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The Future of Crypto and Blockchain: Why Financial Services Leaders Should Advance a Digital Assets Strategy

Interviews with leaders across financial and technology firms highlight 12 applications for cryptocurrency and blockchain that are worthwhile for traditional finance firms to explore—despite current volatility—and how those firms can address the talent challenges along the way.



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Introduction

Cryptocurrency gets the most attention of any blockchain technology, particularly given recent market volatility. These technologies have been the foundation for many other use cases for more than a decade. And some opportunities, in crypto and elsewhere, are now maturing. Yet leaders of many traditional financial services firms have, on the whole, held back, unsure of how to seize the opportunities, given the volatility and opacity of many blockchain initiatives as well as regulatory uncertainty. Interviews conducted in Q2 2022—including during the periods of heightened volatility—with 18 industry experts and experienced executives at traditional financial institutions and blockchain specialist firms have allowed us to gain an understanding of what opportunities are likely to develop and when, as well

as how soon certain disruptors could present substantial challenges. The sharp decline in crypto prices and an increase in market risk factors will cause some leaders to reconsider their commitment to future investments. Instead, we believe this is a critical time for leaders to define a strategy that gives them optionality and ensures readiness for a future that will continue to transform toward a digital assets economy.

"The recent volatility in digital assets highlights the need for regulated products, robust risk frameworks and global collaboration. And this is the space where trusted institutions will play important roles."

Mike Demissie, Head of Digital Assets and Advanced Solutions at BNY Mellon This is a critical time for leaders to define a strategy that gives them optionality and ensures readiness for a future that will continue to transform toward a digital assets economy.

The opportunities



Almost 15 years after Satoshi Nakamoto's whitepaper on Bitcoin, investors are embracing crypto and blockchain in significant ways. And, even after recent market events, we are seeing strong involvement from institutional players. It is therefore no surprise that clients of traditional financial institutions are pushing them to support digital assets.

"Clients expect a combination of trust and innovation across our platforms and services and a seamless, cross-asset solution and client experience."

Roman Regelman, CEO of Securities Services and Digital at BNY Mellon Centralized crypto finance companies and some early-adopting traditional firms have been active on this front. Yet both traditional firms and big tech companies are losing talent to the new crypto players because these new players offer a culture of innovation, the opportunity to fundamentally change the landscape of finance, and the potential for personal wealth creation.

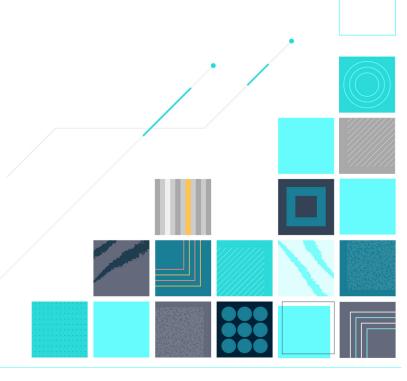
As traditional finance firms seek to understand where they can play most effectively, they should assess 12 use cases that take advantage of the unique characteristics of blockchain and cryptocurrency:

- Retail trading and yield products
- Institutional trading
- Asset and wealth management
- Fund servicing and custody
- B2B payments and trade finance
- B2C merchant acceptance
- Merchant payouts
- Remittances
- Enterprise payments
- Data services
- Alternative investments
- Privacy

"While there is debate within the bank on which use cases to pursue, there is a shared commitment to learn more about the space."

Gunjan Kedia, Vice Chair of Wealth Management and Investment Services at U.S. Bank

Store of value: Digital assets as an investment class



Digital assets gained record adoption as an asset class in 2021 as investors continued to be attracted by their growth potential, low correlation to other asset classes (though that is now in question), and diversification benefits. Exchange spot volumes peaked to all-time highs of \$2.2 trillion in May 2021, before falling to \$0.8 trillion by May 2022, as Bitcoin prices dropped. There are several ways digital assets are adding value: retail trading and yield products, institutional trading, asset and wealth management, and fund servicing and custody.

