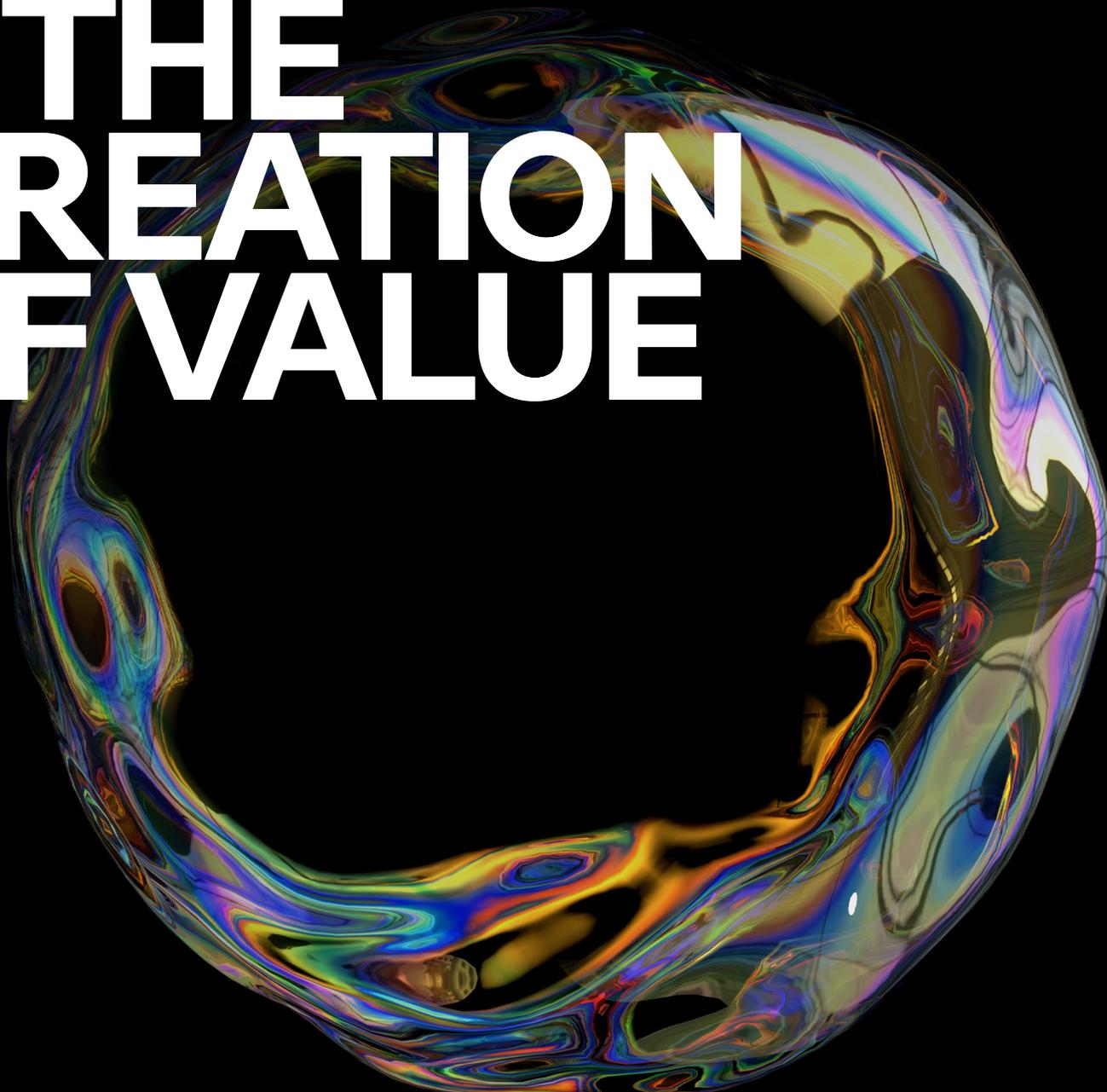


BRANDS, BLOCKCHAINS & THE CREATION OF VALUE



Ogilvy CONSULTING

Foreword

Blockchain technology and cryptocurrency have ushered in what is referred to as “decentralized finance” or DeFi, for those in the know. Who cares? Well, as we’ll show in this new paper, certainly everyone in business should care. Because everything is going to change—how businesses and brands work, how they connect with their customers, and how they create value. The changes will not be incremental either; they will be exponential—up there with the Industrial Revolution, the Internet, & AI combined.

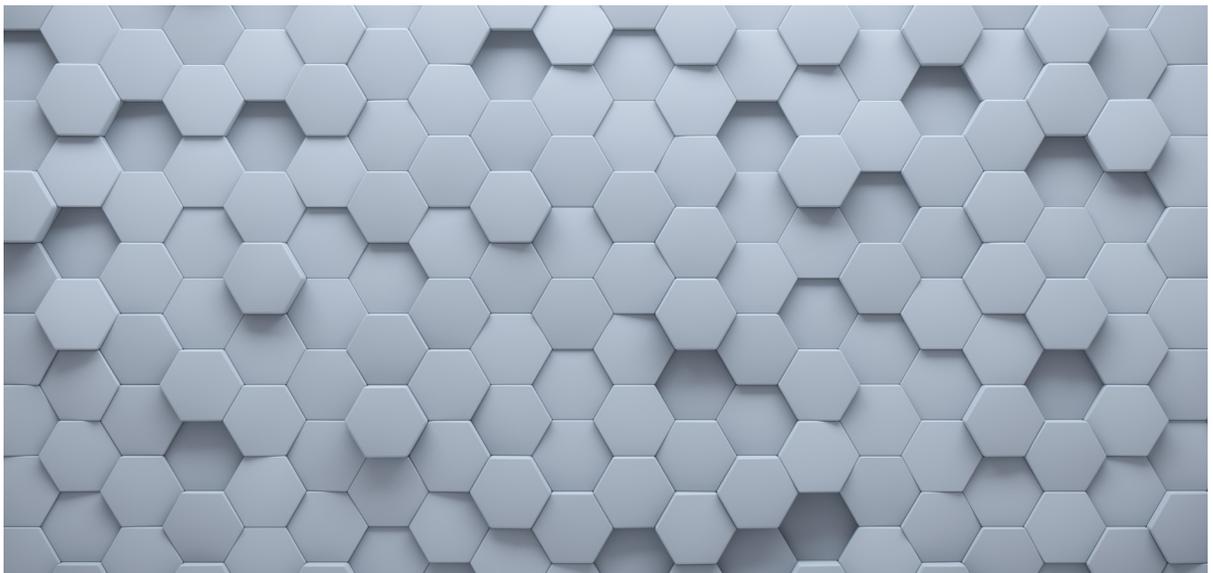
While the decentralized or distributed nature of this technology is important, equally critical is what experts point to as the “immutable trust” that underpins blockchains.

The immutability of a blockchain ledger means that, through cryptography, every

entry of data is a permanent, indelible, unalterable and secure history of transactions.

What does this add up to for business? Three important game-changers. Money can now move in a trusted system without middlemen or friction; money can now be programmed like software to execute contracts; and digital property rights can be established and governed in an environment of immutable trust.

The implications will be huge for brands as well. Brand relationships are built on trust, authenticity, value exchange, and ultimately love of a brand. So, as brands begin to operate in the world of DeFi, we will need to communicate how they change, what becomes possible in decentralized brand experience, and we’ll need to carefully protect the integrity of brands—in a time when human uncertainty is at an all-time high.



