

State Street Digital Asset Survey 2024

Regional Analysis

April 2024





Summary insights

Firms are enthusiastic about Tokenization/ Digital assets

- The allocation towards digital assets is likely to increase gradually in future. Only around 1/3 of the respondents have increased allocations in digital assets in last one year, around 2/3 are likely to increase the allocations in the next 5 years time.
- Cryptocurrencies like Bitcoin are expected to generate much better returns than other digital assets, especially among the respondents in Americas.

 APAC expect central bank digital currencies followed by cryptocurrencies, to provide better returns through direct investments
- · Firms mainly expect to benefit from increased transparency with tokenization and digital trading across regions

When it comes to digital strategy, most organizations are still at nascent stage

- 9 out of 10 respondents say their organization has started to implement a digital transformation strategy, however, only 2 out of 10 respondents are at the advanced phase of the strategy
- Nearly 40% of the institutions have a dedicated Digital Asset team in place and another 40% are at advanced stages of development or planning
- · Hiring new in-house talent is a key priority in building digital asset and related infrastructure
- Asset-servicing companies and Crypto market research firms top the list of organizations that respondents would rely for services in the digital assets space

Trad-fi/de-fi interoperability will be around for a while

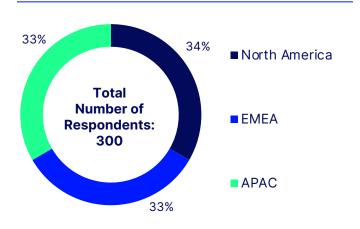
- Only 50% of the respondents say that they are prepared to transfer assets back and forth from traditional custody and trading ledgers to digital ones and another 50% of the respondents are currently doing or extremely prepared to transfer digital assets to ledgers
- Approx. 6 out of 10 respondents believe it will take more than 10 years to make trad-fi / de-fi interoperability mainstream. However, 7 out of 10 respondents also believe trad-fi / de-fi interoperability will remain common for more than 10 years before being replaced by a fully digital investment environment

What has changed and what is consistent since the 2023 Digital Assets Study

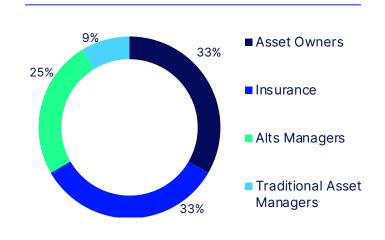
- The number of respondents currently trading digitally has doubled since our 2023 study: 22 percent say they are doing so, compared to 11 then
- · Private assets remain the most in demand use case for tokenisation of real assets, with consistent year-on-year results
- Respondents expect Digital Assets to take longer to become mainstream: around 60 percent say it will take at least a decade, up on just over a third last year
- Organisations' top strategy for building Digital Assets workforce expertise is now hiring new staff, whereas last year their main focus was on training existing employees
- Respondents are more focused on technology challenges, with cybersecurity and blockchain creation/maintenance leapfrogging more financial operations considerations such as distribution and fund administration as the Digital Assets Service they want most support with
- · Asset servicing companies are now the top providers of Digital Asset Services for more than half of respondents, up from around a third last year

Demographics

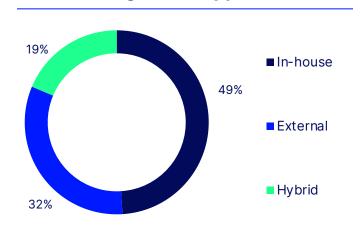
Regions



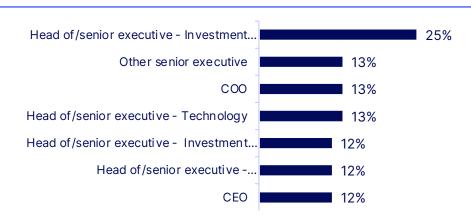
Segments



Asset Management Approach



Job Designations



AUM (asset under management)



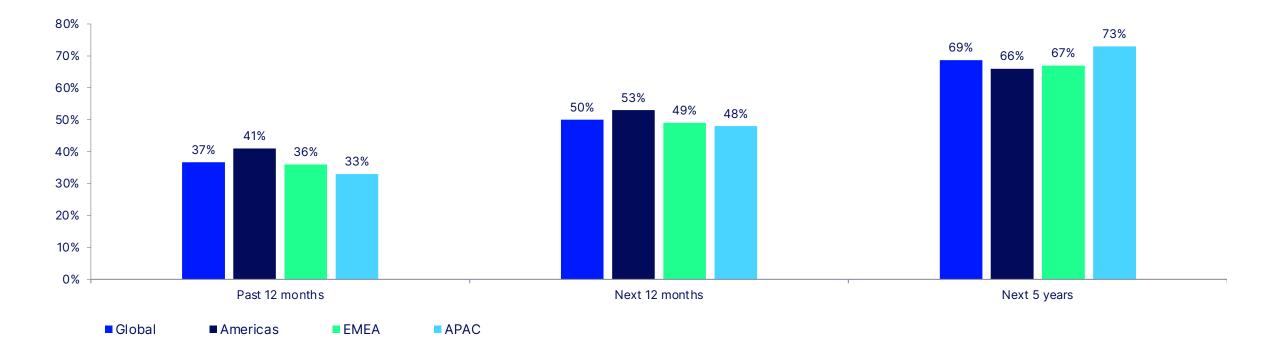
Information Classification: General 3 STATE STREET

Digital Assets &

lokenization

The increase in allocation towards digital assets is likely to increase gradually with time

• While only around 1/3 of the respondents have increased allocations in digital assets in last one year, around 2/3 are likely to increase the allocations in the next 5 years time



% Respondents: The percentage shows respondent who selected increase in allocation (slightly + significantly)

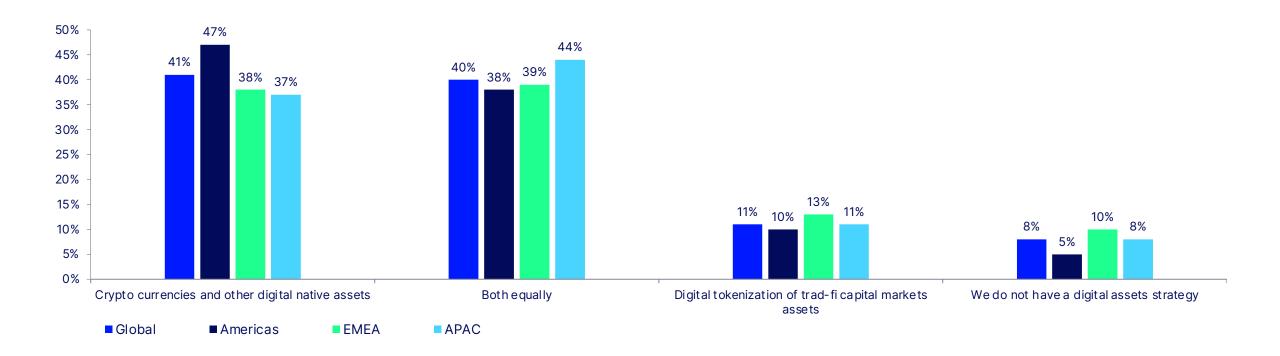
Q15. To what extent has your asset allocation towards digital assets, cryptocurrencies, or related funds/products (e.g., Bitcoin futures) changed in the past 12 months?

