



Center for Board Effectiveness

On the board's agenda | US

From next-generation to now: Digital assets

New ways of creating and exchanging value are disrupting traditional commerce

The proliferation of digital assets has accelerated rapidly, generating a level of market interest sufficient to influence strategy at many major financial institutions and other corporations. Digital assets are disrupting the entire financial market, driving changes in the financial ecosystem. Blockchain, the underlying distributed ledger technology (DLT) for managing digital assets, is also gaining considerable traction, providing companies with the ability to transform some aspects of how they do business.

Digital assets—including cryptocurrencies, stablecoins, tokens, and non-fungible tokens (NFTs)—are items of value that exist only in

digital form. Using cryptographic technology, digital assets are secured, exchanged, and verified in decentralized digital ledgers.

Cryptocurrencies roughly quadrupled in value from the end of 2020 to late 2021, when the market was worth more than \$3 trillion.¹ In early April 2022, market capitalization for the thousands of cryptocurrencies tracked by CoinGecko was valued at \$2.26 trillion.² Thousands of major companies have begun accepting cryptocurrencies as payments and are using crypto for a variety of investment, operational, and transactional purposes. ➤

1. Joanna Ossinger, "[The world's cryptocurrency is now worth more than \\$3 trillion.](#)" *Time*, November 8, 2021.

2. Based on market close data on April 5, 2022, as tracked by [CoinGecko](#).

According to [Deloitte's 2021 Global Blockchain Survey](#), leaders at financial services institutions globally regard digital assets and blockchain technologies as a strategic priority. Nearly 80% of survey respondents said digital assets will be very or somewhat important to their respective industries in the coming two years.³ More than three-quarters of respondents (76%) said they believe digital assets will serve as a strong alternative to or replacement for fiat currencies in the next five to 10 years.⁴

Explosive growth in digital assets prompted President Biden to sign an [executive order](#) on March 9, 2022, to establish a [national policy](#) for digital assets, focused on priorities such as consumer and investor protection, financial stability, financial inclusion, responsible innovation, illicit finance, and US leadership in the global financial system. According to the White House, the significant rise in popularity of digital assets creates an important opportunity for the United States to play a leading role in global governance consistent with the values of democracy and US global competitiveness.⁵ In addition, more than 100 countries, including the United States, are exploring or piloting central bank digital currencies, which are digital forms of a country's sovereign currency.⁶

A strategy that involves movement into cryptocurrencies and other digital assets requires a strong command of the underlying technology. While blockchain began as a cryptocurrency payment platform, it has evolved to much broader commercial uses.

Blockchain, or DLT, enables digital assets to be traced and transacted in near real time while producing an immutable record of activity. All participants in the blockchain access the same ledger, which is not managed by any one intermediary. The technology is rapidly gaining acceptance for a wide variety of uses such as automating contracts, tracing goods in a supply chain, automating insurance claims, centralizing patient medical records, and many more.

Given their duty to oversee strategy and risk, boards have a responsibility to understand this dynamic new market to grasp the opportunities and risks that are swiftly evolving for the companies they oversee.

Crypto opportunities abound

As the digital asset ecosystem becomes more mainstream, companies can consider several possible use cases—using crypto in operations, facilitating payments using crypto, using the underlying blockchain technology for data management and smart contracting, investing in cryptocurrencies, or some combination of these. The possibilities for innovating how the company does business are growing rapidly.


DLT can help automate business models that involve collaboration with other businesses. Revenue-sharing arrangements, such as sales commissions, or cost-distribution arrangements, such as supply



chains, are common examples. Using cryptographic technology, DLT can automate each transaction and settle payment nearly instantaneously, dramatically shortening the payment cycle with virtually complete certainty of what should be paid. The technology can also automate the allocation of revenue to improve efficiency.

Another emerging use involves smart contracts and programmable money in a blockchain-based system of finance called Decentralized Finance (DeFi). Some examples include the automation and clearing of many aspects of lending agreements. Contractual terms and conditions written in code can be automated. Illiquid assets can be tokenized and offered as collateral. A request for a short-term loan can be entered, evaluated, cleared, and settled in a matter of minutes. What's more, the accounting, tax consequences, and various other compliance activities related to the loan can be automated, executed, and recorded in equally rapid fashion.

The total value locked in DeFi protocols rose sharply, from \$19 billion at the end of 2020 to more than \$100 billion by the end of 2021.⁷ The dramatic rise is evidence that investors see value and efficiency in these distributed marketplaces. However, they also contain numerous risks for companies, investors, and others when compared to traditional regulated markets. As such, while the rise of DeFi has shown the potential of the technology to disintermediate traditional financial markets, it is still far from clear how the risks in these decentralized markets are quantified or effectively managed.