Retail trading and yield products

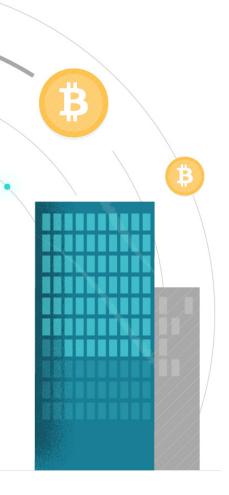
After being dominated by cryptonative players such as Binance, FTX, Kraken, and Coinbase, this market has attracted newer retail brokerages and payments providers. Among the non-crypto-native players, only a few firms, such as Robinhood, have built native capabilities, while most are entering the market through partnerships. Fiserv and Finastra have partnered with crypto-as-a-service firms such as Bakkt to offer crypto trading to banks and credit unions.

Meanwhile, crypto companies that offer yield-based products are in wait-and-watch mode as the regulatory scrutiny in this area has been more intense, particularly in light of recent market events. Despite the regulatory uncertainty, customers will continue to seek new ways to get the most out of crypto holdings. There are also other emerging use cases for utilizing dormant crypto assets, such as for underwriting insurance contracts.

"Expect more use cases on monetizing dormant crypto assets rather than just getting capital appreciation."

Christine Sandler, General Partner at Walden Bridge Capital

^{1 &}quot;Cryptocurrency Exchange Volume (The Block Legitimate Index)", The Block, accessed May 31, 2022, theblockcrypto.com.



Institutional trading

Institutions are playing a critical role in expanding the crypto market. For example, 68% of Coinbase's crypto trading volume is driven by institutional traders.²

This interest has spawned an entire ecosystem of providers that offer OTC trading, prime brokerage, market research and data, and custody services to institutional traders.

Another major catalyst for institutional participation has been CME's offering of products based on bitcoin futures.

Asset and wealth management

Crypto firms have built significant scale in vehicles that offer crypto exposure to retail and institutional clients. As of May 31, 2022, Grayscale had a total of \$20.3 billion in AUM.³

"Crypto ownership is much more widespread in millennials, and they are asking their planners for advice on crypto as part of their portfolio, and [about] potential tax implications."

Mark Casady, General Partner at Vestigo Ventures

Many asset managers are actively evaluating their digital asset strategy, and some have filed applications to launch bitcoin ETFs. To date, the SEC has approved bitcoin futures-based ETFs from ProShares, Valkyrie, and VanEck, but has declined to consider ETF applications that offer direct exposure to bitcoin. As the industry matures, we expect that wealth managers will increasingly offer managed accounts with exposure to crypto assets in diversified portfolios.

Franklin recently launched the firstever mutual fund that uses blockchain to process transactions and record share ownership. Although the funds transfer agent will maintain the official record of share ownership, it will also be recorded on the blockchain. New entrants such as Makara and Titan offer crypto-only portfolios through a robo-advisor experience, while Domain Money is building diversified portfolios with crypto assets and equities.

The promise of asset tokenization continues to attract asset managers. Over time, this could enable deconstruction of assets such as fixed income and ETFs into tokens with unique characteristics, and also enable securitization of real assets.

"Clients are seeking assets that are programmable in terms of structure, form, and behavior."

Sarthak Pattanaik, Chief Information Officer, Digital Assets, Treasury Services, Clearance and Collateral Management at BNY Mellon

Fund servicing and custody

Institutional investors with exposure to digital assets are seeking custody and safekeeping solutions for crypto assets. Crypto custody differs from traditional custody in that what is custodied are private keys that are used to authenticate and permission to access the use of the underlying digital assets. Leading custodians have jumped into the fray with BNY Mellon, State Street, and U.S. Bank planning new offerings. Some players such as BNY Mellon have chosen to engage collaborators to provide supporting technology while retaining the custody function, while others, such as U.S. Bank, have a partner (NYDIG) that is both a subcustodian and a technology provider. In addition, digital asset managers are turning to incumbent custodians for fund accounting and related services. BNY Mellon has become a leader in servicing digital asset funds, including 90% of outsourced Canadian crypto ETFs and crypto funds from Grayscale Investments, the world's largest digital asset manager. This is in line with BNY Mellon's overall commitment to digital assets in response to client needs.