The recent volatility in cryptocurrency markets tends to create a swirl of negativity around blockchain technology and the emergence of DeFi. In this environment it is perhaps tempting to reject the entire blockchain category. However, as Gartner rightly points out, "... coin prices should not be conflated with the value of (blockchain) technology."

There will be some technical definition in this paper, but what we really want to achieve is a way to think about and interpret the impact of blockchains on the future of business in Web3 and the Metaverse. We'll explore the opportunity for brands and businesses to forge an entirely different kind of relationship with their customers—a partnership in which the parties drive bottom line growth and co-create real, incremental economic, commercial and cultural value for each other. And we'll extract from an overwhelming amount of information, the key questions that brands, marketers and businesses can be asking now to prepare for the future.

At Ogilvy Consulting, we focus on growing businesses by taking brands into the future. Every brand and business model is going to be affected by blockchain technology and the new DeFi environment. The potential for business innovation as the use of blockchains

become commonplace (and this is happening very, very fast) is quite simply, huge.

Our consultants are here to help you capitalize on the new potential that brands have with blockchain, crypto, and DeFi:

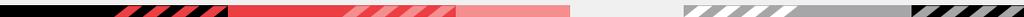
- We can run basic training workshops for teams who need to understand these new environments.
- With our creative partners, we can develop new creative approaches for brand experience that incorporate all the potential of blockchain technology – from consumer to b2b to b2g and beyond.
- We can help build future-back strategies that incorporate new business models that could never have existed before
- Above all, we can design innovative new products and services, and ways to create far deeper bonds between brands and customers.



A handwritten signature in black ink that reads "Carla".

CARLA HENDRA
Global CEO
Ogilvy Consulting

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Introduction

We live in exponential times. The speed of current technological innovation has no historical precedent; breakthroughs come at an exponential versus a linear pace.

And the combinatorial power of these technological innovations is transforming our economic models, social interactions, and the very relationship between physical and digital worlds.

WE ARE WITNESS TO:

THE RAPID EXPANSION OF DECENTRALIZED ECONOMIC ACTIVITY

Blockchain technology and cryptocurrencies have ushered in decentralized finance (DeFi). The adoption rate and creation of new value is staggering. The total value locked in DeFi is \$44 billion.¹ There are over 20,000 cryptocurrencies with a total market capitalization over \$1 trillion.² The non-fungible marketplace is valued at \$3 billion in value, rising from almost nothing in 2019.³ More than 40 blockchain unicorns were born in 2021 alone.⁴

THE DEFINITIVE EMERGENCE OF WEB3

Web1 connected people with information and we got the internet. Web2 connected people to each other and we got social media and eCommerce. Web3, a decentralized online ecosystem enabled by blockchain technology, connects people, places and things, be they physical or digital. The promise is of a user-

centric, interoperable, transparent and safe internet that can create new economies, new classes of products and new services.

THE INEXORABLE MARCH INTO THE METAVERSE

Built on the bedrock of blockchain technology and enabled by Web3, DeFi, 5G, AI, AR, and VR, the metaverse is rising before our eyes: a network of virtual worlds for a vast array of human activity: playing, working, connecting, collaborating, learning, buying. The metaverse will likely infiltrate every sector in some way in the coming years and, by 2025, will represent a \$400 billion revenue opportunity that will be increasingly hard for businesses to ignore.⁵

As this decentralized digital landscape unfolds, it affords businesses and brands historic opportunity to drive bottom line growth and to create entirely new value for, and with, their customers. Blockchain technology is foundational to the transformational forces of decentralized finance, Web3 and, ultimately the metaverse. Understanding it, and the powerful tools it has spawned, is the key to unpacking opportunity specific to your business.

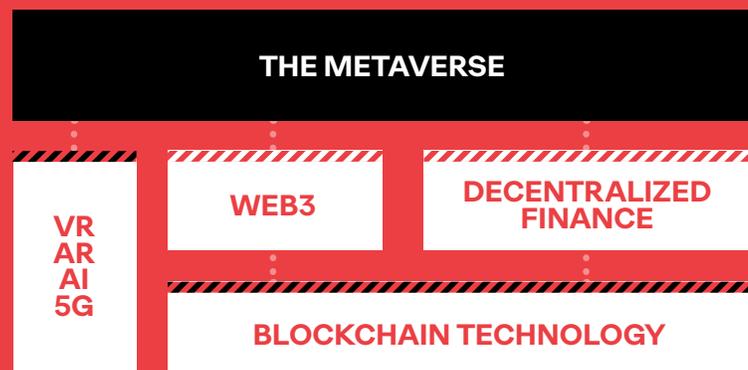
Brands, Blockchains & The Creation of Value shines light on the myriad capabilities, applications and benefits of blockchain technology for business. It charts a course through decentralized finance and Web3 to unpack fresh opportunities for brands to harness the technology to create a symbiotic and self-propelling circle of value with their

customers. And finally, it provides a glimpse into the metaverse and frames key questions for forward-thinking executives.

The velocity of today's technological tsunami and the hype surrounding it can make it difficult to discern the opportunity, to separate the noise from the light. This paper provides inspiration for that heavy lifting.

FOUNDATIONS OF THE METAVERSE

-  Foundational Technologies
-  Foundational Infrastructure



“ ”

The great creation of value (through the use of blockchain technology) is yet to come. Remember with the internet, we did not immediately understand the potential for such use cases as e-commerce, social media and cloud computing.

– DON TAPSCOTT, FOUNDER, BLOCKCHAIN RESEARCH INSTITUTE



THE TRUST MACHINE

The Trust Machine

“The blockchain lets people who have no particular confidence in each other collaborate without having to go through a ... central authority. Simply put, it is a machine for creating trust.⁶” –The Economist

Blockchain technology and its most prominent application to date, the digital currency Bitcoin, were introduced in 2008 when cryptographer and computer scientist Satoshi Nakamoto published technical protocols that enable peer-to-peer transfer of digital assets.

As the internet allows us to digitally transfer information, so the blockchain allows us to digitally transfer items of worth. Some have christened it “The Internet of Value.”⁷

At its most basic, the blockchain is a decentralized digital ledger. The protocols that govern it guarantee security, transparency, authenticity, and credibility. Trust is built into this “machine.”

SATOSHI NAKAMOTO SOLVES THE PROBLEM OF DOUBLE SPENDING

The internet allows us to share documents, video, and photos but not items of value. When a document is shared over the internet it is a copy; the originator retains the original. Obviously, this won't work with money because if I owe you ten dollars it's important that the ten dollars transfer from me to you and that I don't have the ten dollars to send to someone else. That would be a “double spend.” Through the internet we have been able to transfer value only through middlemen who verify possession of funds and clear transactions for a fee (PayPal, Visa, Western Union). Through blockchain technology, Satoshi Nakamoto solved the problem of double spending with decentralized verification protocols enabling peer-to-peer transfer of value unencumbered by third-party fees.

Here's How It Works

There are different types of blockchains but they all have one thing in common; encrypted transactions are initiated and accepted peer-to-peer.

There is no financial middleman or bank that establishes trust between the parties. Instead, trust is established through the decentralized distributed ledger that is visible to anyone within the worldwide network of computers.

