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Crypto Use Cases: 12 Real-World Stories of How Millions of People Are Using Crypto Services Today

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Introduction

The most common criticism we hear about crypto is simple: Where are the real-world use cases?

"Sure it has potential, and I get that technologists are excited," people say. "But when will it start impacting my day-to-day life?"

It's a valid question, and one that is familiar to people who remember the early years of the PC, the World Wide Web, the cloud, and the smartphone.

We ask it ourselves.

To answer this question in a robust fashion, you have to climb into uncharted terrain, exploring the new and unfamiliar world of the decentralized web. But when you do, you discover an astonishing reality: *Millions of people are already using the first generation of crypto services, and in a wider range of ways than most people realize.*

In fact, it's sometimes hidden right before our eyes. As one Fortune 500 executive put it, "The customer, to be honest, may very well not even know that what they're doing is interacting with blockchain technology."[1]

Across the globe, in industries ranging from retail and finance to social media and gaming, some of the most influential companies in the world are using public blockchains like Bitcoin, Ethereum, and Polygon under the hood to reshape how they do business—right now. And, at the same time, there's a slate of completely new services being built by Web3 developers, with names most of us have never heard of before.

This may be why it's so easy for busy people to miss crypto's real-world impact. It's not as obvious as paying for lunch with bitcoin, the reality some of us had imagined. Of course, if we had waited for newspapers to go away to believe in the adoption of the web, we would have missed that too.

Today's crypto services are built for a wide-ranging set of specific uses, from navigating traffic or engaging with your favorite band to getting your daily coffee at Starbucks—and more.

In the stories that follow, we share twelve of the most noteworthy real-world examples of crypto in action today.

(1) https://techcrunch.com/2022/09/12/starbucks-unveils-its-blockchain-based-loyalty-platform-and-nft-community-starbucks-odyssey/

01 Farcaster: Fixing What's Broken in Social Media

Thousands of early adopters and public figures are using Farcaster to free themselves from corporate control, censorship, and misinformation.

One of social media's greatest features—that it allows people to communicate with a huge network of other people—often leads to one of its worst: It creates corporate monopolies.

Facebook, Twitter, and LinkedIn attracted billions of users by creating virtual arenas where people could meet and share ideas at an unprecedented scale with friends and followers. There's a big cost to this, though. Everything you create—your profile, your followers, your posts, your history—is their property. That means they can do an awful lot with that data, like sell it, alter it, or shut it down altogether.

They can also institute arbitrary new rules (an issue that has exploded into the public consciousness in the past year after Elon Musk's purchase of Twitter). Or kill access to the platform's API to block out new developers or innovation.

This is their world; you and your community just live in it.

To get around this, you need a mechanism that lets people preserve the powerful networking benefits of social media while scrapping its Big Brother ownership. You can probably guess that this mechanism is a decentralized blockchain. And one company that has launched such a decentralized social network is Farcaster.

Farcaster has built an open-source version of social media.[2] In the Farcaster network, individuals own and control things like their follower list, content, and username. These records are stored and authenticated not in a corporate database but on the Ethereum blockchain. As a result, your social media becomes your property. Just like you can take the contacts list on your phone and use it in a range of apps, from iMessage to WhatsApp to Telegram to Signal, with Farcaster can take your social media data and plug it into whatever social media app you like.

This means that multiple entities can build different front-end apps to access this data, each with their own design, user experience, and rules. Don't like the censorship rules on one app? No problem. You can switch to another and bring your followers with you. You own your data. Good luck doing that on Twitter today.

This model allows not just consumer control and choice, but innovation. Any clever developer can tap into this network and build new tools, comfortable in the knowledge that a corporate owner can't cut off their access to the database on a whim. For example, someone recently built an app called InstaCaster that combs Farcaster's archives and indexes all images in an Instagram-like feed. Whether that's useful to you or not, it's useful to someone. And that's the point: Builders and users now have the freedom of choice, not limited by the profit motives of a corporate controller.

In this new, crypto-enabled social media paradigm, the most successful companies won't succeed by barricading user data. They'll succeed by taking the same user data everyone else has and building something valuable with it.

Farcaster Key Metrics

551k
Total Posts

11k
Total Users

3.3k
Monthly Active Users

Source: Bitwise Asset Management with data from Farcaster (https://farcaster.network/) as of March 31, 2023.
(2) Farcaster is in its beta phase as of March 31, 2023.

02 Stablecoins: Moving Dollars at the Speed of the Internet

The slow and expensive world of wire transfers, ACH, and checks is giving way to USD stablecoins: instant dollar transfers with no wire fees or minimums, anytime, anywhere.

It's a marvel of the modern world that technology allows you to get groceries delivered to your home in hours. You can stream thousands of HD movies to your phone, or get any book delivered in a day. But, if you want to move money from one bank account to another, or pay a bill via ACH, or run payroll for your employees, it takes days ... and only works if the bank is open.

Enter U.S. dollar stablecoins.

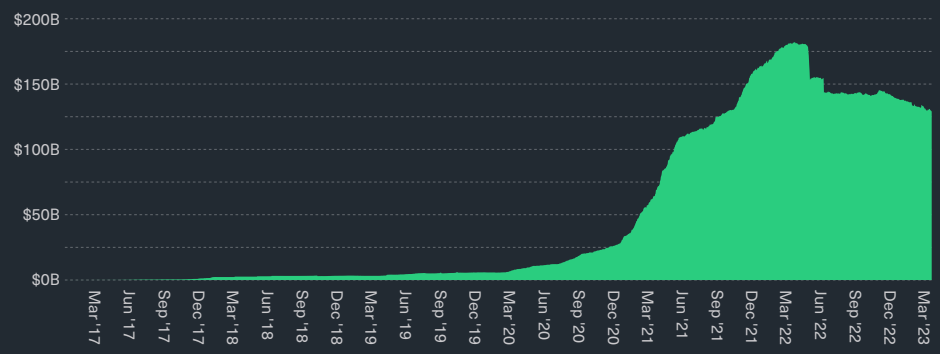
Stablecoins are dollars or other stable reserve assets that are registered on a decentralized blockchain. Users get the obvious benefits of dollars, such as relative stability and global use, imbued with blockchain's ability to move them at the speed of the internet. In doing so, you free your dollars from the captivity of fee-seeking banks, and the slow, expensive, and laborious ACH and wire settlement networks.

