

2024 Technology Survey

SPONSORED BY:

jack henry™



TABLE OF CONTENTS

Executive Summary	3
Key Findings	4
Strategy & Adoption	5
Serving Customers	8
Investment	14
Emerging Technology & Fraud	20
Leveraging Resources	29
About the Survey	34

About Bank Director

Bank Director reaches the leaders of the institutions that comprise America's banking industry. Since 1991, Bank Director has provided board-level research, peer insights and in-depth executive and board services. Built for banks, Bank Director extends into and beyond the boardroom by providing timely and relevant information through *Bank Director* magazine, board training services and the financial industry's premier event, Acquire or Be Acquired. For more information, please visit www.bankdirector.com.

BankDirector.

About Jack Henry & Associates, Inc.

Jack Henry™ (Nasdaq: JKH) is a well-rounded financial technology company that strengthens connections between financial institutions and the people and businesses they serve. We are an S&P 500 company that prioritizes openness, collaboration, and user centricity – offering banks and credit unions a vibrant ecosystem of internally developed modern capabilities as well as the ability to integrate with leading fintechs. For more than 48 years, Jack Henry has provided technology solutions to enable clients to innovate faster, strategically differentiate, and successfully compete while serving the evolving needs of their accountholders. We empower approximately 7,500 clients with people-inspired innovation, personal service, and insight-driven solutions that help reduce the barriers to financial health. Additional information is available at www.jackhenry.com.

jack henry™

EXECUTIVE SUMMARY



Laura Alix is the director of research for Bank Director, an information resource for directors and officers of financial companies. You can connect with her on LinkedIn.

In Capital One Financial Corp.'s 2024 annual report, CEO and Chairman Richard Fairbank reminded shareholders of the tech-forward company's origins as a credit card bank centered around data, analytics and statistical modeling. "We were a technology company that does banking," he wrote, "competing against banks that use technology, but it is not who they are."

For most banks, technology is not a core part of their identity but a means to achieve efficiencies or better serve their customers. Few bank leaders identify their banks as innovators, according to the senior technology executives, CEOs and directors participating in Bank Director's 2024 Technology Survey, sponsored by Jack Henry & Associates. But as community banks increasingly rely on data analytics to improve back-office productivity and manage regulatory compliance duties, respondents point to several key gaps in their strategies around data, artificial intelligence and technology more generally.

As bank technology budgets continue to climb, the survey indicates that more banks could quantify the impact of those investments: Just a third of respondents say their bank measures its return on investment for technology projects.

"What's not measured can't be managed," says Jennifer Geis, fintech innovation strategist with Jack Henry. "While a majority of banks say technology is a strategic priority, few measure ROI for technology projects. This disconnect may be the result of many bank boards not making technology a regular topic of discussion and strategy."

Banks have a wealth of financial information about their customers at their fingertips, but they don't necessarily understand their full financial lives: 38% believe their bank has access to at least half of their customers' financial data, while 39% estimate it's somewhere in the range of a quarter to half. Lee Wetherington, senior director of corporate strategy at Jack Henry, believes that around 25% is a reasonable estimate for most banks. Banks could tap into more of their customers' data through the use of open banking, which uses application programming interfaces to provide third-party access to financial data.

For banks, Wetherington says open banking can provide the additional data required for big-picture goals, including organic growth, fraud prevention and efficiency improvements. "All banks need more data to better fight fraud and improve personal service at scale," he says. "Open banking provides that additional data."

KEY FINDINGS

➔ A Shifting View of Competition

Compared to prior surveys, respondents still identify local banks and credit unions (52%) and big or superregional banks (49%) as their main competitive threats, along with neobanks that compete for consumer deposits (43%). However, bank leaders report increased concern about the competitive threat posed by retailers such as Amazon and Walmart, with 12% citing them as a competitive threat compared to 5% a year earlier.

➔ Delayed Projects

Sixty percent say one or more technology projects weren't completed on schedule over the prior 18 months, and 36% say they experienced issues integrating the new technology into existing systems. Just 21% say they had no issues with planned technology projects.

➔ Tech Budgets Increase

Seventy-five percent say their bank's technology budget rose in fiscal year 2024, at a median 4% increase. A median 10% of that budget was devoted to new initiatives, according to respondents.

➔ Fraud Concerns

A majority (89%) say they are more concerned about fraud in their bank's digital channels compared to last year. Check fraud (80%), phishing scams or socially engineering attacks (53%), and digital payments fraud (49%) are the top three types of fraud that worry respondents most.

➔ Hiring: Developers

Just over a quarter of respondents say their bank employs developers or programmers, double the percentage who said as much a year ago. Banks over \$1 billion in assets are more likely to make these hires.

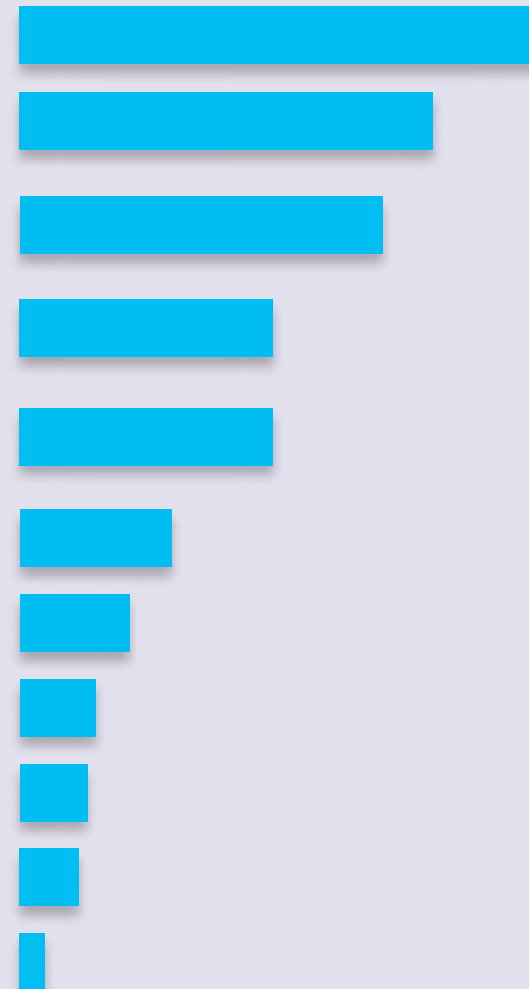
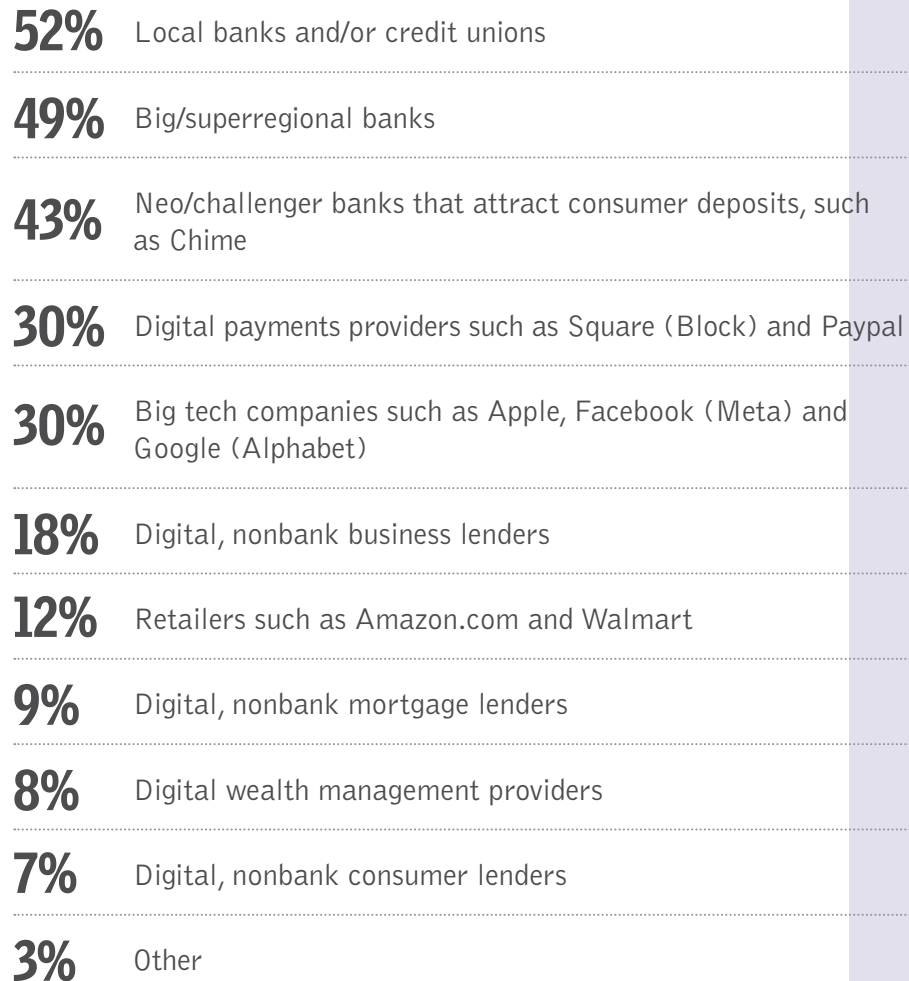
➔ Board Priorities

Sixty-one percent say that leveraging technology is a strategic priority for the board. Half of respondents say their board has a technology expert. Of those without a technology expert, 29% say their board is seeking to add one.