Risks

With the recent decline in Bitcoin and Ethereum prices, we expect retail demand to weaken in trading and yield products in the short term. This could also impact institutional trading given their dependence on crypto assets loaned out by exchanges. Further, the collapse of Celsius will slow down the adoption of yield products and lead to greater focus on a consumer protection framework to oversee the space. This weakening in retail and institutional demand will have a downstream impact on custodians and service providers, who built their crypto propositions in reaction to client demand.

² Coinbase Q4 2021 Shareholder Letter, May 10, 2022, investor. coinbase.com.

^{3 &}quot;Structured products," The Block, accessed May 31, 2022, theblockcrypto.com.

Transfer of value: Digital assets for value exchange



With the advent of stablecoins, digital assets are proving viable as a currency and payment mechanism. Stablecoins are meant to enable on-chain, low-cost, friction-free transfer of value, and collectively exceed \$155 billion in supply.⁴

However, questions remain around the regulatory framework for setting and maintaining stablecoin prices, especially after the meltdown of Terra in late May 2022. Circle, for example, has used this uncertainty as an opportunity to highlight the security offered by its custodians, and the liquidity of the assets backing its stablecoin, USD Coin (USDC).

We see four ways in which cryptocurrencies, especially stablecoins, could materially impact the future of transactions: B2B payments and trade finance, B2C merchant acceptance, merchant payouts, and remittances.

"By creating stablecoins in multiple geographies, you are, in effect, creating a crossborder payments network."

David Puth, CEO of the Centre Consortium

B2B payments and trade finance

Stablecoin's promise of near-instant, 24/7, non-intermediated payments with potentially low fees has tremendous value in B2B use cases such as payments and trade finance. This becomes especially relevant for cross-border transfers, which involve high fees and long settlement periods. Tether controls almost 50% of the market share in stablecoin supply, while USDC, with more than \$46 billion in circulating supply, is the second largest stablecoin.⁵

Circle, the parent company behind USDC, has an ambitious vision to be the global distribution platform for stablecoins. In effect, it is building a new, SWIFT-like network with bridges that banks and corporate treasuries can access to leverage public blockchains to speed up payments and lower costs.

"We are building Circle like Google built Android—as a universal platform. We want to be the engine oil of the real-world economy."

Nikhil Chandhok, Chief Product Officer at Circle

^{4 &}quot;Total stablecoin supply," The Block, accessed May 31, 2022, st theblockcrypto.com.

⁵ Ryan Browne, "\$40 billion payments giant Checkout.com starts accepting stablecoins in major crypto push," CNBC, June 7, 2022, cnbc.com.

B2C merchant acceptance

Firms are looking to solve a variety of use cases, including enabling customers to spend on a credit line backed by their digital assets, earning crypto rewards, and enabling merchants to accept digital assets either directly or through a fiat off-ramp. Mastercard has partnered with Nexo to launch a card that is linked to a Nexo-provided, cryptobacked credit line, allowing investors to spend up to 90% of the fiat value of their crypto assets. Launched in Europe initially, the card allows users to spend without having to sell their digital assets. In addition, Mastercard announced recently that a crypto rewards credit card it developed with Gemini is now available in all 50 US states.

Coinbase continues to scale Coinbase Commerce, a merchant acceptance product that enables businesses to accept bitcoin as payment for goods and services by integrating it with e-commerce platforms including Shopify and Primer. Mastercard is partnering with crypto-native start-ups such as Bakkt to offer support for merchant acceptance of crypto. For example, a customer with a crypto-friendly debit card could approve the transaction while the processor converted their crypto into fiat in real time, de-risking the transaction for merchants. CoinJar, a crypto trading platform in Australia, has launched a Mastercard debit card with this crypto-to-fiat conversion feature.

"Merchants like crypto as it increases a customer's purchasing power. But they don't want to touch or hold crypto due to its complexity—they want fiat."

Dan O'Prey, Chief Product Officer at Bakkt

Use of cryptocurrency for payments will have tax impact and tax reporting implications that are still being worked out.