Q16. To what extent do you expect your asset allocation towards digital assets, cryptocurrencies, or related funds/products to change over the next 12 months?

Q17. To what extent do you expect your asset allocation towards digital assets, cryptocurrencies, or related funds/products to change over the next two to five years?

STATE STREET.

Significant majority of respondents are equally focused on both crypto currencies and tokenization



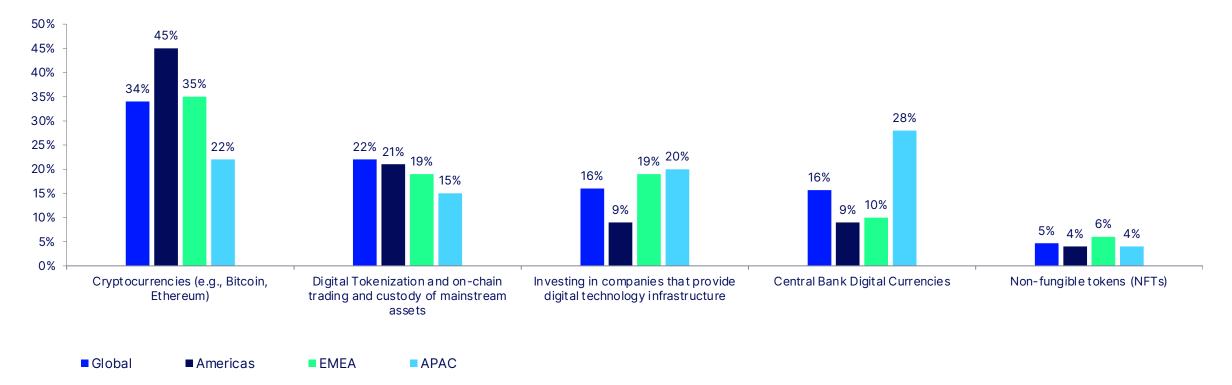
% Respondents

Q02. Which of the following is your digital asset strategy focused on the most?

STATE STREET

Cryptocurrencies like Bitcoin are expected to generate more returns than other digital assets, especially among the respondents in Americas

- APAC expect central bank digital currencies followed by cryptocurrencies, to provide better returns through direct investments
- This represents a big increase in interest in Crypto: in our 2023 study just 24 percent selected Bitcoin and other crypto currencies, compared to 40 percent who saw the highest returns from tokenized mainstream assets; this enhance interest is likely to be related to the SEC approval of spot Bitcoin ETFs



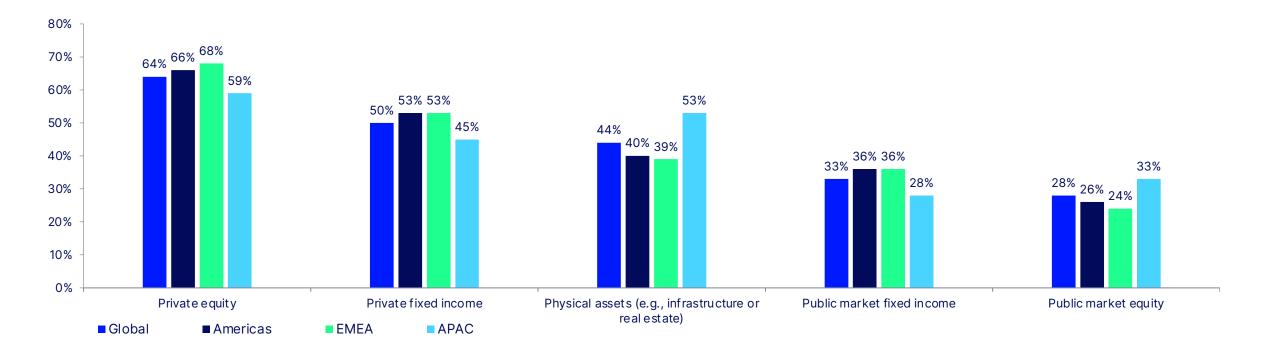
% Respondents

Q18. In which of the following areas does your firm expect to generate the highest returns through direct investment?

STATE STREET.

Private equity followed by other private assets are expected to be tokenized and traded digitally before other asset classes

- Digital fractionalization of private assets could help the industry in its long term goal of enabling more illiquid assets in liquid portfolios for retail investors
- In addition to tokenized assets for portfolio holdings, tokenization of cash and money market funds for collateral and liquidity is a growing use case for digital assets
- These responses are very similar to those in the 2023 Digital Assets Study



% Respondents

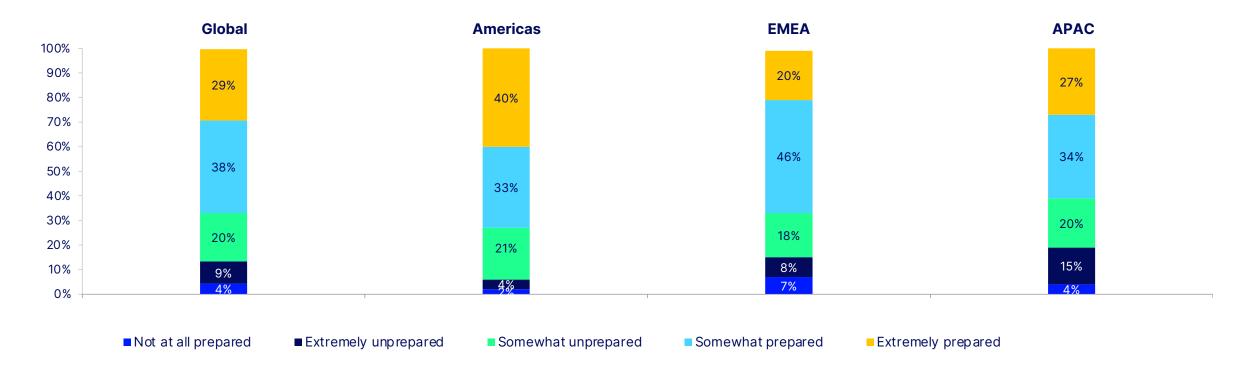
Q19. Which of the following asset classes do you think will be the first to be tokenized and digitally traded?