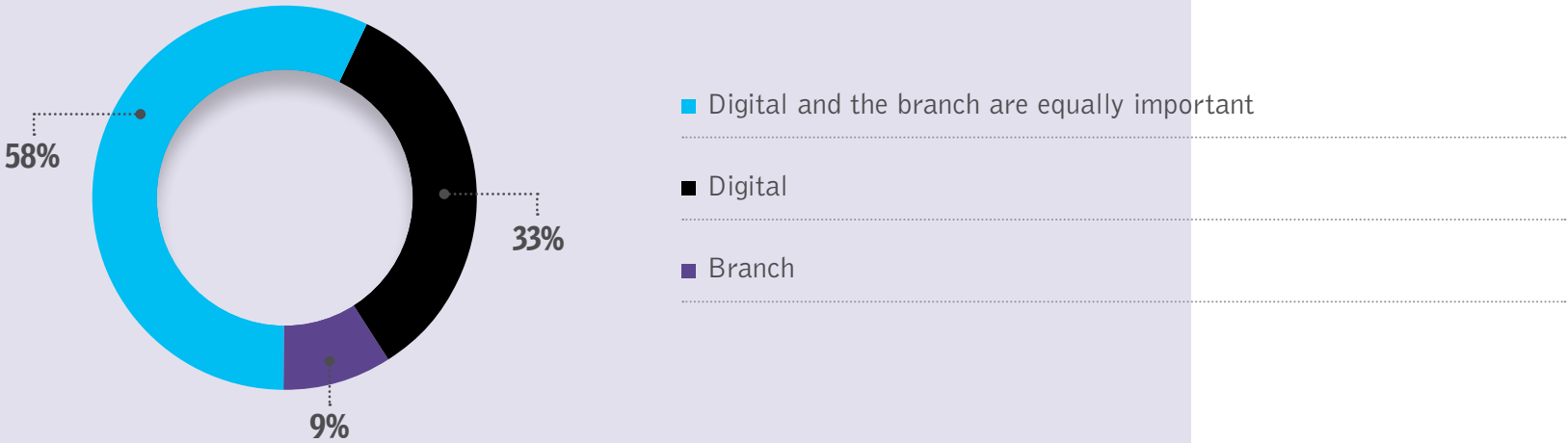
STRATEGY & ADOPTION

1. Of the following, which three do you consider to be the greatest competitive threat to your bank?

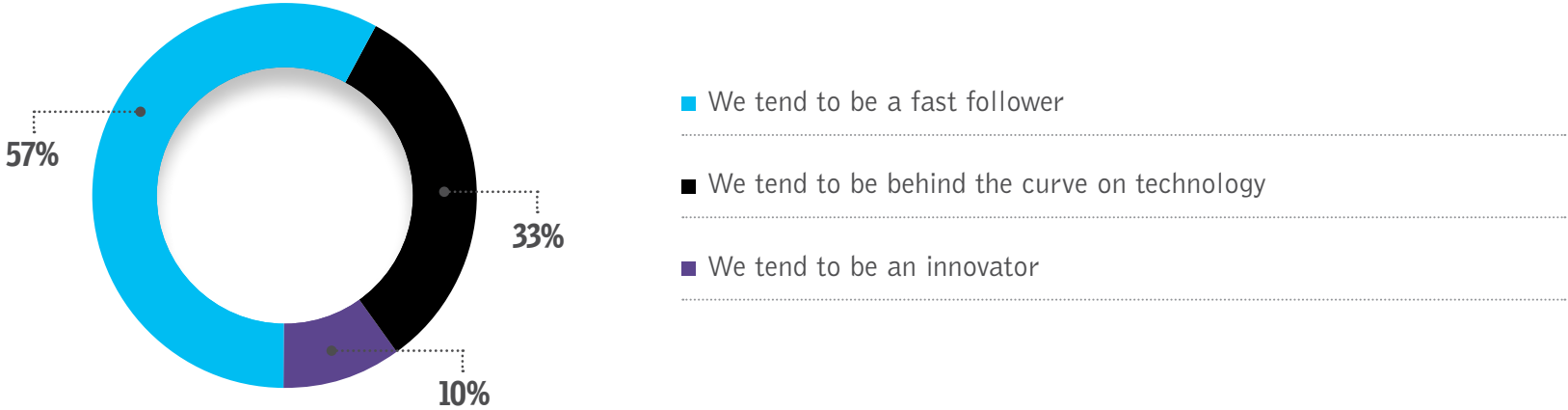
Respondents were asked to select no more than three options.



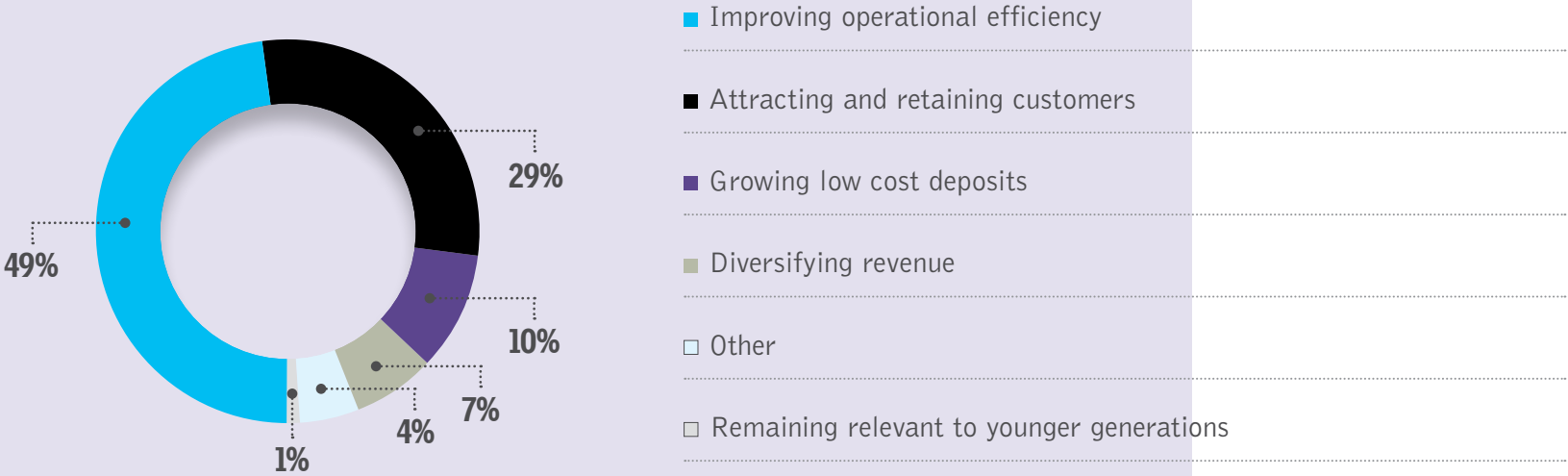
2. Which delivery channel is more critical to your bank's growth strategy?



3. How would you describe your bank's approach to new technology adoption?



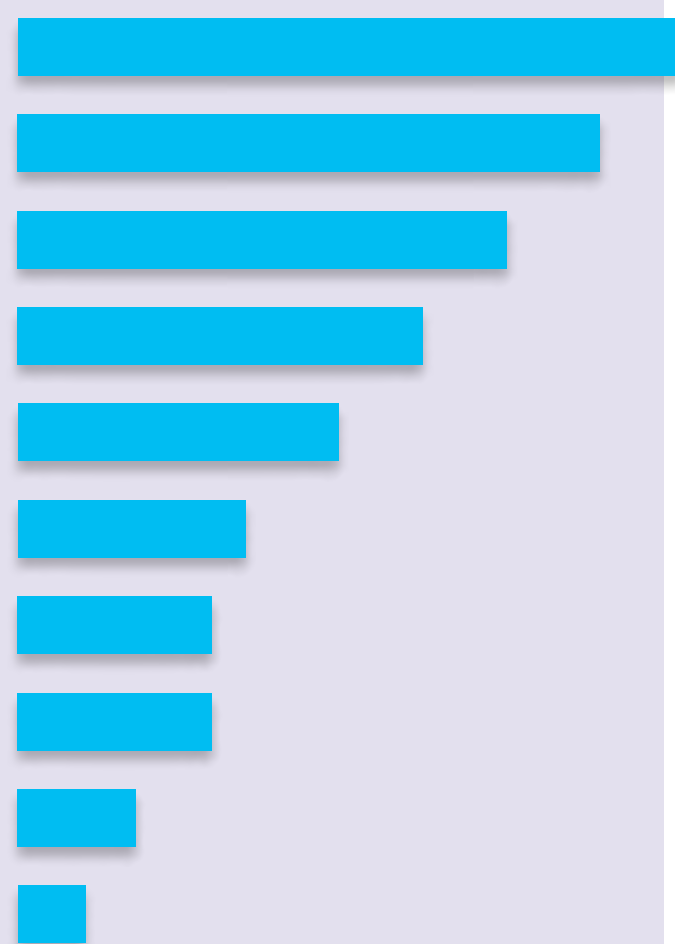
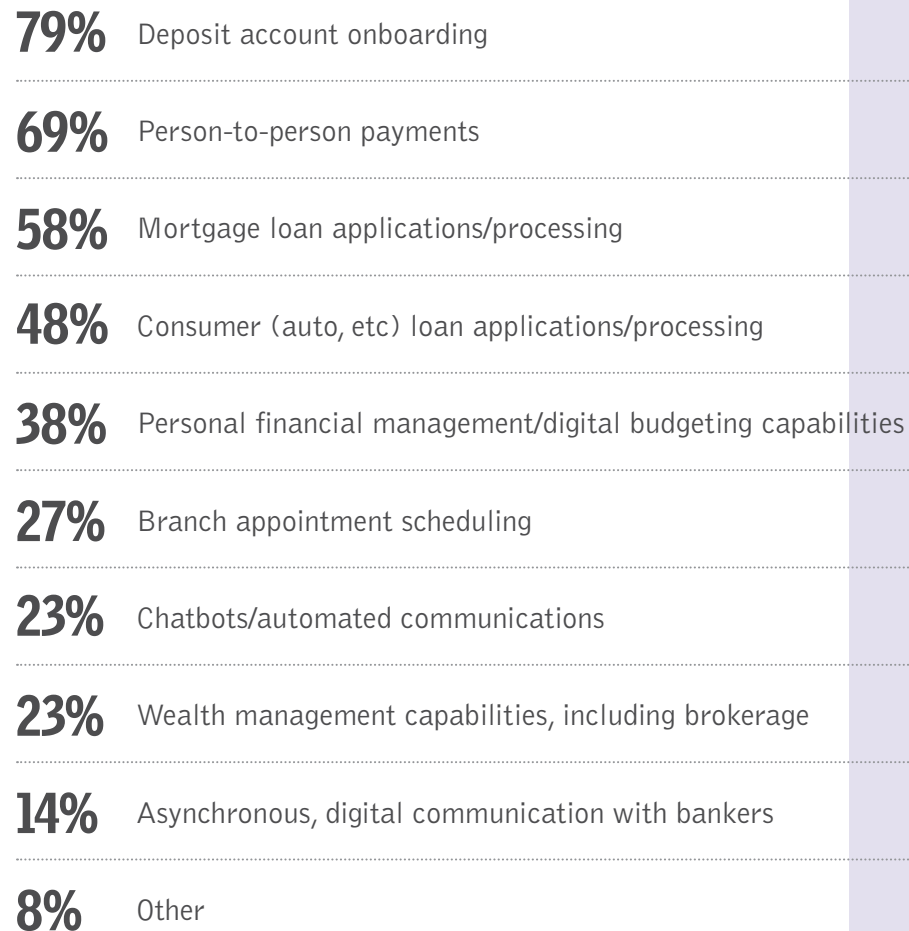
4. What is the primary objective that guides your bank's technology strategy?



