

# 2019 Technology Survey



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## EXECUTIVE SUMMARY



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**The desire to streamline customers' experience and improve efficiency is driving bank technology strategies across the industry, as most executives and directors believe their offerings are "adequate," according to Bank Director's 2019 Technology Survey, sponsored by CDW.**

The survey, conducted in June and July 2019, reflects the views of CEOs, technology executives and independent directors. It seeks to better understand bank strategies, staffing and budgets around technology and innovation, as well as banks' relationships with legacy core providers and newer vendors.

Seventy-eight percent of survey respondents say that improving the customer experience is a top objective driving their bank's strategy around the investment, development and implementation of technology. Seventy-two percent say that fueling efficiency is a top objective.

These strategic objectives are driving where banks are investing in technology: 68% say they're investing in automation in fiscal year 2019, and 67% are investing money to enhance the bank's digital channels.

Most banks rely on their core provider to advance these goals. The cores are the primary providers for many of the technologies used by banks today, including application programming interfaces (68% say that API technology is provided by the core), business process automation (43%), data aggregation (42%) and peer-to-peer (P2P) payments (47%).

That relationship isn't stopping many banks from searching for new potential partners; 60% are willing to work with newer fintech startups. The survey finds that the use of alternate providers is gaining ground, in particular when it comes to the cloud (57%), data aggregation (25%) and P2P payments (29%).

Despite the rise of the digital channel, 51% of respondents say the branch is equally important to online and mobile channels when it comes to growing the bank. More than half indicate they're upgrading branch and ATM technology.

Just 30% say that driving top-line growth fuels their technology strategy, which indicates that most banks see technology as a way to save money and time as opposed to generating revenue.

## KEY FINDINGS

### → Cybersecurity Top of Mind

Protecting the bank from cyberattacks dominates board technology discussions, according to 96% of respondents. Many boards also focus on process improvements (63%) and implementing innovative customer-facing technology (46%).

### → Loyal to the Core

More than half of respondents say their core contract expires within the next five years. Sixty percent say they're unlikely to switch to a new provider.

### → Banks Aren't Satisfied

Just 21% say they're completely satisfied with their core provider.

### → Technology Pain Points

Sixty percent say their current core provider is slow to provide innovative solutions or upgrades to their bank, and almost half cite difficulty in implementing new solutions. These are major sticking points when 60% rely on their core provider to introduce innovative solutions.

### → Data Gap

Almost half describe their bank's data analytics capabilities as inadequate.

### → It's All on IT

Almost three-quarters point to the senior technology executive as the individual responsible for identifying, developing and implementing technology solutions. Almost half task a management-level committee to make decisions about technology.

### → Rising Budgets

Forty-five percent say their technology budget has risen between 5% to 10% for FY2019. Almost one-quarter report an increase of more than 15%. Responding banks budgeted a median of \$750,000 for FY2019.

### → Where the Money's Going

In addition to automation, digital enhancements and branch improvements, banks are hiring consultants to supplement in-house expertise (50%), and bringing on additional employees to focus on technology and innovation (43%).

### → More Expertise Needed

Fifty-three percent say technology is on the agenda at every board meeting — up three points from last year's survey. Yet, 80% say the board needs to enhance its technology expertise. Forty-three percent say they have a technology expert on the board.

# STRATEGY & INVESTMENT

## 1. What are the top three objectives that drive your bank's strategy around the investment, development and/or implementation of technology?

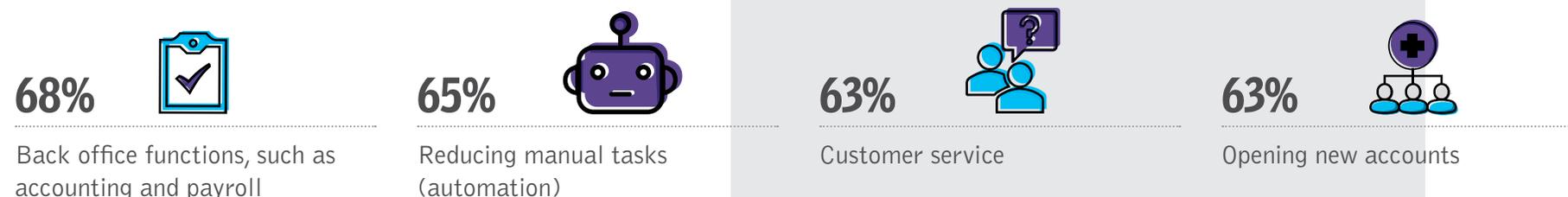
Respondents were asked to select no more than three options. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Improving the customer experience	75%	75%	72%	85%	78%
Creating a more efficient operation	88%	63%	84%	71%	72%
Enhancing online and mobile platforms	75%	43%	52%	38%	46%
Enhancing the bank's top-line growth (revenue and/or sales)	50%	30%	24%	29%	30%
Building and/or implementing more innovative solutions	13%	45%	16%	24%	29%
Competing with larger banks	-	25%	16%	38%	25%
Redesigning the branch network	-	3%	12%	6%	6%
We don't have a strategy in place around technology	-	3%	4%	-	2%
Other	-	3%	-	-	1%

## 2. In what areas is your bank specifically seeking to create efficiencies through the use of technology?

Respondents were asked to select all that apply. Question was only asked of respondents who indicated that creating a more efficient operation is a top-three strategic objective for their institution. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Back office functions, such as accounting and payroll	57%	72%	65%	71%	68%
Reducing manual tasks (automation)	43%	68%	60%	71%	65%
Customer service	43%	72%	35%	79%	63%
Opening new accounts	71%	68%	50%	67%	63%
Lending	29%	64%	55%	54%	55%
Information technology	57%	64%	30%	54%	51%
Compliance	57%	52%	35%	54%	49%
Marketing	-	20%	20%	33%	22%
Other	-	-	-	4%	1%

### 3. Who is the primary provider of the following technologies currently used by your financial institution?

\*Indicates a count of less than 10 within a category.