STATE STREET.

Industry Outlook

Two thirds of institutions believe the industry is prepared for transferring digital assets to and from different digital ledgers

- Around 3/4th of firms in Americas and 2/3rd in EMEA and APAC assert being prepared for transferring digital assets to and from different digital ledgers
- A small chunk (1/5th), however, deem themselves not at all prepared/extremely unprepared for the digital transformation, more so in APAC and EMEA



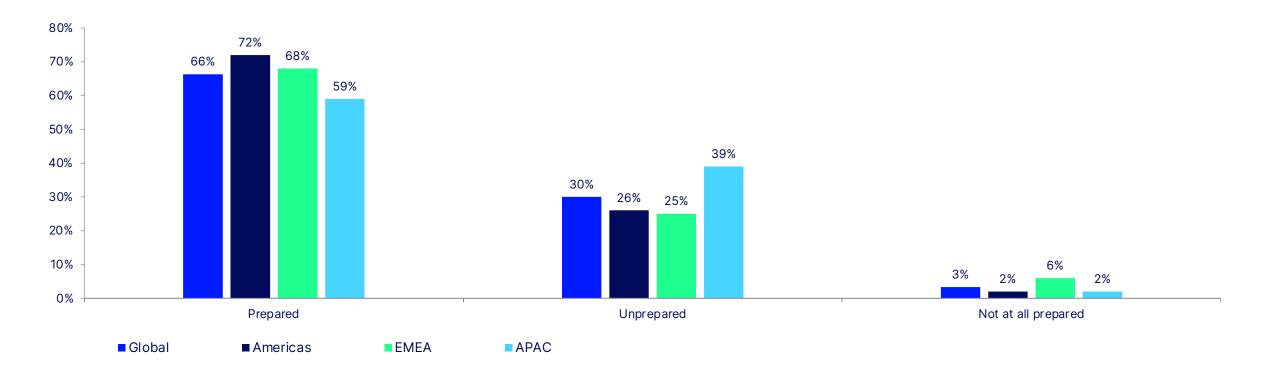
% Respondents

Q20. To what extent do you believe the financial services and investment industry in your primary region of business is prepared for transferring digital assets to and from different digital ledgers (e.g., blockchains)?

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Two thirds of respondents also say their peers are prepared for transferring assets from traditional custody and trading ledgers to a tokenized form, and back again

 Whereas 4 out of 10 respondents in APAC says they are not prepared for transferring assets from traditional custody and trading ledgers to a tokenized form, and back again



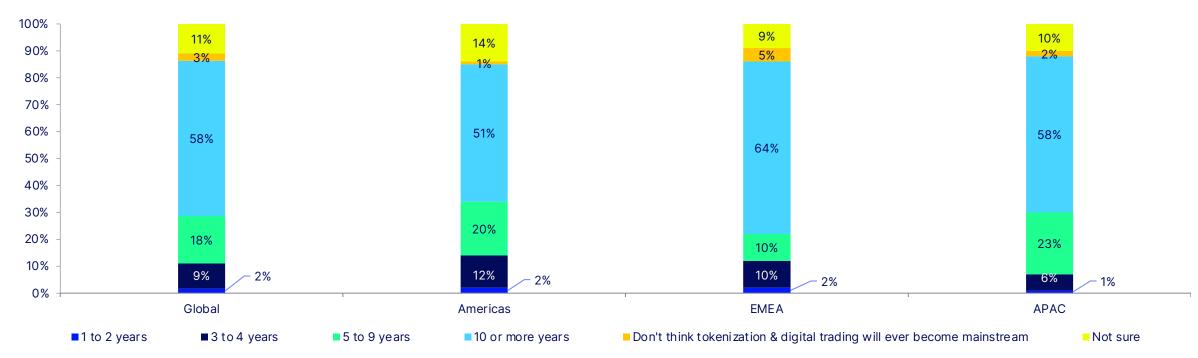
Q21. To what extent do you believe the financial services and investment industry in your primary region of business is prepared for transferring assets from traditional custody and trading ledgers to a tokenized form, and back again?

STATE STREET

[%] Respondents: Prepared includes responses (Extremely prepared and Somewhat prepared) and Unprepared includes responses (Somewhat unprepared and Extremely unprepared)

Approx. 6 out of 10 respondents believe it will take more than 10 years to make trad-fi / de-fi interoperability mainstream

- Enhanced industry collaboration across buyside institutions, servicing companies and the technology industry has the potential to bring these timescales down
- In the 2023 study just 37 percent of respondents thought digital trading would take 10 or more years to become mainstream (NB. last year's question did not refer specifically to trad-fi/de-fi interoperability, just trading tokenized assets on digital networks)



% Respondents

Q22. How close do you think the industry is to making trad-fi/de-fi interoperability mainstream?

STATE STREET

Lack of awareness & demand among buyside institutions and cyber security concerns are cited as the two major barriers to the investment industry in achieving trad-fi / de-fi interoperability

• Respondents in EMEA also see lack of regulatory clarity & interjurisdictional consistency on treatment of digital assets & investment operations & systems as a barrier

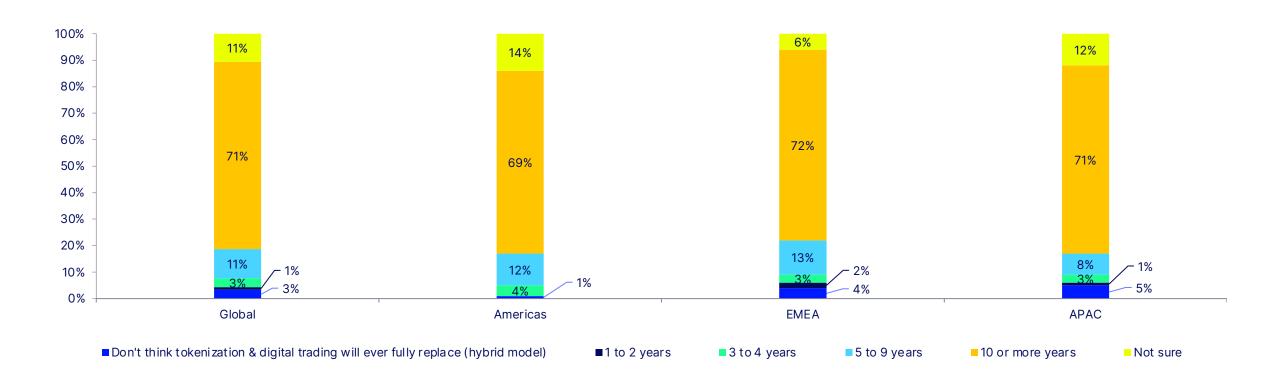
	Global	Americas	EMEA	APAC
Lack of awareness & demand among buyside institutions	45%	50%	45%	39%
Cyber security concerns	43%	42%	42%	45%
Lack of regulatory clarity & interjurisdictional consistency on treatment of digital assets & investment operations & systems	39%	38%	43%	36%
Lack of interoperability between existing blockchains/ distributed ledger technologies with one another	35%	29%	39%	38%
Cost & effort required to create new systems too onerous	34%	28%	37%	38%
Lack of public blockchains/distributed ledger technologies designed to operate with trad-fi networks & systems	30%	34%	25%	31%
Lack of private blockchains/ distributed ledger technologies designed to operate with trad-fi networks and systems	26%	26%	28%	24%
Lack of effective or widespread provision among service providers (i.e., of tokenization services, digital custody, etc.)	13%	19%	10%	11%
Digital tokenization technology doesn't offer sufficient benefits to the investment industry	9%	13%	49	9%