SERVING CUSTOMERS

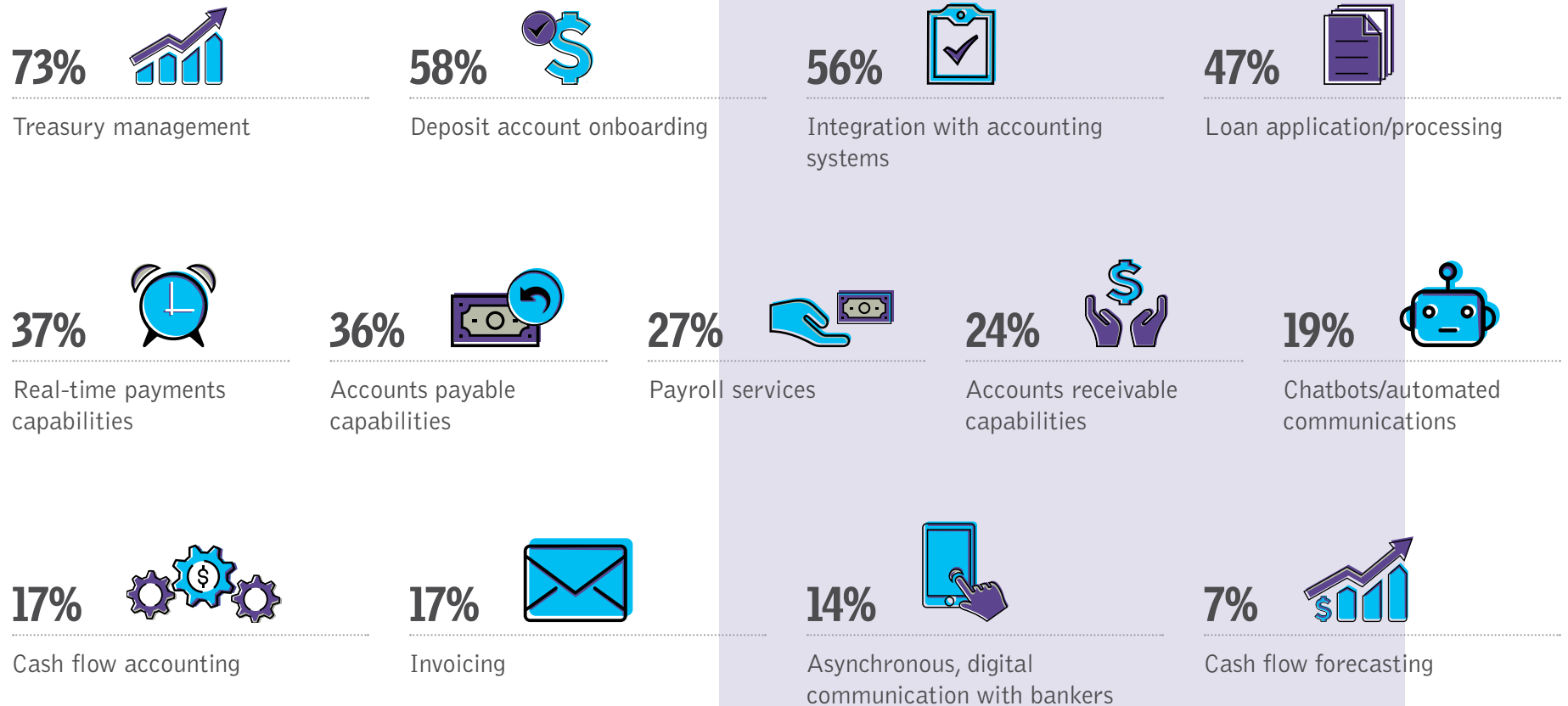
5. What digital capabilities does your bank offer to its retail customers?

Respondents were asked to select all that apply.



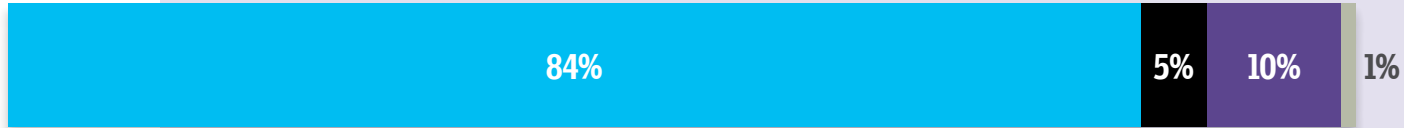
6. What digital capabilities does your bank offer to its small business customers?

Respondents were asked to select all that apply.



7. Do you believe it is important that your bank offer real-time payments capabilities to the following client segments?

Retail customers



Small businesses



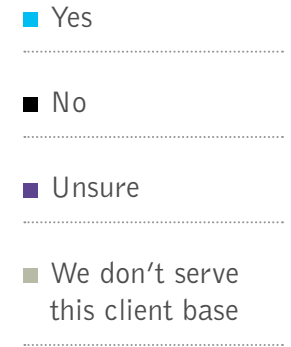
Micro businesses and/or sole proprietors



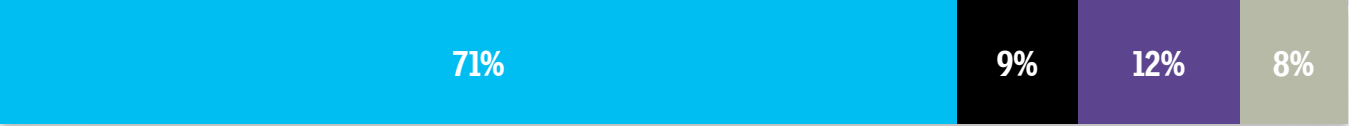
Mid-sized commercial clients



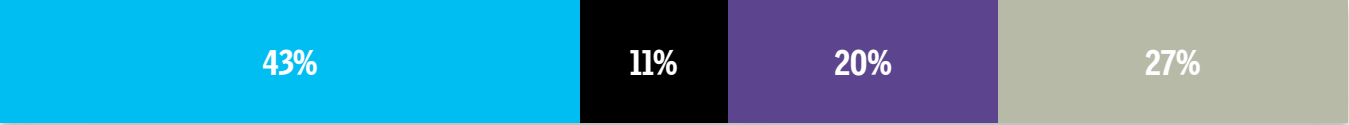
Large commercial clients



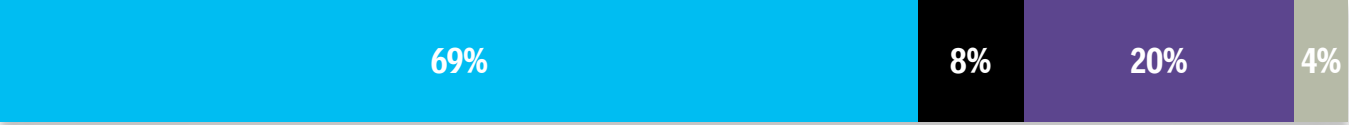
High net-worth clients



Agricultural businesses



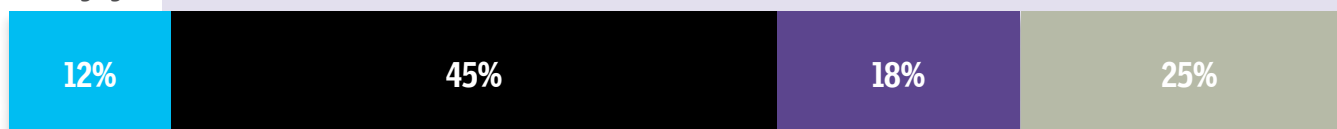
Construction businesses



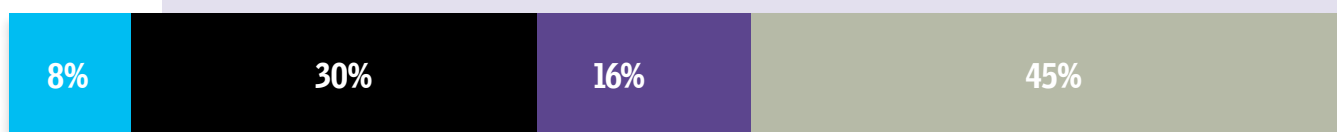
- Yes
- No
- Unsure
- We don't serve this client base

8. Does your bank offer any of the following loans over digital channels?

Mortgage loans



Auto loans



Small dollar consumer loans



Point-of-sale or Buy Now, Pay Later loans

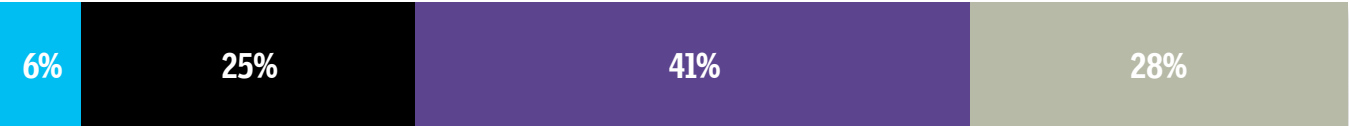


Small business loans or lines of credit



- Fully digitized
- Partially digitized
- We're working on this
- We don't offer this at all

Working capital loans



Commercial loans or lines of credit

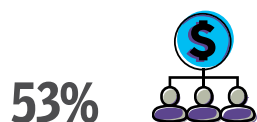


- Fully digitized
- Partially digitized
- We're working on this
- We don't offer this at all

INVESTMENT

9. Over the past 18 months, has your bank upgraded or implemented any of the following to enhance customer experience or improve efficiencies?