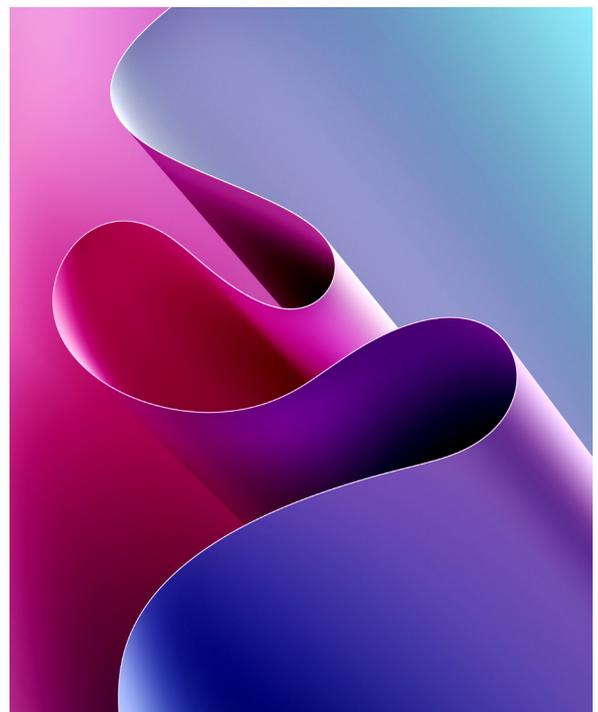
When a transaction is initiated, this worldwide network of computers is required to validate the transaction, to come to a consensus that the transferring party actually has the asset to transfer. On most blockchains, the consensus is reached by Proof of Work (PoW), meaning the network of computers race to solve complex algorithms to validate the transaction. Anyone with the necessary computer power can participate in the verification process (aka become a network "node").

When the network nodes reach consensus that the digital ledger reflects the transferring party has the asset to transfer, the transaction is validated and executed. And the digital ledger is updated simultaneously across the network.

The network is able to validate, timestamp and clear a transaction instantly because that activity happens immediately within the digital ledger itself, not between institutions. After the transaction is cleared, the network cryptographically links it to the prior transaction and publishes them in blocks. Each block is linked to the previous block and so an immutable chain is established. (Hence, the name blockchain technology.)

No information in a block can be altered without changing all of the blocks prior to it, making it virtually impossible to hack.

The protocols of blockchain technology ensure **immutable trust**. **Security** is guaranteed through encrypted transactions that are pseudonymous and sealed into blocks. **Transparency** is ensured through the open, public decentralized ledger that anyone can view. **Authenticity and credibility** are established through a permanent, unalterable record of events.



A WORD ABOUT “NODES” AND “MINERS”

As noted, anyone with the requisite computer processing power can establish a “node” on the worldwide network that validates transactions on the distributed ledger. People that run nodes are called “miners.” Each time a miner solves the complex math problems necessary to authenticate an entire block of transactions, the miner is rewarded with a newly minted, pre-determined amount of cryptocurrency (the type of which is dependent on the blockchain in use). This cryptocurrency reward is important. It acts as an incentive for miners to contribute their considerable computing power and energy to validate transactions. It is the distributed authority of miners to validate transactions that sustains the self-governing nature of the public decentralized ledger.

As of this writing, a miner’s reward for authenticating an entire block of transactions on the Bitcoin Blockchain is 6.25 Bitcoin per block, or about \$152,700. Not bad. But it takes a lot of expensive computing power and energy to support a mining operation. The majority of miners are actually big companies with acres of data centers; not freelancers operating out of their basements.

It’s counter-intuitive to think that a decentralized, distributed ledger is more secure than one tightly controlled by one entity in one place. However, a centralized institution is actually more vulnerable to hacking because a perpetrator need only creep into one main system, as we have so alarmingly learned with the hacking of VISA, JPMorgan Chase, Target and others. A single point of control is also a single point of failure that can expose companies and their customers to disastrous security breaches.

Distributing the blockchain digital ledger across tens of thousands of participating nodes who are anonymous protects the data. It’s impossible to hack all of the nodes at one time. And if any one node is attacked, the intrusion can be detected by the rest of the nodes and the activity associated with the attack invalidated.

It’s critical to highlight that while we frequently read of cryptocurrency theft, these hacks are not taking place on blockchains themselves which are immutable and secure. The hackers exploit vulnerabilities in the software of third-party cryptocurrency wallet providers and cryptocurrency exchanges. This underscores the importance of thoroughly vetting third-party cryptocurrency partners.

DISTINGUISHING CHARACTERISTICS OF THE BLOCKCHAIN

- Secure
- Transparent
- Encrypted & Pseudonymous
- Easy & Accessible
- Peer-to-Peer Transfer
- Instant, Frictionless Settlement

Three Powerful Functions

Viewing blockchain technology as simply a technical protocol that enables only the transfer of digital assets masks its wider strategic business application.

Examining the specific functionality and characteristics of blockchain technology, separately and in combination, gives us a broader perspective on its potential value.

Essentially, “unpacking” the blockchain is the key to imagining possibilities and understanding the fundamental impact it can have on your business.

1. THE BLOCKCHAIN AS A DECENTRALIZED LEDGER

Blockchain technology enables the immediate transfer of digital currency through digital tokens on a decentralized digital ledger. Importantly, digital tokens can also be programmed to carry other units of value, not just currency. Any asset or piece of unique value that can be digitized can be transferred on the blockchain: land and building titles, deeds, a shareholder vote.

2. THE BLOCKCHAIN AS A DISTRIBUTED DATABASE

The blockchain can time stamp, notarize and permanently record information other than transactions of value. So, in addition to being a distributed ledger, it is also a distributed database that can house unchangeable records of all kinds: health records,

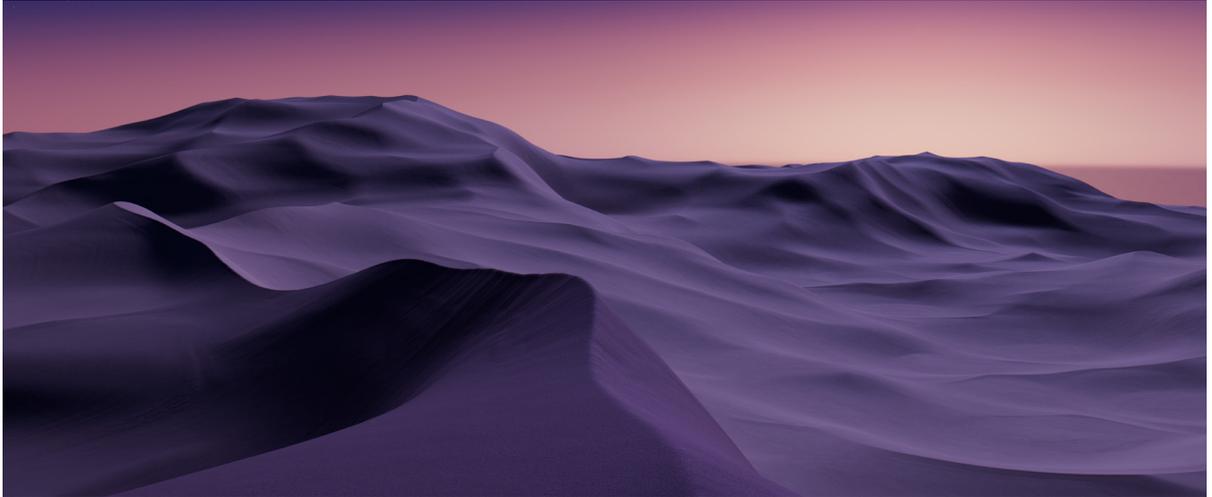
shareholder votes, land titles, provenance documentation, and the like. This opens tremendous opportunity for businesses in areas outside of financial transactions on a decentralized digital ledger.