Merchant payouts

Stripe is initially using stablecoins as a currency for Twitter creators to receive their payouts. Stripe has plans to extend its cross-border network to adopt cryptocurrency for both merchant acceptance and payouts over time.

"Our ethos is to look at the needs of users. We will remain multi-chain and multi-asset for a while until we start seeing consolidation."

Cyril Mathew, Global Head of Business Development and Partnerships for Crypto/Web3, Stripe

Also over time, payments through layer 2 chains such as Lightning, which are built on top of existing blockchains such as Bitcoin or Ethereum to make them more scalable and efficient, have the potential to disrupt traditional networks by improving throughput and lowering transaction fees on smaller payments. Volume of payments on the Lightning Network has roughly doubled over the last year, and the value of payments has increased by more than 400%.

Remittances

Cryptocurrency and blockchain could remove many current problems in the remittance industry once regulatory and infrastructure issues are resolved. Customers would choose crypto remittances if it meant fast transfers and lower fees. Providers such as PavPal and Revolut allow crypto in customers' wallets or in pooled accounts. However, the transfer out for remittances is done after fiat conversion. Coinbase has partnered with Remitly to launch a remittance pilot in Mexico that allows the recipient to hold the crypto in their Coinbase wallet or cash out at a variety of physical locations.

Many large recipient countries for remittances, such as India and China, currently do not allow incoming cryptocurrency remittances due to money laundering concerns and likely given their agenda for central bank digital currencies. However, the potential for a breakthrough solution along the lines of the Coinbase pilot seems high.

Risks

Stablecoins are an essential driver for these use cases. While we expect regulations to soon shed light on transparency rules and safeguards, there is a risk that other stablecoins, especially algorithmic coins, unwind and create more ripples in the market. Over the long term, a small number of credible players will mitigate these risks and help drive momentum.



⁶ Anders Helseth, "The Lightning Network is bringing payments back to bitcoin," CoinDesk, April 26, 2022, coindesk.com.

Blockchain infrastructure



The original promise of blockchain was an open, immutable, transparent, distributed ledger to record transactions and track assets. We continue to see significant traction in use cases that take advantage of blockchain-based technology to modernize processes. The following use cases—enterprise payments, data services, alternative investments, and privacy—are well suited for continued use of certain permissioned blockchains.

"Blockchain infrastructure is the biggest opportunity but will take the longest as it requires collaboration across groups that have never worked together previously."

Sandra Ro, CEO of the Global Blockchain Business Council

Enterprise payments

Several banks have been piloting private, blockchain-based solutions to solve the inherent challenges facing current clients and to offer on- and off-ramps to digital assets.

"Tokens could enable efficient ways to transfer value between banks and their institutional clients, allowing real-time, 24/7 settlement."

Hadley Stern, Global Head of Digital Asset Custody at BNY Mellon

A blockchain with tokenized money could enable payments between incumbent financial institutions and their counterparties, including other financial institutions and clients. Onyx by JP Morgan is the bank's project to offer a blockchain-based platform for the exchange of data, value, and

digital assets. It promises a network that enables payment data sharing between institutions, payment rails that offer instant transfer and clearing of multi-currency assets on a permissioned distributed ledger, and a blockchain network enabling the exchange of value for various types of digital assets. This platform has started to gain traction with approximately \$320 billion in notional value exchanged in 2021, and has signed up partners such as BNP Paribas, which is interested in trading repurchase agreements (repos) to its clients.

Tassat, a start-up with a blockchain platform for B2B payments, recently launched its Digital Interbank Network to enable US banks to settle payments with each other in real-time and 24/7 using tokenized bank money as digital dollars. Tassat claims to have completed more than \$400 billion in secure, real-time transactions through TassatPay.

Data Services

An ecosystem of data providers and data-related services has rapidly developed to support the growth in all crypto and blockchain use cases. New providers span the trade lifecycle from market data to transaction monitoring and compliance use cases. Chainalysis, which provides software tools that allow government agencies and enterprise clients to detect and prevent cryptorelated crime and money laundering, recently doubled its valuation to \$8.6 billion.7 Mastercard has been developing a suite of services including security and fraud services through its recent acquisition of CipherTrace, and identity services, through Ekata. Firms such as Lukka have rapidly gained traction with crypto data and reporting solutions for institutional clients.