<b>Application programming interfaces (APIs)</b>					
<b>Bank Asset Size</b>	<b>&gt;\$10B*</b>	<b>\$1B - \$10B</b>	<b>\$500M - \$1B</b>	<b>&lt;\$500M</b>	<b>Total</b>
Core provider	50%	73%	64%	69%	68%
Alternate provider	25%	16%	23%	3%	14%
Developed in-house	25%	5%	-	6%	6%
We don't use this technology	-	5%	9%	6%	6%
Unsure	-	-	5%	16%	6%

<b>Artificial intelligence/machine learning</b>					
<b>Bank Asset Size</b>	<b>&gt;\$10B*</b>	<b>\$1B - \$10B</b>	<b>\$500M - \$1B</b>	<b>&lt;\$500M</b>	<b>Total</b>
Core provider	-	24%	24%	9%	17%
Alternate provider	25%	18%	10%	3%	12%
Developed in-house	13%	5%	-	3%	4%
We don't use this technology	38%	47%	57%	63%	54%
Unsure	25%	5%	10%	22%	13%

## Biometrics

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	-	19%	19%	9%	14%
Alternate provider	50%	19%	14%	25%	22%
Developed in-house	13%	11%	-	-	5%
We don't use this technology	38%	46%	62%	44%	48%
Unsure	-	5%	5%	22%	10%

## Blockchain

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	-	6%	-	3%	3%
Alternate provider	13%	3%	-	-	2%
Developed in-house	-	-	-	-	-
We don't use this technology	88%	78%	95%	73%	80%
Unsure	-	14%	5%	24%	14%

## Business process automation (BPA)

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	-	50%	50%	40%	43%
Alternate provider	63%	13%	20%	20%	21%
Developed in-house	13%	21%	-	3%	10%
We don't use this technology	13%	5%	20%	20%	14%
Unsure	13%	11%	10%	17%	13%

## Cloud

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	38%	26%	15%	21%	23%
Alternate provider	50%	55%	70%	52%	57%
Developed in-house	13%	3%	-	6%	4%
We don't use this technology	-	11%	15%	9%	10%
Unsure	-	5%	-	12%	6%

## Data aggregation

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	25%	56%	25%	41%	42%
Alternate provider	63%	14%	50%	13%	25%
Developed in-house	13%	14%	5%	9%	10%
We don't use this technology	-	5%	15%	19%	12%
Unsure	-	11%	5%	19%	12%

## Peer-to-peer payments

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	25%	50%	55%	45%	47%
Alternate provider	50%	34%	30%	16%	29%
Developed in-house	-	5%	-	3%	3%
We don't use this technology	-	-	5%	13%	5%
Unsure	25%	11%	10%	23%	16%

## Robotic process automation (RPA)

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	13%	13%	5%	-	7%
Alternate provider	50%	18%	10%	3%	14%
Developed in-house	-	-	-	-	-
We don't use this technology	38%	47%	75%	66%	58%
Unsure	-	21%	10%	31%	20%

## Virtual or augmented reality

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Core provider	-	3%	-	-	1%
Alternate provider	-	3%	5%	-	2%
Developed in-house	-	3%	-	3%	2%
We don't use this technology	100%	78%	85%	68%	78%
Unsure	-	14%	10%	29%	17%

## 4. Who on your bank's staff is responsible for identifying, developing and/or implementing new technology solutions?

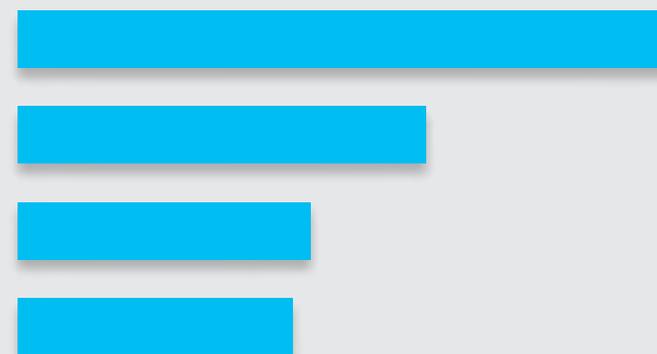
Respondents were asked to select all that apply. \*Indicates a count of less than 10 within a category.

**74%** Senior executive or manager responsible for I.T.

**46%** A management-level technology committee

**33%** Chief operating officer

**31%** CEO



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Senior executive or manager responsible for information technology	63%	82%	77%	64%	74%
A management-level technology committee	50%	41%	41%	55%	46%
Chief operating officer	38%	44%	32%	21%	33%
CEO	38%	41%	23%	24%	31%
Senior executive or manager responsible for strategy	13%	28%	9%	18%	20%
Senior executive or manager responsible for innovation	13%	13%	5%	15%	12%
Relevant business lines	13%	10%	9%	12%	11%
Other	-	-	14%	6%	5%

## 5. Which of the following are elements of your bank's innovation strategy?

Respondents were asked to select all that apply. \*Indicates a count of less than 10 within a category.

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
The bank relies on the core provider to introduce innovative solutions	38%	59%	70%	61%	60%
Increasing the number of staff focused on technology and innovation	63%	31%	35%	39%	37%
Designating a high-level bank executive to focus on innovation	63%	44%	35%	21%	36%
Engaging directors through a board-level technology committee	25%	28%	39%	21%	28%
Collaborating with fintech firms to develop new technology	13%	28%	13%	15%	19%
Implementing solutions from technology startups	-	18%	9%	18%	15%
Investing in technology startups	13%	10%	9%	9%	10%
Building an innovation lab or team	-	15%	9%	6%	10%
Other	-	5%	13%	12%	9%
None of the above	25%	8%	-	6%	7%
Participating in startup accelerators (external or in-house)	-	3%	-	3%	2%
Acquiring technology companies	-	3%	-	-	1%
Hosting hackathons or similar events	-	-	4%	-	1%

## 6. How would you describe your bank's technological capabilities when it comes to?

*\*Indicates a count of less than 10 within a category.*

Serving retail customers					
Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	-	-	17%	3%	5%
Adequate	75%	90%	74%	91%	85%
Inadequate	25%	10%	9%	6%	10%
Not applicable	-	-	-	-	-

Serving small business customers					
Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	13%	5%	13%	6%	8%
Adequate	63%	77%	78%	79%	77%
Inadequate	25%	18%	9%	15%	16%
Not applicable	-	-	-	-	-

## Serving corporate customers

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	25%	5%	13%	3%	8%
Adequate	75%	67%	61%	70%	67%
Inadequate	-	28%	22%	21%	22%
Not applicable	-	-	4%	6%	3%

