



Visa Consulting & Analytics

DIGITAL CURRENCIES GO MAINSTREAM – HOW TO PREPARE

VISA

everywhere you want to be

As interest and demand from consumers and businesses grows, the cryptocurrency market capitalization touches US\$2 trillion¹ and governments look at the issuance of their own digital currencies, many financial institutions are looking at the implications of digital currencies for their own business – and the potential to provide related products and services.

In this paper, Visa Consulting & Analytics (VCA) introduces digital currencies, considers the opportunities and the vulnerabilities for financial institutions, and sets out a plan for any financial institution to get more deeply involved.

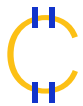
1. Crypto market cap surges to record \$2 trillion, bitcoin at \$1.1 trillion, Reuters, April 2021: <https://www.reuters.com/article/us-crypto-currency-marketcap-idUSKBN2BS1IZ>

Three types of digital currencies emerging

Digital currencies, which are digital versions of cash, have been dominated mostly by Bitcoin – a decentralized virtual currency based on blockchain technology, that first entered the scene back in 2009², and has been in the headlines ever since.

However, the digital currency opportunity extends beyond Bitcoin’s meteoric rise, and encompasses not just the currencies themselves, but also their enabling technologies, particularly blockchain.

At Visa, the term digital currency is used to describe any form of digital cash that is controlled by a private cryptographic key. There are three distinct types emerging:



Cryptocurrencies

A non-sovereign digital currency that is largely untethered from mainstream financial services



Bitcoin



Ethereum



Stablecoins

A digital currency that is backed by fiat currency and held at commercial banks



USDC



PAX



CBDCs

A digital currency backed by fiat currency and issued directly by a central bank



eCNY
(China)



e-Krona
(Sweden)

A related topic is the emergence of non-fungible tokens (NFTs). Simply put, these are units of data stored on a blockchain. Because they are unique and not interchangeable, they are emerging as a new asset class – and attracting investment as the digital answer to collectables.

Meanwhile, the digitization of all forms of money is increasing rapidly, and the emergence of digital currencies is part of this wider trend. In 2020, the combined Global Digital Retail Volume (total value of all currencies bought and sold comprising of digital currencies, national real-time payment rails, and private sector consumer technology platforms with mobile wallets) exceeded US\$42 trillion – and is expected to reach US\$60 trillion by 2024.³

2. The History of Bitcoin, USNews.com Sept.1, 2020, <https://money.usnews.com/investing/articles/the-history-of-bitcoin>

3. Estimated by Visa Consulting & Analytics, based on a combination of Euromonitor data, BCG Google Digital Payments 2020 report, Kantar survey March 2020

Why financial institutions need to care now

Given the sheer scale of digital currencies, the level of interest in them, and the wider adoption from both traditional and non-traditional ecosystem players, this is a trend that is making its way into the financial mainstream.



There are three main reasons why forward-thinking banks must pay attention:

REASON #1

Digital currencies are too big to ignore

It is becoming impossible to overlook the level of participation now being enjoyed by digital currencies.

This is partly driven by technology developments, which are expanding the range of economically viable use cases. It is also driven by the sheer number of traditional and non-traditional players, led by the fintech community, who are expanding their digital currency and blockchain capabilities and extending access to more businesses and consumers.

Consider, for example, that in 2021 the total market capitalization of the world's cryptocurrencies exceeded US\$2 trillion,⁴ there were an estimated 106 million cryptocurrency users worldwide,⁵ the daily trading volume of cryptocurrencies exceeded US\$80 billion,⁶ and Visa has made it easy to convert and spend digital currency at 70M+ merchants worldwide.⁷

While the market and interest continues to expand greatly, some major risks still exist. Digital currencies are not yet considered legal tender, and are not subject to Federal Deposit Insurance Corporation (FDIC) or Securities Investor Protection Corporation (SIPC) protections, meaning investments can be lost entirely. In addition, the regulatory environment is continuing to develop, therefore future government stance on digital currencies is uncertain.