Respondents were asked to select all that apply.



Payments capabilities



Digital retail account opening



Digital business account opening



Data analysis platforms/capabilities



Digital business lending



Fraud resolution



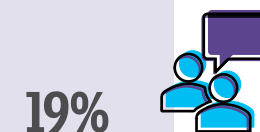
Chatbots or similar automated communications



Digital marketing platforms



Digital consumer or mortgage lending



Direct digital communications with bankers



Personal financial management/digital budgeting capabilities



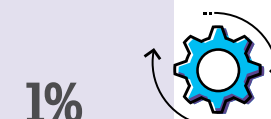
Other digital banking services or technologies



Software integration layer (e.g. middleware)



Digital wealth management capabilities



Side core

10. What drove you to make those technology investments over the past 18 months?



11. Has your bank been challenged in completing a planned technology project over the past 18 months?

Respondents were asked to select all statements that align with their bank's experience.

60% One or more projects weren't completed on schedule

36% We had issues integrating new technology into existing systems

28% One or more projects went over budget

27% It was difficult to train/communicate changes to employees

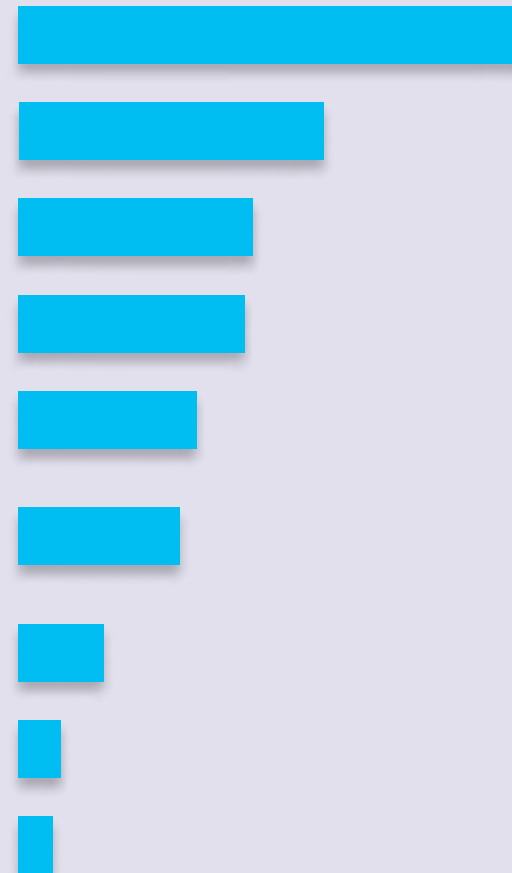
21% We experienced no issues with planned technology projects

19% We ran into vendor due diligence challenges in one or more projects

10% Customers weren't eager to use the new technology

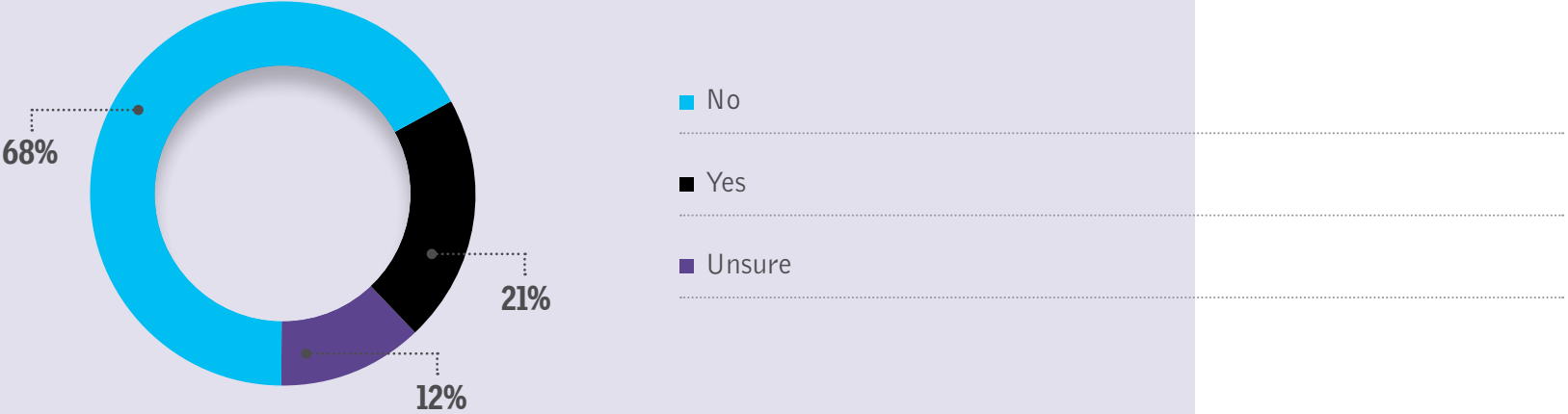
5% We had difficulty identifying a vendor for one or more projects

4% Other



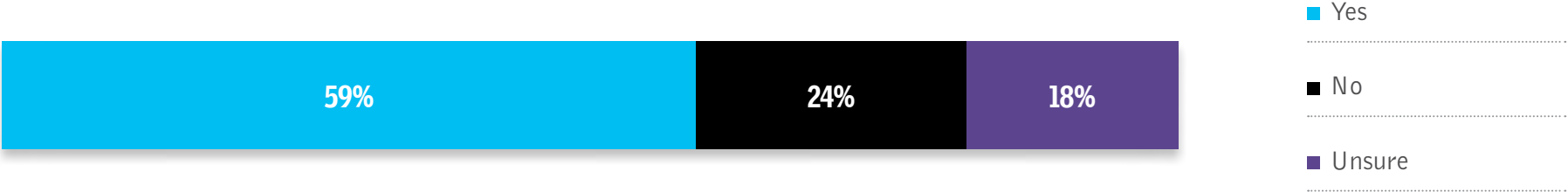
12. Does your bank measure return on investment for its technology projects?

Numbers don't add up to 100% due to rounding.



13. Overall, have you been satisfied with the ROI associated with your bank's recent technology projects (in 2023-24)?

Question only asked of respondents who indicated their bank measures its return on investment from technology projects. Numbers don't add up to 100% due to rounding.



14. How much has your bank budgeted for technology in fiscal year 2024?

Respondents were asked to report the total amount as a whole number and not enter zero values.



\$1,500,000

Median amount budgeted for technology

15. How much has your bank budgeted for technology in FY 2024 as a percentage of noninterest expenses?

Respondents were asked to report the total amount as a whole number and not enter zero values.



10%

Median percentage budgeted for technology

16. What percentage of your technology budget is devoted to new initiatives?

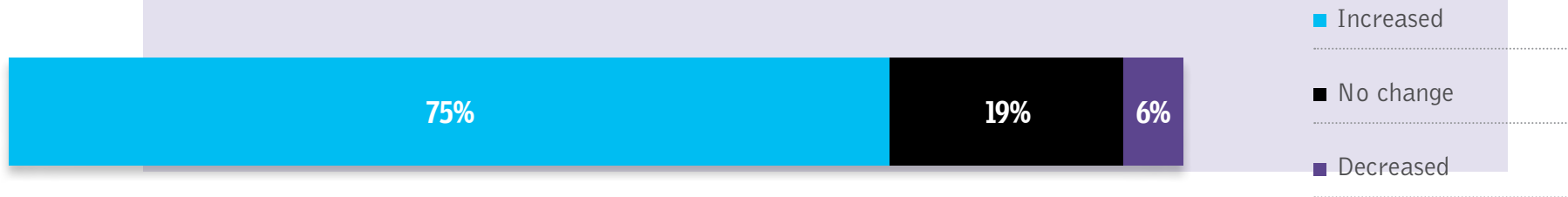
Respondents were asked to report the total amount as a whole number and not enter zero values.



10%

Median percent budgeted for new initiatives

17. Did your bank increase or decrease its budget for technology in FY 2024 compared to its technology budget for FY 2023?



18. By what percentage did your technology budget increase for FY 2024, compared to your bank's technology budget in FY 2023?

Respondents were asked to report the total amount as a whole number and not enter zero values. Question only asked of respondents who indicated their bank's technology budget had increased.