## Data analytics

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	13%	-	-	6%	3%
Adequate	50%	37%	57%	39%	43%
Inadequate	38%	54%	44%	45%	48%
Not applicable	-	8%	-	9%	6%

## Digital channels, including the mobile app

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	-	5%	9%	12%	8%
Adequate	50%	90%	78%	79%	81%
Inadequate	50%	5%	13%	9%	12%
Not applicable	-	-	-	-	-

## Branch channels, including ATMs

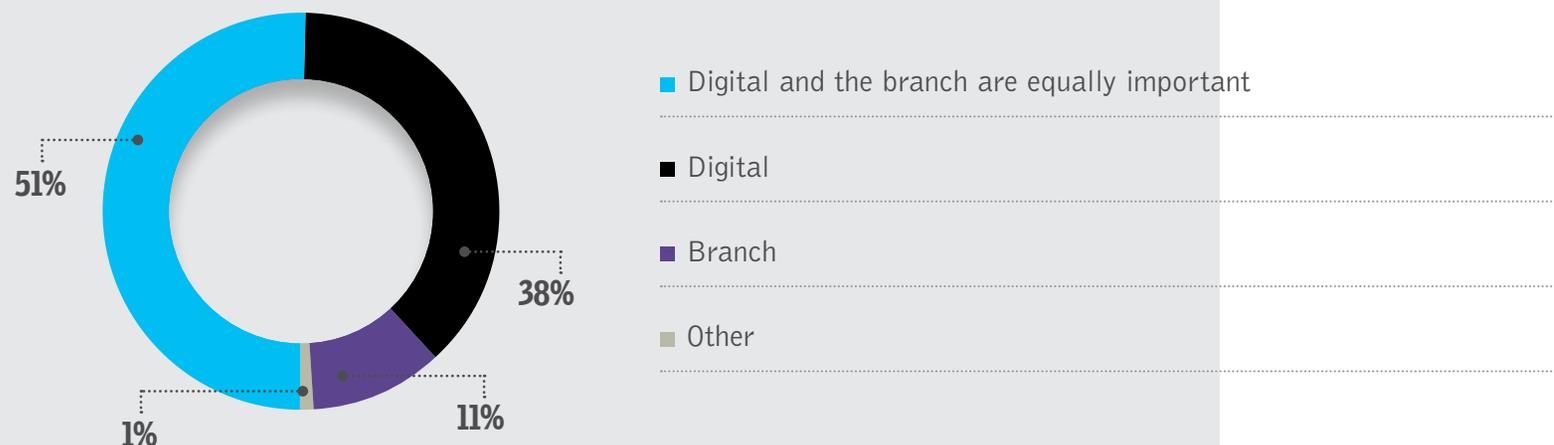
Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	13%	3%	13%	9%	8%
Adequate	75%	84%	83%	88%	84%
Inadequate	13%	13%	4%	-	7%
Not applicable	-	-	-	3%	1%

## Call centers

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Industry-leading	-	8%	4%	-	4%
Adequate	88%	51%	52%	28%	47%
Inadequate	-	26%	17%	22%	21%
Not applicable	13%	15%	26%	50%	28%

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

Numbers do not add up to 100% due to rounding. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Digital and the branch are equally important	50%	49%	52%	52%	51%
Digital	38%	38%	48%	30%	38%
Branch	13%	10%	-	18%	11%
Other	-	3%	-	-	1%

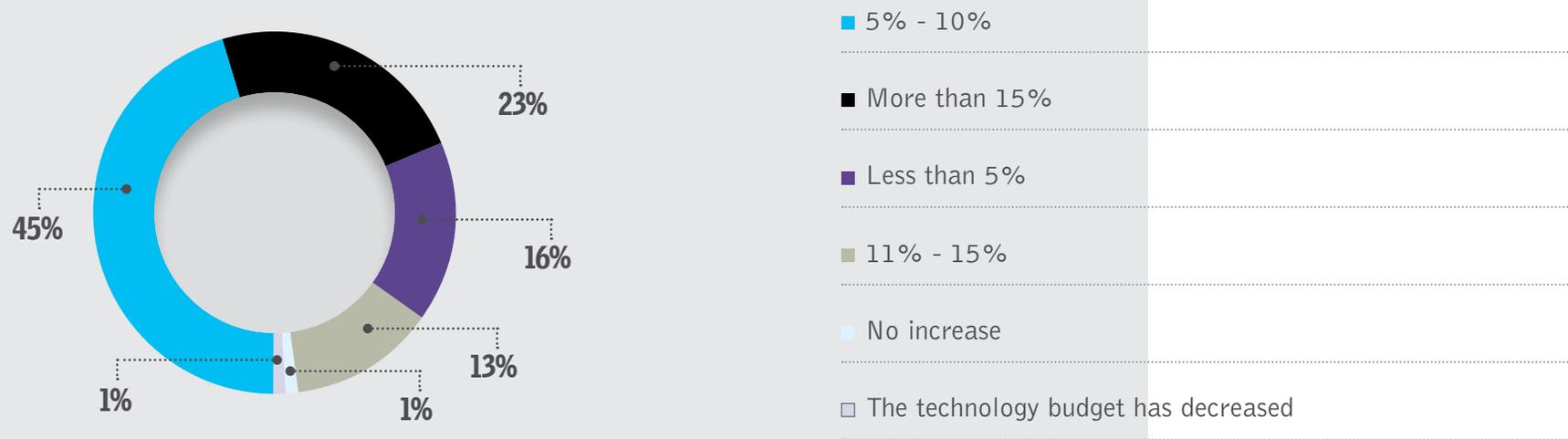
## 8. How much has your bank budgeted for technology in fiscal year 2019?

Median values reported. \*Indicates a count of less than 10 within a category.