% Respondents

Information Classification: General 13 55

Q24. Which of the following do you believe are the top barriers to the investment industry in achieving this form of trad-fi/de-fi interoperability?

However, 7 out of 10 respondents also believe trad-fi / de-fi interoperability will remain common for more than 10 years before being replaced by a fully digital investment environment



% Respondents

Q23. How long do you think trad-fi/de-fi interoperability will remain common before being replaced by a fully digital investment environment?

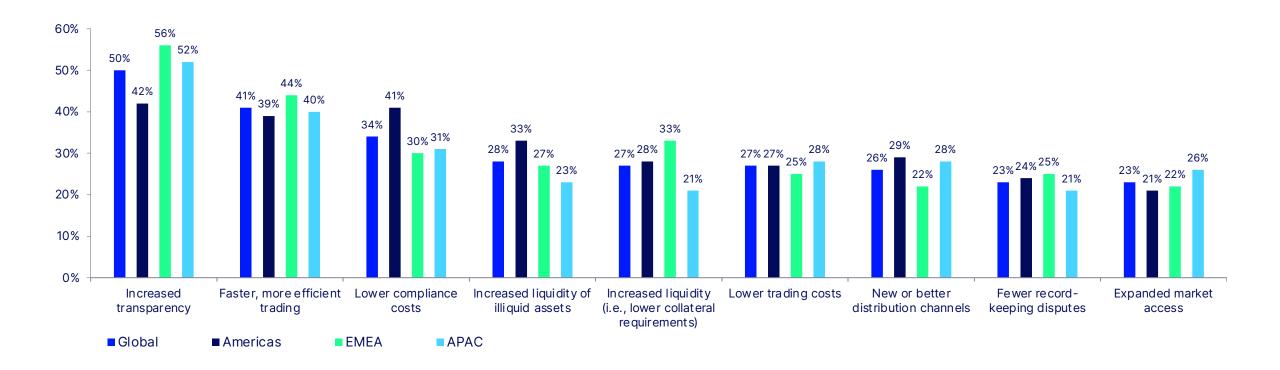
Information Classification: General 14 STATE STREET

Digital Operations

Strategy

Firms mainly expect to benefit from increased transparency with tokenization and digital trading across regions

These anticipated benefits largely mirror the responses to the same question in our 2023 Digital Assets Study



% Respondents

Q12. Which of the following benefits do you think your organization will experience from tokenization and digital trading?

STATE STREET.

Respondents anticipate significant revenue growth and cost savings from the benefits derived from tokenization and digital trading

	Global	Americas	EMEA	APAC
New or better distribution channels	49%	58%	41%	48%
	50%	53%	45%	51%
Fewer record-keeping disputes	48%	54%	44%	46%
	49%	57%	44%	47%
Lower compliance costs	47%	54%	43%	44%
	47%	52%	42%	46%
Increased transparency	46%	50%	43%	48%
	46%	49%	43%	48%
Increased liquidity of illiquid assets	46%	49%	42%	46%
	46%	46%	41%	51%
Lower trading costs	46%	50%	40%	46%
	44%	48%	37%	47%
Faster, more efficient trading	45%	48%	40%	47%
	44%	49%	40%	45%
Expanded market access	44%	42%	45%	45%
	45%	40%	48%	47%
Increased liquidity (i.e., lower collateral requirements)	43%	46%	36%	51%
	43%	46%	37%	47%

[■] Revenue Growth ■ Cost Savings

[%] Respondents: The percentage is calculated using weighted average for each parameter

Q13. For each of your top three choices you previously selected, what are the approximate cost savings you anticipate as a percent of your current expenditure?

Q14. For each of your top three choices you previously selected, what are the approximate revenue growth increases you anticipate as a percent of your current revenues?

The cost savings derived from fewer record keeping disputes and new distribution channels benefits is expectedly much more than other advantages anticipated from digital trading, more so in Americas

· Americas also expect increased cost savings due to lower compliance costs advantage that would come from tokenization and digital trading



Cost Savings ■0%-40% ■41%-60% ■>60%

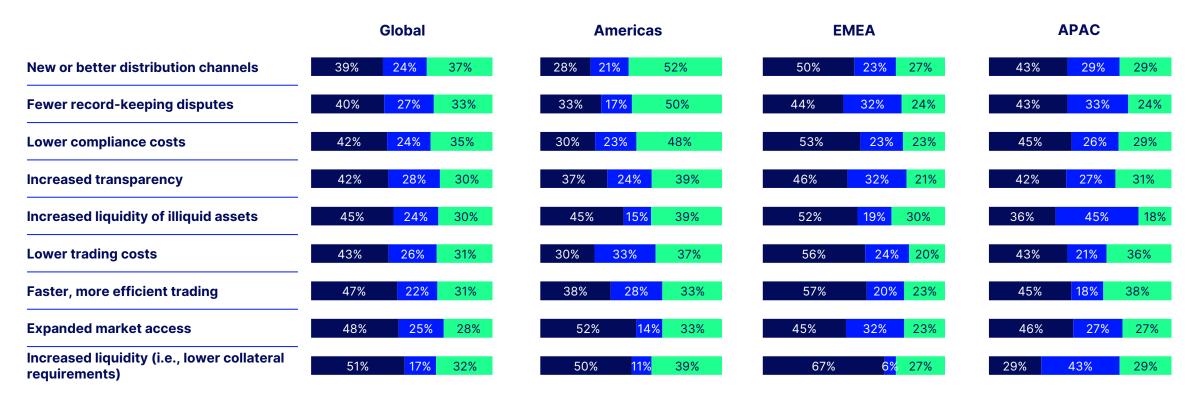
% Respondents

Q13. For each of your top three choices you previously selected, what are the approximate cost savings you anticipate as a percent of your current expenditure?