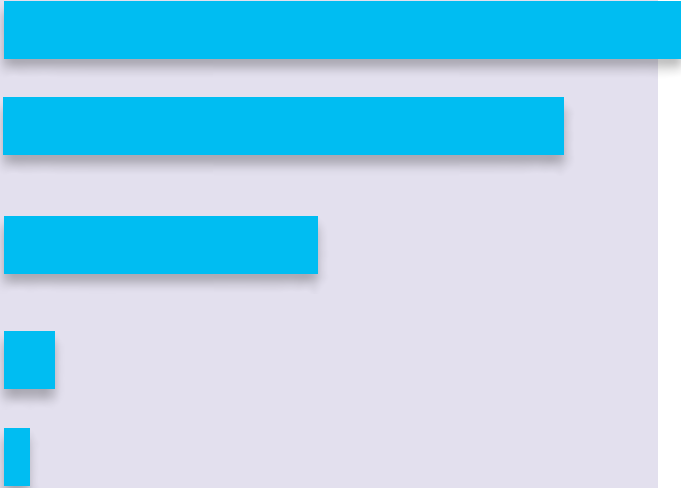
4%

Median percent budget increase

EMERGING TECHNOLOGY & FRAUD

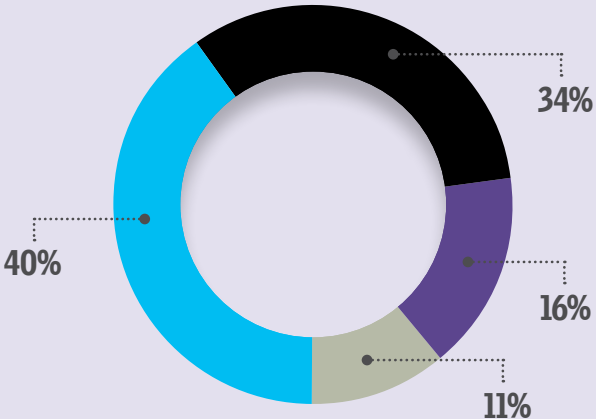
19. Over the past 18 months, has your bank’s leadership team and/or board discussed allocating budget or resources to any of the following emerging areas?

- 80% Data analytics
- 66% Artificial intelligence
- 37% Banking as a service (e.g., payments as a service, lending as a service, deposits as a service)
- 6% Cryptocurrency/digital assets
- 3% Blockchain



20. How would you describe the maturity of your bank's data strategy?

Respondents were asked to select the statement that best describes their bank.



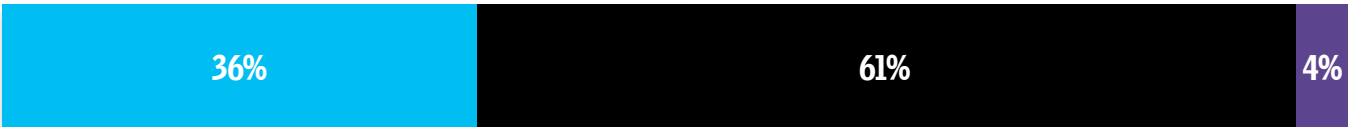
- We use data in several areas of the bank but see significant room for improvement.
- We are in the early stages of our data strategy and have leveraged data in just a few areas of our operations.
- We do not have a data strategy.
- We use data in many of our decisions and areas of the bank, and believe our data strategy and execution exceeds our peers in the industry.

21. Do you believe your bank effectively uses data analytics in the following areas of the bank?

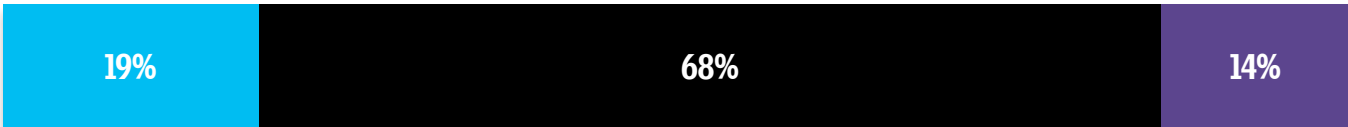
Operations



Marketing



Human resources



Regulatory compliance



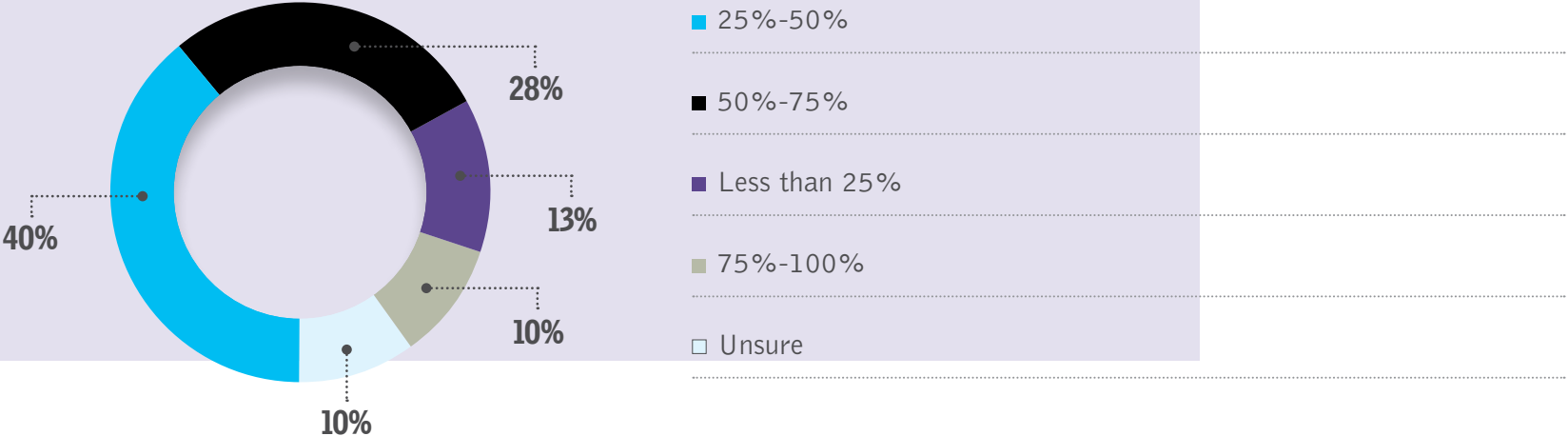
Risk



- Yes
- No
- Unsure

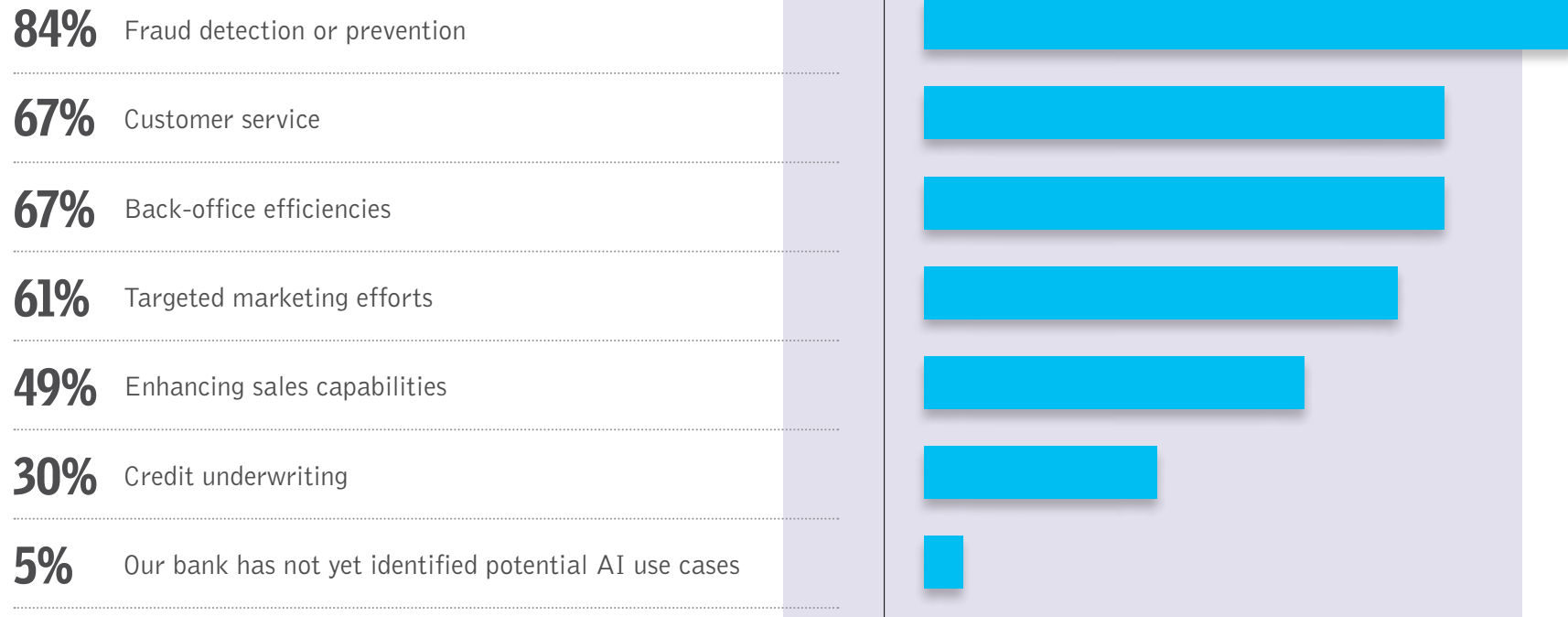
22. Thinking about your customers' financial relationships – with your bank as well as other financial providers – how much of your customers' financial data do you believe your bank has?

Numbers don't add up to 100% due to rounding.