-
4. Decrypt – Crypto Nears 2 Trillion as Bitcoin and USD Close Quarter on a High, March 2021 - <https://decrypt.co/63469/crypto-nears-2-trillion-as-bitcoin-and-usd-close-quarter-on-a-high>
 5. Business Insider – Estimated Global Crypto Users Pass 100M, Feb 2021- <https://markets.businessinsider.com/currencies/news/crypto-users-pass-100-million-boomers-gen-x-bitcoin-btc-ethereum-2021-2-103012720#:~:text=More%20than%20100%20million%20people,according%20to%20two%20separate%20reports>.
 6. Yahoo Finance – Top Cryptos by Volume, January 2021 - <https://www.reuters.com/article/us-crypto-currency/crypto-trading-volumes-hit-record-68-3-billion-on-monday-cryptocompare-idUSKBN29A1N6>
 7. Medium.com - Visa Anticipates Cryptocurrency Becoming Mainstream, March 2021, <https://medium.com/dvchain/visa-anticipates-cryptocurrency-becoming-mainstream-working-to-allow-bitcoin-use-at-70-million-6ed6ae1b5>

REASON #2

Digital currencies offer functional benefits

Given their attributes, there are several ways in which digital currencies could offer functional benefits to all stakeholders.

For consumers, for example, there is the potential for near instantaneous payments and fund transfers, which are settled immediately and become available immediately, even across national borders. For people in regions that incur high levels of inflation, digital currencies could offer a more stable way of storing value. For some, the anonymity of digital currencies is an attraction. And, for unbanked or underbanked populations, there could be an easier and more cost-effective way to join the financial mainstream.

For businesses, meanwhile, the instantaneous nature of payments and fund transfers is also a potential benefit, as is the opportunity for lower transaction costs and reduced risks, and easier reconciliation processes.

For central banks, there is a desire to take an active role in shaping the future of digital currencies, the opportunity to extend financial inclusion and access to capital to traditionally underserved people, the potential to benefit from enhanced security and privacy controls, and the possibility of diversifying their monetary policies.

REASON #3

Digital currencies bring the potential for new revenue streams – as well as vulnerabilities

Many different applications relating to digital currencies are now emerging across the financial services and payments ecosystem which, of course, brings the potential for new revenue streams.

For financial institutions, the ability to remain competitive, deliver new services, capitalize on new opportunities and meet customer needs offers a wide range of new revenue opportunities.

Similarly, the emerging use cases coming to market indicate the arrival of disruptive implications across a range of traditional banking services, such as money movement and payment flows.

The scale of existing applications also cannot be underestimated. Various use cases are coming to fruition, however, the technology is developing rapidly; a lack of consumer education, support, and regulatory protections may leave consumers vulnerable. Major players continue to make progress, but large gaps remain.

Given the scale and rapid development of digital currencies and the emergence of related regulation, the operating models of traditional financial institutions could be impacted across several dimensions, such as business strategy, infrastructure, operations, and people and performance management.

Understanding the market opportunities and use cases

Led primarily by the fintech community, several proven use cases have now emerged. As demonstrated in the graphic below, these currently revolve around four main themes.

LED BY FINTECHS, CURRENT CRYPTO USE CASES REVOLVE AROUND FOUR THEMES

Crypto Services	Leading Programs	Description
Exchanging Crypto-currencies (Buy, Sell, Hold)	Cash App	Customers can buy and sell Bitcoin, send some to friends and family, or transfer funds to another digital wallet on the blockchain
	PayPal	PayPal users can now buy, hold, and sell cryptocurrencies including Bitcoin, Ethereum, Litecoin, and Bitcoin Cash
	Robinhood	Robinhood Crypto allows customers to buy and sell cryptocurrencies 24/7 and commission-free
	Revolut	Revolut allows customers to buy, sell, and send digital currencies at the touch of a button, with no hidden fees and go from cash to crypto instantly
	Coinbase	Coinbase customers can invest, spend, save, earn, and use crypto
	Facebook	Facebook's Novi digital wallet is designed for Libra digital currencies, a new payment system which is built on innovative blockchain technology
Crypto Card Rewards	Cash App	Cash App has added Bitcoin Boosts that allow customers to earn Bitcoin on Cash Card purchases
	BlockFi	BlockFi's Bitcoin Rewards Visa Signature credit card allows customers to earn Bitcoin rewards on every purchase. The card has a 1.5% cash back value that automatically converts to Bitcoin
	Fold	Fold's Visa Bitcoin Rewards debit card allows customers to earn Bitcoin rewards on every purchase
Digital Platform	J.P. Morgan Chase	JPM Coin enables cross-border B2B payments in real-time using blockchain technology. Each coin holds the equivalent value of one U.S. dollar
	Signature Bank	Signature Bank's new digital payments platform, Signet, is designed to enable real-time payments for its commercial clients
	U.S. Bank	U.S. Bank launches new cryptocurrency custody services to securely store digital currencies for institutional clients
Consumer Payments	Visa	Visa is partnering with 50 of the leading crypto platforms on card programs to make it easy to convert and spend digital currency at 70M+ merchants worldwide
	PayPal	PayPal enables customers to use their cryptocurrency holdings as a funding source to pay at PayPal's 26 million merchants around the globe