Alternative Investments

The processes for creating, managing, and exiting investments in the alternatives space are operationally intensive, given the need for data exchange and reconciliation across multiple stakeholders. For example, Apollo, BlackRock, Blackstone, BNY Mellon, Carlyle, iCapital, KKR, Morgan Stanley, State Street, UBS, and WestCap are working together to develop distributed ledger-based enhancements for the alternative investment ecosystem. Their objective is to create a secure, shared, auditable record for each alternative investment as a way to alleviate current operational challenges.

Privacy

Solutions such as Zero Knowledge Proof ("ZKP") systems, from companies such as O(1) Labs (which launched the SnarkyJS toolkit and incubated the Mina Protocol, a ZKP-based blockchain), form a new class of technology that allows something to be proven without disclosing the underlying information. For example, a DeFi user can prove that their credit score is over 700, and that they have been KYC'd by a

Why decentralized finance (DeFi) is lagging

Centralized finance, even with the benefits of distributed ledgers and cryptocurrencies, has several inherent shortcomings: concentration risk from centralized control, financial exclusion, inefficiencies (for example, slow transfer of funds and legacy brick-and-mortar costs), and lack of transparency (for example, confusing pricing schedules and unknown risk of failure of providers).

DeFi aims to solve these issues across multiple protocols including exchanges, lending, derivatives, payments, and asset management. It is no surprise that Total Value Locked (TVL)—that is, the USD value of all assets locked into corresponding smart contracts—grew rapidly just in the first half of 2022. However, there is significant volatility in TVL, as evidenced by the mid-2022 crypto pullback.

And there are a number of real risks and downsides associated with DeFi at this point in its evolution. Smart contracts, unless carefully audited and protected, can have software bugs or allow developer malpractice. Hackers can economically exploit smart contracts. The majority of cryptocurrency stolen in 2021 involved DeFi protocols. And the use of DeFi to launder money increased by an estimated 1,964% between 2020 and 2021, according to Chainalysis.² DeFi also introduces governance risks, because Decentralized Autonomous Organizations (DAOs,

- 1 Casey Wagner, "Large Institutional Transactions Push Total Value Locked in DeFi to \$239B" Blockworks, April 20, 2022, blockworks, co.
- Mengqi Sun and David Smagalla, "Cryptocurrency-Based Crime Hit a Record \$14 Billion in 2021," Wall Street Journal, January 6, 2022, wsj.com.

which are responsible for ongoing updates to the protocol) can be manipulated through the timing and supply of governance tokens. And DeFi protocols need to access off-chain data, such as asset prices, through so-called oracles that are vulnerable to attacks.

"Decentralization is an ageold issue. Durable mechanisms such as those that were used 250 years ago for setting up a functional democracy in the US could be relevant in tackling DeFi governance."

Kevin Werbach, Professor of Legal Studies and Business Ethics, The Wharton School, University of Pennsylvania

In addition to these DeFi-specific risks, the use of blockchain infrastructure in DeFi comes with the challenges of scalability and the perils of custody given the use of private keys that can be lost with self-custody or hacked with third-party custody.

Regulators are on high alert as DeFi protocols have started to gain momentum. We expect close scrutiny from regulatory agencies as the space grows. All that said, we expect DeFi to raise the bar on centralized finance but do not see widespread adoption or impact to traditional finance firms in the foreseeable future.

regulated institution, without having to reveal their identity or disclose the underlying documentation. This can be especially useful in a DeFi setting (see sidebar, "Why decentralized finance (DeFi) is lagging").

This is important in a context where permission-less apps need to work with permissioned or private data.

"Privacy and scalability are two of the biggest challenges with blockchains—that is where ZKPs, using specialized cryptographic techniques and solutions, can provide entirely new capabilities."