Blythe Masters, a seasoned Wall Street executive and former CEO of Digital Asset Holdings says, “I had an ‘aha moment’ where I began to appreciate the potential implications of the technology. While the cryptocurrency application of the distributed ledgers technology was interesting, the underlying database technology itself had far broader implications.”⁸

HEALTHCARE & A DISTRIBUTED DATABASE

Healthcare is one industry that can be dramatically improved and made more efficient and effective for all parties through blockchain technology and its unique functionality as a distributed database.

At the most personal level, patient records can be uploaded, updated and immutably stored on private blockchains. At a routine doctor’s visit, for example, blood pressure readings, weight, EKG results could be recorded as “transactions” that the physician validates and timestamps onto the blockchain. Patients themselves



can control the access to their records by doctors and hospitals of their choosing. Communication between patients and healthcare providers becomes frictionless, saving time and improving efficiency in delivering necessary care.

These new processes and interoperability will dramatically improve the health insurance industry. Bruce Broussard, President & CEO, Humana says, “With (blockchain) transparency and automation, greater efficiencies will lead to lower administration costs, faster claims and less money wasted.”⁹

And health research can be dramatically transformed. Consider that the pseudonymous nature of the blockchain would enable vast pools of patient data to be aggregated. These pools could be mined for factors that impact outcomes, determining optimal treatment options based on genetic markers, and identifying behaviors that influence preventative medicine.

3. THE BLOCKCHAIN AS A “SMART” CONTRACT PLATFORM

“Smart” contracts are an essential and unique functionality of blockchain technology and innumerable possibilities open up through their power. Smart contracts are contracts that can be programmed directly onto the blockchain and automatically executed as terms are met. Simply put, smart contracts program trust, translating it into use for specific business circumstances.

A smart contract is not the same as a contractual agreement. It is enabling software code that enforces and self-executes terms of legal agreements as stipulated by contracting parties. It is dynamic, as opposed to static, in that it can be programmed to automatically interact with databases and other sources of information to make determinations on whether terms have been met and the contract should be executed. It is this dynamic agency that differentiates smart

contracts from the online password protected static contractual agreements available through the internet today.

Because smart contracts are peer-to-peer and instantaneously settled, they have a huge role to play in increasing the efficiencies and lowering costs in such industries as Real Estate, Automotive and Manufacturing.

Importantly, because smart contracts are transparent on the blockchain, it is public record that the contracting parties have met their terms. The details of the transaction cannot be accessed, but the fact that each party fulfilled its obligation can. In this way, blockchain transparency acts to establish the reputations of individuals and businesses. In fact, transparency in meeting one's business

obligations over time, as immutably recorded by the blockchain, will be a major lever of control for corporations wishing to build or restore their reputations.

The blockchain as a decentralized digital ledger. The blockchain as decentralized database. The blockchain as a platform for smart contracts. Each of these three functions enable businesses to imagine new paths to innovation and growth based on peer-to-peer trust.

Says Arvind Krishna of IBM, "Blockchain technology is not really about digital payments, **but establishing trust in transactions in general**. It's a technology that can change the world."¹¹

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The notion of shared public ledgers may not sound revolutionary or sexy. Neither did double-entry book-keeping.¹⁰

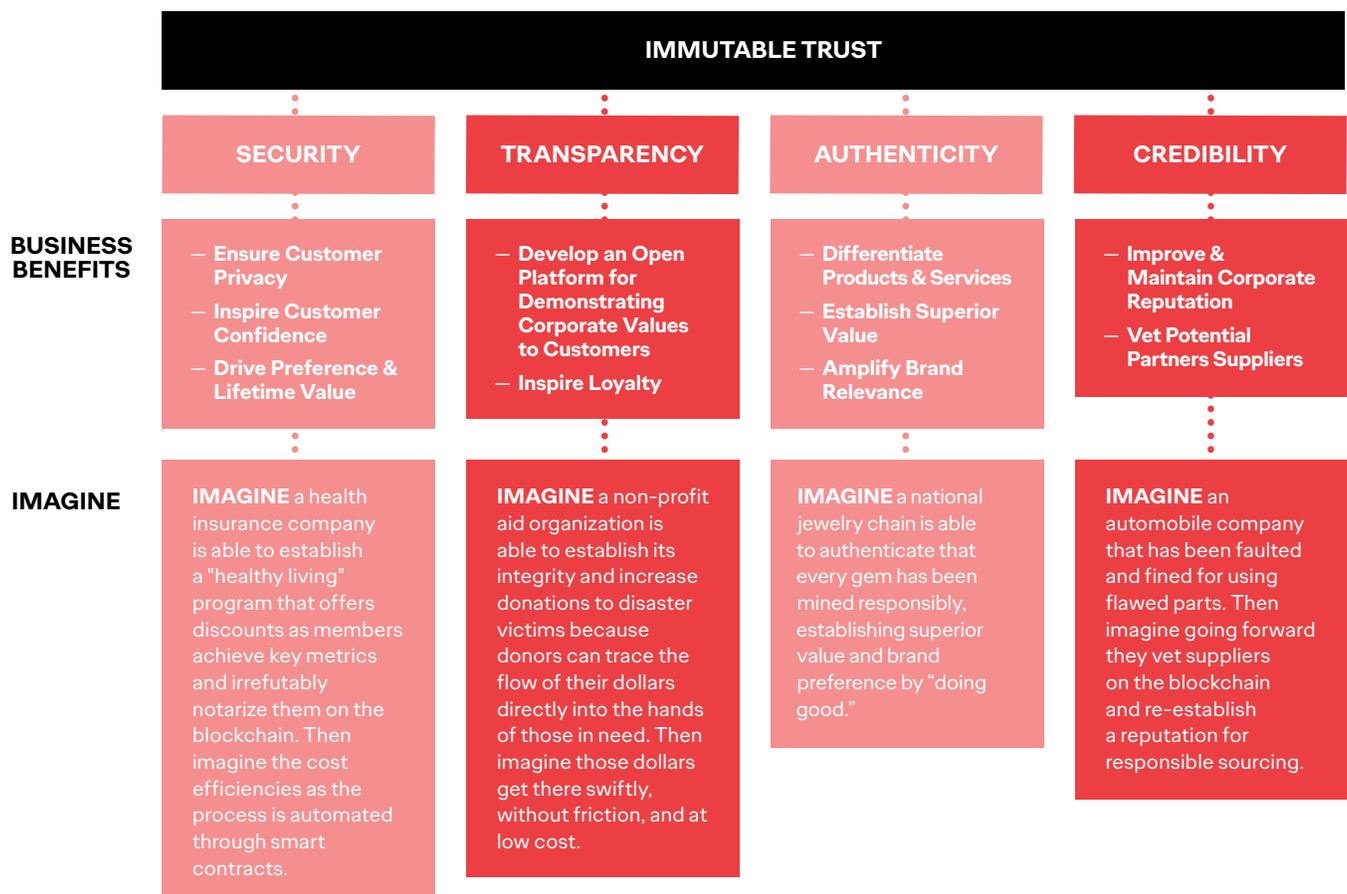
- THE ECONOMIST

What Can You Do from a Place of Immutable Trust?

Immutable trust is a rare opportunity. 58% CEO's worry that a lack of trust in business will harm their company's growth.

And in an increasingly digitized world, 69% of CEOs think it's harder for businesses to gain—and retain—people's trust.¹² VW, Uber, Chipotle and Wells Fargo have all learned the hard way about the value of trust to the bottom line.