All brand names, logos and/or trademarks are the property of their respective owners, are used for identification purposes only, and do not necessarily imply product endorsement or affiliation with Visa.

The implications and opportunities for each financial institution will vary depending on the characteristics of its customer base, and the nature and mix of its existing lines of business.

However, there are four areas of potential that warrant attention:

Cards

The opportunity to drive loyalty and engagement by rewarding customers with cryptocurrencies

An emerging trend, and one that has met with real intrigue from many consumers, has been to integrate digital currencies into loyalty and reward programs. The opportunity here is for cardholders to spend fiat currency and earn rewards in cryptocurrency. This presents a low-risk, low-commitment opportunity to earn a stake in a new asset class, and one that could potentially appreciate rapidly. According to one survey, 82 percent of U.S. consumers said they are willing to participate in such a program.⁸

One of the simplest ways to spend crypto is through a Visa card. Visa has partnered with 50 of the leading crypto platforms on card programs to make it easy to convert and spend digital currency at 70M+ merchants worldwide. With more than \$1 billion spent on crypto-linked Visa cards in the first half of 2021⁹, it's clear that the crypto community sees value in linking digital currencies to Visa's global network.

Individual and institutional investments

The opportunity to build additional revenue streams and drive customer acquisition and engagement by enabling customers to trade in cryptocurrencies and stablecoins

This is the most immediate opportunity, which is to make it easy for customers to invest in cryptocurrencies (something that 106 million people worldwide are already active in¹⁰). Existing services,

such as those offered by Revolut and Coinbase, are typically wallet based, and aim to give customers a simple and elegant way to buy, store, and sell a range of digital currencies.

Lending

The potential to innovate the savings and lending ecosystem with improved accessibility, transparency and higher yields

Financial services like savings accounts and lending can be provided via centralized and decentralized blockchain technology. Centralized blockchain-based banks, such as BlockFi, offer these services while complying with regulatory functions like Know Your Customer (KYC), offering customers high Annual Percentage Yield (APY) for lending their digital assets, or allowing them to borrow against those assets as collateral for interest rates as low as 4.5%¹¹.

On the other hand, DeFi offers such services via decentralized technology or code, rather than a centralized company, promising full transparency without restrictions based on the blockchain ledger. In the case of lending, a consumer can go to a platform such as Compound and lend their funds to earn interest or borrow against collateral they deposit. The process is real time and instant, no credit check is required, the experience is seamless, and the interest rates may be in the region of six-to-eight percent (compared to an average of around 0.07 percent for a fiat currency savings account)¹².

Commercial banking

The potential for seamless cross-border business-to-business payments

Digital currencies could help to provide a solution for improving cross-border business-to-business payments, with the promise of near instant settlement, low processing and compliance costs, and an elimination of counterparty risk. For now, the benefits have yet to be proven at scale, but the opportunity for commercial banks is considerable.

8. KPMH Study - KPMG Study Finds Digital Tokens Are Transforming The Way Consumers Interact With Each Other And Businesses, Sept. 2019, <https://www.prnewswire.com/news-releases/kpmg-study-finds-digital-tokens-are-transforming-the-way-consumers-interact-with-each-other-and-businesses-300925211.html>

9. Visa Fintech Fast Track Participants for North America with plans to issue Visa card programs.

10. Business Insider - Estimated Global Crypto Users Pass 100M, Feb 2021- <https://markets.businessinsider.com/news/currencies/crypto-users-pass-100-million-boomers-gen-x-bitcoin-btc-ethereum-2021-2>