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
	\$12,000,000	\$1,500,000	\$1,450,000	\$225,000	\$750,000

## 9. How much has your bank's technology budget increased for FY2019?

Numbers do not add up to 100% due to rounding. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
5% - 10%	25%	55%	35%	48%	45%
More than 15%	38%	21%	15%	28%	23%
Less than 5%	-	17%	35%	4%	16%
11% - 15%	38%	3%	10%	20%	13%
No increase	-	3%	-	-	1%
The technology budget has decreased	-	-	5%	-	1%

## 10. Which of the following are included in your bank's technology budget for FY2019?

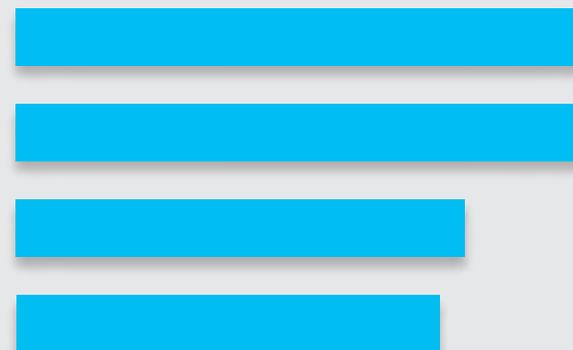
Respondents were asked to select all that apply. \*Indicates a count of less than 10 within a category.

**68%** Investing in automation to make our operation more efficient

**67%** Enhancing digital channels

**53%** Upgrading branch and/or ATM technology

**50%** Hiring consultants to supplement the bank's in-house expertise



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Investing in automation to make our operation more efficient	88%	63%	76%	63%	68%
Enhancing digital channels	88%	69%	81%	48%	67%
Upgrading branch and/or ATM technology	50%	59%	48%	52%	53%
Hiring consultants to supplement the bank's in-house expertise	75%	50%	38%	52%	50%
Investing in additional employees to focus on technology and/or innovation	63%	50%	38%	33%	43%
Partnering with technology solution providers (outside the core provider)	38%	50%	48%	33%	43%
Increasing adoption of cloud technology	63%	31%	52%	22%	36%

## 11. Does your bank's staff include any of the following?

Respondents were asked to select all that apply. \*Indicates a count of less than 10 within a category.

- 56%** Chief information officer (CIO)

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- 41%** Chief information security officer (CISO)

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- 35%** Chief technology officer (CTO)

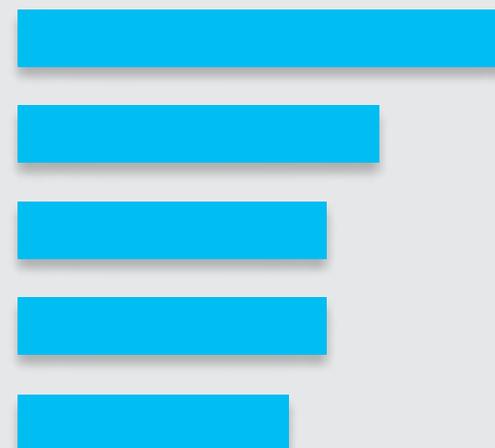
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- 35%** An officer focused on the digital channel

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- 29%** An officer focused on the customer/user experience

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Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Chief information officer (CIO)	88%	64%	48%	40%	56%
Chief information security officer (CISO)	88%	48%	26%	25%	41%
Chief technology officer (CTO)	75%	30%	21%	40%	35%
An officer focused on the digital channel	63%	36%	26%	30%	35%
An officer focused on the customer/user experience	63%	24%	26%	25%	29%
Developers/programmers	50%	24%	11%	10%	20%
An officer focused on innovation	13%	21%	5%	20%	16%
Data scientists	25%	9%	-	5%	8%

## 12. How is your bank seeking to enhance its digital channels?

Respondents were asked to select all that apply. Question was only asked of respondents who indicated that enhancing digital channels is part of their bank's technology budget for FY2019. \*Indicates a count of less than 10 within a category.

86%



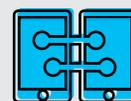
Improve the user experience on mobile and/or online channels

83%



Improve account onboarding

75%



Add more features/functionality to the mobile app

68%



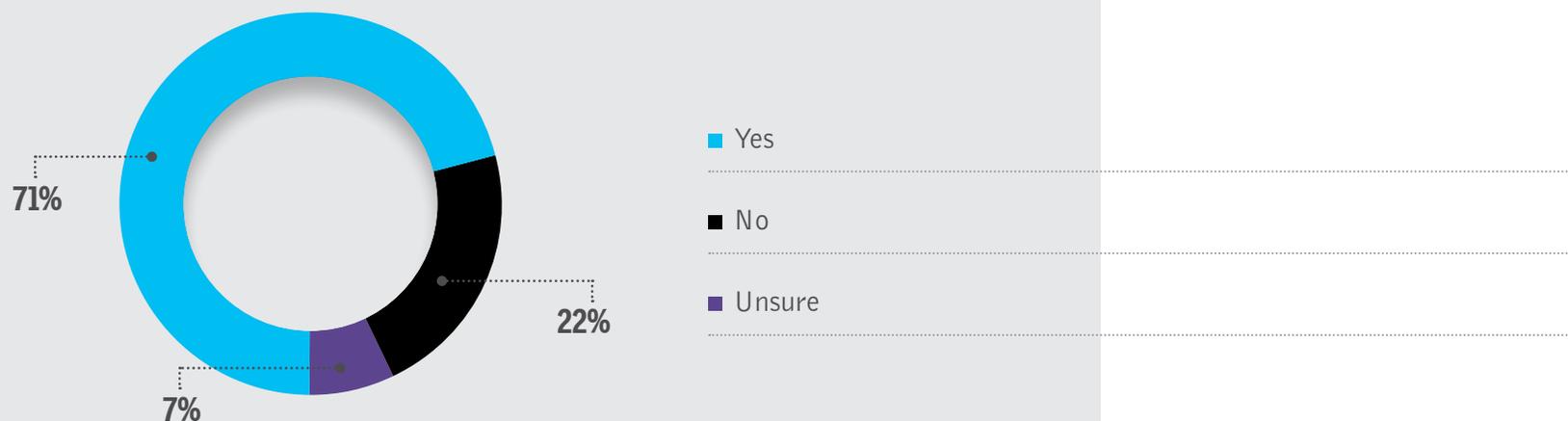
Streamline the online lending platform

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Improve the user experience on mobile and/or online channels	100%	82%	82%	92%	86%
Improve account onboarding	86%	86%	77%	85%	83%
Add more features/functionality to the mobile app	57%	73%	77%	85%	75%
Streamline the online lending platform	57%	77%	65%	62%	68%
Add more apps or digital products that appeal to small business or commercial customers	57%	45%	47%	38%	46%
Add more apps or digital products that appeal to retail customers	29%	50%	47%	38%	44%
Integrate with external platforms, such as Amazon's Alexa	-	23%	6%	23%	15%

### 13. Will your bank rely on its core provider to enhance its digital channels?

Question was only asked of respondents who indicated that enhancing digital channels is part of their bank's technology budget for FY2019.