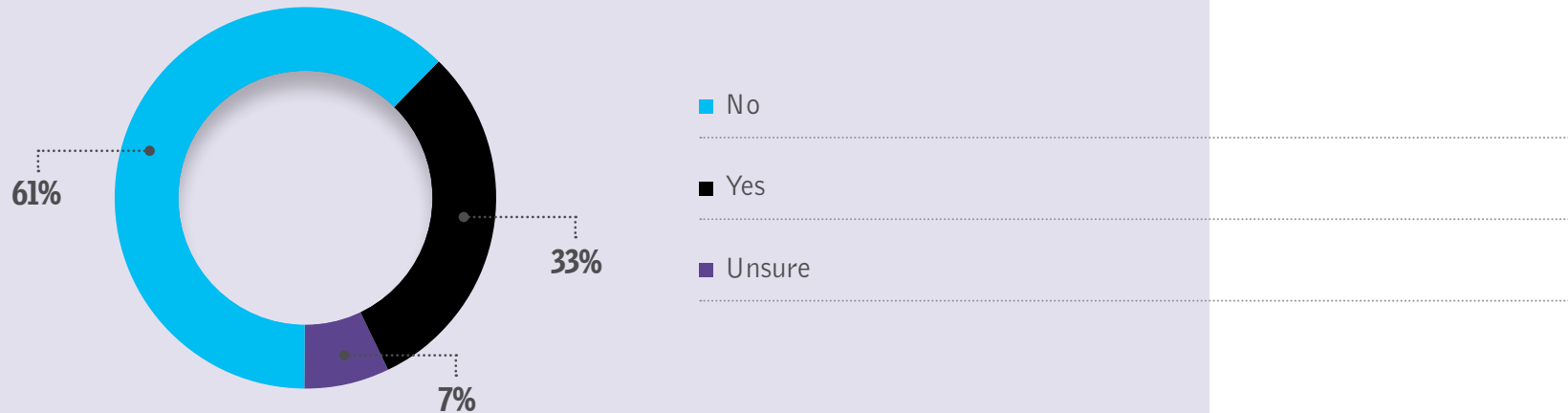
23. What use cases for artificial intelligence is your bank exploring?

Respondents were asked to select all that apply. Question only asked of respondents who said their bank's leadership had discussed allocating budget or resources to AI over the past 18 months.



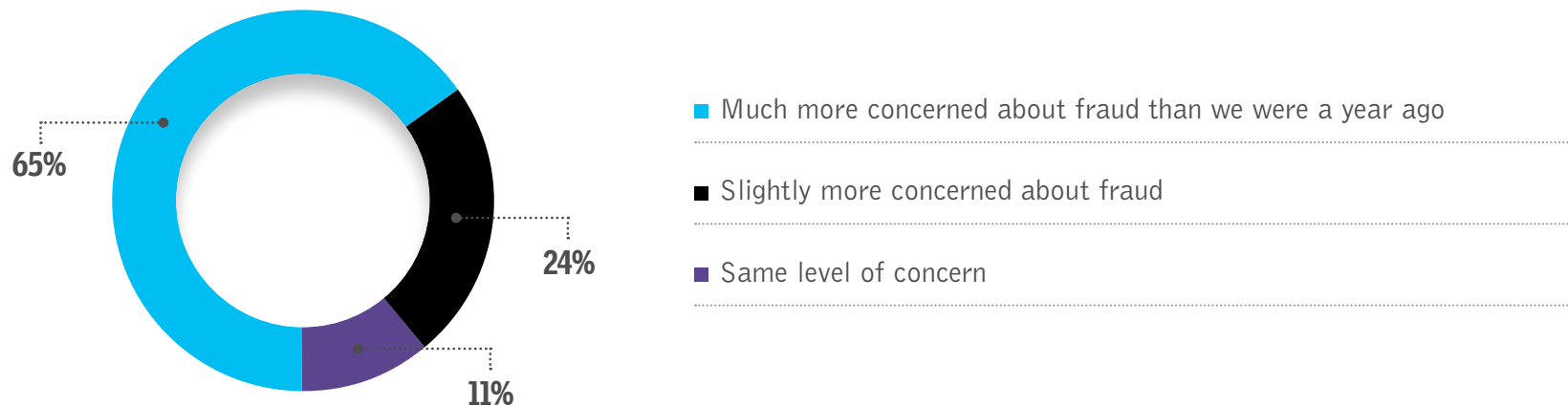
24. Has your bank developed written policies to guide the use of artificial intelligence in your institution, including acceptable uses, risks and ethics?

Question only asked of respondents who said their bank's leadership had discussed allocating budget or resources to AI over the past 18 months.



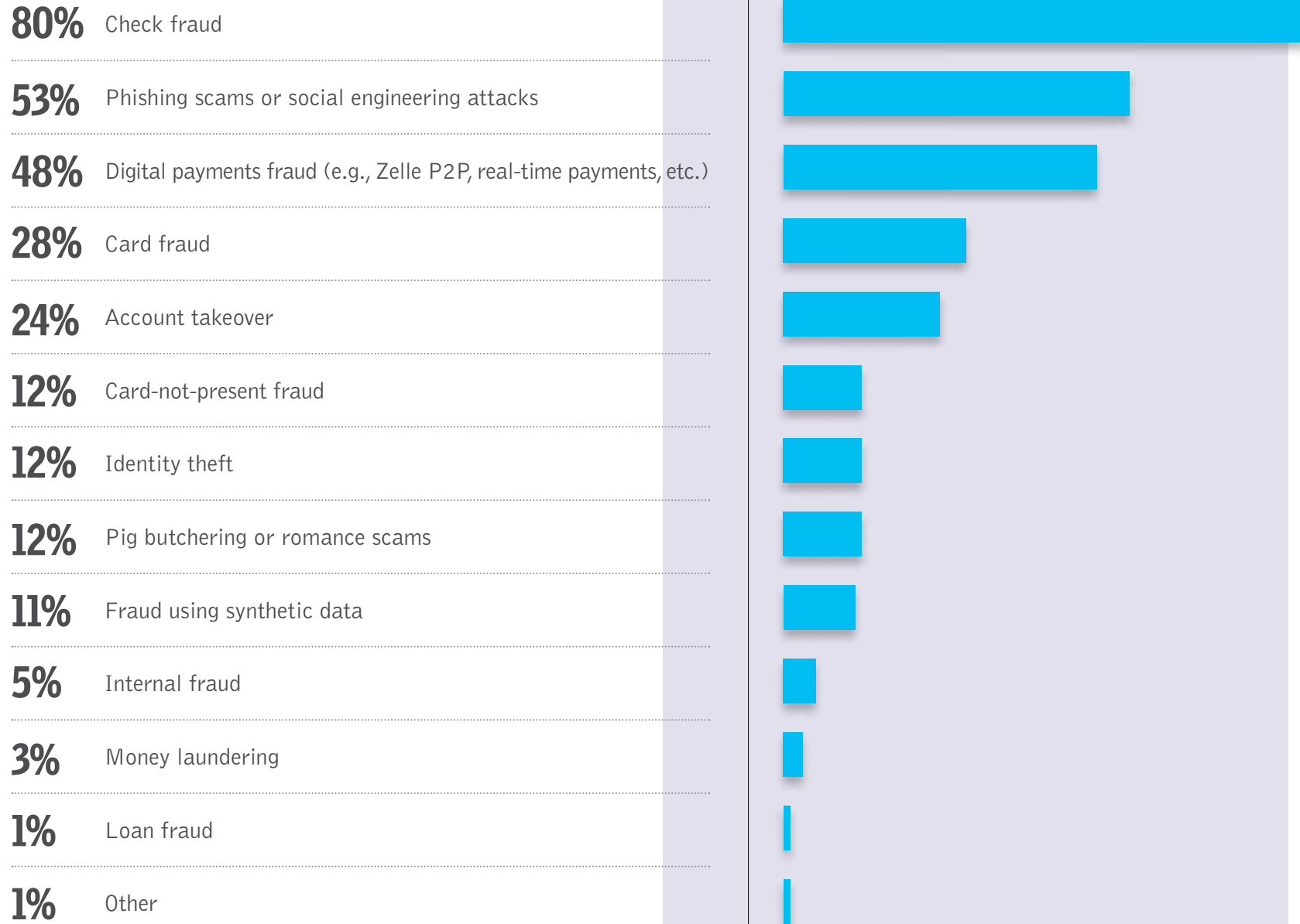
25. How would you characterize your bank's level of concern about fraud in its digital channels this year versus last year?

Respondents were asked to choose the statement that best describes their bank.



26. Which of the following types of fraud currently concern you most?

Respondents were asked to select up to three.



27. What kind of fraud prevention measures does your bank have in place?

Respondents were asked to select all that apply.

