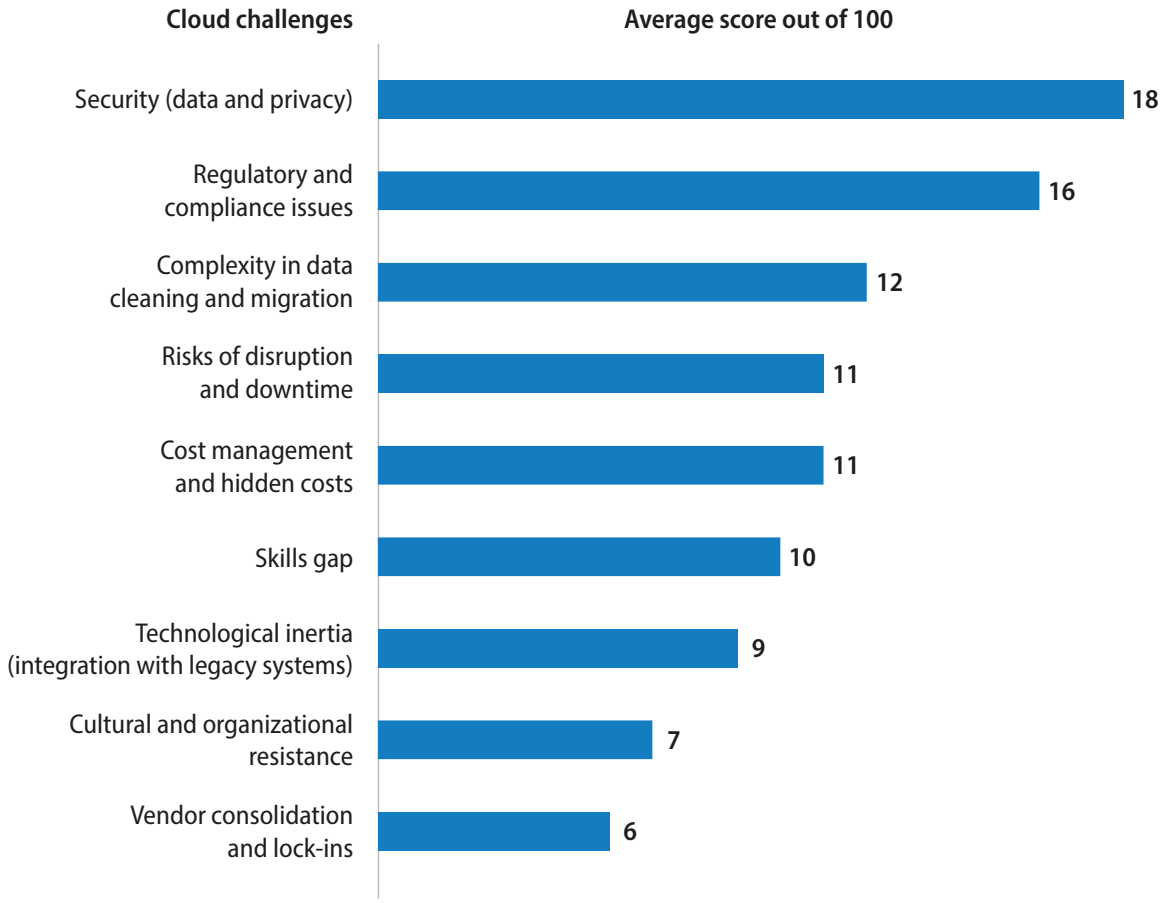
1. N = 400, where N is the number of banks surveyed in Volume 5.

North American banks are more likely to move to the cloud — North American banks are more likely to shift organizational data to cloud than the banks located in other regions. One-third of European and Middle East and African banks will not move their organizational data to cloud.

APAC banks ahead on moving non-core platforms and customer data to the cloud — North American banks lead on moving core platforms to the cloud while APAC banks lead on moving non-core platforms and customer data to the cloud.