There's another benefit too for those outside the U.S. If you're in a country with a weak and volatile currency, such as Venezuela, Argentina or Turkey of late—or a country where accessing a bank account is difficult—stablecoins allow you the stability of dollars with no minimum to access.

So, what does real-world adoption look like?

Globally, people and businesses have already put over $100 billion into stablecoins to take advantage of this 21st-century system. USD Coin ("USDC") is among the best-known and most popular, with over 1.6 million users worldwide.

Total Stablecoin Assets Under Management (USD billions)



Source: Bitwise Asset Management with data from The Block and Coin Metrics as of March 31, 2023.

How are people using it?

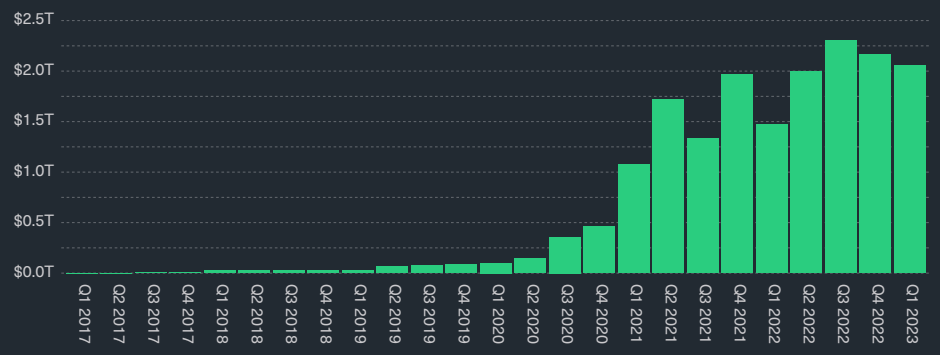
Some use cases are "crypto-native," like decentralized services (including a few mentioned elsewhere in this report) that don't support conventional bank accounts but want to utilize U.S. dollars. Some are "crypto-adjacent," like the growing list of venture capital firms that fund investments with stablecoins rather than dollars. And some are more traditional: For instance, more than 500,000 users in Latin America (principally Venezuela) have signed up to use a stablecoin service called Reserve, helping them access dollar stability as a shield against political and economic uncertainty.

Indeed, stablecoin payments and transfers are growing rapidly, with $10 trillion in USDC transfers to date and more than $2.0 trillion in stablecoin transactions in Q1 2023 alone. (For context, $2 trillion is more than PayPal processed in all of 2022.)

Even monetary authorities see the potential. In November 2021, the U.S. Treasury's "Report on Stablecoins" noted, "If well-designed and appropriately regulated, stablecoins could support faster, more efficient, and more inclusive payments."[3]

This is one of crypto's killer apps at a meaningful scale of adoption.

Value of Stablecoin Transfers (USD trillions)



Source: Bitwise Asset Management with data from Coin Metrics and CoinGecko as of March 31, 2023.

(3) https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf

03 Hivemapper: Crowdsourcing a Better Real-Time Map

Drivers around the world are earning crypto assets while helping build a higher-resolution map that's updated more frequently than existing services.

When was the last time you wrote down directions? 2005? Earlier? That's because navigation apps like Google Maps and Waze have transformed driving.

But they have some flaws. For one, it's insanely expensive to create and update maps (those fancy camera cars aren't free). That leads to pain points: For instance, maps aren't updated often, so your "street view" photo often shows a retail store that went out of business months ago, or a city road that's now under construction. Also, Google and Waze go to great lengths to track data about your driving history, which they can (and do) sell to other companies for profit.

Today, a project called Hivemapper wants to flip this model on its head by creating an equity-like, crowdsourced incentive system that runs on a blockchain.

Here's how it works.

Drivers purchase a high-quality dashcam, plug it in, and drive—to work, to school, the grocery store. All the while, the camera snaps street images and relays them back to the Hivemapper database, which uses them to create a high-quality, open-source map, with constantly updated photos that are added to the database in real time.[4] Hivemapper then charges businesses or customers a fee to use the map.

(4) https://hivemapper.com/product/

Where does crypto fit in?

The entire system is powered by the Hivemapper network's native token, HONEY, which runs on the Solana blockchain. This system lets Hivemapper pay its sprawling workforce efficiently (and instantly).

You might be thinking, "Great, another crypto token. This is just a way of duping workers to accept an asset with no underlying value."

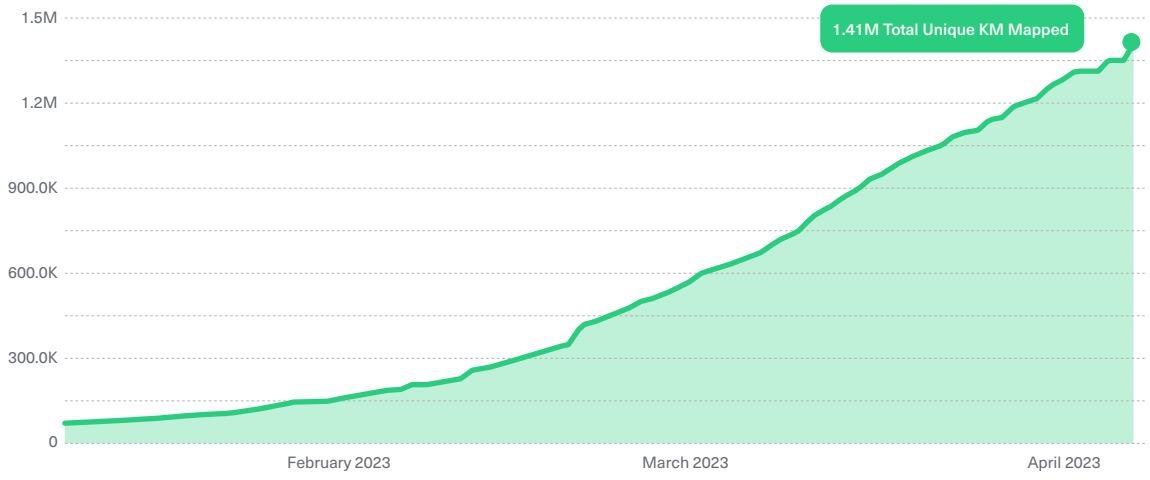
But no: To use the map, businesses need to pay for it with HONEY. This generates demand for the token in the marketplace, theoretically increasing its value. What's more, as soon as Hivemapper receives the HONEY token from a map customer, the company destroys it—reducing the supply of all tokens, similar to a stock buyback (also theoretically boosting its price).