94% Two-factor (2FA) or multi-factor authentication (MFA)

91% Extra verification procedures for ACH and wire transfers

89% Ongoing staff training

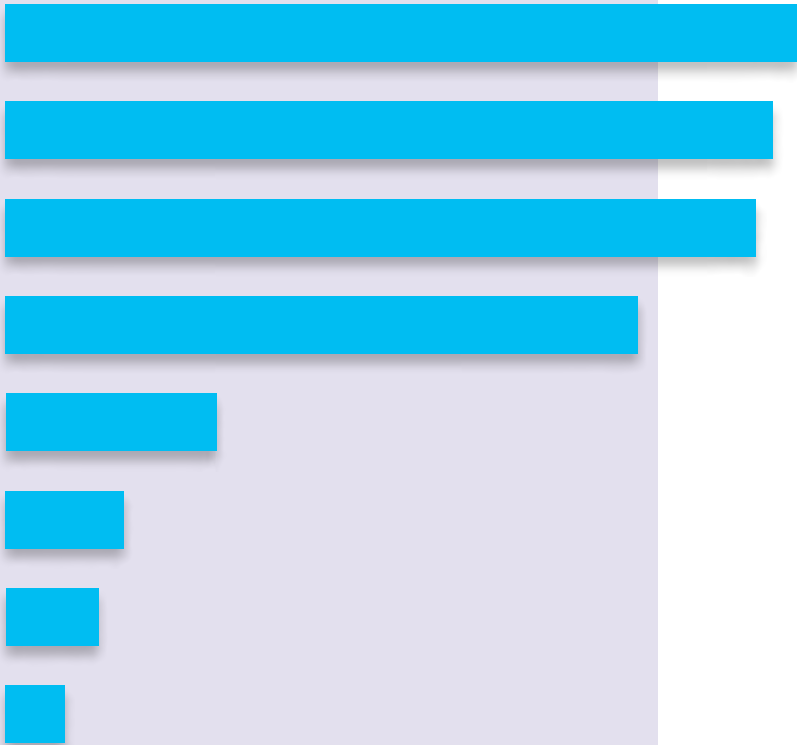
75% Customer education

25% Behavioral detection technology

14% AI-enabled fraud detection

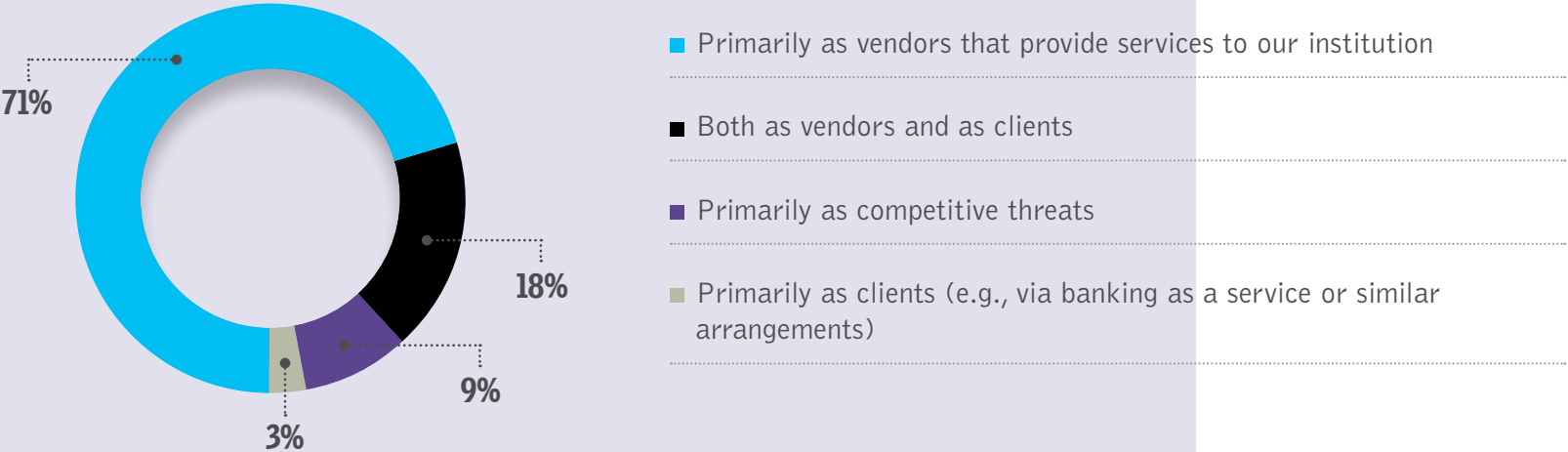
11% Biometric detection technology

7% Third-party tip line for reporting suspected fraud



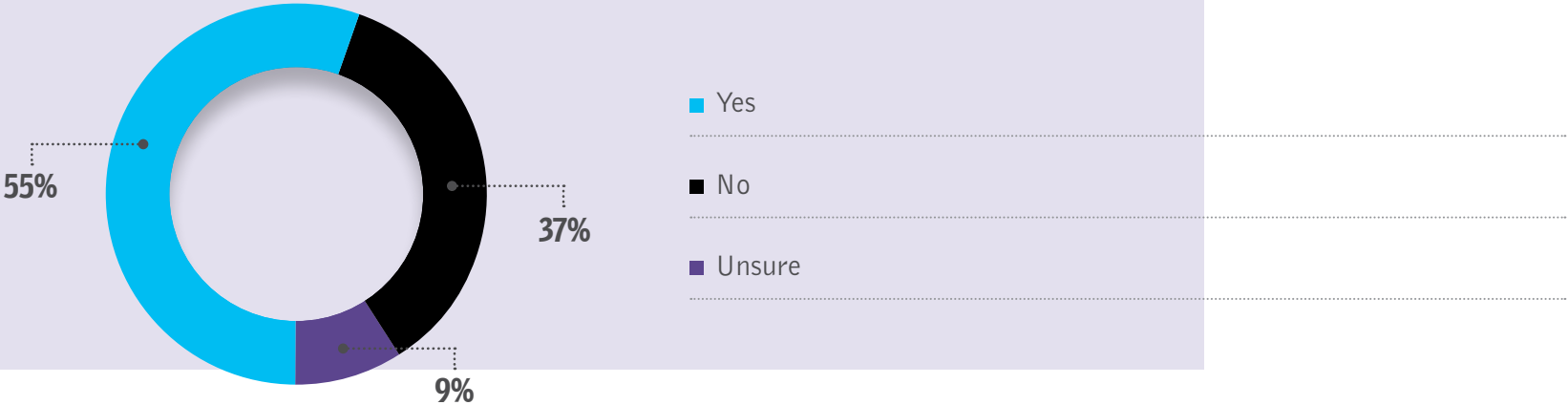
28. How do you view your bank's relationship with fintechs?

Respondents were asked to select the statement that best aligns with their bank's relationships.



LEVERAGING RESOURCES

29. Overall, do you believe your bank allocates sufficient resources to technology and innovation?



30. What deficiencies do you see in your bank's allocation of resources to technology and innovation?

Question only asked of respondents who said their bank does not allocate sufficient resources to technology.

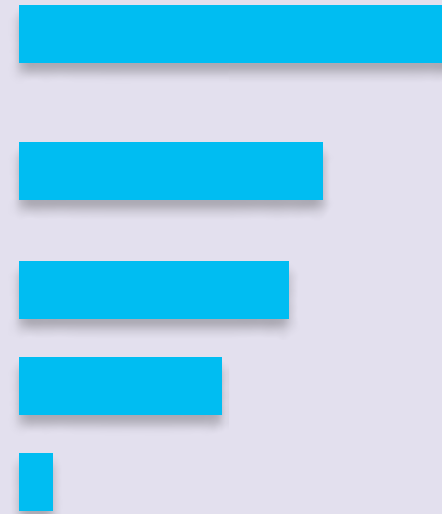
52% More budget dollars should be allocated to technology and innovation

36% Mid-level staffing (programmers, developers, data scientists, etc)

32% Executive or officer-level staffing

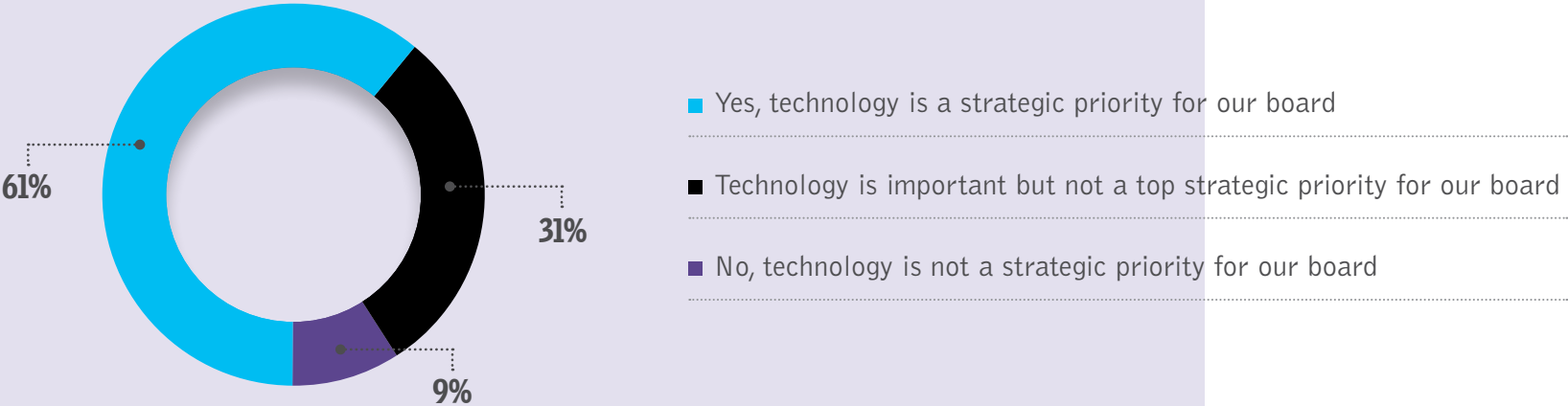
24% Misalignment with bank strategy

4% Other



31. Is leveraging technology a strategic priority for your bank's board?

Numbers don't add up to 100% due to rounding.