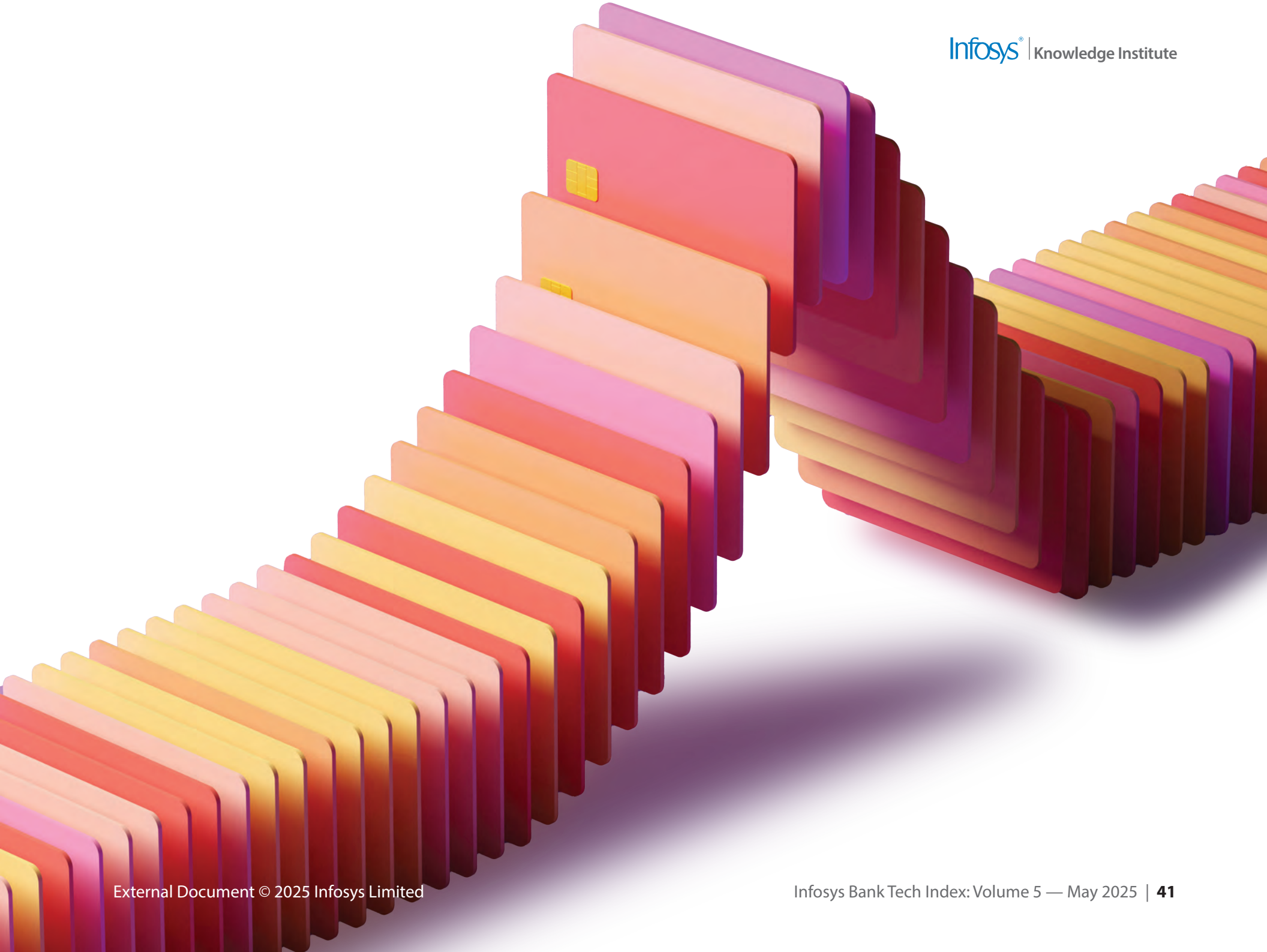
Security and compliance issues hold back cloud migration