\*Indicates a count of less than 10 within a category.

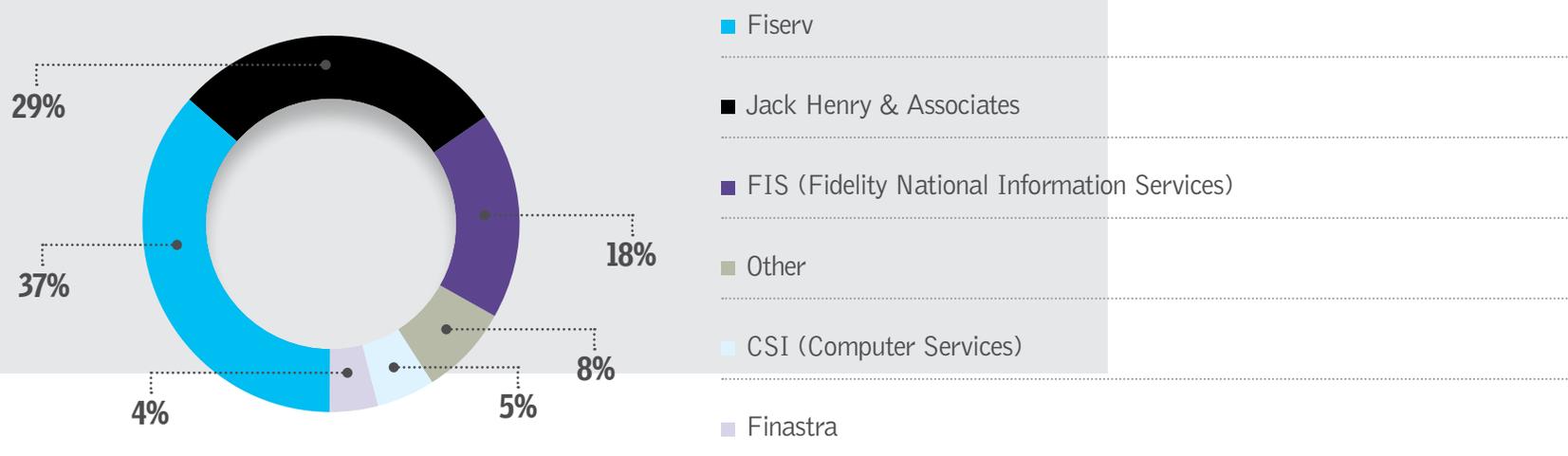


Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	29%	73%	82%	77%	71%
No	43%	23%	18%	15%	22%
Unsure	29%	5%	-	8%	7%

# VENDOR RELATIONSHIPS

## 14. Which company is your current core provider?

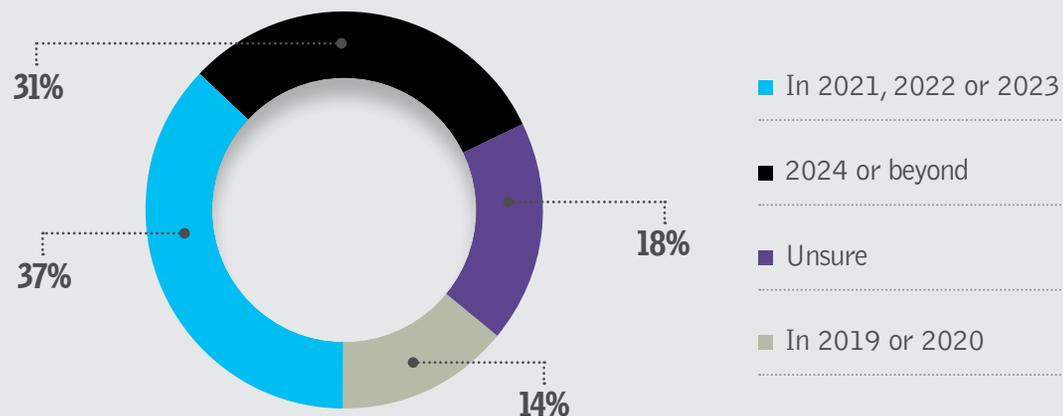
Numbers don't add up to 100 percent due to rounding.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Fiserv	43%	29%	62%	23%	37%
Jack Henry & Associates	-	42%	19%	31%	29%
FIS (Fidelity National Information Services)	43%	13%	10%	23%	18%
Other	14%	13%	-	8%	8%
CSI (Computer Services)	-	3%	-	12%	5%
Finastra	-	-	10%	4%	4%

## 15. When will your bank's current contract with its core provider expire?

\*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
In 2021, 2022 or 2023	14%	33%	29%	54%	37%
2024 or beyond	29%	40%	33%	19%	31%
Unsure	57%	20%	14%	8%	18%
In 2019 or 2020	-	7%	24%	19%	14%

## 16. In what ways are you dissatisfied with your bank's current core provider?

Respondents were asked to select all that apply. \*Indicates a count of less than 10 within a category.