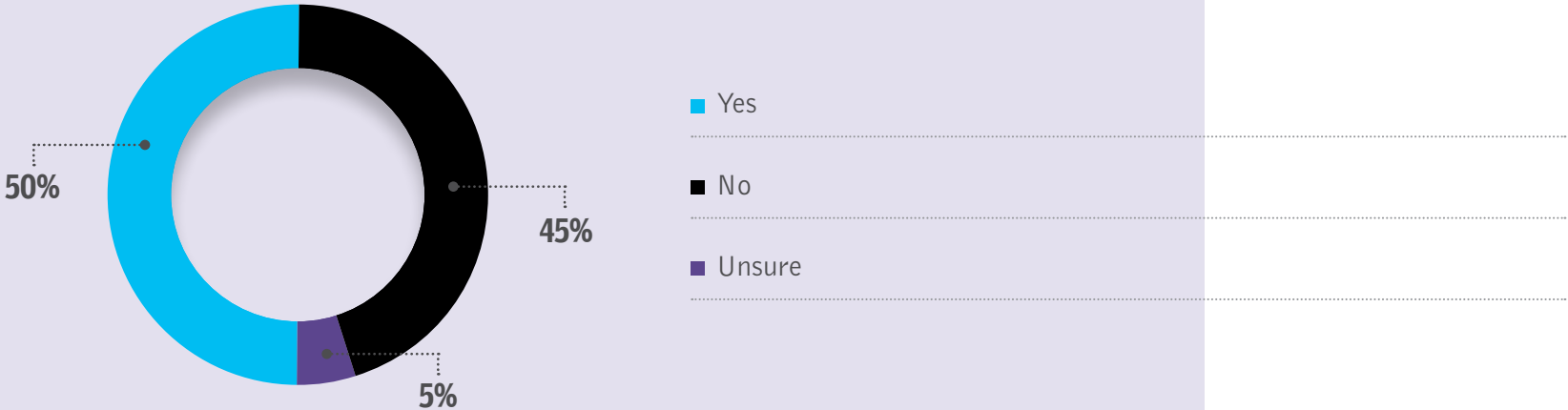


32. Which of the following positions do you currently have on staff at your bank?

Respondents were asked to select the options that best align with their technology team's roles and responsibilities.

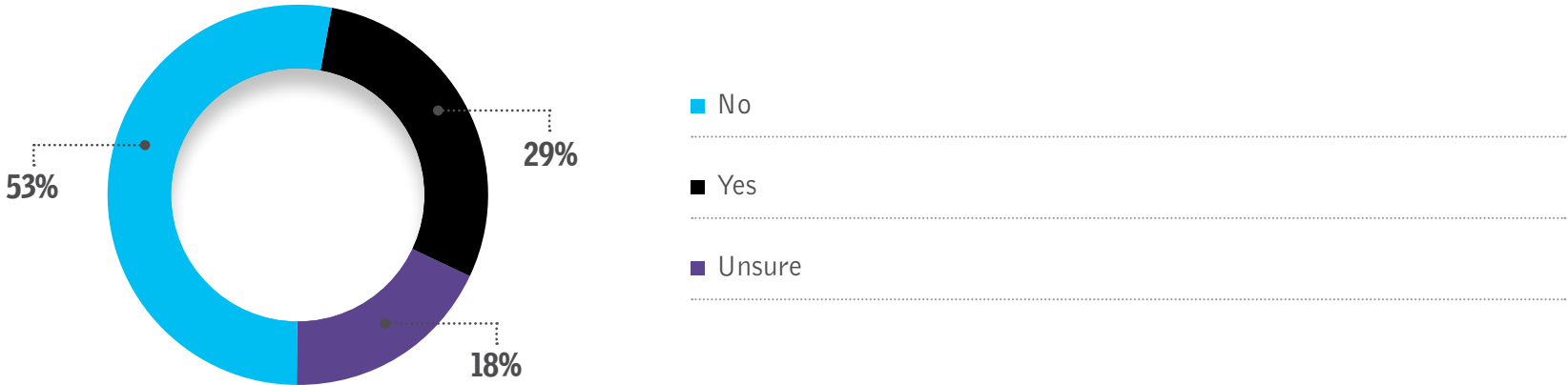


33. Do you have at least one technology expert on your board?



34. Are you actively seeking to add a director with technology expertise to your board?

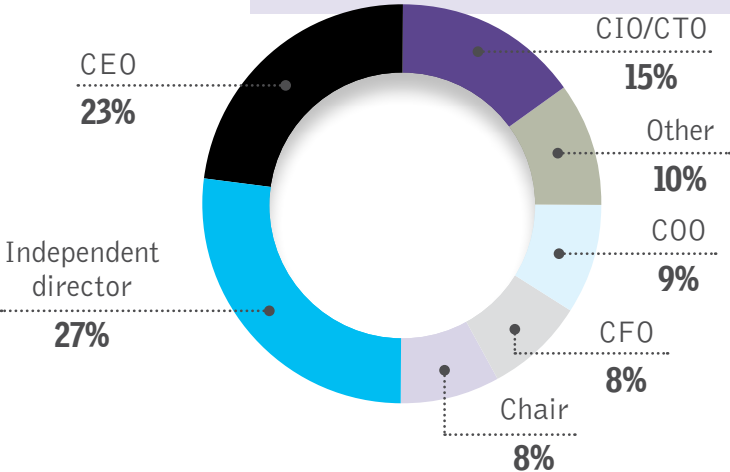
Question only asked of respondents who said their board does not already have a director with technology expertise.



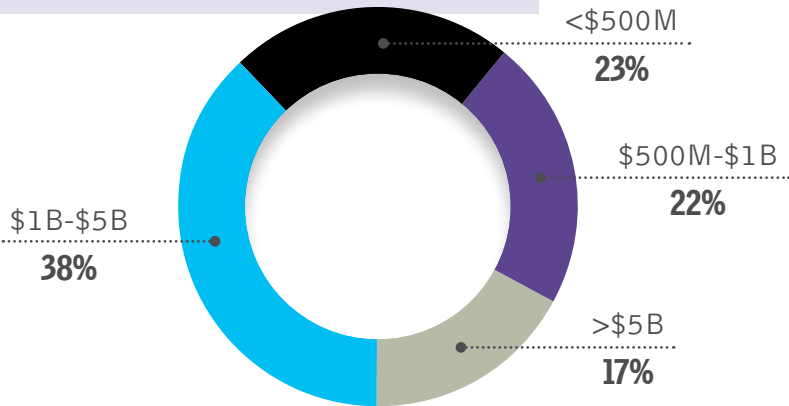
ABOUT THE SURVEY

Bank Director’s 2024 Technology Survey, sponsored by Jack Henry & Associates, surveyed 111 independent directors, chief executive officers, chief operating officers and senior technology executives of U.S. banks below \$100 billion in assets to understand how these institutions approach data, staffing and new technologies. The survey was conducted in June and July 2024. More than half of respondents represented financial institutions with over \$1 billion in assets.

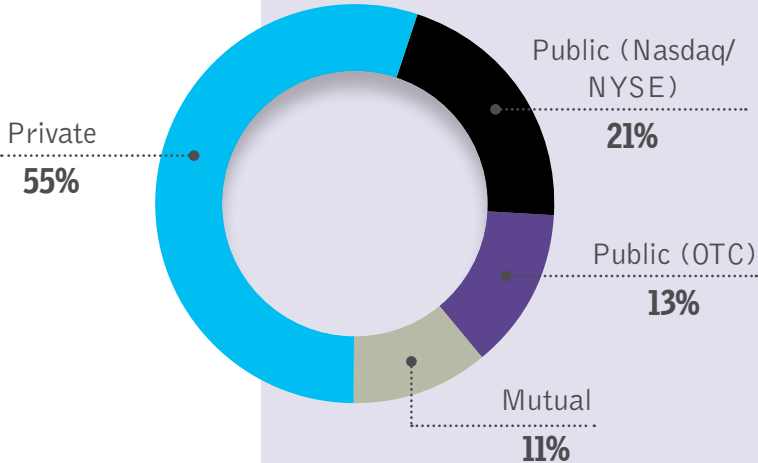
TITLE



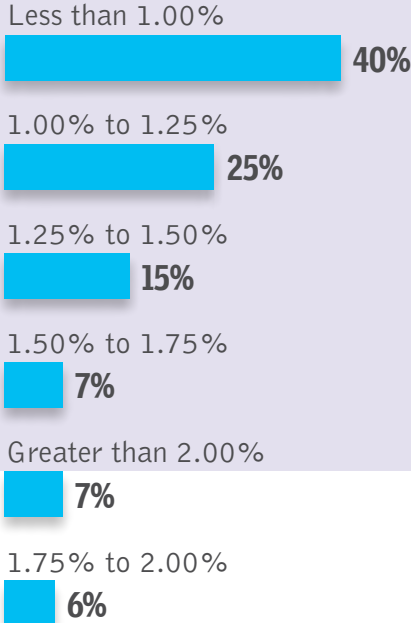
ASSET SIZE



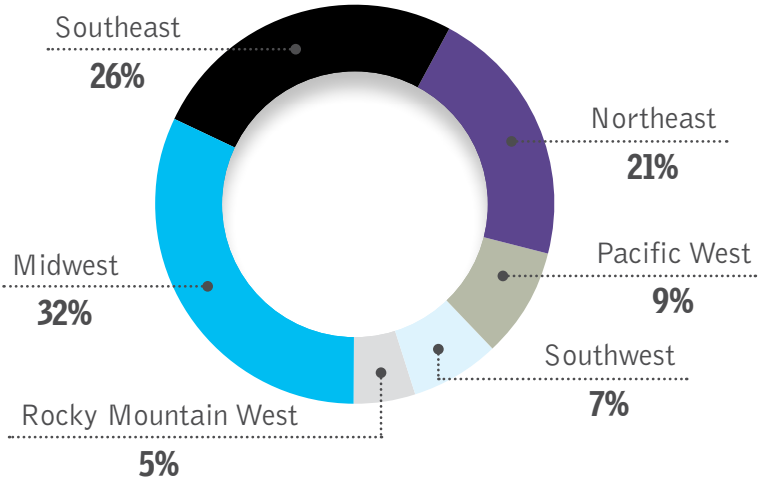
OWNERSHIP STRUCTURE



RETURN ON ASSETS, FY 23



REGION*



*Regions defined as follows: Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI); Northeast (CT, ME, MA, NH, NJ, NY, PA, RI, VT); Pacific West (AK, CA, HI, OR, WA); Rocky Mountain West (CO, ID, MT, NV, UT, WY); Southeast (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, SC, TN, VA, WV); Southwest (AZ, NM, OK, TX)