Phil Kelly, Head of Business Development at O(1) Labs

⁷ Rite Liao, "Crypto forensics startup Chainalysis raises \$170M at \$8.6B valuation," TechCrunch, May 11, 2022, techcrunch.com.



As we write this, there is active concern in the market regarding a crypto winter triggered by falling crypto prices, a sharp fall in trading activity, and the collapse of algorithmic stablecoins like Terra and crypto yield company Celsius. This has also intensified the need for oversight and a clear regulatory framework to govern crypto assets.

"There is consensus among many policy makers that there are some unique attributes to crypto and we need a federal regulator surveilling the market to ensure integrity."

Kristin Smith, Executive Director of the Blockchain Association

It is clear that the crypto market is not a price inflation hedge as many had expected, or a significant source of diversification given the correlation with the broader equity market. It is also clear that institutional players, given their access to sophisticated tools for risk management and trading, are better suited to dealing with digital assets relative to retail investors.

"Activities such as those of Terra/ Luna need to be squeezed out for the real functionality to dominate over greed and speculation."

Kevin Werbach, Professor of Legal Studies and Business Ethics, The Wharton School, University of Pennsylvania

Nonetheless, blockchain technology does not directly depend on the pricing of current tokens. Therefore we expect to see continued investment into blockchain infrastructure for enterprise applications, independent of the volatility of crypto assets. In fact, the current pullback in crypto assets will lead to further consolidation of

firms and tokens and could provide a unique opportunity to attract cryptonative talent to blockchain projects.

A survey we conducted in Spring 2022 found that three-quarters of financial services executives included said they expect their firms to increase their investments in this area; they are most keen on digital assets as an exchange of value.⁸ They will need to overcome their concerns about volatility, scalability, and regulatory uncertainty as they do so.

"We are refining our stance on crypto. It has become too big to ignore. And we are coming from both a strategy angle and a risk management angle."

Gunjan Kedia, Vice Chair of Wealth Management and Investment Services at U.S. Bank

We see three **major catalysts** to growth:

1. Market demand:

Customer interest and adoption is a critical indicator for future investments. In addition, the speed at which central banks become comfortable with digital currencies will play an important role in shaping the market.

2. Path to profits:

Ultimately, incumbents need to see clear incremental business cases for new crypto applications. While this should not prevent experimentation, banks will need to consider unit economics over time, as spreads tighten.

3. Supply readiness:

Given the need for unique expertise and IP, incumbents need to watch the evolution of the ecosystem of providers in this market as well as build and attract their own blockchain talent. In addition to market volatility, we see four other **major inhibitors** to growth:

1. Threat to existing business:

Some crypto use cases are designed to remove friction and transaction costs from today's financial system. Banks need to tread carefully and consider the near- and long-term impact of disrupting an existing business model.

2. Cyber-specific risk:

Cryptocurrency-based crime hit a new all-time high in 2021, with illicit addresses receiving \$14 billion over the course of the year, up from \$7.8 billion in 2020.9 And \$3.2 billion in cryptocurrency was stolen in the same year, of which 72% was stolen from DeFi protocols, according to Chainalysis.10

3. Scalability and sustainability:

Despite huge growth, digital assets represent only about 1% of overall global financial wealth. Further, the speed and throughput of various chains remain abysmally low relative to current payments networks. In some cases, transaction costs (for instance, gas fees for Ethereum) remain high, especially when the networks are congested. Finally, retail interest may ebb as returns from crypto investments are expected to moderate over time.

4. Regulatory uncertainty:

The most material challenge to future investments is the lack of a clear regulatory framework. Several questions remain regarding the legality of digital assets and the jurisdictional authority across the different regulators. In this environment, many incumbents are unwilling to push the boundaries of regulation, especially when some business cases remain dubious in their value creation potential.

Mengqi Sun and David Smagalla, "Cryptocurrency-Based Crime Hit a Record \$14 Billion in 2021," Wall Street Journal, January 6, 2022, wsj.com.
 The 2022 Crypto Crime Report, Chainalysis, February 2022, go.chainalysis.com.