The trust inherent in traditional regulated financial institutions may reduce the risk of their disintermediation, but it should also serve as a harbinger that continued innovation may be important for seizing opportunities into the future. The speed and efficiency that smart 

3. Linda Pawczuk, Richard Walker, and Claudina Castro Tanco, [Deloitte's 2021 Global Blockchain Survey](#), Deloitte Insights, 2021.

4. Ibid.

5. The White House, "[Fact sheet: President Biden to sign executive order ensuring responsible development of digital assets](#)," press release, March 9, 2022.

6. Ibid.

7. The Block Research, [2022 digital asset outlook report](#), December 16, 2021.

contracts and programmable money can bring can be embraced, with the benefits passed onto customers. The opportunities tied to digital assets and cryptocurrencies lead to some compelling rationales for companies to consider:

- Crypto may lead to engagement with new customers and counterparties. A study commissioned by BitPay in 2020 found that up to 40% of customers that pay with crypto are new to the merchant, and purchase amounts are twice those of credit card purchases.⁸ Some are heralding cryptocurrencies as a solution for financial inclusion, providing a means for the 1.7 billion unbanked people in the world to engage in financial markets.⁹
- Programmable money can enable real-time, accurate revenue sharing while enhancing transparency to facilitate back-office reconciliations, which is not possible with fiat currency.
- Crypto can enable companies to access new asset classes as well as new capital and liquidity pools through traditional investments that are tokenized.
- Crypto can enhance traditional treasury functions, for example by enabling real-time, secure money transfers and by strengthening control over capital.
- Use of crypto in the business can help position the company to engage with central bank digital currencies as they evolve.

Companies can begin their journey into digital assets incrementally. For example, some companies use vendors to engage in crypto payment transactions on their behalf, remitting back the fiat equivalent less commission. In this way, companies can accept crypto as a form of payment without handling crypto directly.

Enabling this kind of hands-off payment capability may not give rise to a financial reporting obligation, but the company must be mindful of its responsibilities with respect to sanctions compliance. Regulators such as the Office of Foreign Asset Control now publish specific crypto wallet addresses that must be included in payments acceptance compliance, and companies that use these vendors can evaluate whether they have appropriate systems in place to promote such compliance.

A more active approach is to enable crypto more broadly in operations and treasury. Consider how a payment network using crypto can provide highly effective solutions for managing supply chains in manufacturing. A distributed ledger can link payment and delivery of goods to reduce counterparty risk and reduce days sales outstanding, which supports enhanced margin and working capital. It can also provide a guaranteed delivery of payment in real time, which can improve transparency, forecasting, and reporting.

The potential for automated settlement with crypto can also enhance free cash flow by reducing the investment in working capital in compelling ways. When companies commit to transactions with crypto, transactions and fund transfers are settled within minutes, promoting real-time understanding of what money the company has, where it is, and who can access it. This kind of visibility can reduce the short-term blind spots often associated with transactions in fiat currencies.

Some companies that allocate cash to digital assets and cryptocurrencies as an investment are focusing on whether they can realize improved returns and capital preservation compared with holding cash. These companies may be pursuing natural hedges against fluctuating fiat currencies, a complement to an operational strategy that includes accepting digital assets as payments, or a corporate strategy to embrace modern technologies.

Identifying a path into the crypto space, or even an entry point, requires collaboration across the enterprise—the board, treasury, finance, tax, accounting, operations, technology, legal, and communications—to identify an innovation strategy and objectives. Some companies begin by piloting the use of crypto as they might pilot a new technology. The pilot can be internal or intradepartmental to enable the company to confirm real-time balancing and help isolate and identify potential opportunities and obstacles to broader adoption. ➤



8. BitPay, "[Study shows merchants that accept bitcoin attract new customers and sales](#)," press release, September 20, 2020.

9. Vincent Lau, "[How cryptocurrency can support financial inclusion in India](#)," *Times of India*, October 11, 2021.

Risks to consider

With an understanding of the broad opportunities digital assets portend, boards should also understand the scope of risks. Strong governance over risk and controls is critical. Boards should be prepared to engage with senior leaders on a number of risk areas.

Technology and talent. Companies venturing into digital assets need to consider their investment in technology to support such a movement as well as the capability of people to manage it. Blockchain and crypto can be complicated to manage, so it's important for companies to have the necessary skills and resources. Given how new DeFi is, companies can begin by developing this skill internally, perhaps with limited pilots that offer learning opportunities.

Cybersecurity. Cybersecurity is already a challenge for most companies, and digital assets introduce additional unique cybersecurity risks. Key risk areas to consider include how the digital assets are custodied, the process for approving distributions, phishing attacks designed to target digital assets, and vulnerabilities in the protocol code underpinning digital assets.