11. Blockfi.com, <https://blockfi.com/rates/>

12. Compound.finance, <https://compound.finance/>

A three-step action plan for financial institutions

Financial institutions thinking about their role in the digital currencies ecosystem and looking for opportunities to enable digital currency payments can consider a three-step plan:



STEP #1

Develop a crypto-focussed strategy

Key considerations

- Decide which use cases you can prioritize to achieve your strategic objectives
- Understand what your traditional and non-traditional competitors or peers are doing in the digital currency space
- Quantify how much of your revenue will be at risk as digital technologies make their way further into the mainstream
- Calculate how much of your existing business could be affected going forward



STEP #2

Invest in the necessary technology and operations

Key considerations

- Identify the risk-related considerations (e.g., regulatory, credit, fraud) and compliance-related considerations (e.g., Anti-Money Laundering, Know Your Customer) across the use cases you have prioritized
- Calculate the investments you need to make in technology and infrastructure
- Understand what type and quality of experience your customers are expecting
- Identify the capability gaps and skills gaps you need to overcome



STEP #3

Define your go to market approach

Key considerations

- Understand what the new economics of your business look like
- Select the marketplace players you must work with
- Identify the customers most likely to be interested, and how they will be segmented

How Visa can help

Visa can help in several ways including serving as a bridge to connect our network of clients to new digital currency products and blockchain networks. To this end, Visa has forged a wide range of partnerships, is extending settlement services to digital currency transactions, and making it easier for clients to offer digital currency capabilities by building the Visa Crypto APIs. A digital currency innovation lab has also been established to help clients and partners discover, co-create, and build digital currency concepts and pilots.

Meanwhile, VCA is ideally positioned to work with clients to help formulate a digital currencies strategy, capabilities assessment, business case, and go-to-market approach, including build-partner-buy considerations. Similarly, subject matter experts can assist in areas such as product development, innovation and design, and marketing strategy and execution.

VCA DIGITAL CURRENCIES SOLUTIONS



Organizations in all sectors must start to plan how to capitalize on the opportunities that this new digital revolution will bring, just as online marketplaces two decades ago revolutionized the way consumers shop. One thing is clear, digital currency will change the rules of the game as we move from an internet of information to an internet of value.



We are a global team of hundreds of payments consultants, data scientists and economists across six continents.

About Visa Consulting & Analytics

- Our consultants are experts in strategy, product, portfolio management, risk, digital and more with decades of experience in the payments industry.
- Our data scientists are experts in statistics, advanced analytics and machine learning with exclusive access to insights from VisaNet, one of the largest payment networks in the world.
- Our economists understand economic conditions impacting consumer spending and provide unique and timely insights into global spending trends.

The combination of our deep payments consulting expertise, our economic intelligence and our breadth of data allows us to identify actionable insights and recommendations that drive better business decisions.

For more information, please contact your Visa Account Executive, email **Visa Consulting & Analytics** at VCA@Visa.com or visit us at Visa.com/VCA

Visa Consulting & Analytics is a global team of industry experts in strategy, marketing, operations, risk and economics consulting, with decades of experience in the payments industry. Using analytics from the payment network with the most purchase transactions worldwide, our team of subject matter experts can provide you with proven strategies and data-driven insights that support your business objectives.

The terms described in this material are provided for discussion purposes only and are non-binding on Visa. Terms and any proposed commitments or obligations are subject to and contingent upon the parties' negotiation and execution of a written and binding definitive agreement. Visa reserves the right to negotiate all provisions of any such definitive agreements, including terms and conditions that may be ordinarily included in contracts. Case studies, comparisons, statistics, research and recommendations are provided "AS IS" and intended for informational purposes only and should not be relied upon for operational, marketing, legal, technical, tax, financial or other advice. Visa Inc. neither makes any warranty or representation as to the completeness or accuracy of the information within this document, nor assumes any liability or responsibility that may result from reliance on such information. The information contained herein is not intended as investment or legal advice, and readers are encouraged to seek the advice of a competent professional where such advice is required. When implementing any new strategy or practice, you should consult with your legal counsel to determine what laws and regulations may apply to your specific circumstances. The actual costs, savings and benefits of any recommendations, programs or "best practices" may vary based upon your specific business needs and program requirements. By their nature, recommendations are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify. All brand names, logos and/or trademarks are the property of their respective owners, are used for identification purposes only, and do not necessarily imply product endorsement or affiliation with Visa.