STATE STREET

Fewer record keeping disputes and new distribution channels are also expected to bring revenue growth much more than the rest

• Americas is very optimistic about the impact on revenue due to advantages of better distribution channels, fewer record-keeping disputes and lower compliance cost from digitization



Revenue Growth ■0%-40% ■41%-60% ■>60%

% Respondents

Q14. For each of your top three choices you previously selected, what are the approximate revenue growth increases you anticipate as a percent of your current revenues?

STATE STREET.

Nearly 40% of the institutions have a dedicated Digital Asset team in place and another 40% are at advanced stages of development or planning

- · Americas region is comparatively better positioned than EMEA and APAC in terms of having a dedicated digital team
- Approximately 10% of the respondents are tentative, having no fixed plans to invest in a dedicated Digital Asset capability

	Global	Americas	EMEA	APAC
We have a dedicated team or business unit	40%	45%	38%	37%
We have started building a dedicated team or business unit	22%	20%	21%	24%
We have fixed plans to create a dedicated team or business unit in the next year	13%	15%	11%	14%
We have fixed plans to create a dedicated team or business unit in the next 2-3 years	9%	8%	9%	10%
We do not have fixed plans to create a dedicated team or business unit but would like to do so in the next year	- 6%	/- 2%	/ -9%	/- 7%
We do not have fixed plans to create a dedicated team or business unit but would like to in the next 2-3 years	-5%	-6%	_/ -4%	-4%

% Respondents

Q01. Do you have a team or business unit that is dedicated to your organization's digital assets strategy?

Information Classification: General 20 STAT

Mix of external and in-house talent is a key to building digital asset infrastructure

- Nearly 50% of EMEA respondents target to outsource digital assets and related infrastructure to expert vendors
- There is a higher focus on developing in-house expertise in Americas and APAC
- In the 2023 Digital Assets Study, retraining existing staff was the top priority with 57 percent of respondents choosing it

	Global	Americas	EMEA	APAC
Hiring new in-house staff with this expertise, fully integrated with other asset management operations	54%	57%	55%	50%
Hiring new in-house staff with this expertise as a separate division of our organization	46%	48%	45%	45%
Outsourcing to companies and organizations with this expertise	41%	37%	48%	39%
Investing in companies and organizations with this expertise	40%	40%	39%	42%
Retraining current employees in this expertise	40%	46%	30%	43%
Partnering with companies and organizations with this expertise	30%	28%	39%	24%
Other	/ -6%	5%	/ - 6%	\ -8%

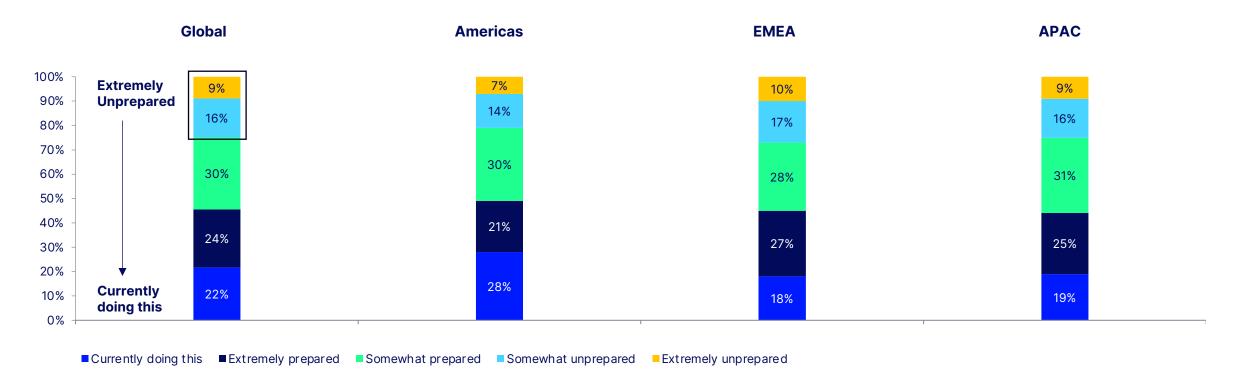
% Respondents

Q03. How is your organization building its expertise in digital assets and related infrastructure?

Information Classification: General 21 STA

Nearly 50% of the respondents are currently doing or extremely prepared to transfer digital assets to ledgers

- A quarter of the respondents mentioned unpreparedness towards transferring digital assets to and from different digital ledgers
- The number of respondents currently trading digitally has doubled since our 2023 study, where 11 percent claimed to be doing so; then 22 percent said they were well prepared to do so (NB. we didn't distinguish between between digital ledgers and on/off chain last year, so this data makes for an imperfect but still useful comparison here, and in Q06 on the following slide)



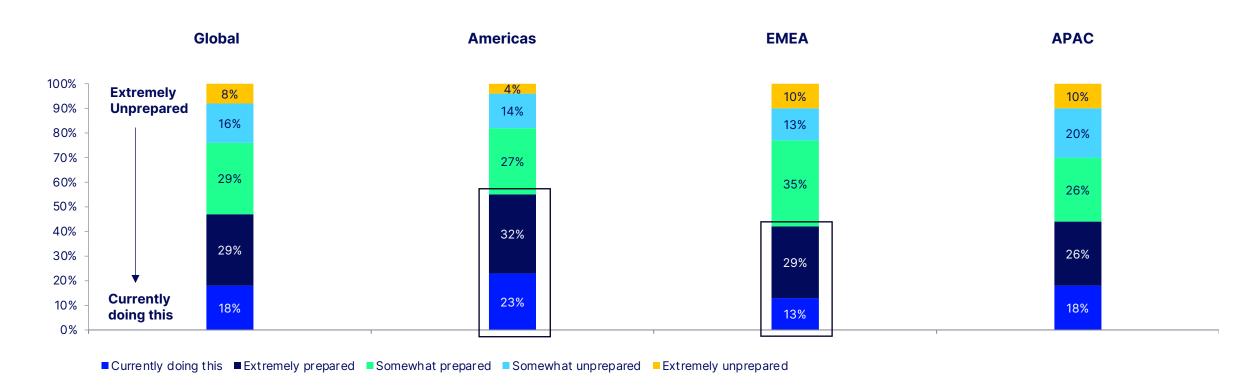
% Respondents

Q05. To what extent is your organization prepared for transferring digital assets to and from different digital ledgers such as blockchains?

STATE STREET.

Nearly 50% of the respondents also say that they are prepared to transfer assets back and forth from traditional custody and trading ledgers to digital ones

Level of preparedness is better among Americas as compared to EMEA and APAC



% Respondents

Q06. How well prepared is your organization to transfer assets from traditional custody and trading ledgers to digital ones, such as blockchains in a tokenized form, and back again?

