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Digital Assets Survey

State Street Final Data Presentation

January 2023

Fielded from October 21, 2022 – November 21, 2022

Short-term caution, long-term optimism

- Executives expect to increase their allocation to digital assets, cryptocurrencies, and related products in the long term, but they remain cautious for now—not surprising, given the recent crypto market and FTX headlines. Most executives say their digital asset allocations have either not changed or have only changed slightly in the past 12 months (73%); even more expect little or no changes over the next 12 months (82%). However, more than two-thirds (69%) expect to significantly or slightly increase their allocation in the next 2–5 years. Q5, Q6, Q7
 - These shifts represent a significant slowdown in digital asset investing. In our 2021 Digital Assets survey, 55% of executives said they increased their allocations over the previous 12 months (vs. 21% in this year's survey), 70% said they will increase their allocations in the following 12 months (vs. 25%), and 81% said they will increase allocations in the following 2–5 years.
- Executives expect to see the most upside from their investments in cryptocurrencies and DeFi, while their expectations about NFTs and stablecoins have diminished. Executives expect the most direct-investment value from cryptocurrencies (24%) and DeFi tokens/applications (24%); similar responses came out of last year's survey. However, fewer executives today are betting on NFTs (16% vs. 19% last year) and stablecoins (8% vs. 22%). Q8
- About half of executives expect private equity and physical assets to be the first tokenized, but they do not expect digital trading to become mainstream for at least five years. Roughly half believe private equity (51%) and roughly half believe physical assets (48%) will be the first to be tokenized and routinely traded digitally, but not for at least 5 years: In the fund industry, 23% expect it to take 5–9 years for digital trading to become a commonplace means of transferring mainstream assets, while 37% expect it to take 10+ years. Q17, Q18, Q19



The race to build expertise

- Firms rely on both internal staff and partnerships with crypto-specific organizations to monitor the digital asset space. Nearly a quarter of respondents' firms do not monitor the digital asset space at all internally (23% vs. 17% last year), and another 49% (vs. 53% last year) monitor it with internal staff who do so as one part of their jobs. Only 27% (vs. 30% last year) have a dedicated, full-time, internal investment staff monitoring the space. At the same time, most firms use third parties to monitor the space. Some are in regular contact with these third parties (28%); others are in occasional contact with them, without the advantage of systematic monitoring (35%). These third parties tend to be crypto market research firms (40%), digital asset/crypto market data providers (39%), asset-servicing companies (37%), or management companies (34%). Q9, Q10, Q11
- Executives are strategizing to increase their firms' expertise in digital assets—but some firms are moving more slowly. More than a quarter (29%) say they already have a team or business unit that is dedicated to the firm's digital asset strategy. Those behind these leaders are currently building such a team (9%), have fixed plans to build one over the next three years (39%), or do not yet have fixed plans but are trying to establish some over the next three years (19%). Only 5% of executives have no plans or desire to create a dedicated digital assets strategy team. For those firms with a dedicated team or fixed plans to create one, retraining current employees (57%) is the top strategy they rely on to develop this expertise, followed by hiring new staff with this expertise as a separate division (50%) and contracting independent consultants with this expertise (48%).
 - When asked if their firm would be ready to trade tokenized versions of traditional assets using smart-contracts, only 11% of executives said they are very well prepared to do so and have been pioneering transactions of this nature—and these respondents are already experiencing the benefits, ranging from increased transparency (58%) to lower compliance costs (52%). Meanwhile, 22% have not executed these transactions but have what they need to do so, 40% are still working on the ability to do conduct the transactions, and 27% cannot and are not working on the ability to do so. Q12, Q13, Q16, Q23

The future of the digital assets space

• Executives see value in digital asset services, but their implementation plans vary. When asked about which digital asset services would be most useful to their firm, executives were most likely to select digital distribution mechanisms (41%), asset/fund issuance and tokenization (37%), and digital fund administration and accounting services (34%) as their top three. But their implementation plans vary between in-house development, outsourcing, and a mix of both. For example, 44% of those who say digital distribution mechanisms would be useful to them plan to implement this fully or mainly in-house, 32% plan to fully or mainly outsource the challenge, and 24% plan to implement the solution roughly equally in-house and through outsourcing.

Plans for in-house implementation are more popular than outsourcing for investing in and trading the assets (47% in-house, vs. 19% outsourced); for asset/fund issuance and tokenization (38% vs. 28%); for a complete, unified view of all assets (39% vs. 35%); and for cybersecurity (46% vs. 30%). On the other hand, outsourcing is more popular than in-house implementation for distributed ledger/blockchain network creation/maintenance (34% in-house, vs. 37% outsourced), smart contract generation (34% vs. 43%), and digital asset prime brokerage services and collateral management (32% vs. 48%). Q14, Q15

• Many expect to see a number of benefits from tokenization. When asked how they think the existing split of wrappers for holding and distributing asset classes will be changed by tokenization, more than half of executives expect the speed and lower cost of digital custody to enable increased customization of portfolios and less reliance on funds for both institutional (64%) and retail (58%) investors. This tracks expectations: Most executives expect tokenization and digital trading to increase transparency (58%), to lead to faster and more efficient trading (49%), and to lower compliance costs (47%)—and nearly half believe mainstream digital trading and tokenization will be positive from an ESG perspective. Many expect digital assets to significantly reduce risk (47%) and transaction management costs (46%). Q20, Q21, Q22, Q24

Digital Asset Allocations and Plans



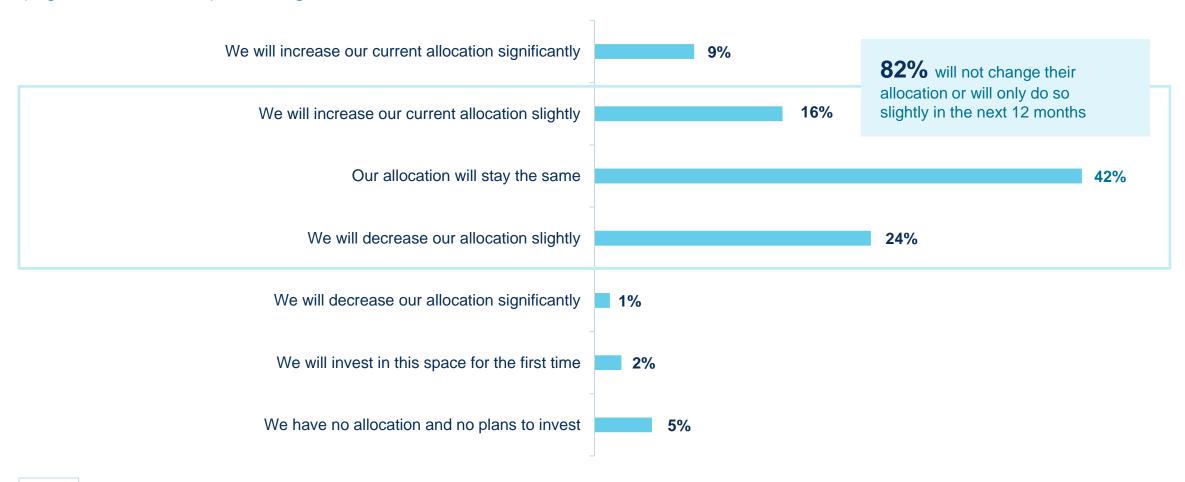
Slight to no changes in digital asset allocation in the past year...