The most empowering characteristic of the blockchain is immutable trust and it is built on the characteristics of security, transparency, authenticity and credibility. Each represent real business opportunity.



TRUST IS THE FOUNDATION OF A BRAND

Trust is the foundation of a brand.
Trust in the experience that a brand promises.
Trust that the experience will be consistent.
Trust that the brand expresses and shares our values.

And the blockchain is a Trust Machine.

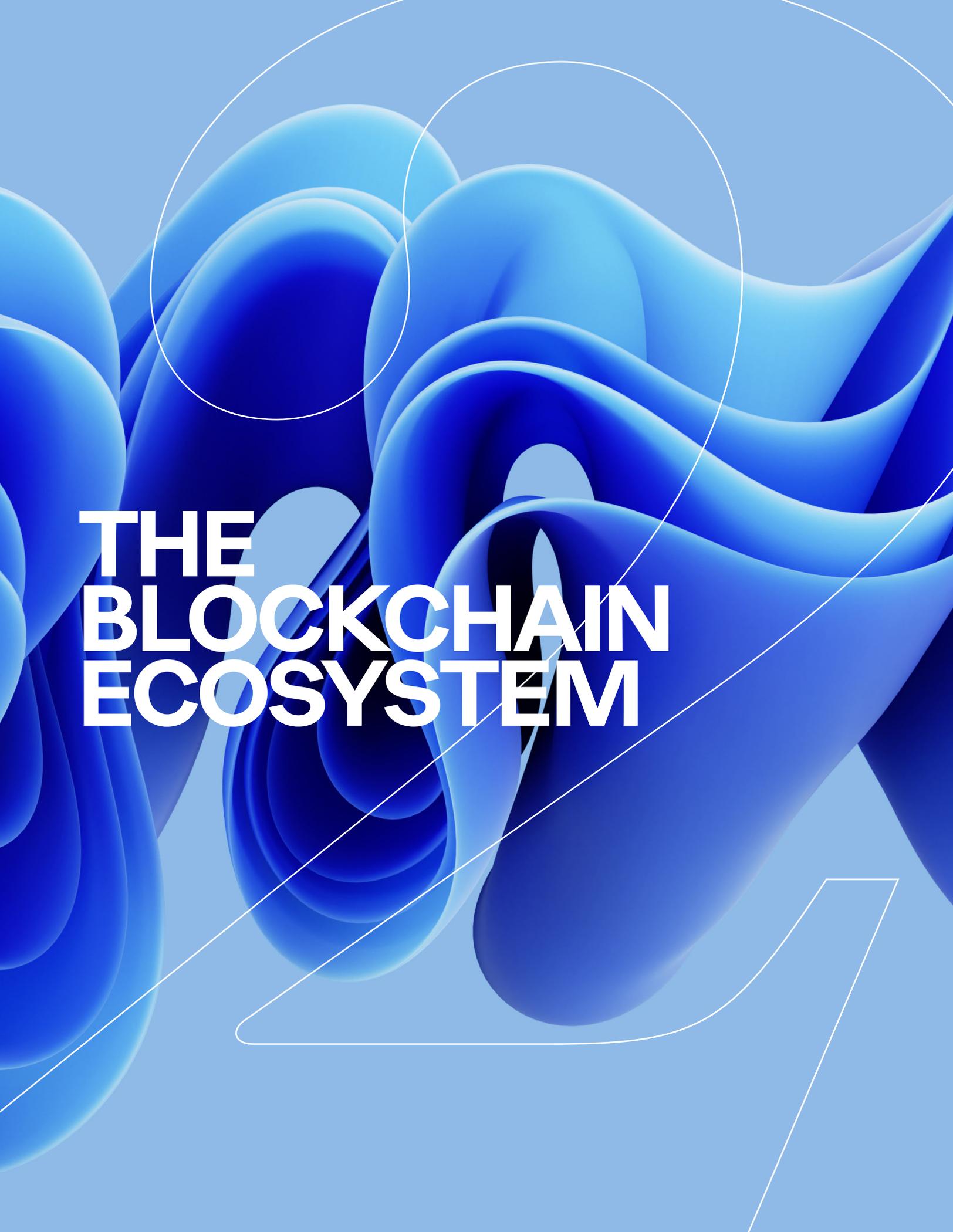


Increasingly, consumers and customers are attracted to brands that meet their needs not only on rational and emotional levels, but on a social level as well. From Toms to UnderArmour, brands that do, and do good, are able to establish and increase brand relevance.

Consider the ways blockchain-enabled trust can help marketers build brands with stronger bonding capability than ever before:

- Irrefutably trace the provenance of materials and ingredients to their source
- Indisputably document that a brand's supply partners employ workers under acceptable conditions
- Transparently display the charitable giving and activities of the brand
- Instantly verify that a brand is environmentally, socially and economically responsible
- Securely transact in ways that put customer in control of their personal data

Figuring out ways to irrefutably prove that your brand is trustworthy is critical to establishing and maintaining a brand in our new borderless world. The blockchain can help you get there.

The background is a vibrant blue with a gradient. It features several large, overlapping, wavy, 3D-like shapes that resemble liquid or flowing fabric. These shapes are rendered with soft shadows and highlights, giving them a sense of depth. Overlaid on this are several thin white lines: two large circles in the upper half, a diagonal line crossing from the bottom left towards the top right, and a white outline of a rounded rectangle in the bottom right corner.

THE BLOCKCHAIN ECOSYSTEM

The Blockchain Ecosystem

“The industrial-age solution of companies and vast government bureaucracies coordinating human activity and the movement of value in the economy and in society is coming to an end. Blockchain enables new decentralized governance systems that are more inclusive, participatory, transparent, and trustworthy.”¹³

Blockchain technology is the foundation of the emerging global decentralized financial system (DeFi). The burgeoning capabilities that have been built on top of blockchains form a complex ecosystem that both decentralizes and improves upon traditional financial functionality as well as enables entirely new business opportunity that extends beyond the realm of finance. This blockchain ecosystem will be the decentralized commercial engine of Web3.

BLOCKCHAINS

There are two basic types of blockchains: public and private. A public blockchain is just that: open to everyone and anyone who wants to transact and/or verify as part of the network. It is permissionless, meaning there are no barriers to participation. A private blockchain is one that is restricted within a company or limited to a group of cooperating companies. It is permissioned as one needs credentials to participate. Our focus is on public blockchains, the two most prominent of which are the Bitcoin Blockchain and the Ethereum blockchain.

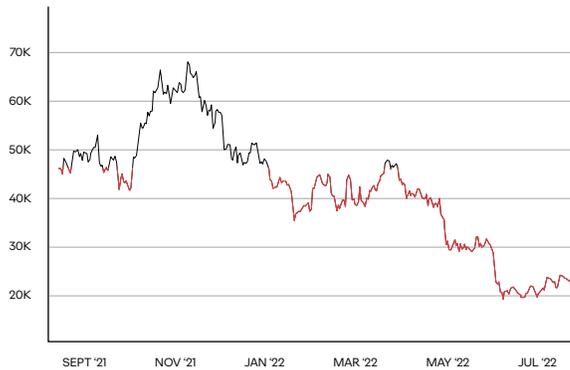
THE BITCOIN BLOCKCHAIN

The Bitcoin Blockchain is so called because it is the blockchain on which the digital currency Bitcoin rides. It was the first blockchain, born of Satoshi Nakamoto’s white paper in 2009.