"The elephant in the room for banks is the capital constraint. BIS has proposed that banks apply a 1,250% risk weight to crypto, which, through an 8% minimum capital requirement, translates to holding 100% of dollars against crypto positions."

Brian Quintenz, Advisory Partner at a16z

We scored the 12 use cases described earlier based on our view of the relevant catalysts and inhibitors for each of them. "High" indicates significant client demand and contribution to profitability; "low" indicates that client demand exists but infrastructure and/or regulatory hurdles need to be overcome. In the following chart, the most near-term attractive use cases are in the upper left:

"You will see more scaling and development on the enterprise blockchain side and digitized tokens, though not necessarily crypto assets."

Sandra Ro, CEO of the Global Blockchain Business Council

Crypto as investment

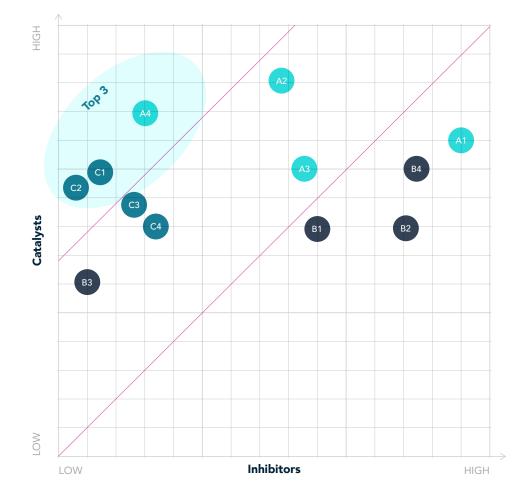
- A Retail trading/yield
- Institutional trading
- Asset/wealth management
- Fund services and custody

Crypto for payments

- B1 B2B payments, trade finance
- Merchant acceptance
- **B3** Merchant payouts
- B4 Cross-border remittances

Blockchain infrastructure

- c Payments infrastructure
- Data services
- Alternatives
- Privacy



Against this backdrop, incumbent financial firms would do well to make some no-regret moves—learning about the space through participation in discussion forums, for example, and keeping tabs on technology players emerging in their space. Over time, it will be critical for senior leaders to engage directly on strategy, investment, and talent needs. They can start to develop their next moves—and the leaders they will need to make them—by addressing a few questions:

Path to play:

- Given your strategy, customer base, and current talent, where can you play today on the spectrum of waitand-watch to experimentation to active participation? To maintain or improve your competitive position, where do you need to be playing in three years?
- What are your underlying beliefs about the future of crypto and client demand, and what are some noregret decisions you can make now?

Capabilities needed:

- What are relevant start-up firms to track, invest in, or partner with?
- Do you have an updated view of how your client needs will evolve?
- How can you keep abreast of relevant developments in this space?
- How can you best find the leaders you need?

How to be relevant in that future



This emerging landscape requires traditional finance firms to develop a new playbook to participate and win. Over the next two or three years, we see a different path for larger and smaller incumbent players:

Large incumbent financial firms: The onus of supporting and championing crypto will fall on large banks and other financial institutions. But each large player's chosen approach will depend on its beliefs, risk appetite, risk of disruption, and client needs. Most will actively experiment with select use cases, as some have already started doing. They may act by themselves or in partnership with other financial or technology players. A select few are already willingly embracing crypto by building infrastructure and products, while staking out their position as first movers.

Focused banks and financial institutions:

These firms will likely play to their existing strengths and wait to see what works for the larger players.

Community banks, for example, might steer clear of the allure of the new world but a focused, digital-first player like WebBank will embrace crypto by enabling new economy players as their preferred banking partner.