Q05. How did your allocation to digital assets, cryptocurrencies, or related funds/products (e.g., Bitcoin futures) change in the previous 12 months? Select one.



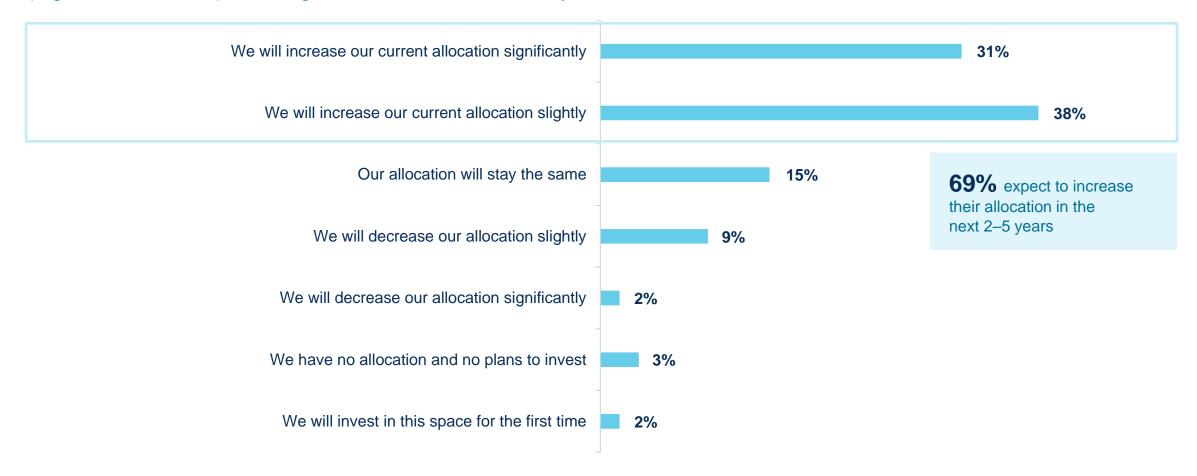
...or for the next year

Q06. How do you expect your allocation to digital assets, cryptocurrencies, or related funds/products (e.g., Bitcoin futures) to change over the next 12 months? Select one.



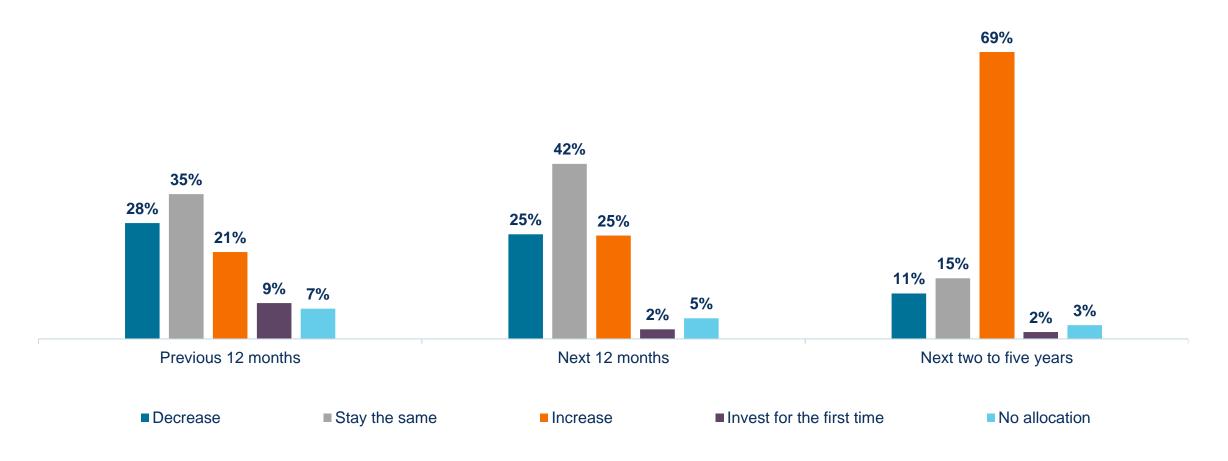
Almost one-third plan to increase digital allocations significantly in the longer term

Q07. How do you expect your allocation to digital assets, cryptocurrencies, or related funds/products (e.g., Bitcoin futures) to change over the next two to five years? Select one.



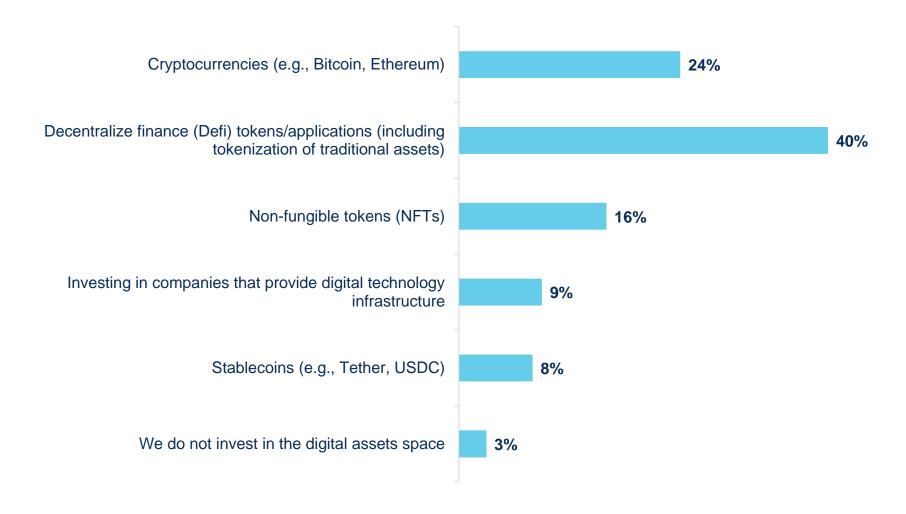
Summary: A majority have long-term plans to increase their digital asset allocation at least to some degree

Combined Q05,Q06,Q07. How did your allocation to digital assets, cryptocurrencies, or related funds/products (e.g., Bitcoin futures) change in previous 12 months? over the next 12 months? Over the next two to five years?



Cryptocurrencies and DeFi seem to be most promising

Q08. In which area does your firm expect to see the most potential value (through direct investment)? Select one.



Organisational preparedness for Digital Investment

Nearly a quarter do not monitor the digital assets space internally...

Q09. How does your firm allocate resources (i.e., staff) to monitor developments in the digital assets space? Select one.