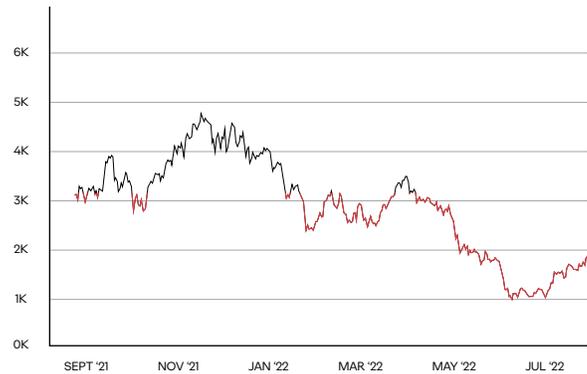
Bitcoin is one example of a digital asset that can be transferred across this blockchain. It is not a national fiat currency backed by any one government. Part of what makes Bitcoin valuable is that there is a finite supply. Supply is limited by virtue of the way it is “mined” and by the fact that Satoshi Nakamoto capped the number of Bitcoin at 21 million to counteract inflationary pressure.

As of this writing, one Bitcoin is worth \$24,375 although the price is highly volatile having soared above \$64,000 in late 2021 only to drop dramatically to today. And, every day around the globe, there are about 275,000 Bitcoin transactions, worth a total of about \$39 billion.¹⁴

BITCOIN PRICE INDEX: SEPT 2021—JUL 2022



ETHEREUM PRICE INDEX: SEPT 2021—JUL 2022



ETHEREUM

Ethereum is the second major public blockchain with its own digital currency, Ether (ETH), and has properties that are distinct from the Bitcoin Blockchain. Ethereum is a powerful open-source development platform on which programmers can build a diverse array of decentralized applications (dApps) due to its core innovation, smart contracts. Vitalik Buterin, the founder of Ethereum says, “Ethereum introduced general-purpose programmability, allowing blockchain-based contracts that can hold digital assets and transfer them according to predefined rules.”¹⁵

Since its launch in 2015, Ethereum has attracted countless innovators who have launched thousands of projects, products, tokens and dApps. Almost 80% of NFTs are created (“minted”) on the Ethereum blockchain. As of this writing, one ETH is worth \$1,900. And, every day around the globe, there are about 1.1 million ETH transactions, worth a total of about \$24 billion.¹⁶

Ethereum has emerged as the bedrock blockchain layer of what advocates say will be the new, open-source, decentralized internet—Web3. Alexis Ohanian, the founder of Reddit says Ethereum is “giving the world some of the most powerful Legos it’s ever seen.”¹⁷

THE BLOCKCHAIN LANDSCAPE

It's important to note that while Bitcoin Blockchain and Ethereum are the two most prominent public blockchains, a definitive designation of one as better than the other isn't appropriate. It's not a question of "either/or" but rather of "both/and." Each are attractive for different reasons: Bitcoin Blockchain carries Bitcoin, the most widely adopted cryptocurrency; Ethereum is a powerful open-source development platform, a launching pad for creativity and innovation.

A critical distinction between all blockchains is the method by which their participating network nodes reach consensus on the validity of transactions. Bitcoin Blockchain and Ethereum use Proof of Work (PoW) to reach consensus, which requires computers to expend vast amounts of energy. An alternative to this environmentally unfriendly consensus mechanism is Proof of Stake (PoS) in which

the validating computer nodes actually stake some of their own cryptocurrency to get the opportunity to validate. PoS is much less energy intensive and some blockchains like Cardano, Polkadot and Avalanche use it.

Importantly, Ethereum is looking to make the transition from PoW to PoS (dubbed "The Merge") by September 2022. This would be significant as 80% of decentralized finance activity takes place on Ethereum and so the environmental implications of blockchain technology could be meaningfully mitigated. The shift to PoS is predicted to reduce energy consumption on Ethereum by 99%.

For context, the chart below compares the some of the leading blockchains in terms of size, consensus mechanism, efficiency and energy consumption. Each blockchain favors certain needs and use cases over others. Accordingly, businesses and brands should consider their own criteria carefully when choosing a platform.

BLOCKCHAIN	TOKEN	MARKET CAPITALIZATION*	CONSENSUS MECHANISM	EFFICIENCY: transactions / sec**	ENERGY: consumption per transaction
Bitcoin Blockchain	Bitcoin	\$465 billion	Proof of Work	7 / sec	Extremely High: 1,173 kwh elec
Ethereum	ETH	\$230 billion	Proof of Work	30 / sec	Moderate: 30 kwh elec
Cardano	ADA	\$18 billion	Proof of Stake	250 / sec	Low: 0.5 kwh elec
Solana	SOL	\$15 billion	Proof of History	2,700 / sec	Extremely Low: 0.17 kwh elec
Algorand	ALGO	\$3 billion	Proof of Stake	1,000 / sec	Fully Carbon Neutral***

* CoinMarketCap as of August 11, 2022

** For comparison, VISA executes approximately 1,700 / sec

*** Algorand asserts negligible carbon emissions from PoS consensus mechanism offset by purchased carbon credits



A BLOCKCHAIN TO WATCH

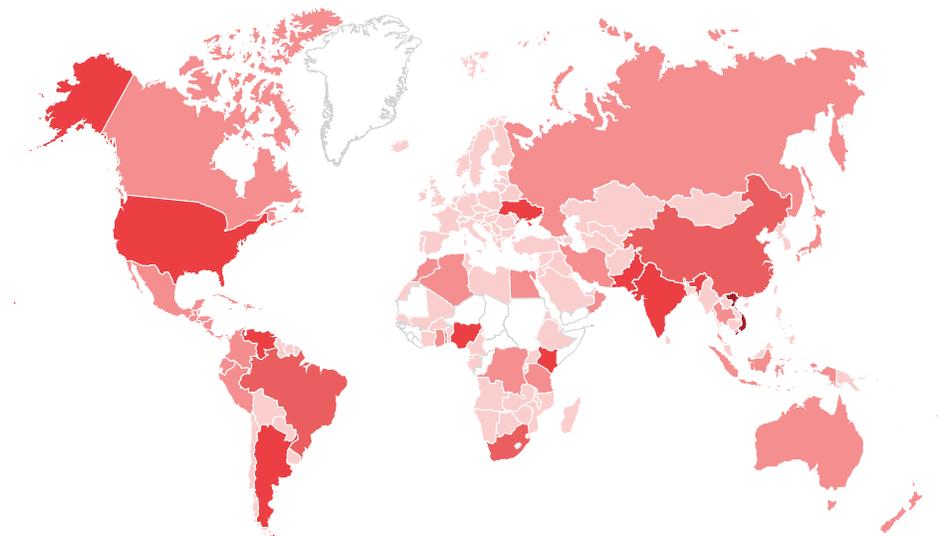
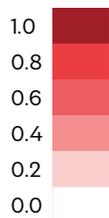
In light of concerns over energy consumption, Algorand is an interesting blockchain to watch as it claims to be verifiably carbon neutral. Employing the Proof of Stake consensus mechanism, carbon emissions from the Algorand blockchain are negligible and Algorand asserts that even the small amount of emissions are completely offset with carbon credits. Moreover, Algorand is making big moves to drive awareness and adoption of its platform. In May 2022 Algorand and FIFA inked a deal that makes Algorand the exclusive blockchain partner of FIFA. Algorand will assist FIFA with its digital assets strategy and FIFA will make sponsorship assets, including advertising and promotional opportunities available to Algorand. This puts Algorand at the forefront of the largest soccer association in the world, able to promote its token to hundreds of millions of fans across the globe.