STATE STREET

Core tokenization technology support emerged as the most useful digital asset service over digital financial operations services

- In addition to the above, Smart contract generation, fund issuance and tokenization is equally preferred as a top service in EMEA region
- At this point, respondents do not worry much about having a unified view of assets (both digital and non-digital).
- Distribution has fallen down the list of priorities since last year's study, when it was top with 41 percent of respondents choosing it; meanwhile cybersecurity was a top concern for just 15 percent of respondents then; tokenization and blockchain maintenance have also increased in significance, both getting 33 percent of responses last year

	Global	Americas	EMEA	APAC
Distributed ledger/blockchain network creation/maintenance	45%	51%	43%	41%
Cybersecurity	43%	35%	42%	53%
Smart contract generation/asset or fund issuance and tokenization	41%	43%	42%	38%
Digital fund administration and accounting services	30%	30%	33%	28%
Digital distribution mechanisms (e.g., digital wallets)	27%	26%	26%	29%
Digital custody services	27%	30%	26%	25%
Digital investor record keeping	21%	25%	19%	18%
A complete, unified view of all your assets (i.e., digital and non-digital)	18%	18%	20%	16%

% Respondents

Q07. Which of the following digital asset services do you believe would be most useful to your organization in achieving the previous form of trad-fi/de-fi interoperability?

Information Classification: General 24 55

Asset-servicing companies and Crypto market research firms top the list of organizations that respondents would rely for services in the digital assets space

- Broadly, respondents are likely to use a variety of organizations
- In 2023 Asset Servicing companies were in third place with 37 percent of respondents choosing them; Crypto Research Firms were top with 40 percent

	Global	Americas	EMEA	APAC
Asset-servicing companies	57%	64%	56%	51%
Crypto Market research firms	55%	61%	52%	52%
Consultants	49%	52%	50%	44%
Established technology companies	48%	50%	44%	50%
Newer FinTech companies	44%	53%	41%	39%
Asset management companies	41%	41%	42%	41%
Digital Asset/Crypto Market Data providers	41%	46%	36%	40%
Exchanges	38%	37%	36%	42%
Investment banks	30%	37%	20%	33%

% Respondents

Q04. Which of the following types of organizations do you rely on for services in the digital assets space?

Information Classification: General 25 ST/

Back office service providers expected to play the same roles even for tokenized assets

- Americas, additionally, expect the custodians to take up issuer of tokenized assets role on digital assets platform
- More than half of the respondents also expect the custodians to service them as transfer agent for tokenized assets on digital platforms

	Global	Americas	EMEA	APAC
Investor Custodian	66%	68%	60%	69%
Transfer Agent	55%	54%	57%	53%
Issuer of the Tokenized Asset	54%	66%	43%	54%
Administrator	40%	40%	36%	44%
Accountant	39%	35%	37%	45%
None of the above	_ _{3%}	/- 4%	/- 3%	/- 3%

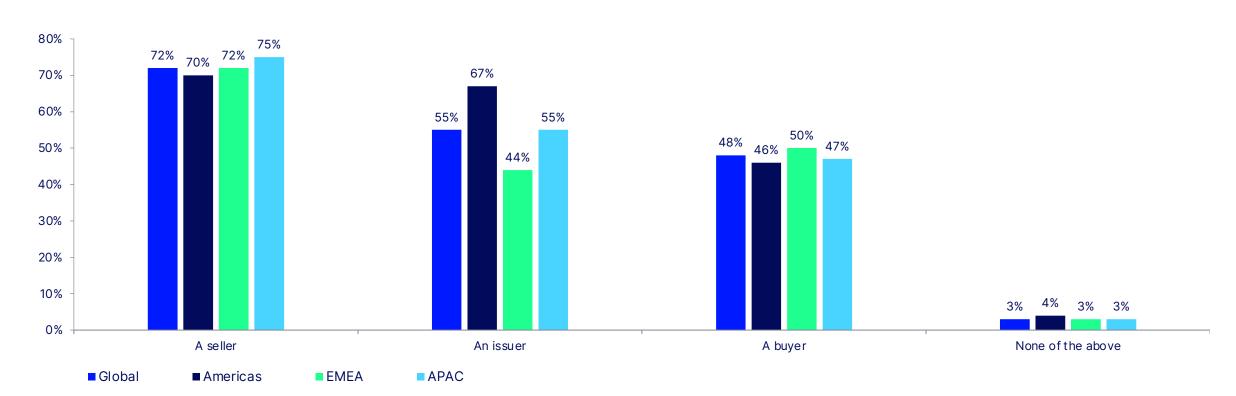
% Respondents

Q11. If you participate or plan to participate on digital asset platforms for tokenized assets, what role do you expect your custodian/back-office service providers to play?

Information Classification: General 26 ST

Most of the respondents plan to be sellers in digital asset transaction except nearly 2/3rds of Americas respondents also aspiring to be an issuer

Role



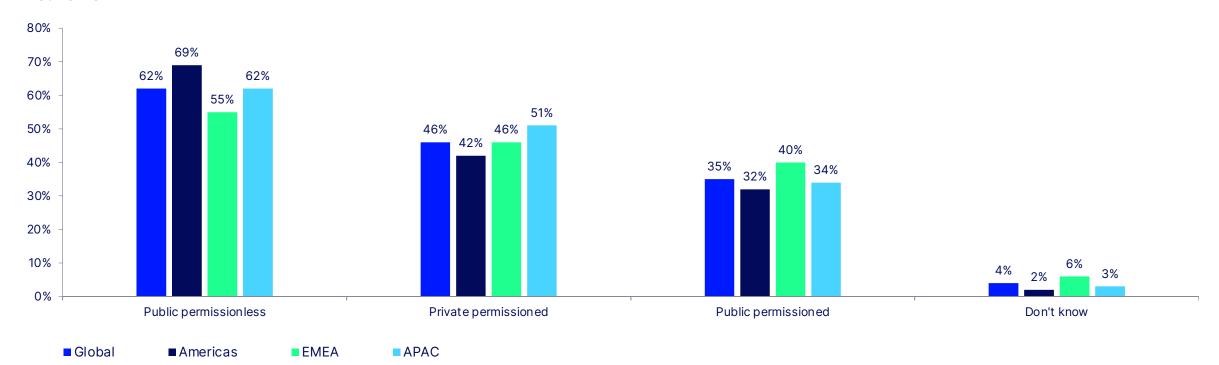
% Respondents

Q08. What is your role, or what role do you plan to have, in digital asset transactions?

Most of the respondents operate in public permissionless networks

- Half of the APAC respondents conduct digital asset transactions in private networks as well
- · Significant share of respondents in EMEA also look at public permissioned network as well
- · Most existing traded digital assets are crypto currencies and other digital native assets, which are predominantly on public permissionless networks
- As tokenized traditional assets start making up more of portfolios they are more likely to require permissioned networks

Networks



% Respondents

Q09. On which of the following network types do you conduct or plan to conduct digital asset transactions?