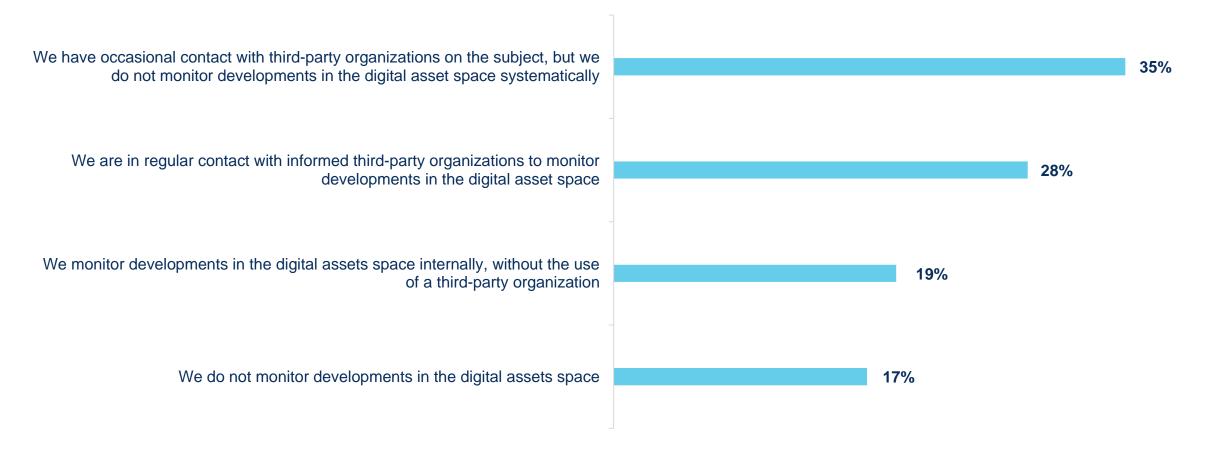


n=300

12

...and most work with third parties to monitor developments

Q10. How does your firm work with third-party organizations to monitor developments in the digital assets space? Select one.



n=300

13

Many turn to crypto-specific firms for information on digital assets

Q11. Which of the following types of organizations do you rely on for information on developments in the digital assets space? Select all that apply

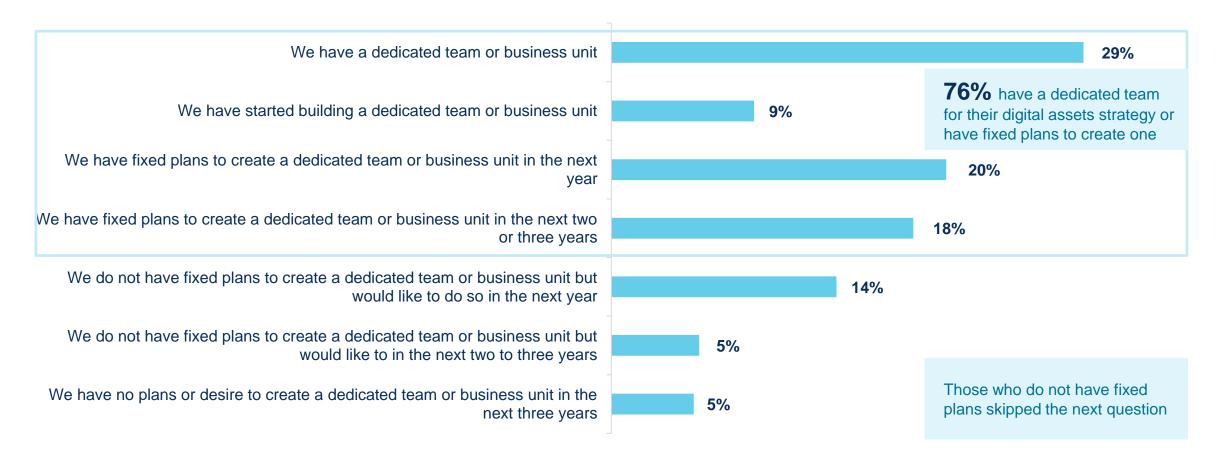


n=Asset management companies 200; 300 for all others

14

Most already have or plan to create a dedicated digital assets team

Q12. Do you have or plan to have a team or business unit that is dedicated to your organization's digital assets strategy? Select one.



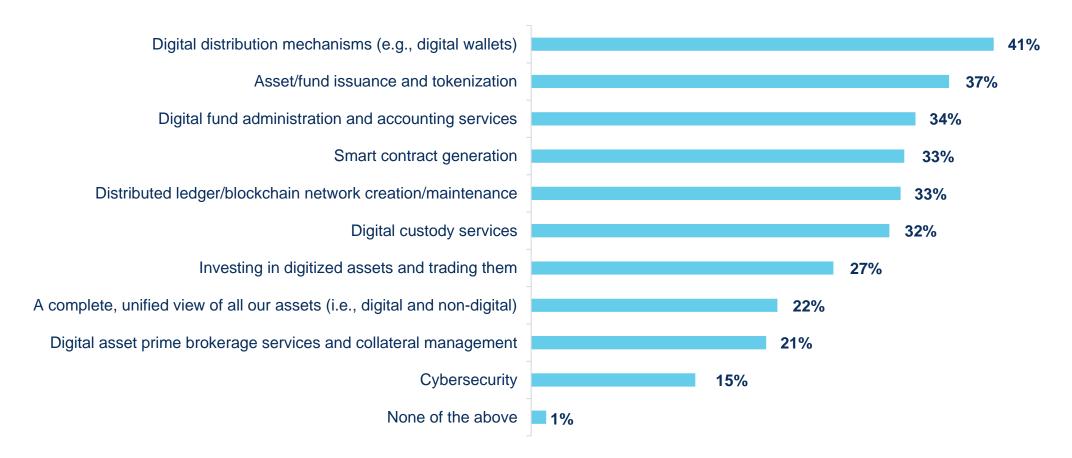
Most turn to employee training to develop digital assets expertise

Q13. How is your organization building its expertise in digital assets? Select up to three



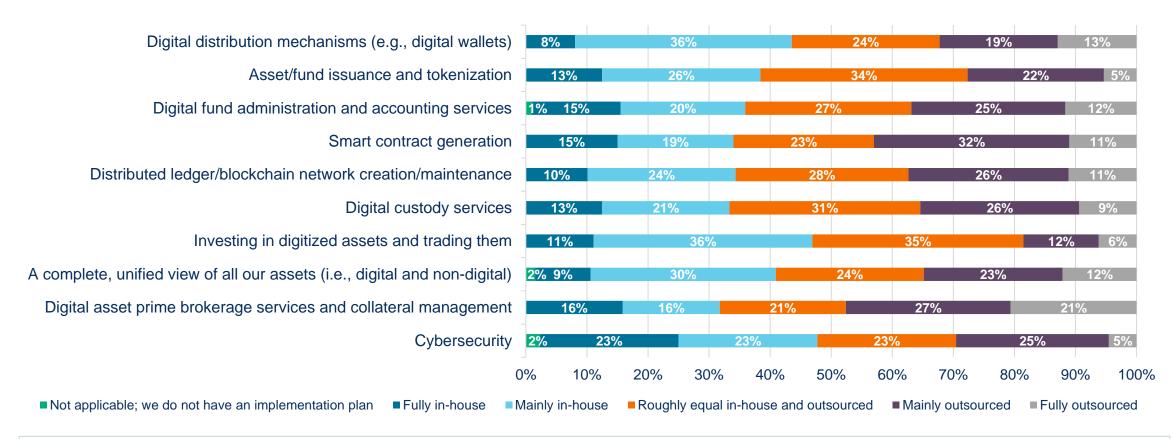
Services for digital distribution mechanisms would be most useful

Q14. Which of the following digital asset services do you believe would be most useful to your organization? Select top 3



In-house strategies are of growing importance to executives

Q15. For the digital asset services you believe would be the most useful to your organization, which best describes your overall implementation plan (or likely implementation plan)?