THE CRYPTOCURRENCY LANDSCAPE

There are over 20,000 cryptocurrencies in circulation,¹⁸ although the majority of them have little to no following or trading volume. Here’s a look at those that are most widely circulated and where global adoption is most prevalent.

NAME	PRICE	MARKET CAP
1. Bitcoin	\$24,375	\$465 billion
2. Ethereum	\$1,900	\$230 billion
3. Tether	\$1.00	\$65 billion
4. BNB	\$325	\$53 billion
5. USD Coin	\$1	\$53 billion

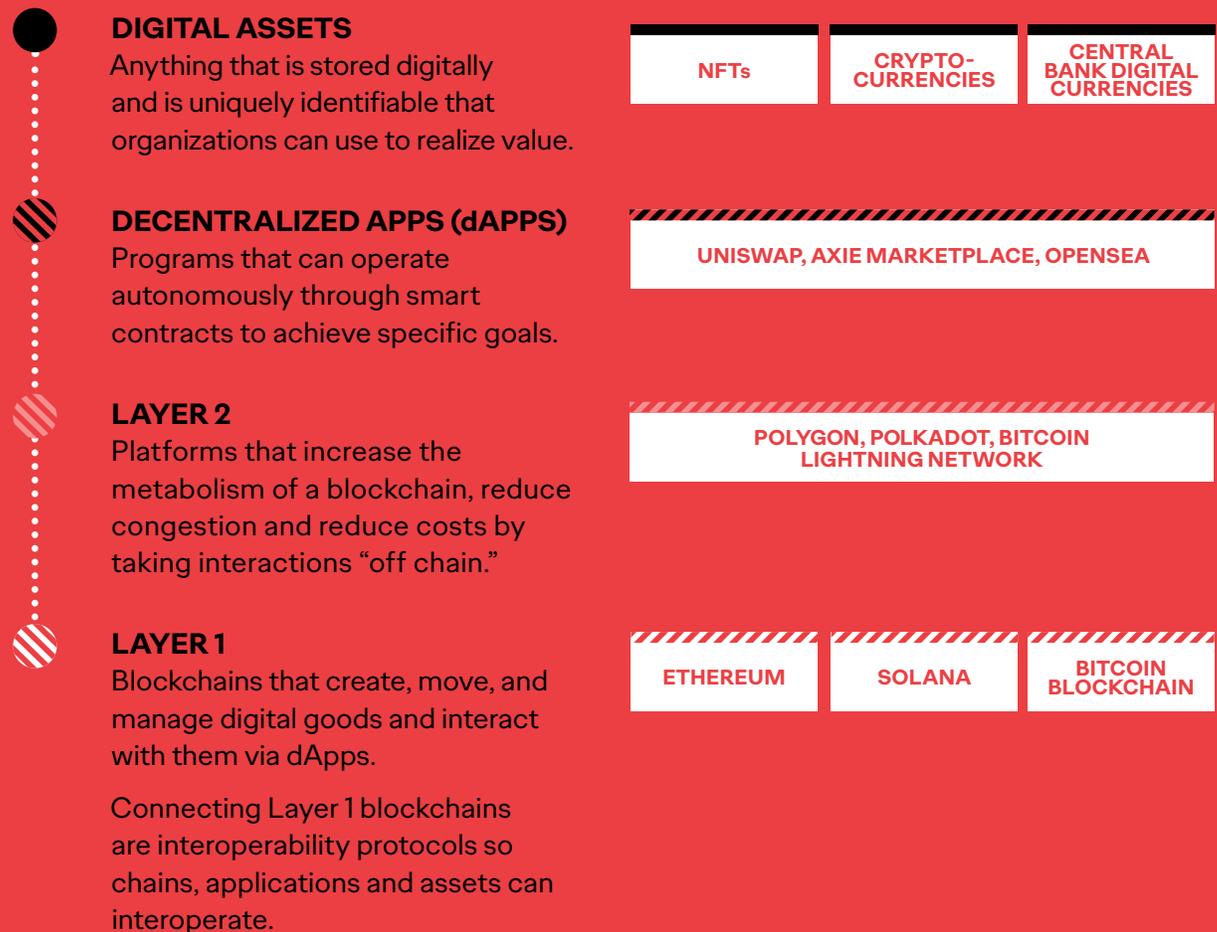
GLOBAL ADOPTION INDEX



THE BLOCKCHAIN STACK

The blockchain stack is made up of interlocking layers that enable many different kinds of functionality. It consists of Layer 1 blockchains onto which Layer 2 protocols, dApps and unique digital assets are built.

The interoperability protocols of Layer 1 and the scaling capability provided by Layer 2 are essential to the development of Web3 and the growth of DeFi.



THE IMPORTANCE OF INTEROPERABILITY

The interoperability protocols connecting Layer 1 blockchains are essential to enable data and value to be transferred across different networks yet they are still very much a work in progress. An example underscores the incredible importance of creating secure interoperable protocols:

As noted previously, the two biggest blockchains are the Bitcoin Blockchain and Ethereum. Bitcoin supports the most widely used cryptocurrency; Ethereum supports the most dApps and a large proportion of DeFi activity. Without interoperability, users of the world's largest crypto can't use their funds within the world's largest DeFi ecosystem. Users can't even transact Bitcoin

for ETH without going through a centralized cryptocurrency exchange.¹⁹

More broadly, interoperability is critical to attract widespread adoption of blockchain and functionality between businesses and organizations that employ different blockchains. Imagine if your Android phone couldn't call an iPhone; that would severely depress adoption of and use of cell phones.

Consider the incredible benefits of interoperability from both a B2B and B2C perspective across sectors—healthcare, law, real estate, supply chain and others—when smart contracts can be executed seamlessly between multiple blockchains. Moreover, by definition, interoperability spreads activity across blockchains and sidechains, relieves congestion on one main blockchain and therefore enhances scalability.



TAXONOMY OF DIGITAL ASSETS²⁰

Cryptocurrencies are just one type of digital asset. There are many different kinds of digital assets at work in the various layers of the blockchain stack. It's important to recognize their characteristics and roles.

Cryptocurrencies: Function like cash for the internet and a final settlement layer for the crypto economy. Bitcoin is by far the leading cryptocurrency with a market capitalization of over \$465 billion.

Protocol Tokens: These are the native tokens of Layer 1 blockchains and used to both power transactions and secure these networks. The most prominent example is Ether (ETH).

Governance Tokens: These tokens give holders say in the governance of dApps and decentralized autonomous organizations (DAOs).

“ ”

Crypto may look like a speculative casino from the outside. But that distracts many from the deeper truth: the casino is a Trojan horse with a new financial system (DeFi) inside.²¹

Non-Fungible Tokens: NFTs are unique non-interchangeable digital assets which may also represent ownership of a physical product or experience.

Exchange Tokens: Crypto-exchange tokens are native to their centralized exchanges such as Binance Coin (BNB) for Binance.

Security Tokens: Digital, liquid contracts for fractions of any asset that already has value, like real estate, or corporate stock. They are transforming markets for stocks, bonds, and derivatives.

Stablecoins: Crypto assets whose value is backed by deposits of cash and equivalents or are collateralized by crypto assets held in smart contracts. For example, Tether (USDT) is backed by the US dollar. Stablecoins are the backbone of DeFi trading. There is a sub-set of stablecoins called Algorithmic Stablecoins which rely on financial engineering to maintain their link to the dollar. These have proven very risky, as the recent collapse of TerraUSD and Luna have demonstrated.