60%



Slow to provide innovative solutions or upgrades

49%



Difficulty implementing new solutions

40%



Cost

35%

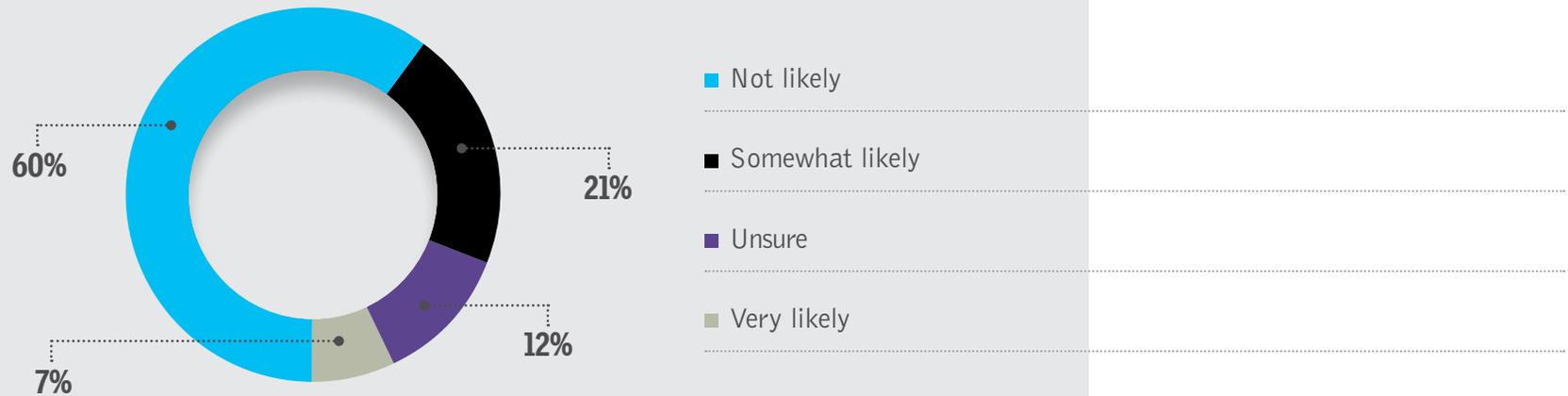


Unable or unwilling to customize solutions for our bank

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Slow to provide innovative solutions or upgrades	57%	57%	63%	62%	60%
Difficulty implementing new solutions	57%	39%	53%	54%	49%
Cost	14%	25%	42%	62%	40%
Unable or unwilling to customize solutions for our bank	29%	29%	32%	46%	35%
Additional fees to access our bank's data	-	21%	53%	31%	30%
Subpar customer service	29%	7%	53%	35%	29%
Our banks needs aren't prioritized	14%	21%	42%	31%	29%
I'm completely satisfied with our core provider	43%	25%	11%	19%	21%
Other	-	-	11%	8%	5%

# 17. How likely is your bank to switch its core provider when its contract is due to renew?

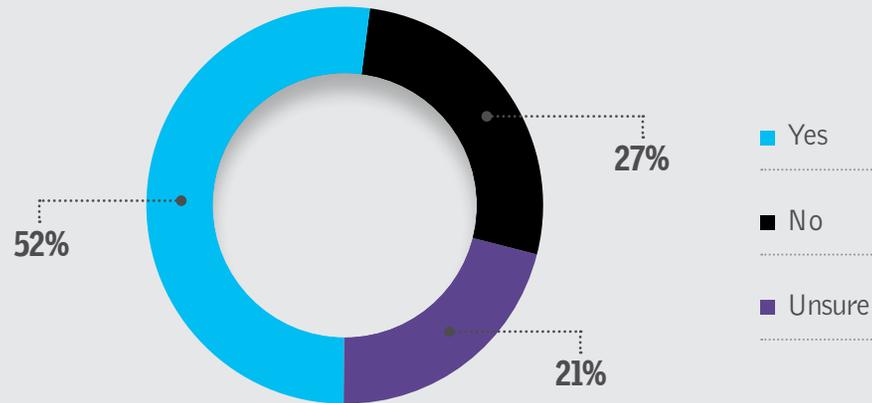
*\*Indicates a count of less than 10 within a category.*



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Not likely	57%	66%	52%	62%	60%
Somewhat likely	14%	21%	19%	23%	21%
Unsure	14%	10%	14%	12%	12%
Very likely	14%	3%	14%	4%	7%

## 18. Does your bank plan to work with a third-party consultant to renew its core contract?

\*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	-	47%	76%	52%	52%
No	67%	33%	5%	28%	27%
Unsure	33%	20%	19%	20%	21%

## 19. Is your bank willing to consider a new core technology, or would you prefer to use one of the three largest providers (Jack Henry, FIS or Fiserv)?

Question was only asked of respondents who indicated that FIS, Fiserv or Jack Henry is their current core provider, and that the bank is likely to switch its core provider when its contract is due to renew.



## 20. Including your bank's core processor, how many technology firms currently work with your institution?

5

**Median technology firms per  
financial institution**

## 21. Are the management team and board at your bank open to working with newer fintech startups, which were founded less than five years ago, to help the bank implement new products and services, or create efficiencies within the organization?

Numbers do not add up to 100% due to rounding. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	71%	73%	52%	46%	60%
We haven't considered working with startups	14%	23%	33%	35%	29%
No	14%	3%	14%	19%	12%

## 22. Why is the bank reluctant to work with newer fintech startups?

Respondents were asked to select all that apply. Question was only asked of respondents who indicated that the management team and board are not open to working with newer startup companies.

Concerns about startups' stability/funding



Concerns that regulator/examiner will disapprove



We rely on our core technology provider to help us with innovation



We lack the in-house knowledge required to properly vet startups



Deficiencies in the bank's vendor risk management process



We believe we can innovate in-house



Our current relationships allow us to innovate at a pace in line with the bank's strategy



## 23. Is a member of your bank's staff responsible for managing relationships with technology providers, including startups?

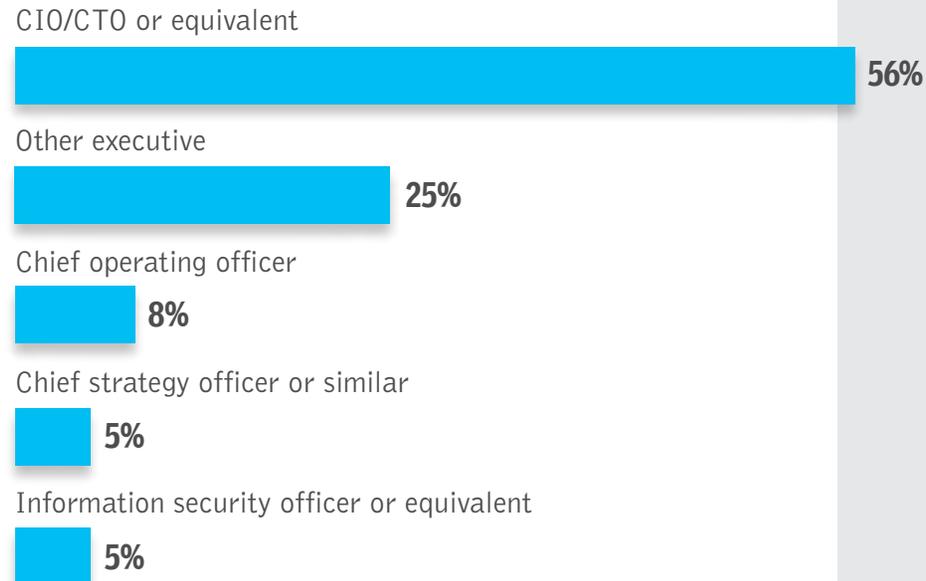
Numbers do not add up to 100% due to rounding. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	50%	93%	62%	65%	74%
No	17%	3%	24%	27%	17%
Unsure	33%	3%	14%	8%	10%