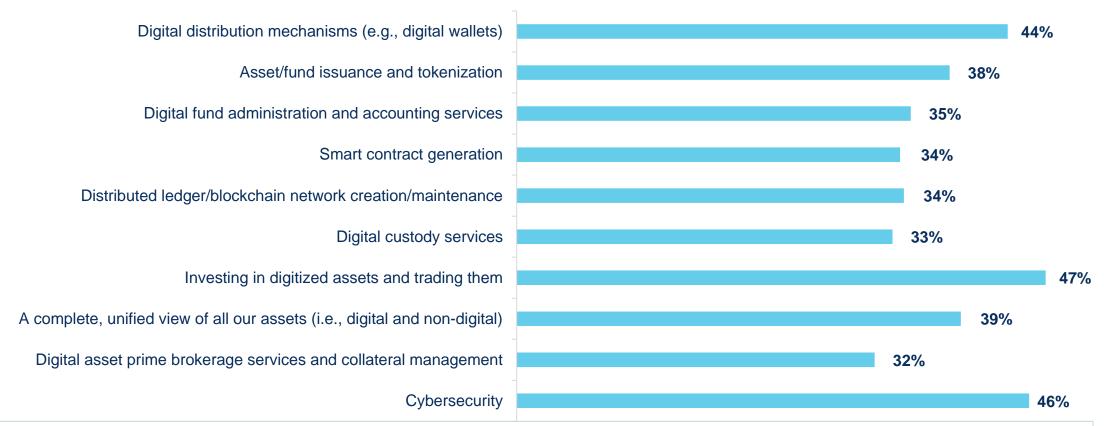


n=Cybersecurity 44; Digital asset prime brokerage services and collateral management 63; A complete, unified view of all our assets (i.e., digital and non-digital) 66; Investing in digitized assets and trading them 81; Digital custody services 96; Distributed ledger/blockchain network creation/maintenance 99; Smart contract generation 100; Digital fund administration and accounting services 103; Asset/fund issuance and tokenization 112; Digital distribution mechanisms (e.g., digital wallets) 124



Summary: Plans for in-house implementation

Q15. For the digital asset services you believe would be the most useful to your organization, which best describes your overall implementation plan (or likely implementation plan)? Fully and mainly in-house

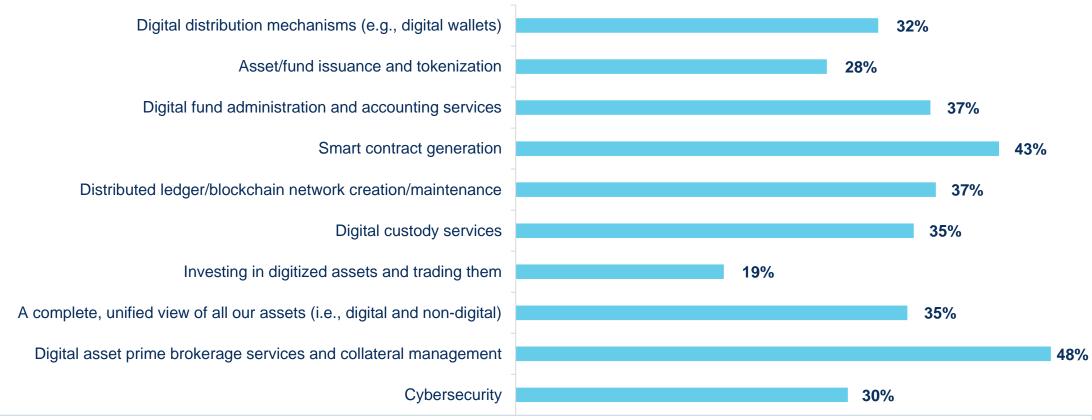


n=Cybersecurity 44; Digital asset prime brokerage services and collateral management 63; A complete, unified view of all our assets (i.e., digital and non-digital) 66; Investing in digitized assets and trading them 81; Digital custody services 96; Distributed ledger/blockchain network creation/maintenance 99; Smart contract generation 100; Digital fund administration and accounting services 103; Asset/fund issuance and tokenization 112; Digital distribution mechanisms (e.g., digital wallets) 124



Summary: Plans to outsource services

Q15. For the digital asset services you believe would be the most useful to your organization, which best describes your overall implementation plan (or likely implementation plan)? Fully and mainly outsourced

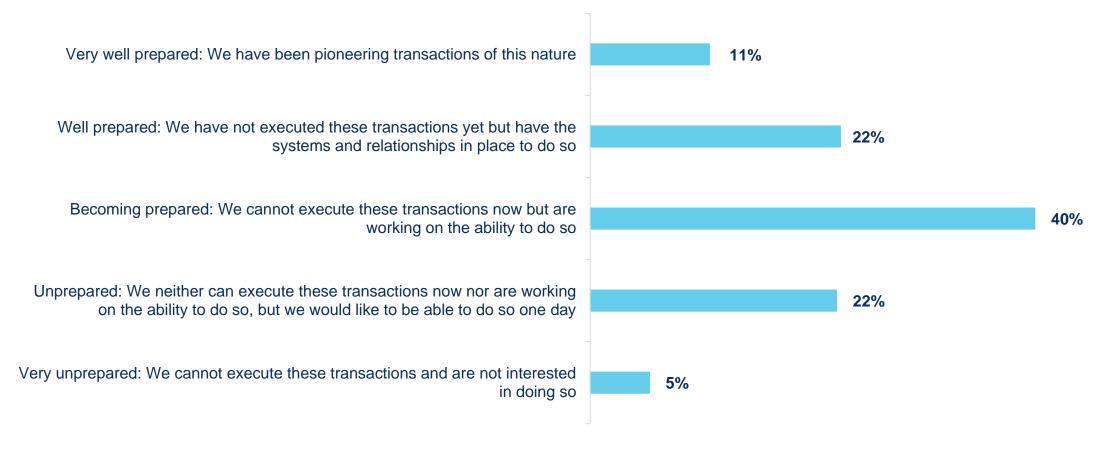


n=Cybersecurity 44; Digital asset prime brokerage services and collateral management 63; A complete, unified view of all our assets (i.e., digital and non-digital) 66; Investing in digitized assets and trading them 81; Digital custody services 96; Distributed ledger/blockchain network creation/maintenance 99; Smart contract generation 100; Digital fund administration and accounting services 103; Asset/fund issuance and tokenization 112; Digital distribution mechanisms (e.g., digital wallets) 124



One-third are prepared to trade using smart contracts

Q16. If the needed external market infrastructure were suddenly in place, how well prepared is your organization today to start using code-based smart contracts to trade tokenized versions of traditional assets on distributed ledger/blockchain? Select one.