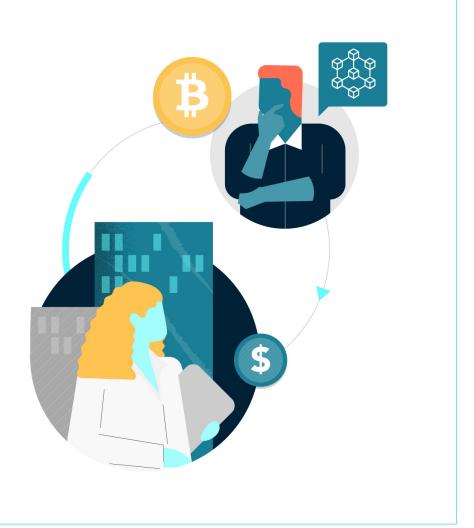
"WebBank is able to leverage our best-in-class compliance infrastructure to support crypto-native fintechs. There is significant innovation occurring in the space and it is exciting to help power these solutions."

Seth Goodman, Chief Revenue Officer at WebBank Beyond senior engagement and commitment, we see three critical enablers for success.

1. Partnerships

Being clear about the respective value proposition that traditional finance and centralized crypto firms each bring to partnerships will be important. We have seen two models. In the first, traditional firms bring relationships with institutional clients, while centralized crypto firms bring unique IP to solve crypto-specific challenges. As an example, BNY Mellon is building a custody solution for clients with collaborators. In the second, the two types of firms form virtuous ecosystems, so institutional clients get access to an end-to-end solution. For instance, Coinbase is a primary investor in Circle; BNY Mellon is serving as the primary custodian for the Reserves of Circle's USD Coin: BlackRock invested in Circle with an eye to likely manage Circle's assets; and Stripe announced support for Circle's stablecoin, USDC, to enable payments for Twitter content creators.

Such partnerships are attractive to technology and crypto firms because of traditional players' large client bases and brand reputation, as well as the likelihood of investment from the incumbents. These may be mega players like Coinbase or smaller firms like Fireblocks, NYDIG, Chainalysis, or Lukka.





2. Organization

Firms that are early in their journey rely on an enterprise strategy function to define the business case and near-term road map, and then prototype early solutions. Firms that have a stronger commitment to digital assets are building business units with a dedicated executive leader to grow and scale their propositions. Sometimes these lie within an existing line of business—for instance,

BNY Mellon stood up a digital custody business within its broader custody business—or they can be independent business units, such as Fidelity Digital Assets, which are unencumbered by the traditional operating model and equipped with dedicated talent, investments, and technology.

3. Talent

Succeeding with crypto initiatives also requires a proactive approach to managing talent, given fierce competition to attract the right leaders.

"Finding and recruiting talent with even one or two years of crypto experience is challenging. Demand far surpasses supply of talent today."

Dan O'Prey, Chief Product Officer of Bakkt

Skill sets that are critical to success include product, engineering, risk/ compliance/legal, and strategy. A model where the crypto business sits in an existing line of business will also require leaders with capabilities related to transformation such as creating new ways across working and collaborating across boundaries.¹¹ In addition, other Heidrick & Struggles work has identified four leadership capabilities that will

be critical for new leaders: leading through influence, driving execution, creating possibilities from new thinking, and having an ownership mindset. When taken together, these allow leaders to build strong, trusting, and inclusive relationships across their firms, which helps new ideas get heard and supports resilience on their teams.¹²

"With an emerging area like crypto, hiring talent—particularly depending on the market—is a challenge. So, we have been encouraging employees to diversify their expertise and learn new skills."

Raj Seshadri, President of Data and Services at Mastercard

Partnering with start-ups that have complementary solutions will give incumbents a chance to connect

with high-end talent who might otherwise hesitate to work in large banks—and it may prevent some traditional-firm executives from jumping ship. Investing in these startups will also help incumbents get their business cases prioritized.

Financial services executives who responded to our Spring survey indicated their companies are spreading the net wide to find talent, most often hiring from tech companies, developing their own emerging leaders, and establishing partnerships or hiring consultants.¹³ And they are implementing these tactics in collaborative ways that develop other internal talent as well. As an example, BNY Mellon has invested in attracting crypto talent with experience in security and ledgers, and has them working with existing leaders with experience in building platforms.



Over time, successful incumbents will bring together the best of both worlds: the stability, resilience, and regulatory compliance associated with banks, with the innovation, creativity, and intuitiveness of technology start-ups. Understanding the landscape now—and making right bets on strategy and talent—will best position firms for success.

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