Average score of cloud migration challenges

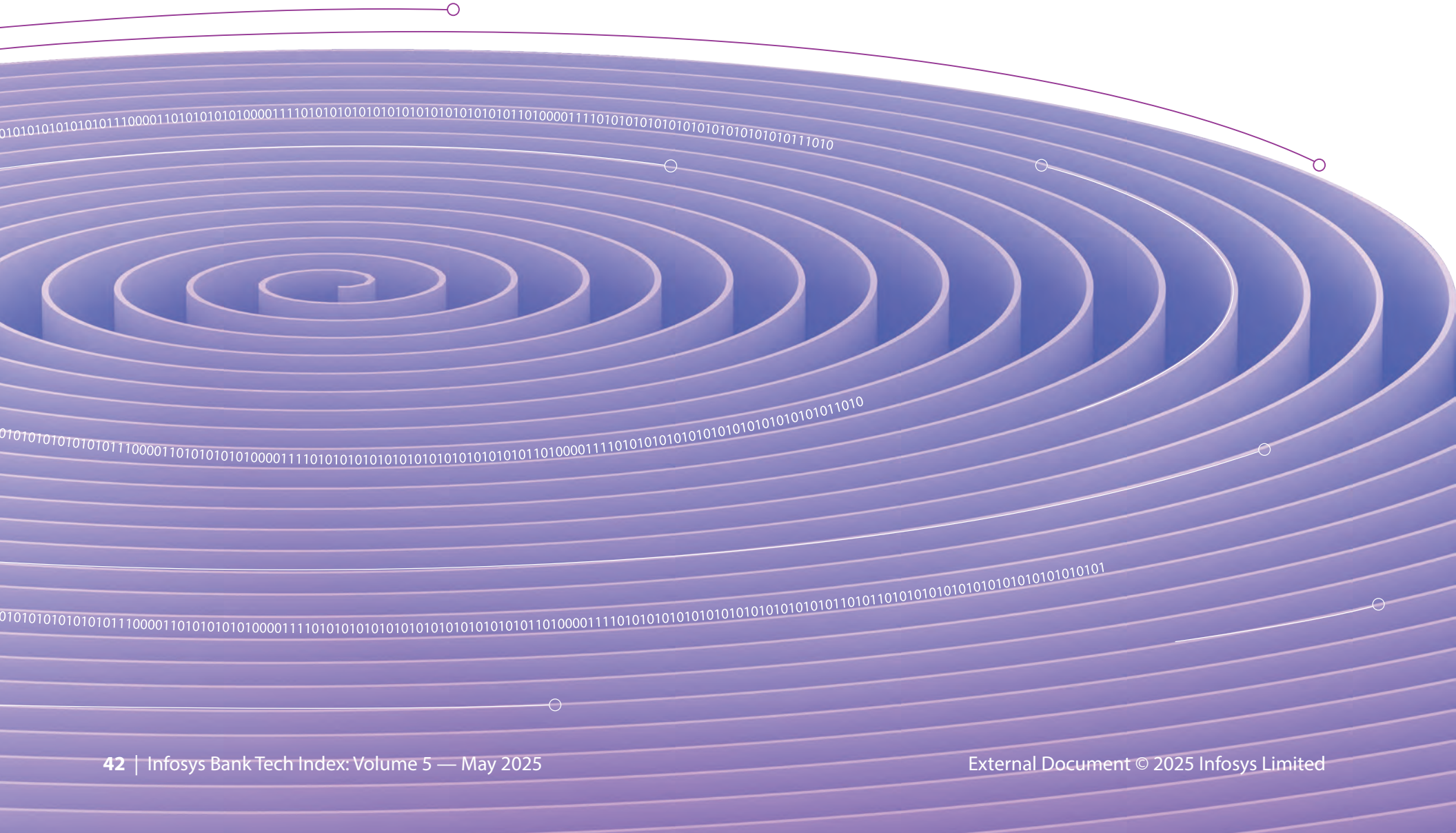


Notes:
1. N = 400, where N is the number of banks surveyed in Volume 5.

Data privacy and security are the biggest challenges to cloud migration — Data privacy and security stand out as the most significant obstacles to cloud migration for banks, eclipsing regulatory concerns and operational complexity. Handling sensitive customer data while meeting stringent compliance standards makes security a top priority, underscoring the critical need for robust governance frameworks and encryption protocols during migration efforts.



Appendix



Appendix A: Methodology

The Infosys Bank Tech Index is a semiannual, survey-based research report that indexes technology investment, adoption, and talent trends across the banking industry.

The fifth edition gathers quantitative data from 400 of the largest banks by total assets in Asia Pacific, Europe, Latin America, Middle East and Africa, and North America. Our survey, exclusive to banks with assets surpassing $10 billion, represent 98% of this asset pool. This quarterly research gathers insights on technology spending, staffing, and performance from a panel of leading banks.