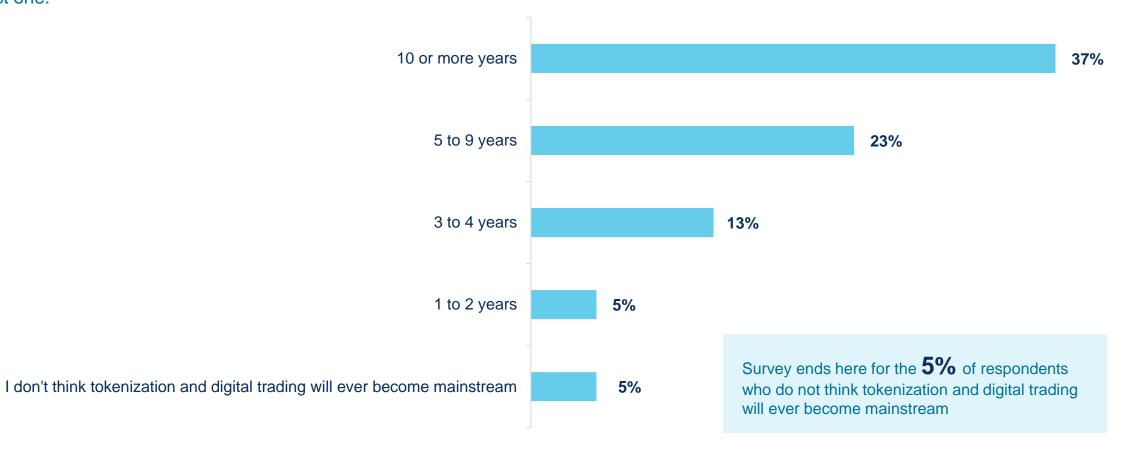
Expectations for Digital Investment



Digital trading not expected to be mainstream any time soon

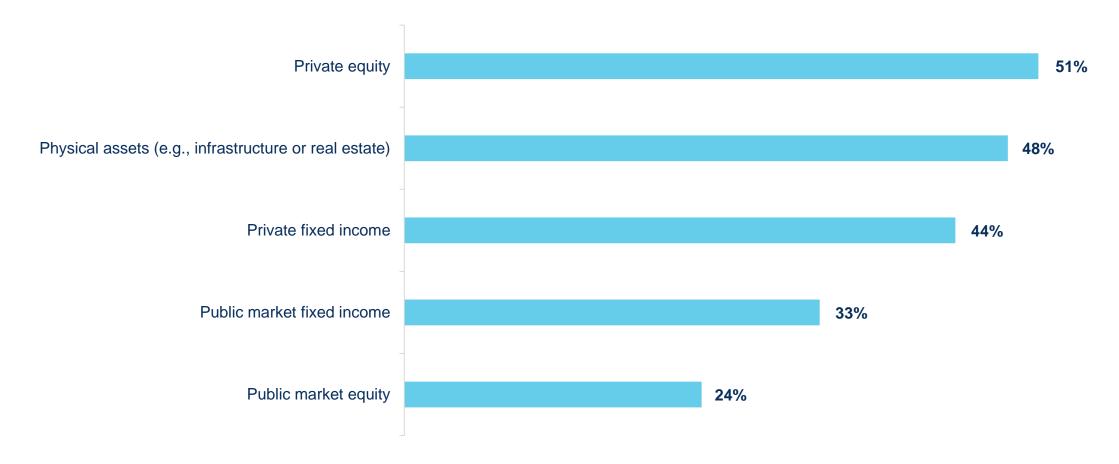
Q17. How many years do you think it will take for digital trading to become a commonplace form of transferring mainstream assets (e.g., stocks, bonds, and private market assets) in the fund industry?

Select one.



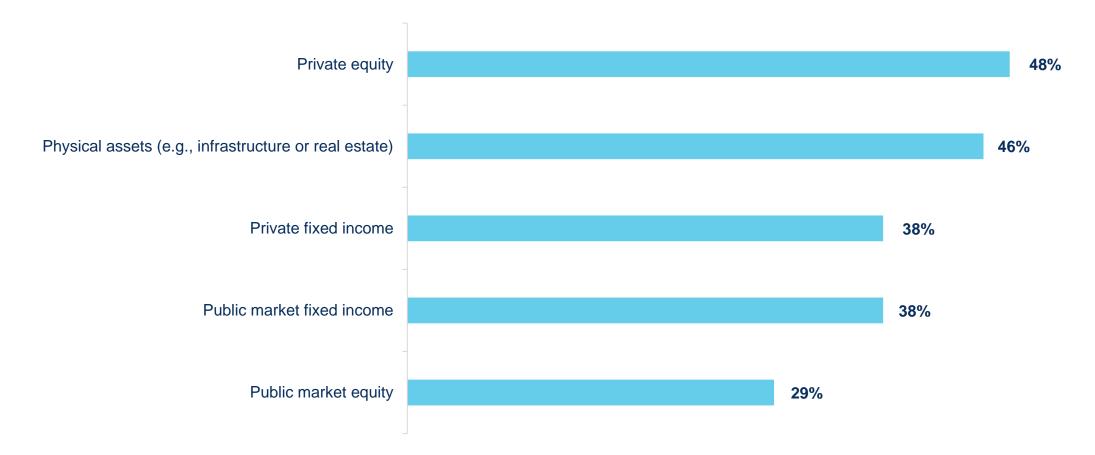
Private equity expected to be first tokenized and routinely digitally traded asset class...

Q18. Which asset classes do you think will be the first to be tokenized and routinely traded digitally? Select two



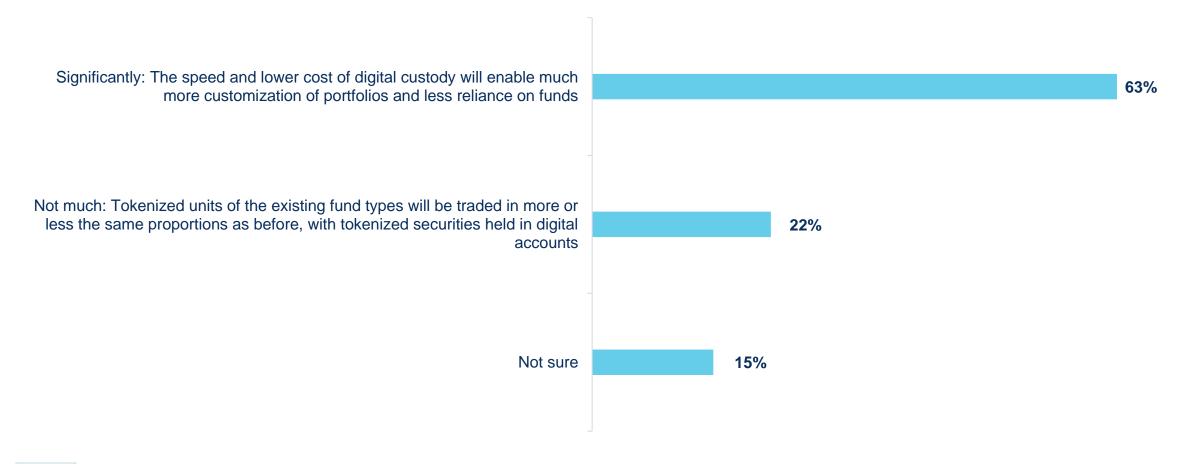
...and is the top priority for tokenization

Q19. Which asset classes are the main priorities for your organization as candidates to be tokenized? Select two