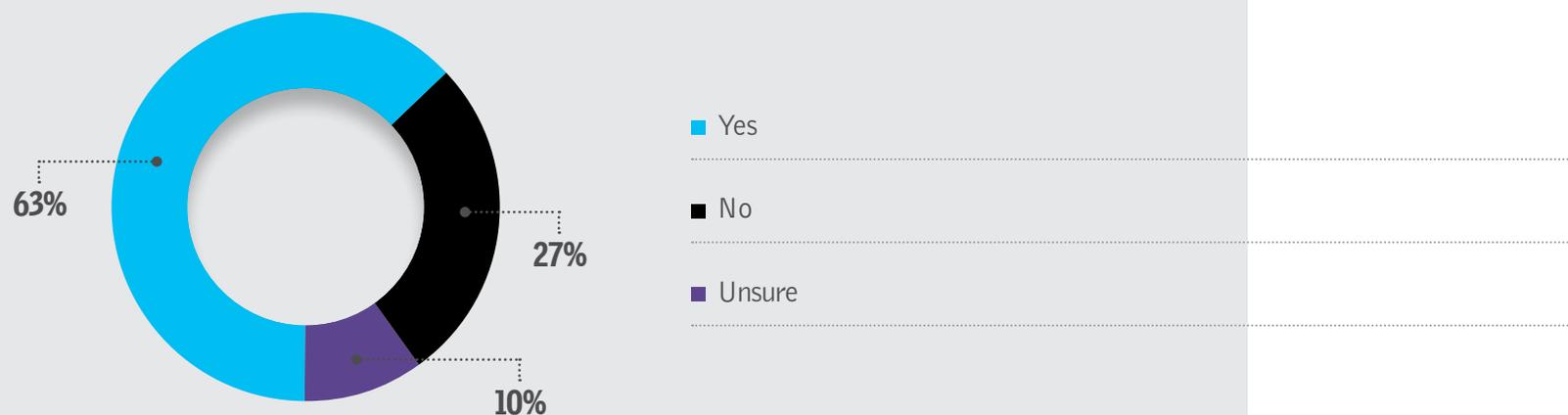
## 24. What is the title of the person responsible for managing the bank's technology relationships?

*Question was only asked of respondents who indicated that a member of the bank's staff is responsible for managing relationships with technology providers.*



## 25. Are acquisitions part of your bank's growth strategy?

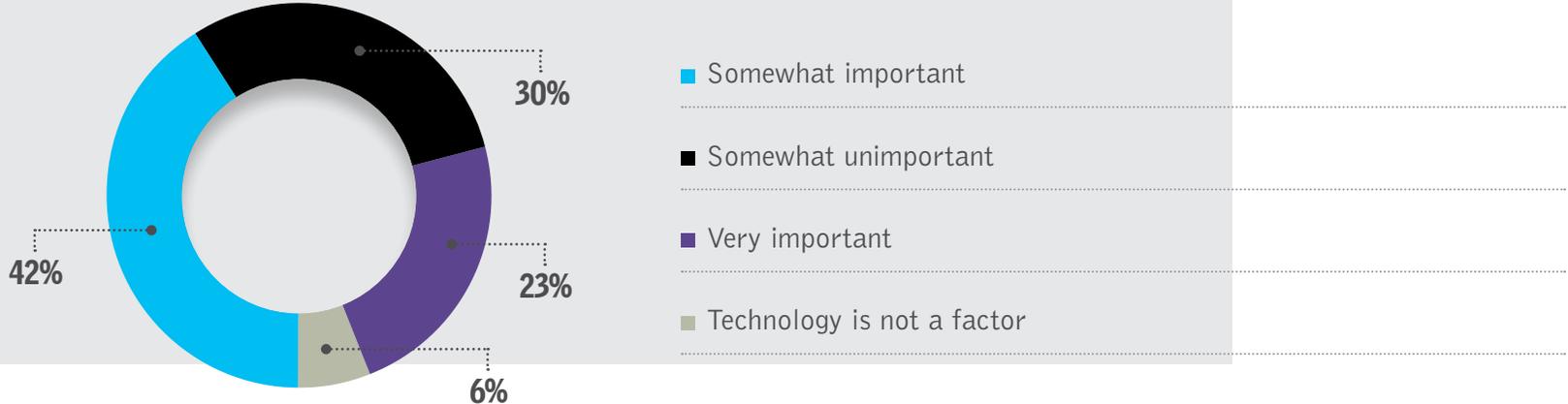
\*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	43%	73%	71%	50%	63%
No	43%	20%	19%	38%	27%
Unsure	14%	7%	10%	12%	10%

## 26. As your bank’s leadership team evaluates acquisition targets, how important is the target’s technology – meaning, whether the technology is outdated or incompatible – when making the decision to acquire?