Regulation. The regulatory landscape is evolving, but not as rapidly as the crypto ecosystem. In the absence of legislative activity, some agencies are using existing powers to enforce and supervise crypto, a trend that is expected to continue.

The SEC has emerged as one of the main regulators policing the cryptocurrency market, although Chair Gary Gensler testified to the US Senate in September 2021 that "large parts of the field of crypto are sitting astride of, not operating within, regulatory frameworks that protect investors and consumers, guard against illicit activity, and ensure for financial stability."¹⁰ The SEC released [Staff Accounting Bulletin 121](#) on March 31, 2022, calling for enhancements in the disclosure and accounting of crypto-assets held by platform companies on behalf of third parties.

President Biden's recent executive order directs the US Treasury Department and other agency partners to assess and develop policy recommendations to address the implications of digital assets and changes in financial markets. It also encourages regulators to ensure sufficient oversight and safeguard against any systemic financial risks.

Accounting and finance. US GAAP doesn't contain explicit guidance on how to account for digital assets. Companies generally draw on various pertinent sections of GAAP to facilitate accounting for digital assets. Investments in certain cryptocurrencies, for example, are often accounted for under guidance related to indefinite-lived intangible assets, assuming industry-specific guidance does not apply.

Under this area of accounting, companies are required to book acquired assets at cost and evaluate them periodically for impairment, or markdown, when values diminish. However, GAAP does not provide for such assets to recover value. This accounting consequence makes it virtually impossible for digital assets held as investments to realize any return on value until they are sold, which should be understood when a company considers including digital assets in an investment portfolio.

Tax. The Internal Revenue Service regards digital asset transactions as taxable, although treatment may vary depending on whether transactions are for purposes of investment or business transactions. Companies need to segregate assets into separate digital wallets to clearly distinguish between assets held for investments and those used in operations. The accounting for digital assets as distinguished from the tax consequences can be complex, and the treatment of digital assets in other jurisdictions adds to the complexity.

Companies may also need to consider whether they have examined each of the business cycles that will use crypto to layer on tax treatment. Examples include payroll tax withholding, indirect tax, revenue recognition, and basis tracking.

Fraud risk. The disintermediation of activity occurring in a blockchain makes it important for companies to understand who their counterparties are in business transactions. Compliance with anti-money laundering, know-your-customer, and anticorruption requirements apply.

To the extent companies rely on third parties such as exchanges or custodians to execute transactions, companies are still responsible for compliance with all relevant laws and regulations.

Internal controls. The importance of strong internal controls over digital asset activity cannot be overstated. Companies need due diligence with respect to how various platforms operate, their vulnerabilities and volatilities, and the terms and conditions of doing business in the space. They need to understand the blockchain supporting each asset and how the related governance system operates.

A decision to onboard the use of digital assets and cryptocurrencies represents a significant commitment to innovate how the company operates. It requires a broad rethinking of fundamental strategic questions and how the company intends to manage operational complexities.

An incremental movement into cryptocurrencies can help a company develop a road map for broader adoptions that support the company's strategy and growth objectives. Adoption will require new processes and controls that span departments. A collaborative effort of the board and its committees with management leaders across the enterprise is critical to help each company prepare for the journey. 

10. Securities and Exchange Commission, "[Testimony of Gary Gensler before the United States Senate Committee on Banking, Housing, and Urban Affairs](#)," September 14, 2021.



Questions for the board to consider asking:

1. What is our company's current involvement with digital assets and blockchain? How does our involvement compare with that of our customers, vendors, competitors, and peers in the marketplace?
2. How does our position on cryptocurrency fit with our risk appetite and growth strategy? What is the business case for expanding our consideration for integrating crypto into our strategy?
3. What about our position on blockchain? Are there opportunities to engage with the technology that we're overlooking, such as the use of smart contracts to elevate commercial activities? Have we considered replatforming on blockchain to take advantage of new methods of digital rights management?
4. What financial risks do we need to consider with respect to cryptocurrencies and blockchain technology? Are our treasury and finance leaders monitoring the marketplace for emerging risks and opportunities?
5. What controls, processes, policies, and procedures do we have in place currently with respect to cryptocurrency? Should we revisit them?
6. What operational risks do we need to consider? Do we have the talent and technology necessary? Does our investment strategy support a consideration for engaging in cryptocurrencies and the underlying technology?
7. What are the regulatory and tax implications of engaging with cryptocurrencies and blockchain technology?
8. How can we continue to educate ourselves on digital assets and the underlying technology to understand how they may transform the way we engage in the marketplace of the future?



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