In other words, paying drivers in HONEY gives them a material stake in the value of the map that they help to build.

The use of public blockchains and token incentives is an innovation that allows Hivemapper to tackle a problem that would normally take billions of dollars in cash for a traditional corporation. It also allows Hivemapper to operate efficiently at a massive scale. Google can't pay drivers 1/1000th of a share of Google stock to install a camera and update Waze (which Google owns); but with Hivemapper and the frictionless efficiency of blockchain networks, it's easy to pay someone in HONEY to drive one block.

The system is working. Three months after launch, Hivemapper had mapped over 1,410,000 kilometers of roads with complete 4K street-level photography. It's mapping the world 5X faster than Google did when it launched its Street View service, while delivering significantly higher quality and accuracy … and it's just getting started.

Total Unique Kilometers Mapped on Hivemapper



Source: Bitwise Asset Management with data from Hivemapper (https://hivemapper.com/explorer/unique-km-mapped) as of March 30, 2023.

04

Starbucks: Customer Rewards 2.0

The coffee giant's new blockchain-based rewards program allows members to buy and sell earned prizes.

A staggering stat from Starbucks is that its loyalty rewards program has 29 million members.[5] That's nearly 1 in every 10 Americans, equivalent to the entire state of Texas. It's one of the most successful loyalty programs in the world. As customers buy more coffee, they build up rewards that they can eventually redeem for pumpkin spice lattes, cake pops, and more.

But rewards programs cost a lot of money. To a company, "free" coffee is essentially the same as offering your most loyal customers a discount on each item they buy. Yes, it's a strategic decision, and yes, it generates repeat business—but it's an incentive whose cost Starbucks ultimately pays. Plus, rewards points aren't perfect for consumers: They have limited uses, and it's tough to transfer them from person to person (like to a family member).

That's why Starbucks' most recent loyalty initiative is so intriguing.

In late 2022, Starbucks launched a rewards program in which the company will issue certain members digital stamps packaged as NFTs on the Polygon blockchain. Some of these collectibles are just that—memorabilia that connects users to the brand. But some are tickets to special experiences, like exclusive coffee tastings.

(5) Source: Starbucks Q4 and Full Year Fiscal 2022 Results (https://investor.starbucks.com/press-releases/financial-releases/press-release-details/2022/Starbucks-Reports-Q4-and-Full-Year-Fiscal-2022-Results/default.aspx).

This new announcement transforms the traditional rewards framework in three ways:

Cost: Moving from discounts to NFTs transforms rewards from a discounting tool to a brand engagement exercise, with lower costs.

Market: Turning rewards into NFTs allows users to buy and sell their rewards on the broader market. If you're a loyal Starbucks patron but don't care for the NFT they just issued you, sell it! The going rate for the initial Starbucks stamp today is upwards of $500. Conversely, if you want to add more stamps to your collection as a super-fan, you can do that too.

Platform: As an open-architecture system, NFTs issued on a blockchain can be built upon by anyone. If an enterprising software engineer wants to create a new game or online store that's accessible only to Starbucks NFT holders—or a way of showing off your Starbucks fan status—that new application can become yet another reason for customers to value these rewards.

All of these benefits to Starbucks and its millions of customers are possible because of decentralized blockchains.

It costs Starbucks relatively little to produce and distribute these digital collectibles. And asset transfers are fast, cheap, and broadly available.

So, with few outlays and a strong boost in customer incentives, ask yourself: Why *wouldn't* Starbucks—and other companies—do this too?

Key Stats for Starbucks' Odyssey Collections NFTs

COLLECTION NAME	RELEASE DATE	NUMBER OF ITEMS	FLOOR PRICE	VOLUME (DEC. 2022-MAR. 2023)
The Starbucks Siren Collection	March 2023	2,000	$550.00	$682K
Doing Good Journey Stamp	January 2023	30,000	$44.50	$8K
Bean to Cup Journey Stamp	January 2023	5,000	$44.00	$26K
Coffee Heritage Journey Stamp	January 2023	5,000	$51.55	$32K
Holiday Cheer Edition 1 Stamp	December 2022	5,000	$1,150.00	$191K

Source: Bitwise Asset Management with data from Nifty Gateway (https://www.niftygateway.com/publishers/starbucks-odyssey) as of March 29, 2023.

05

Uniswap and DeFi: Improving Financial Services by Replacing Humans With Blockchain Automation

Over four million people have used Uniswap, a leading DeFi application, to trade over $1 trillion in assets.

Traditional finance firms use complex human processes to deliver services. Decentralized applications can use code to deliver many of these same services in a fully automated way. This automation creates faster, cheaper, and more transparent alternatives, less subject to the errors of human judgment and labor. These efforts fall under the term “decentralized finance,” or “DeFi.”

A great way to tell the story of DeFi is to look at Coinbase.

While Coinbase is a crypto-focused company, it is not DeFi. Like other financial services companies, it employs and organizes thousands of individuals to deliver a financial product. It’s very good at this: Today Coinbase has over 110 million users from more than 100 countries, who have placed upwards of $80 billion on the platform to buy, sell, and stake crypto.

Also like other traditional financial services companies, Coinbase makes revenue through fees: a 1% or more fee on each transaction for retail investors.