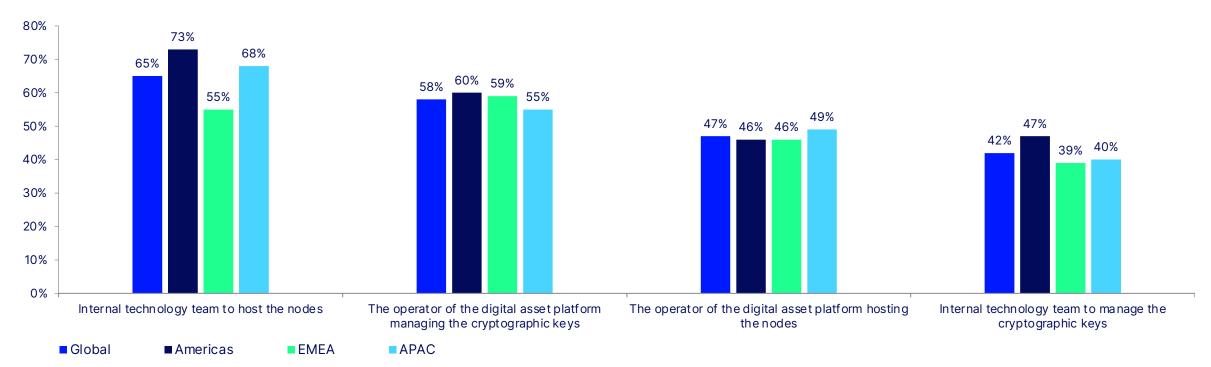
Information Classification: General 28 STAT



Internal tech teams to hosts the networks predominantly

• In many cases, platform operators that handle crypto keys, typically participate in the network

Networks



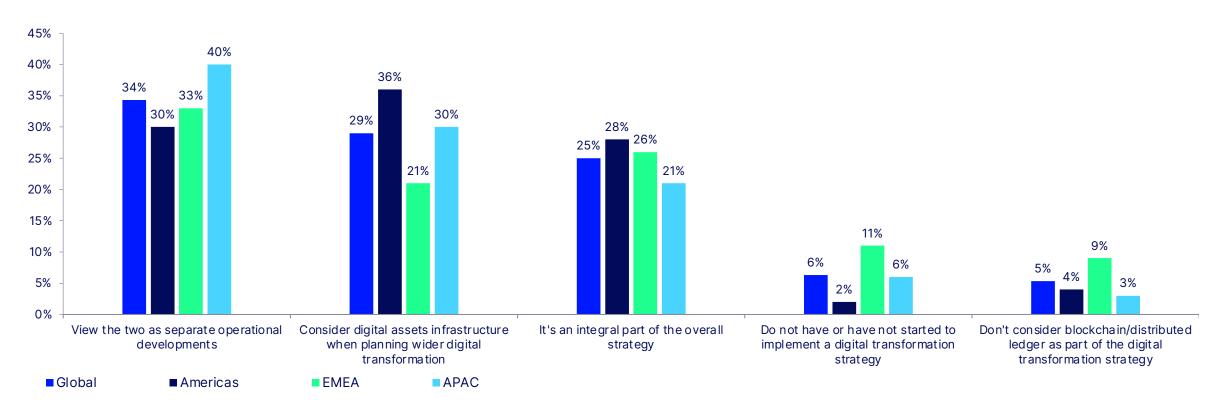
% Respondents

Q10. Which of the following do you use or plan to use to participate in the networks mentioned previously?

OtherTech

Strategies

54% of respondents view digital transformation* and digital asset infrastructure as combined operational developments

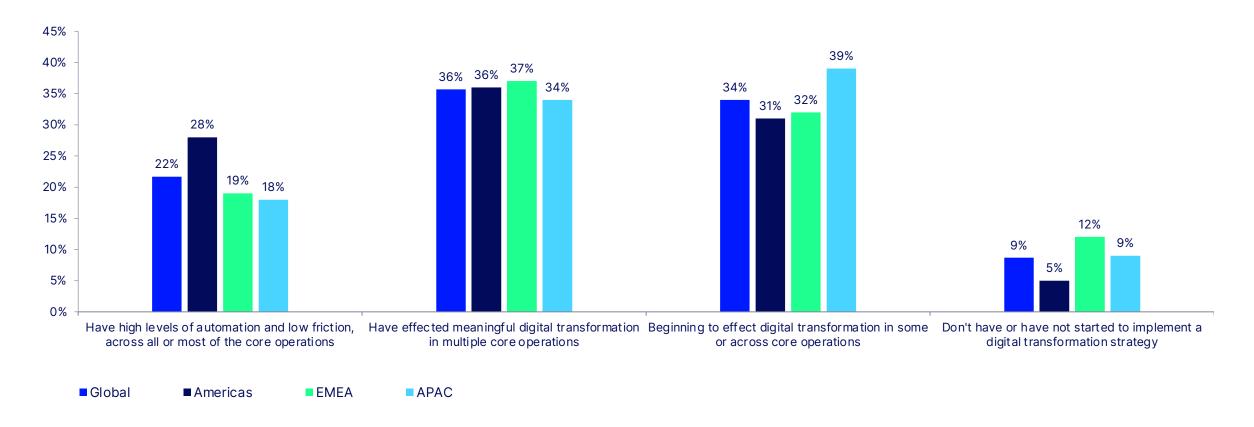


^{*}Defined to respondents as: Use of existing and advanced/emerging technologies to automate manual processes and remove manual/physical touchpoints and frictions from automated ones, in order to improve process efficiency and interoperability across core operations.

% Respondents

Q25. To what extent is digital operations architecture (e.g., blockchain) combined with your organization's wider digital transformation strategy?

9 out of 10 respondents' say their organization has started to implement a digital transformation strategy, however, only 2 in 10 are at the advanced phase of the strategy



% Respondents

Q26. To what extent do you consider your organization 'advanced' in its wider digital transformation strategy?