Our executive panelists are key decision makers for their respective bank's technology investments and talent strategies. Panel respondents will remain confidential to maintain data privacy and ethical considerations.

The research delves into the following areas:

1. **Technology strategic priorities:** Current priorities of banks related to growth, operational efficiency and transformation.

2. **Technology talent:** Current technology workforce and expected recruitment for technology roles.

3. **Technology budget analysis:** Current technology budget distribution and expected technology budget distribution

4. **AI insights:** Percentage of initiatives in each stage of deployment, functions where AI generates the most value, reduces costs the most and improves productivity the most, areas where AI has the most positive impact, business lines where AI is used the most and, challenges to AI adoption

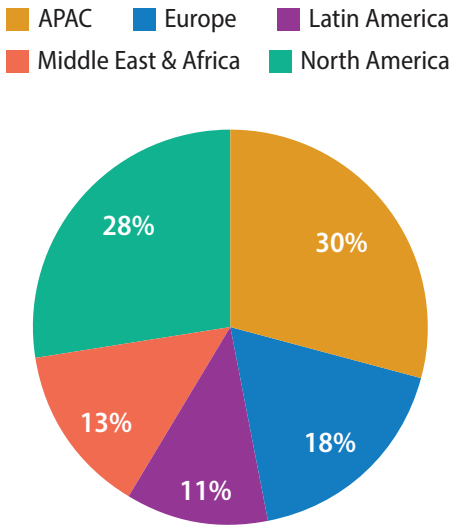
5. **Cloud insights:** Current cloud strategy and expected cloud strategy, plans to migrate to cloud or use a cloud service platform, and challenges to cloud migration.

As data is gathered in subsequent volumes, this research will provide a dynamic view of the trends, track evolving patterns and help decision-makers at banks make informed decisions about technology and talent.

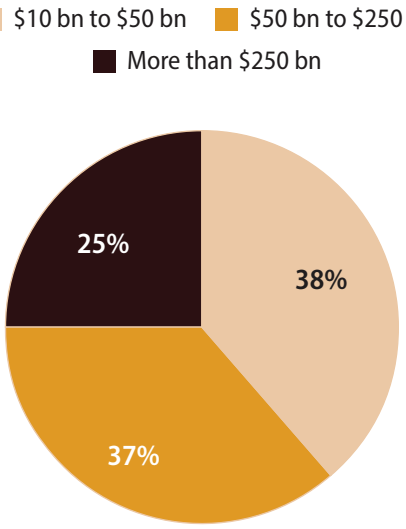
In Volume 5, we asked our panel to provide the expected total spending (this includes capital expenditure and operational expenditures), expected technology spending change and expected technology recruitment for the first six months of this year i.e. January 2025 through the end of June 2025.

Appendix B: Panel distribution

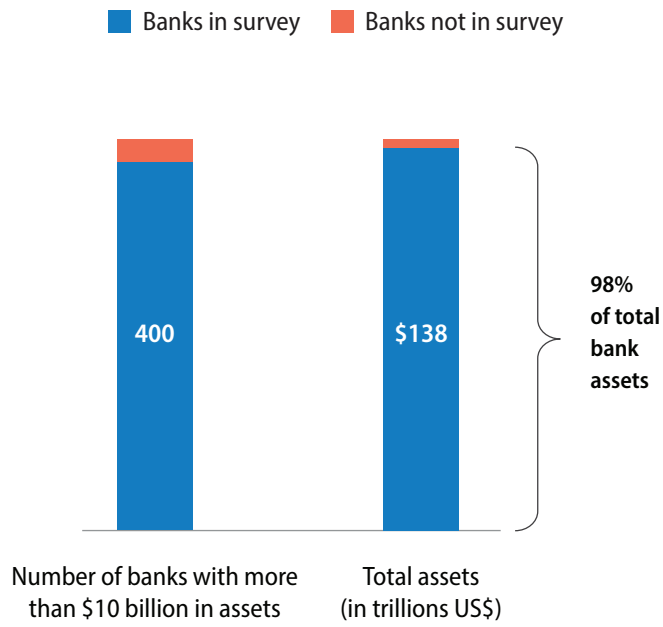
Banks by region



Banks by total assets



Our sample represents 98% of banking assets for banks with over $10 billion in assets



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