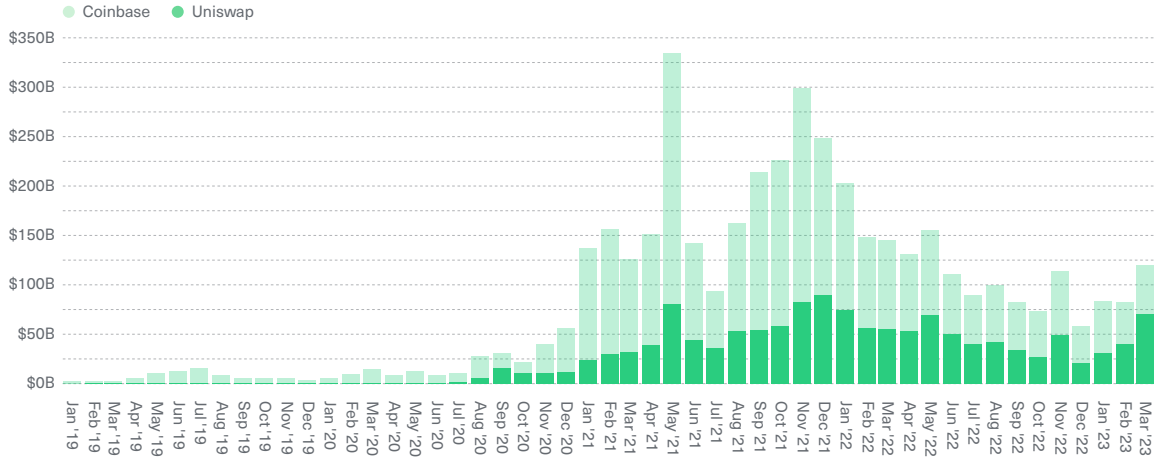
Why such high fees? Think of all the areas the company has to spend big money on: sales, marketing, legal, technology, research, product development, risk management, HR, government affairs, and office space, to name a few.

Enter DeFi. The DeFi equivalent to Coinbase is Uniswap, a software program that operates on the Ethereum blockchain. It competes with Coinbase by allowing users to buy and sell crypto. But Uniswap isn't a company. It has no employees, no offices, no water coolers. It doesn't need to hire people to handle complex things like custody, market-making, and settlement, because the software handles all of these automatically. As a result, the cost to use Uniswap is dramatically lower than the cost to use Coinbase.

The market is responding. Uniswap now regularly processes a similar amount of trading volume as Coinbase. And in March 2023, Uniswap trading spiked as investors worried about risk in non-transparent centralized platforms. In fact, it processed $72 billion in trading volume that month—more than 1.4x Coinbase's volume.

Entrepreneurs have taken note, and are increasingly setting their sights on the traditional financial ecosystem. Consider PV01, a new startup from a former Goldman bond trader that is looking to move bond trading onto the blockchain, potentially transforming one of the most inefficient corners of the financial ecosystem. And some of the most recognizable names in traditional finance are embracing DeFi too: JPMorgan, the world's largest bank, recently executed its first DeFi trade using Polygon and Aave. With these tailwinds, DeFi may be emerging as a major tool to improve traditional finance.

Uniswap vs. Coinbase: Relative Share of Trading Volume



Source: Bitwise Asset Management with data from The Block and CoinGecko as of March 31, 2023.

06

Music NFTs: Artists Sharing Royalties With Fans

A new Rihanna NFT collection offers fans something never before possible: part ownership in her music.

What if you could not only stream your favorite songs ... but own a piece of them?

Today, this isn't just the privilege of record labels or billionaires. Just ask Rihanna's fans.

In February, 118 million people watched the pop star give a dazzling performance at the Super Bowl Halftime Show. Perhaps unsurprisingly, her songs exploded in popularity on music streaming platforms immediately afterward.[6]

Less well known, though, is that a portion of those streaming revenues accrued to her fans. The week before, one of Rihanna's producers partnered with Web3 startup Anotherblock to sell 300 non-fungible tokens, or NFTs, that entitled their owners to a percentage of the royalties generated by one of her most popular songs.[7]

(6) https://variety.com/2023/music/news/rihanna-streaming-surge-super-bowl-spotify-1235521703/

(7) https://www.coindesk.com/web3/2023/02/10/popular-rihanna-song-offered-as-nft-with-royalty-sharing-ahead-of-super-bowl/

Note: NFTs are certificates of ownership that are transferred and verified virtually instantaneously on a secure blockchain like Ethereum or Solana. While the best-known NFTs involve ownership of digital images, NFTs can also involve ownership of a royalty stream, thereby creating instantly transferable assets that provide rights to the streaming royalties embedded in them. For these Rihanna NFTs, each NFT holder receives "a portion of 0.0033% of the streaming royalties" for the song, which amounts to an estimated 6.1-6.8% return over the first year based on the listing price.

In other words, thanks to crypto, Rihanna's NFT holders are now part-owners of her music. That's a powerful way to activate and engage a fan base.

And it's not just Rhianna—other famous contemporary artists ranging from The Chainsmokers to Diplo are embracing music NFTs too. In May, The Chainsmokers' new album, "So Far So Good," included an NFT that gave a 1% cut of the album's royalties to five thousand of their most loyal fans, as well as access to perks like meet-and-greets with the band.

Now, you may not like Rhianna or The Chainsmokers. But if the initial response is any guide, music fans love the idea of owning a portion of one of their favorite artist's songs—and getting paid every time it's streamed. And it's only possible today via decentralized blockchains that allow efficient and reliable calculation, settlement, and transfer.

Streams and Royalty Returns for First Rhianna Music NFT[8]

Spotify Streams

710,141,791
Total Streams

18,016,596
Streams Last Month

Predicted Royalty Returns

6.1%
Pessimistic Return (Year 1)

6.5%
Probable Return (Year 1)

6.8%
Optimistic Return (Year 1)

Source: Bitwise Asset Management with data from anotherblock.io and Unchained Music as of March 30, 2023.

(8) Predictions are based on U.S. dollars and the percent return is estimated based on the initial listing price of $210. This is a one-year prediction starting from the first available purchase date.

07

International Payroll: Using Bitcoin To Activate the Global Gig Economy

Global companies like Premise are using bitcoin to make micro payments to a large number of workers around the globe.

Imagine you run a market research company. You want to understand what local grocery stores look like across the globe, from Bangladesh to Botswana to Budapest. How are they laid out? What products do they feature most? What shelves are always empty?