Information Classification: General 32 STATE STREET

Respondents, across regions, expect securities selection / asset allocation analysis to benefit the most from effective digital transformation

• Respondents in APAC also expect benefit in front, middle and back-office interoperability and portfolio analysis from effective digital transformation

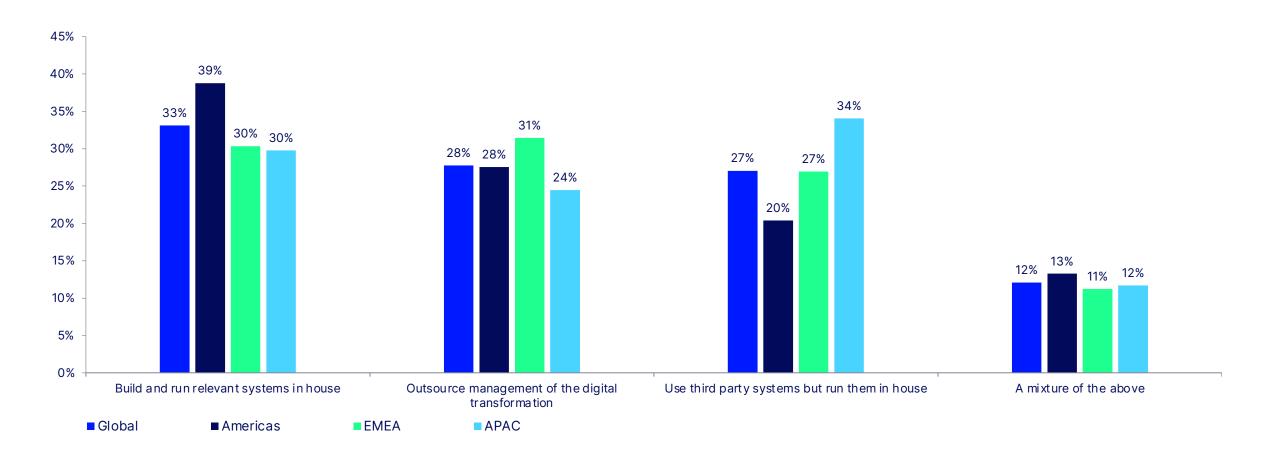
	Global	Americas	EMEA	APAC
Securities selection/asset allocation analysis	57%	55%	46%	64%
Interoperability between your organisation and back-office providers (e.g. custodians, transfer agent, etc.)	38%	38%	36%	34%
Front, middle and back-office interoperability	35%	27%	29%	45%
Portfolio analysis	32%	27%	25%	41%
Risk management	27%	28%	32%	18%
Regulatory compliance	25%	22%	22%	28%
Collateral management	25%	27%	26%	17%
Client/member communications	23%	25%	21%	21%
Sales/distribution	14%	14%	14%	11%
ESG	11%	16%	10%	6%

[%] Respondents

Information Classification: General 33 ST/

Q27. When thinking about your front, middle, and back-office operations, which of the following areas do you expect effective digital transformation to drive growth or optimize your operations?

Respondents don't have a clear consensus on their approaches for managing and running digital transformation strategies



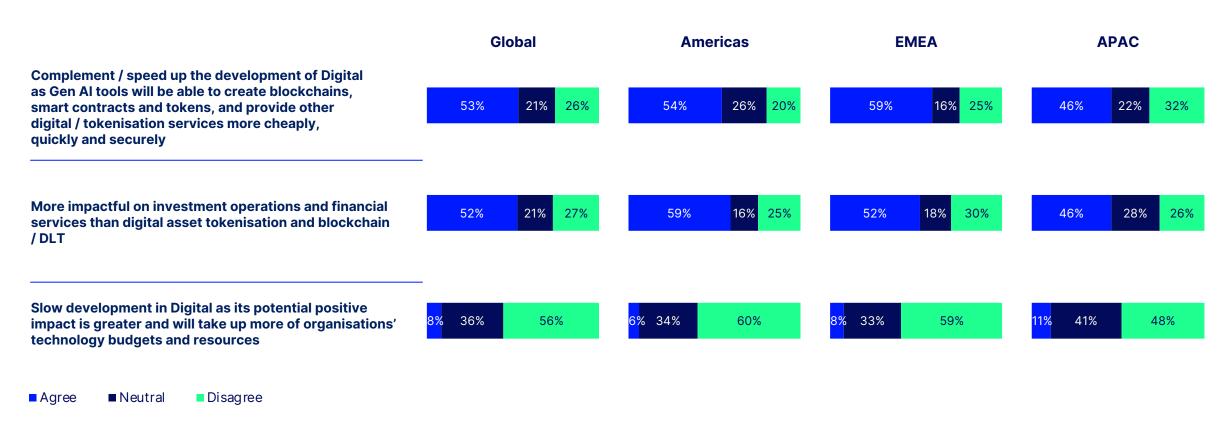
% Respondents

Q28. Which of the following best represents your organization's approach to its digital transformation strategy?

STATE STREET

More than half of the respondents feel GenAI will complement / speed up the development of digital assets

Recent and sudden advances in GenAl will:

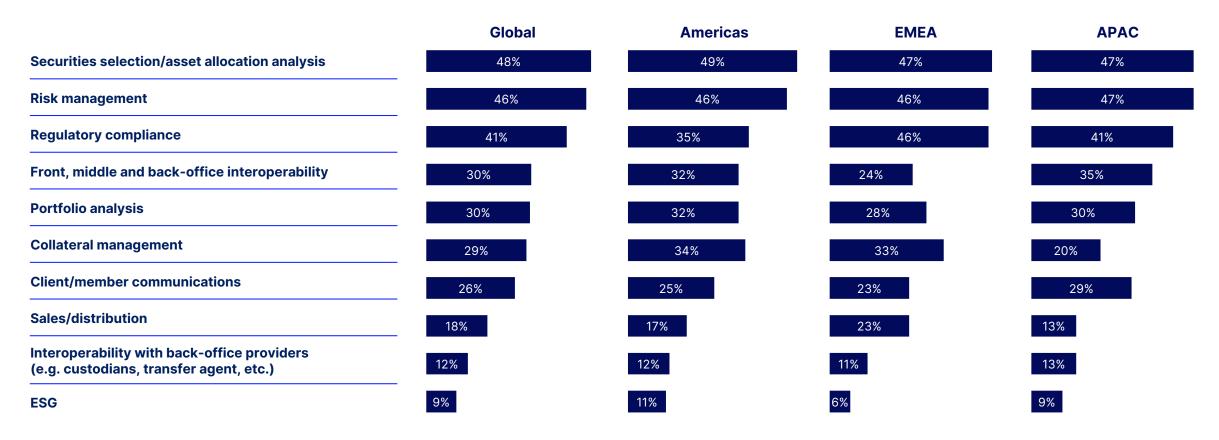


% Respondents: Agree includes responses (Strongly agree and Somewhat agree) and disagree includes responses (Strongly disagree and Somewhat disagree) Q30. To what extent to do you agree with the following statements?

Information Classification: General 35 STATE STREET

Respondents, across regions, believe securities selection / asset allocation analysis and risk management will have the most positive impact from GenAI

Respondents in EMEA and APAC also see positive impact of GenAl on regulatory compliance



% Respondents

Q29. In which of the following areas do you believe generative AI will have the largest positive impact on your operations?

Information Classification: General 36 ST

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