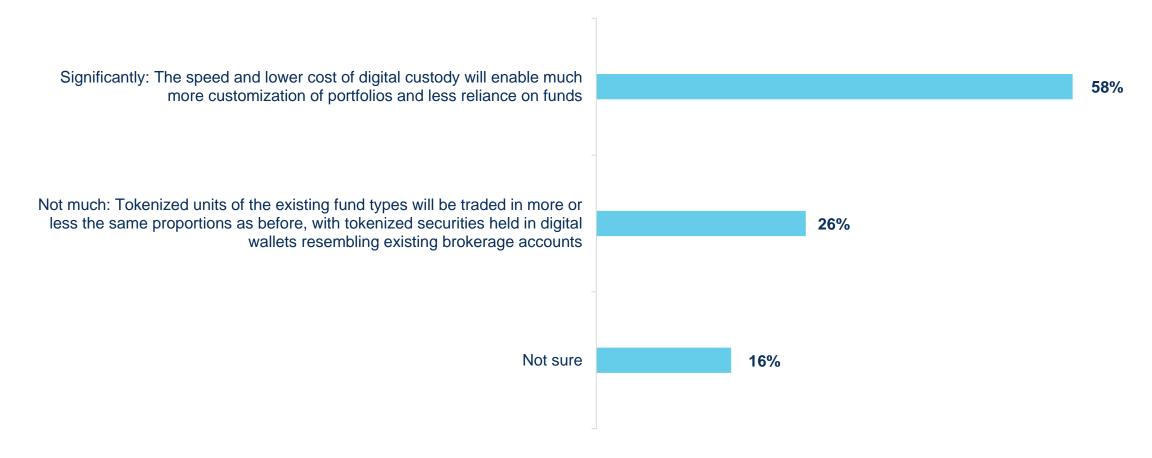
Tokenization expected to increase customization and lower reliance on funds for institutional investors...

Q20. Which statement best describes how you think the existing split of wrappers for holding and distributing asset classes (e.g., mutual funds, ETFs, segregated accounts) by institutional investors will be changed by tokenization?



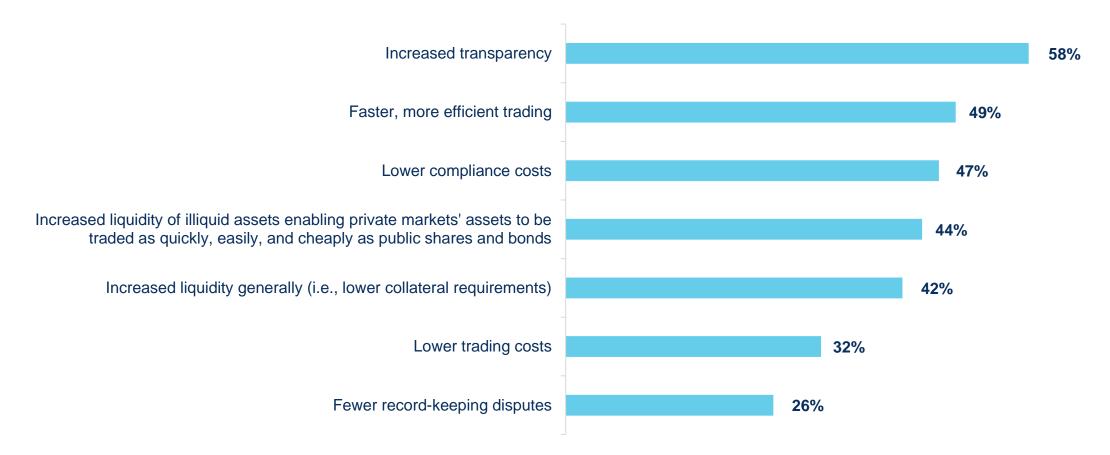
...and for retail investors

Q21. Which statement best describes how you think the existing split of wrappers for holding and distributing asset classes (e.g., mutual funds, ETFs, brokerage accounts) by retail investors will be changed by tokenization?



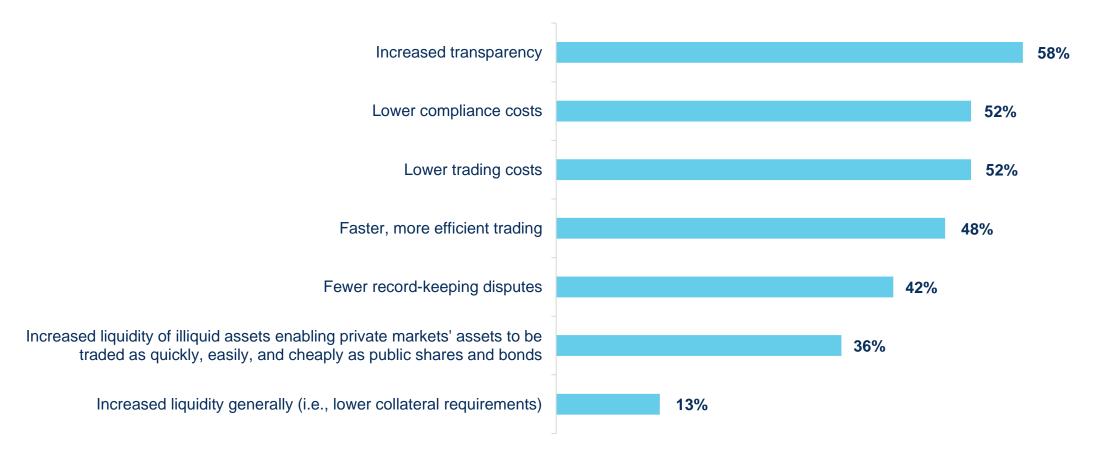
Expected benefits of tokenization and digital trading...

Q22. Which of the following benefits do you think your organization will experience from tokenization and digital trading? Select top 3



...tend to align with realized benefits

Q23. Which of the following benefits has your organization already realized from tokenization and digital trading? Select top 3



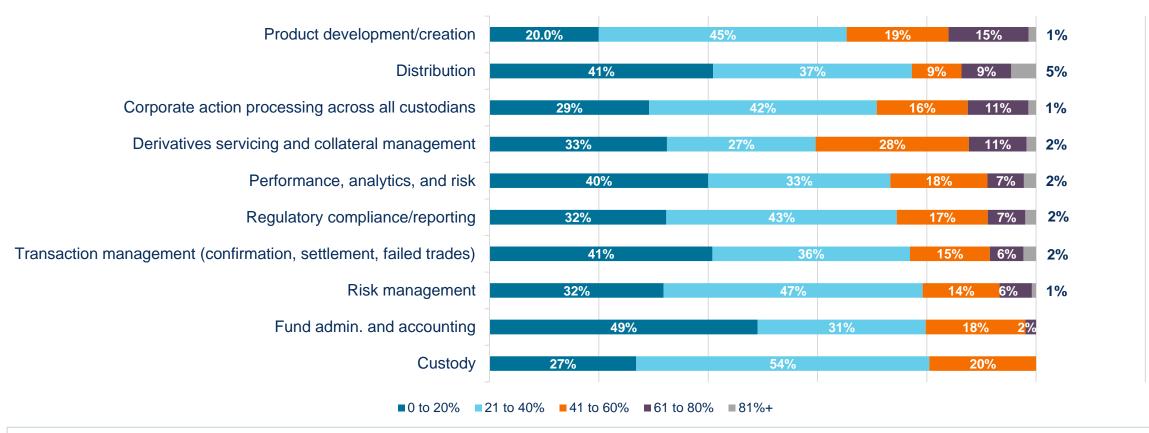
Digital savings expected to reduce risk and transaction management costs...