You need boots-on-the-ground workers, people willing to take 10 iPhone photos and send them your way. And, of course, you need an efficient and secure way to pay them in small amounts.

Here's the problem: It's really hard to pay someone in Bangladesh. Currency conversion and transfer fees can easily erode 15% of someone's payment, and administrative barriers are high. Now multiply this by five countries, or 10, or 100 ... and suddenly that market research doesn't look like it's happening.

One potential solution: Pay people in bitcoin.

A great example of a company that's figuring this out is Premise. They coordinate gig workers across the globe. For many workers, they use PayPal or other mobile payment platforms. But for others, they use bitcoin.

Why? One, because it's much faster and cheaper than sending cash from Bank A to Bank B. (In January 2020, a $1 billion bitcoin transfer famously took minutes to settle for a total fee of less than 0.00001%.)[9] Two, in a lot of places around the world, bitcoin is considered a stable store of value relative to other available options. In fact, one survey found that more than two-fifths of people across 76 different countries regarded bitcoin as more trustworthy than their local currency.[10]

For that reason, any business looking to engage a workforce across different countries—each with their own currencies, banks, laws, and infrastructure—can either try to deal with all the particulars a la carte, or pay everyone via crypto.

Cost and Duration: Bitcoin Payment vs. International Bank Transfer

Transfer Amount

$100,000

Bitcoin Payment

Fee %: 0.00001%

Fee $: $0.01

Time to Settle: ~10 minutes

Standard Bank Transfer[11]

Fee %: 0.02% to 0.03%

Fee $: $20.00 to $30.00

Time to Settle: 2-4 days

Instant Bank Transfer[11]

Fee %: 2.00%

Fee $: $2,000.00

Time to Settle: Instant

Source: Bitwise Asset Management with data from Monito (https://www.monito.com/en/compare/transfer/us/hu/usd/usd/100000) as of March 14, 2023.

(9) https://www.blockchain.com/explorer/transactions/btc/5deca6b2b21eb6bdd7fb5f0be4199d81a65193ac9066ec3579343b21b3eb7037

(10) https://www.prnewswire.com/news-releases/41-of-people-globally-say-they-trust-bitcoin-over-local-currencies-according-to-premise-survey-301428250.html

(11) Represents estimated fee and settlement time for a $100,000 international bank transfer from the U.S. to Hungary.

08

Nike and the $250 Million Digital Fashion Gold Rush

Global brands like Nike are cashing in big on virtual apparel enabled by decentralized blockchains, as social signaling enters the online world.

We all have a friend who's into fashion. They buy fancy clothes, the latest shoes, anything that can help them show off their money and taste.

But the average American spends over eight hours online each day, working and connecting with friends.[12] Many digital natives spend more. Why would these online-first citizens buy $1,000 sneakers or $50,000 Birkin bags? No one can see your feet when you're typing.

This is a market that Nike, Dolce & Gabbana, Tiffany, and other brands are cashing in on, in a much bigger way than you might think. Call them "digital collectibles," or take a crypto-native lens and call them non-fungible tokens (NFTs)—it's the same thing. These prominent luxury brands are selling digital items that let people flash their wealth and taste online, the same way they would in the analog world, and it's all stored on an immutable public database of ownership (aka crypto).

Not convinced? Try this on: Nike did $186 million in NFT revenue last year.

(12) https://www.statista.com/statistics/262340/daily-time-spent-with-digital-media-according-to-us-consumsers/

Do we have your attention?

Is it crazy to pay all that money for digital sneakers? Perhaps. But you could equally argue it's ludicrous to drop $990 on black Manolo pumps at Neiman Marcus. The reality is that people invest enormous effort into curating their digital profiles, posting just the right pictures, sending just the right Tweets, and polishing their LinkedIn profile. Should we be surprised they are embracing the brands they love online the same way they do in the physical world? And the only way you can do it is through public blockchains (mostly Ethereum), where the ownership of these goods is recorded and fully, irrevocably yours.

Today, it's Nike and a few other tech-forward companies making the biggest splash. Just Google "NFT and ____(Hermès / Louis Vuitton / Ferragamo / Rolex)" and see what turns up.

The next big thing in branding is virtual swagger, and NFTs are the way to do it.

NFT Revenue Generated by Top Brands

COMPANY	TOTAL NFT TRANSACTIONS	TOTAL NFT REVENUE ($M)
Nike	82,500	$186.1
Dolce & Gabbana	11,966	$23.7
Tiffany	76	$12.6
Gucci	4,838	$11.6
Adidas	57,351	$11.0
Time Magazine	22,381	$10.8
Budweiser	4,444	$5.9
Bud Light	11,227	$4.0
Australian Open	10,531	$1.7
Lacoste	15,275	$1.1

Source: Bitwise Asset Management with data from Dune Analytics (https://dune.com/queries/1167760/1996588) as of March 31, 2023

09

DAOs: The Biggest Organizational Innovation Since the C-Corp, Native to the Digital Era

Decentralized Autonomous Organizations (DAOs) use decentralized blockchains to create rules and governance for groups of people, who organize online around shared goals or interests.

There are only 13 original copies of the U.S. Constitution. Recently, one of those came shockingly close to being controlled by thousands of strangers with a common goal who assembled and organized in mere days thanks to the workings of public blockchain technology.

The quick backstory: In late 2021, Sotheby's opened up an auction for one of the first printed copies of the Constitution. Shortly thereafter, a decentralized autonomous organization, or DAO, formed to make a bid.

A DAO is like an online co-op whose members are verified and vote on proposals through a decentralized blockchain. With breakneck speed, the DAO attracted more than 17,000 participants, and raised almost $50 million in a matter of days by issuing tokens granting their holders governance rights over the document (in the event they won the bid).

In a dramatic climax worthy of a Sorkin film, ConstitutionDAO engaged in a bidding war with an "anonymous buyer" during the auction's final eight minutes.[13] In the end, they lost out to a final bid of $43 million from billionaire Citadel founder Ken Griffin.

In addition to being a compelling story ("18th-Century Archive Almost Transferred to Digital Co-Op!"), the bidding war shed light on how crypto technology is reshaping how organizations develop, organize, and govern themselves. Before blockchains, how would 17,000 strangers have created a financial juggernaut oriented around a common cause in a single week? Ask for everyone for checks and hope strangers will do what they say? Launch a Kickstarter?