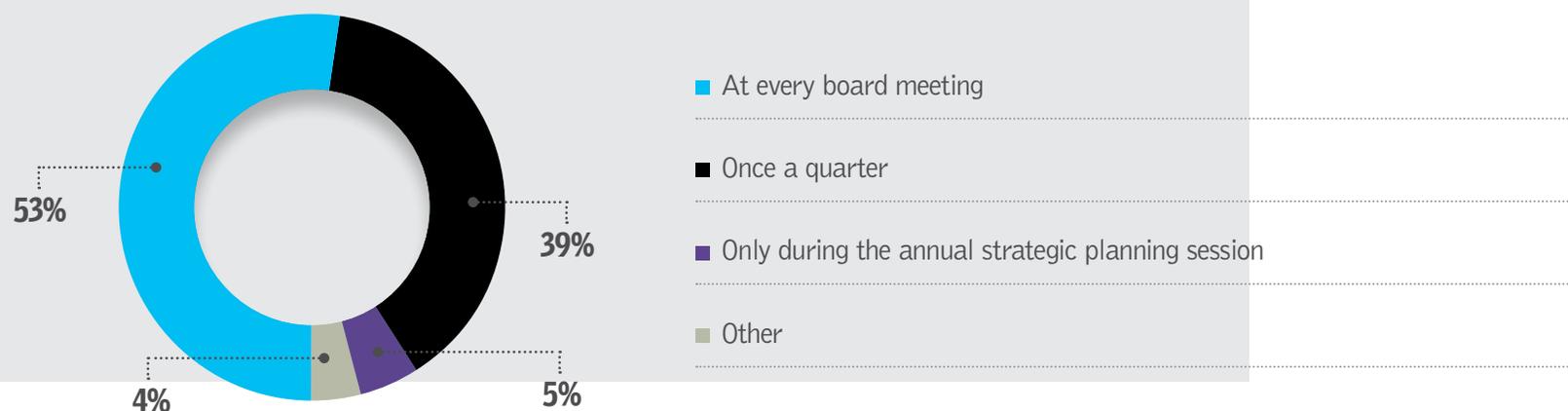
Question was only asked of respondents who indicated that acquisitions are part of their bank’s growth strategy. Numbers do not add up to 100% due to rounding.



# TECHNOLOGY GOVERNANCE

## 27. How frequently does your board discuss technology?

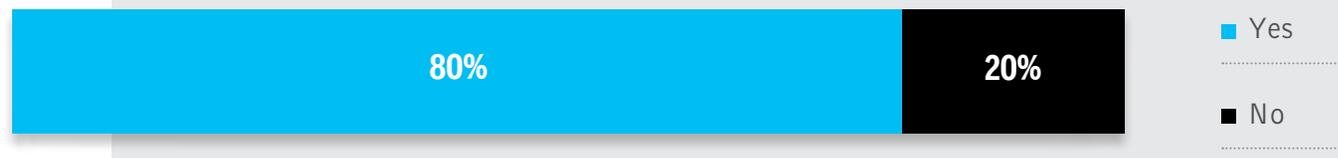
Numbers do not add up to 100% due to rounding. \*Indicates a count of less than 10 within a category.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
At every board meeting	86%	59%	57%	35%	53%
Once a quarter	-	31%	38%	58%	39%
Only during the annual strategic planning session	-	7%	5%	4%	5%
Other	14%	3%	-	4%	4%

## 28. In your opinion, does the board as a whole need to enhance its level of expertise regarding technology?

\*Indicates a base count of less than 10 within a field.



Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Yes	57%	83%	81%	81%	80%
No	43%	17%	19%	19%	20%

## 29. Is there a member of the board who you would consider to be an expert on technology?

\*Indicates a base count of less than 10 within a category.

52%

No

43%

Yes

5%

Unsure

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
No	71%	50%	52%	50%	52%
Yes	29%	47%	43%	42%	43%
Unsure	-	3%	5%	8%	5%

## 30. Regarding technology, what issues does the board currently focus on?

\*Indicates a base count of less than 10 within a field.

**96%** 

Cybersecurity

**63%** 

Improving processes within the bank

**46%** 

Implementing innovative customer-facing technology

**42%** 

Our relationship with our core technology provider

Bank Asset Size	>\$10B*	\$1B - \$10B	\$500M - \$1B	<\$500M	Total
Cybersecurity	86%	97%	100%	96%	96%
Improving processes within the bank	71%	52%	71%	65%	63%
Implementing innovative customer-facing technology	71%	31%	48%	54%	46%
Our relationship with our core technology provider	71%	38%	43%	38%	42%
Staying on top of technology trends	29%	52%	29%	38%	40%
Technology to improve the compliance function (regtech)	29%	24%	29%	15%	23%
Implementing innovative solutions to improve back-end processes	43%	14%	29%	15%	21%
Evaluating new technologies	14%	21%	14%	12%	16%
Our relationships with newer technology providers	29%	3%	5%	12%	8%
Other	-	-	5%	-	1%

## ABOUT THE SURVEY

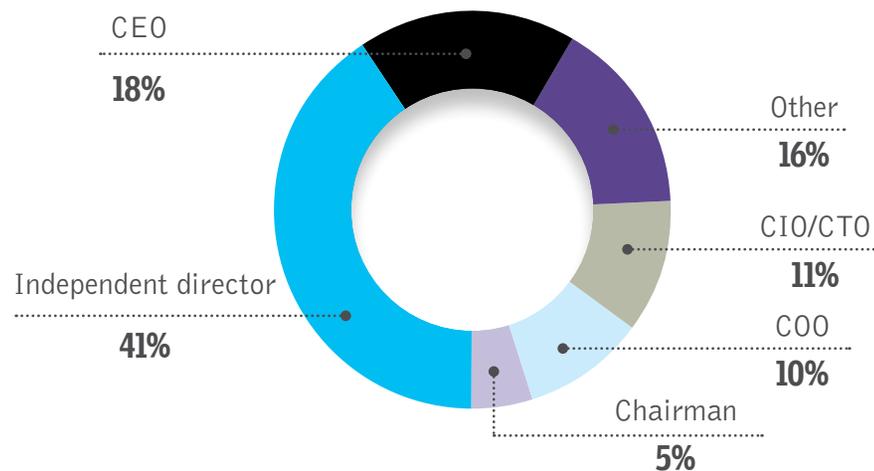
Bank Director's 2019 Technology Survey, sponsored by CDW, surveyed more than 150 independent directors, chief executives, high-level technology executives and other senior executives of U.S. banks to examine technology strategies, staffing and budgets, and relationships with new vendors and legacy core providers. The survey was conducted in June and July 2019. Forty-six percent of respondents serve as independent board members or chairmen. Eleven percent hold the title of chief information officer or chief technology officer.

## MEDIAN AGE

58

## TITLE

Numbers do not add up to 100% due to rounding.



## ASSET SIZE