Q24. In which area of your organization's operations would a switch to digital assets yield the most significant cost savings? Select top 3



...by up to 40% of current expenditure

Q25. For each of your top three choices above, what is the approximate saving you anticipate as a percentage of your current expenditure?

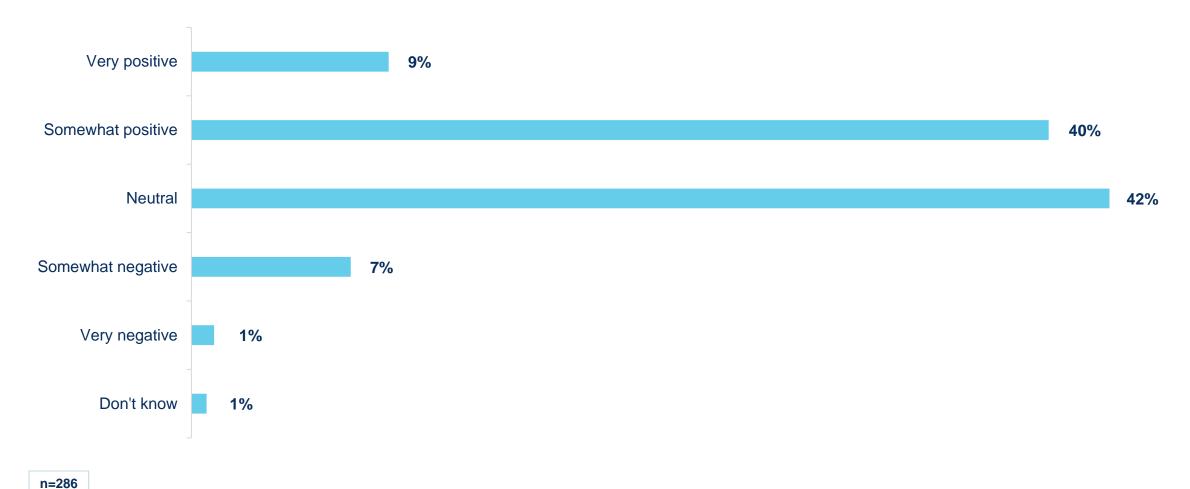


Distribution 22; Custody 41; Performance, analytics, and risk 45; Corporate action processing across all custodians 72; Product development/creation 75; Regulatory compliance/reporting 102; Fund admin. and accounting 104; Derivatives servicing and collateral management 114; Transaction management (confirmation, settlement, failed trades) 130; Risk management 135



Many executives think tokenization will not have an ESG impact

Q26. Do you think mainstream digital trading and tokenization will be broadly positive or negative from an ESG perspective?

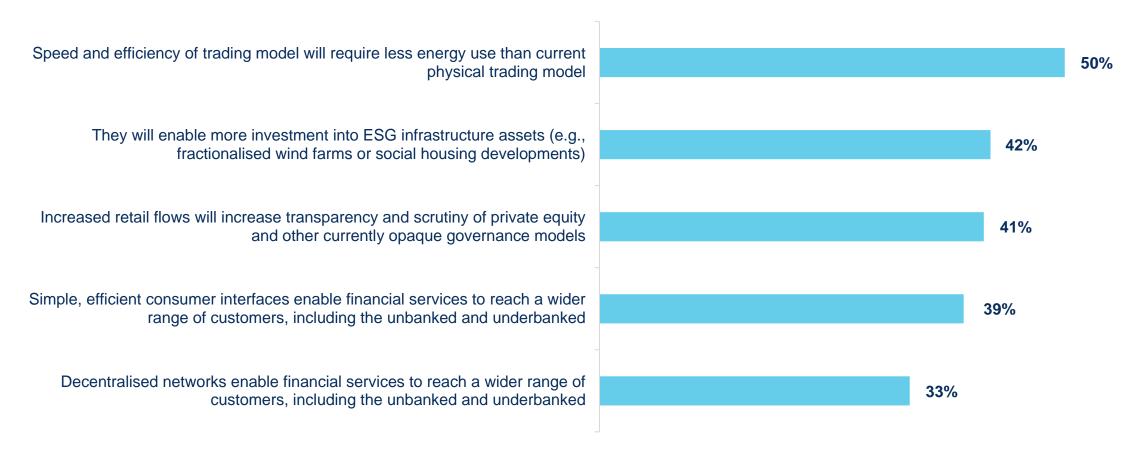


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Information Classification: General

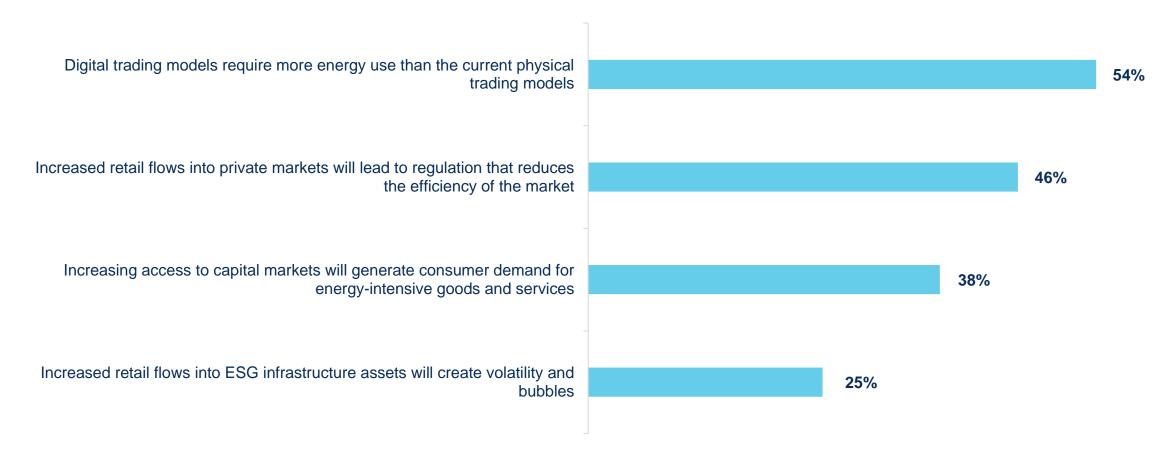
Speed and efficiency are top ESG benefits of digital trading

Q27. Which of the following reasons describe why you believe digital trading and tokenization will be positive for ESG? Select all that apply



Energy usage is a top concern of digital trading

Q28. Which of the following reasons describe why you believe digital trading and tokenization will be negative for ESG? Select all that apply