Other DAOs have sprung up to pursue any number of collective interests: purchasing a sports franchise,[14] forming a media organization,[15] or buying land.[16] It's yet another example of how crypto's applications continue to reshape the world of business.

ConstitutionDAO Key Fundraising Stats, November 15-18, 2021

$49,474,830

Total Raised (USD)

17,555

Total Contributors

$213.28

Median Contribution (USD)

Source: Bitwise Asset Management with data from Dune Analytics (https://dune.com/ilemi/ConstitutionDAO-Funding-Tracker) as of March 31, 2023. Dollar values are based on the mean USD-ETH conversion rate from November 15 to 18, 2021.

(13) https://www.cnbc.com/2021/11/19/citadel-ceo-ken-griffin-pays-43point2-million-for-constitution-copy-outbidding-crypto-group.html
(14) https://www.buythebroncos.com/
(15) https://daocentral.com/explore/media
(16) https://www.citydao.io/

10

ENS: Domain Names for a Web3 World

Ethereum Name Service (ENS) is to blockchain as .com is to the internet. Already over half a million people have reserved almost three million domains.

If you wanted to pay someone in crypto, they might ask you to send the payment to this address:

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e915125f2d5b9634dcb6039d846d0575ea2
af1f3762a868hbhcd28a46e73b28039

Got it? And if it's a large sum, you'd better hope the copy-and-paste feature is flawless. You wouldn't want to send $1 million to the wrong crypto wallet.

The early web had a similar challenge. If you wanted to go to a company's website, you needed their unwieldy IP address: something like 143.204.176.32. It's hard to get people to remember 143.204.176.32. It isn't hard, however, to get someone to remember amazon.com.

That was the brilliance of domain names: Creating an intuitive, name-based address that links to a more complex numerical address.

Ethereum Name Service, or ENS, solves a similar problem. With ENS, you can purchase a simple domain like alice.eth or bob.eth, and then connect that address to any number of other things: your crypto wallets, your personal website, or even your email account.

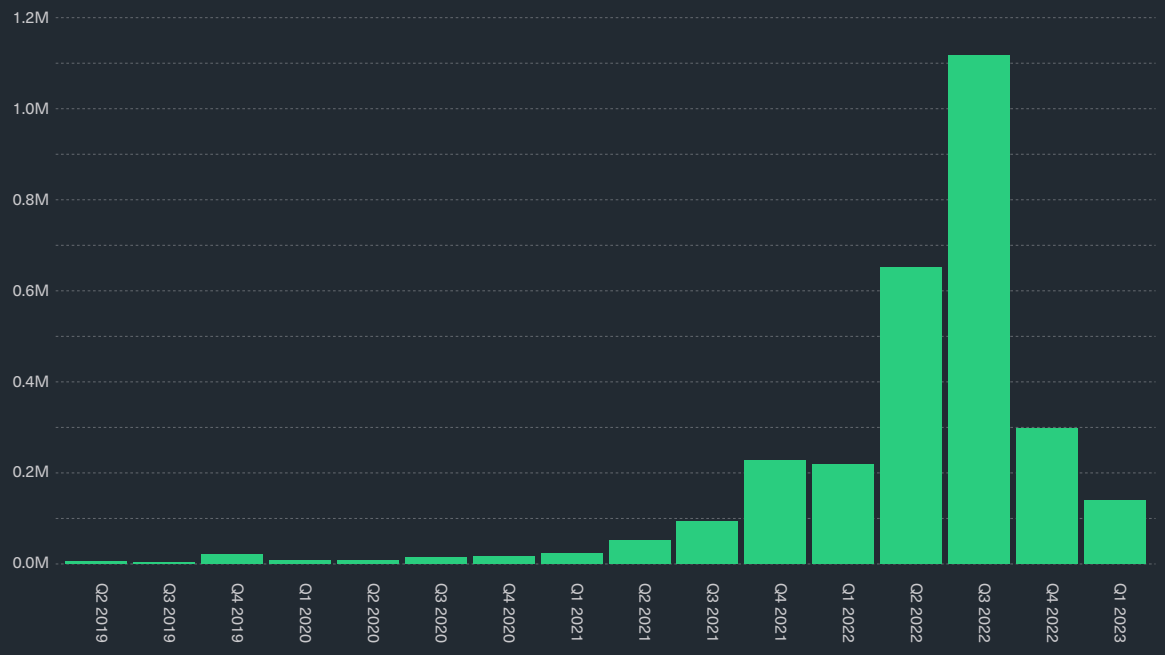
Importantly, ownership of this domain name is recorded on the Ethereum blockchain. What does that mean?

It means that, if someone types “alice.eth,” they can see what amounts to Alice’s digital business card, complete with her bitcoin address, Ethereum address, avatar image, NFT collection, Twitter handle, personal website, or email address. It’s like a place to park your digital assets and communicate to the world, “These are all mine.” It’s the closest thing to an identity in crypto today.

Second, it means that Alice can carry her information with her across the internet more easily. Today, if you want to use Facebook, Twitter, or Uber, you have to create different profiles for each. But Web3-friendly sites allow Alice to simply type in her ENS name and feed all her details to the application at once. Headache averted.

Think back to email addresses in 1995: They existed, some people had them, but they were a few years away from mass adoption. Then they became indispensable. That’s where ENS is today.

Ethereum Name Service (.eth) Registrations From Q2 2019 to Q1 2023 (millions)



Source: Bitwise Asset Management with data from Dune Analytics as of March 31, 2023

11 Crypto Gaming: Digital Ownership in Games

As in-game purchases continue to rise, the case for crypto-based gaming is accelerating.

Online games: Love them or hate them, they're a massive industry.

Today, three billion people worldwide play online games such as PUBG, Minecraft, and Fortnite.[17] In the U.S., consumers spend more than $60 billion a year on them. A huge chunk of that spending goes toward in-game purchases—digital items like extra lives, coins, diamonds, or weapons that can be used in the game itself. Consumers have shown a remarkable willingness to open their wallets to get an edge on the competition.

But what happens if the game's company goes bankrupt? Or if they decide to discontinue an in-game item someone spent hours—or hard-earned dollars—acquiring?

Basically, it's tough luck. The digital assets players have accumulated simply vanish, because they're inextricable from their native game. You can't bring your sword from one game to the other.

That is, unless the digital asset you've earned is also your own property. That (once again!) is the magic of NFTs—digital certificates of ownership stored on a blockchain. With NFTs, the existence of an asset isn't tied to a single game but rather to a virtually impenetrable global database that publicly states the owner.

What does that mean?

(17) https://truelist.co/blog/gaming-statistics/#:~:text=Over%20227%20million%20people%20in-,than%2065%20play%20video%20games.

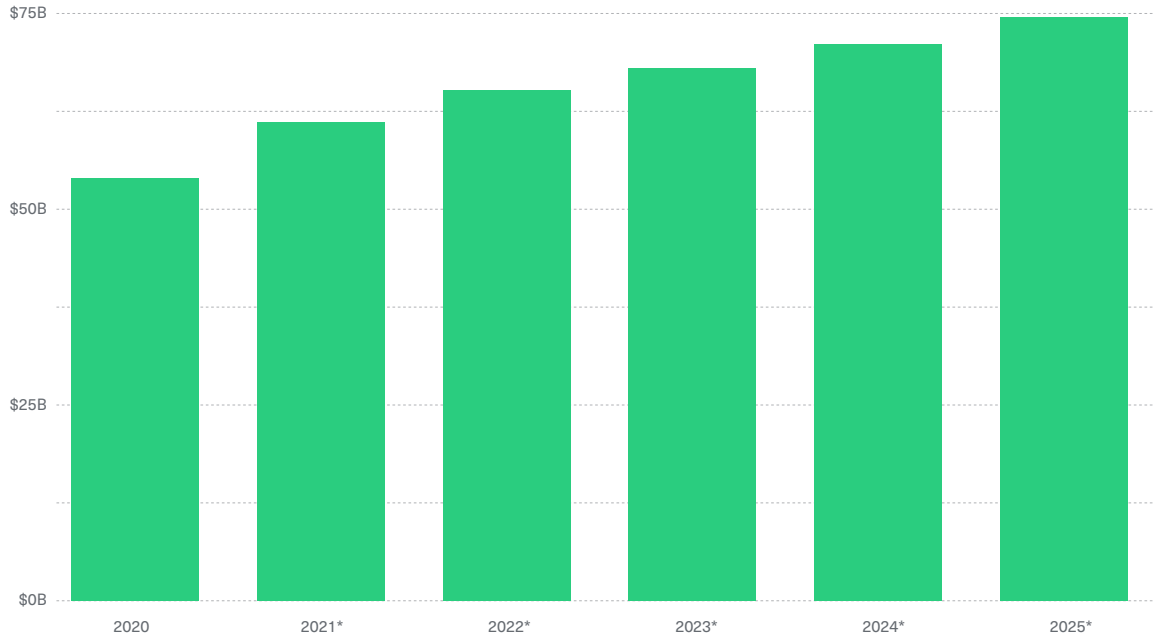
It means your digital sword, car, or artwork could be transferred and used across games. It could also be bought and sold on the open market. So if you lose your taste for a particular game, you could liquidate your holdings, rather than having them go to waste.

In-game purchases surpassed $50 billion worldwide in 2020, the last year for which there is data. And if users are willing to pay that much for in-game items that are captive to a single universe, imagine the size of the market if those items could be used in multiple games.

This is one of the reasons why crypto-based gaming is accelerating. Of the top ten gaming companies, eight have full-time teams working on crypto gaming. And several venture capital firms have already launched funds dedicated exclusively to Metaverse gaming, including a16z's recently launched $600 million fund.

Video gaming is big business, and crypto improves it.

Actual and Projected Consumer Spending on In-Game Purchases Worldwide, 2020 to 2025 (USD billions)



Source: Bitwise Asset Management with data from Statista (https://www.statista.com/statistics/558952/in-game-consumer-spending-worldwide/) as of September 7, 2021. *Note: Data for 2020 is actual; data for 2021-2025 is projected.

12

Bitcoin: An Emerging Digital Store of Value

Bitcoin offers investors a digital, non-sovereign store of value, which may be useful in certain portfolios.

Our final example harkens back to crypto's original use case.

Bitcoin was born out of the Global Financial Crisis of 2008/2009. Frustrated with the bailout of banks and the debasement of traditional currencies, bitcoin advocates dreamed of creating a new alternative: one untethered to the traditional financial system, and orthogonal to traditional banking crises, subjective monetary policy, hyperinflation, and authoritarian regimes.

You might be thinking: "That's what gold is for, right?"