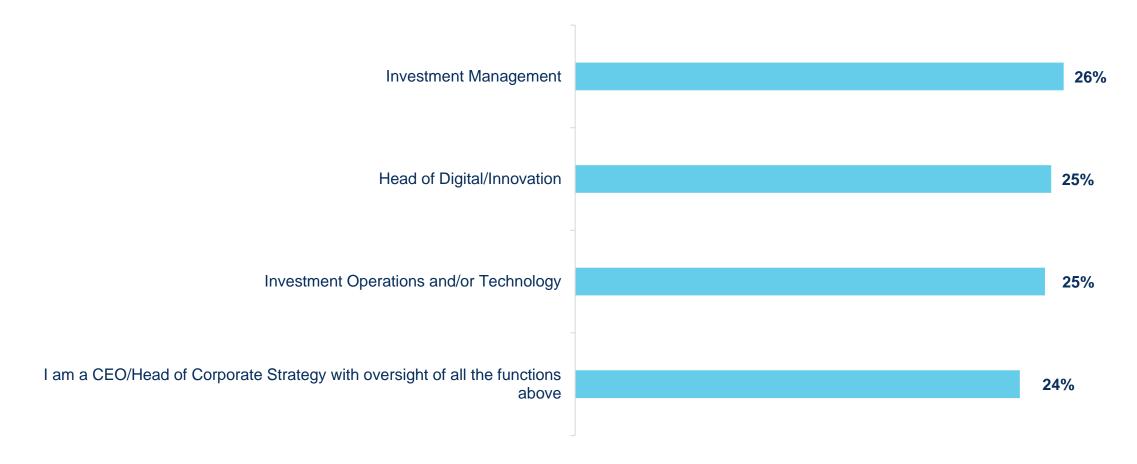


Demographics



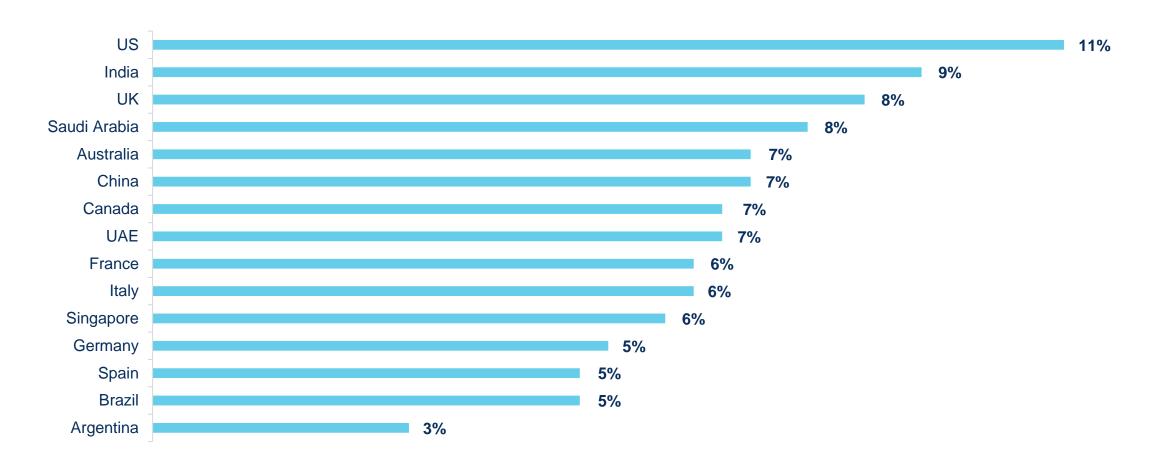
Role

Q01. What is your functional role?



Country

Q02. In what country are you based?



Financial institution type

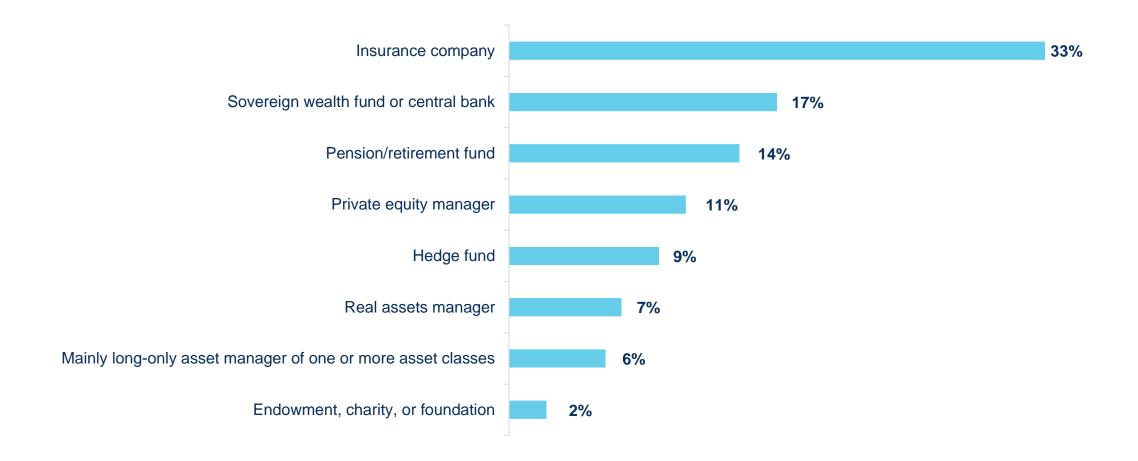
Q03. What type of financial institution do you work for?

Grouped



Financial institution type

Q03. What type of financial institution do you work for?



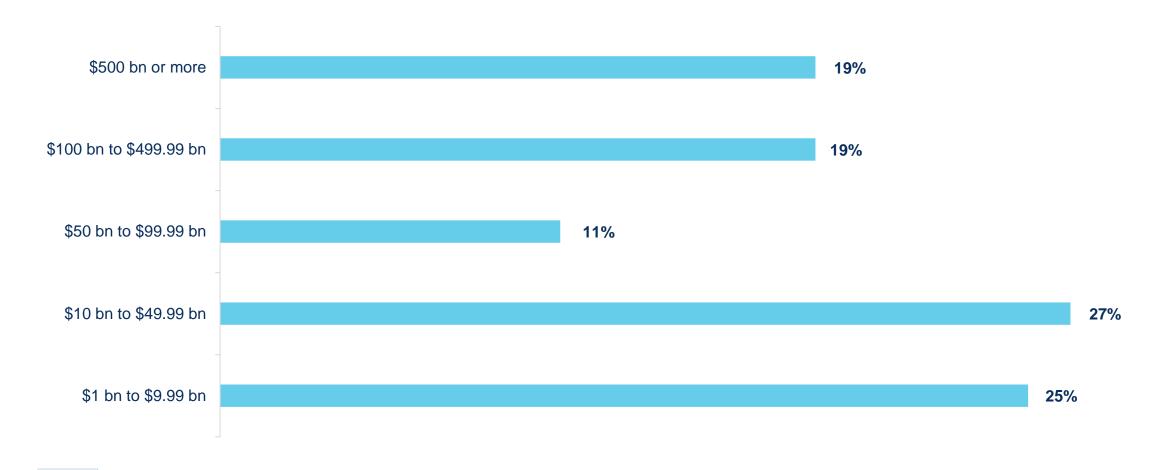
Asset management

Q03a. Which best describes your organization? (Asset Owner respondents only)



Total assets under management

Q04. What are your institution's total assets under management (AUM) today?



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