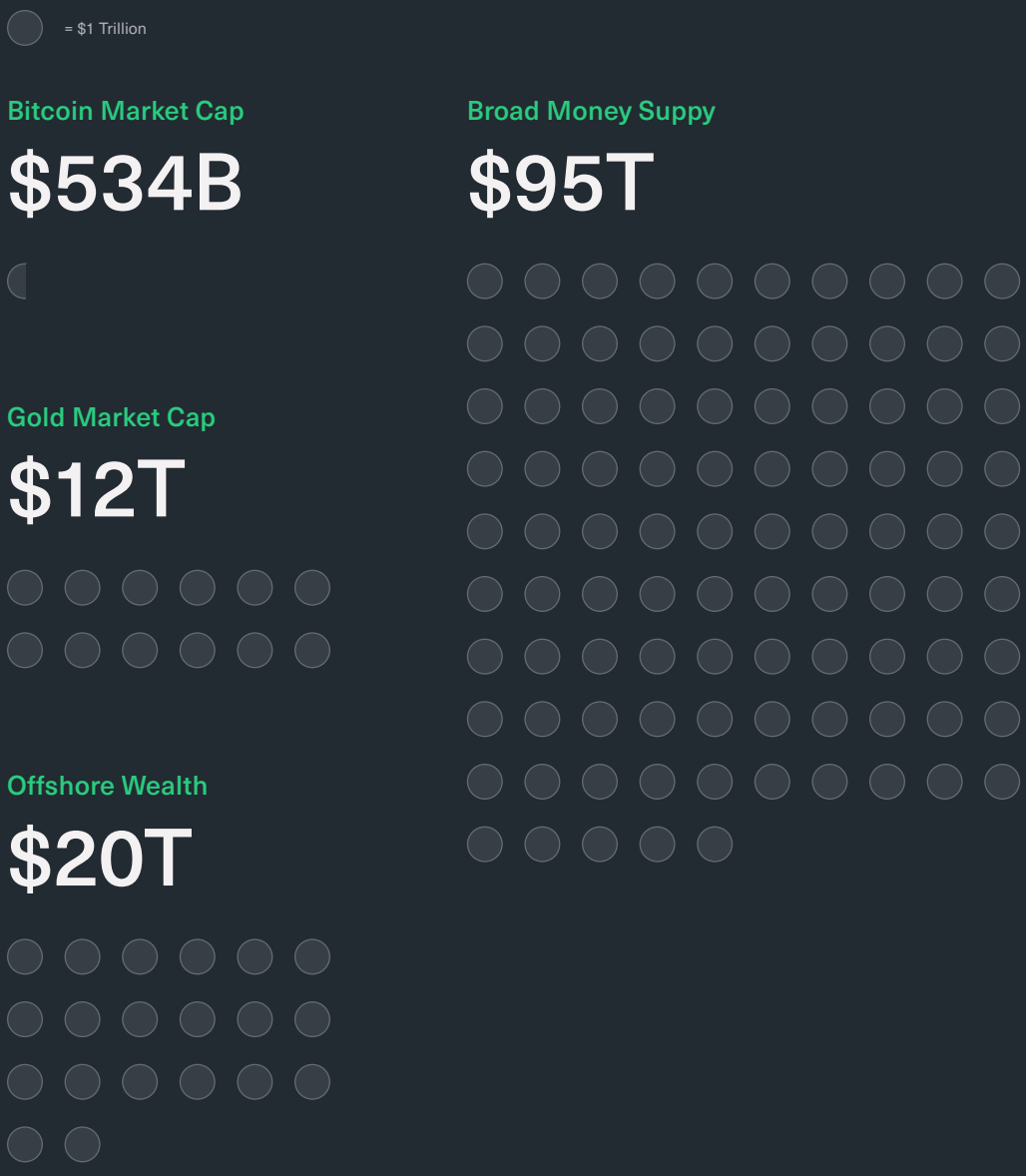
But gold is a precious metal—hard to mine, difficult to move, subject to counterfeiting, and expensive to store. In the 21st century, a digital alternative seems natural.

And for the past 14 years, bitcoin has been growing into this role.

From a cold start, it is now a multi-hundred-billion dollar asset that can be converted into local currency in more than 100 countries around the world. It has moved beyond its birthplace in internet chat rooms to be discussed in the gilded halls and on the investment research reports of the world's largest investment banks and most established institutions, from Goldman Sachs to JPMorgan to BlackRock and beyond. Regulated futures that track its price trade on the largest derivatives exchanges in the world, and financial giants like Fidelity, NASDAQ, Bank of New York Mellon and others now strive to custody bitcoin on the behalf of clients. While not everyone today accepts it as "mainstream," few expect it to disappear. It has found a place in the world, and its adoption is growing.

This last use case is powerful, if only because the potential market is gigantic. Gold, for instance, is a $12 trillion market, and it is just one of many markets bitcoin can address as its potential use as an enduring store of value continues to gain traction.

Relative Size of Bitcoin vs. Addressable Markets



Source: Bitwise Asset Management with data from Visual Capitalist, Family Wealth Report, and World Gold Council as of March 31, 2023

Conclusion

The crypto revolution began in 2008 when an anonymous computer scientist operating under the pseudonym Satoshi Nakamoto conceived of a system to create a digital peer-to-peer payments network. Satoshi's breakthrough, however, did more than just introduce the world to a digital version of cash; it created a new computing platform, a decentralized blockchain, that birthed entirely new possibilities, including new ways of transferring value, organizing communities, and storing data online.

We are still at the early stages of figuring out all the applications of this and subsequent breakthroughs. But we are figuring it out. From gaming, music, and social media to payments, DeFi, stablecoins, and beyond, there are real-world use cases for crypto involving billions of dollars being used by millions of people and companies around the world every day.

Importantly, these dozen use cases represent just some of those that we at Bitwise find most promising. And it's still early. Many of the biggest potential breakthroughs of crypto probably have not been invented yet. It's like the internet in 1993—The Amazons, Facebooks, Netflixs, and Googles of the next wave of technology are, more than likely, still incubating in the minds of the growing community of thousands of developers and entrepreneurs devoting their talents to inventing the future.

We can't wait to see what's next.

Risks and Important Information

No Advice on Investment; Risk of Loss: Prior to making any investment decision, each investor must undertake its own independent examination and investigation, including the merits and risks involved in an investment, and must base its investment decision—including a determination whether the investment would be a suitable investment for the investor—on such examination and investigation.

Crypto assets are digital representations of value that function as a medium of exchange, a unit of account, or a store of value, but they do not have legal tender status. Crypto assets are sometimes exchanged for U.S. dollars or other currencies around the world, but they are not currently backed nor supported by any government or central bank. Their value is completely derived by market forces of supply and demand, and they are more volatile than traditional currencies, stocks, or bonds.

Trading in crypto assets comes with significant risks, including volatile market price swings or flash crashes, market manipulation, and cybersecurity risks and risk of losing principal or all of your investment. In addition, crypto asset markets and exchanges are not regulated with the same controls or customer protections available in equity, option, futures, or foreign exchange investing.

Crypto asset trading requires knowledge of crypto asset markets. In attempting to profit through crypto asset trading, you must compete with traders worldwide. You should have appropriate knowledge and experience before engaging in substantial crypto asset trading. Crypto asset trading can lead to large and immediate financial losses. Under certain market conditions, you may find it difficult or impossible to liquidate a position quickly at a reasonable price.

The information herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice, or investment recommendations. You should consult your accounting, legal, tax or other advisors about the matters discussed herein.

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