Natural Asset Coins: These are digital assets backed by real-world commodities such as oil, gas, land or carbon. For example, Pax Gold (PAXG) is backed by gold.

Central Bank Digital Currencies

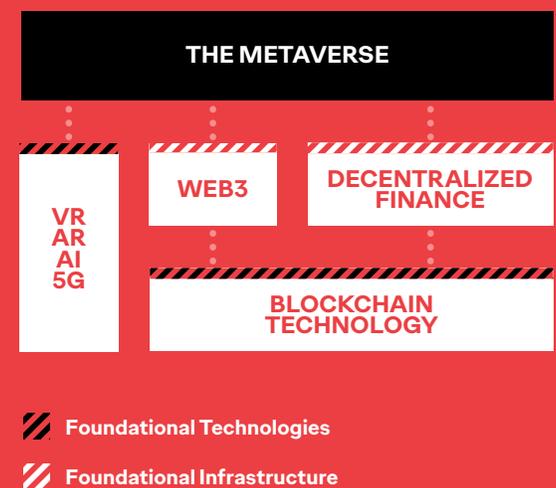
(CBDCs): Crypto versions of fiat currency such as China's digital renminbi and South Korea's digital won.

BLOCKCHAIN IS FOUNDATIONAL TO WEB3, DEFI & THE METAVERSE

Taken together, the blockchain ecosystem – Layer 1 blockchains, Layer 2 sidechains, dApps and digital assets—are the building blocks of Web3. The promise is that these technological advances can rewire the internet, forging a decentralized online ecosystem that fundamentally shifts how we store, share and own information onto a blockchain-based transparent, immutable, equitable network. The vision of Web3 is that it would: be owned by the builders and users; break big tech's monopoly on who controls information and who makes money from it; and open new decentralized participatory economies.

So, without blockchain technology Web3 could not be built. And without blockchain and the peer-to-peer, immutable, secure transfer of value it enables, DeFi could not operate. Without DeFi and Web3, the metaverse can't be developed.

FOUNDATIONS OF THE METAVERSE





A GLIMPSE INTO THE METAVERSE

The metaverse is upon us, as we have been repeatedly told by the media, tech leaders, and all those who stand to profit from it. Businesses are staking their claims in virtual worlds like Decentraland and The Sandbox. A look at the extensive list of trademarks being filed by top brands is an indication of the vibrant activity and commercial intent. McDonald's will operate virtual restaurants where customers can purchase virtual food items that will then be delivered in real life. Miracle-Gro will sell virtual lawn care products and customers will compete for cryptocurrency to see who can grow the best yard. Neutrogena, Victoria's Secret, Walmart, Nike and countless other brands have all filed trademarks to sell virtual goods and protect their brands in the metaverse.

And this immersive environment isn't just an opportunity for consumer-facing companies. From training workers in digital twin factory floors to rolling out product demos, there are plenty of meaningful B2B applications.

At present, for many brands and businesses the metaverse may seem a distant and

indecipherable opportunity. But it's important to begin to test and to learn how brands can participate in the metaverse to forge stronger bonds with their customers. By studying the development of the enabling technology and applying imagination to the metaverse, brands can harness it to drive new growth.



MERCK IN THE METAVERSE

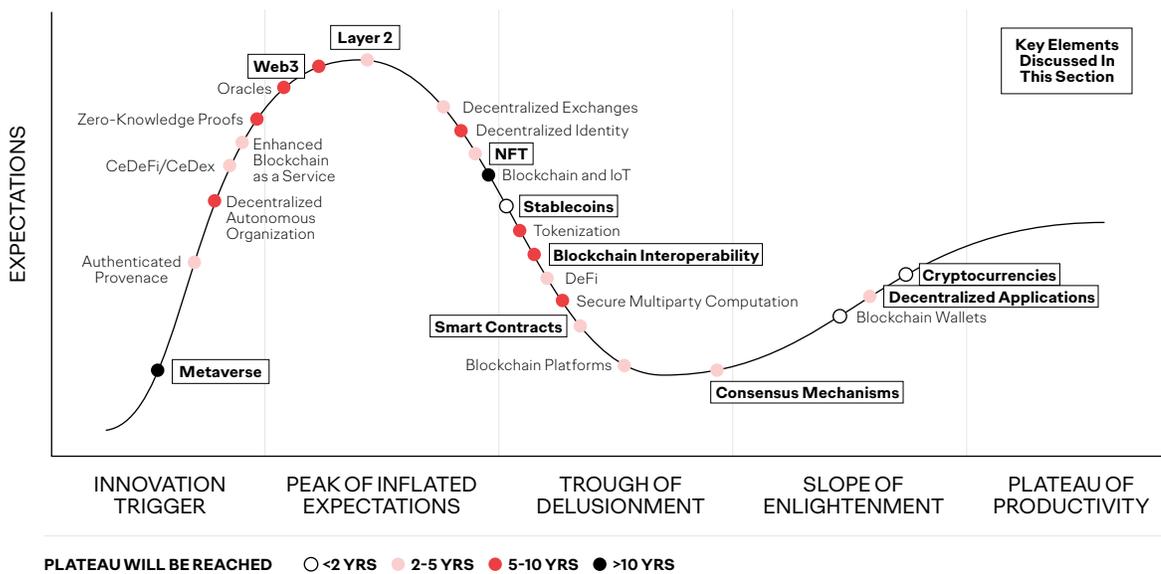
Merck's passion for invention isn't limited to the health care industry and the patients they serve; it drives them to inspire the next generation of inventors. So, Merck teamed with Ogilvy New York to create a new approach to science-based learning. "Periodic Odyssey" is a new STEM educational experience in the virtual world Minecraft in which students explore, search for and find elements from the periodic table and unlock the power of science with special in-game rewards. It all adds up to make screen time learning time and to spark inspiration in budding scientists.

THE OUTLOOK FOR BLOCKCHAINS

Blockchain technology is still emerging, with substantial challenges to meet – chief among them that the energy blockchains consume is unsustainable, inefficiency is hindering scaling and there are no really easy, intuitive interfaces, or “on ramps,” for consumers and businesses. Serious efforts are underway to overcome those challenges and, as they are gradually met in the next two to ten years, blockchain technology is laying the critical foundation of Web3, DeFi and the metaverse.



HYPE CYCLE FOR BLOCKCHAIN, 2022



The background features a collection of glossy, reflective spheres in shades of purple and blue. Overlaid on this are several white geometric shapes, including a large, irregular polygon at the top and several thin, curved lines that create a sense of depth and movement.

DEFI & THE IMPACT OF BLOCKCHAIN ON FINANCIAL SERVICES

DeFi & The Impact of Blockchain on Financial Services

“The unstoppable force of blockchain is on a collision course with the existing colossus of global finance. Buckle up.”²²

DeFi is short for decentralized finance. It refers to a new global financial system that relies on blockchain technology to establish trust for peer-to-peer transactions, rather than rely on traditional financial intermediaries. While DeFi is relatively small today, containing tens of billions of dollars versus hundreds of trillions in the traditional finance system, it is growing rapidly. As of this writing, the total value locked in DeFi projects is \$44 billion.²³

Sandeep Nailwal, co-founder of multibillion-dollar blockchain protocol Polygon, explains the growth in DeFi activity. “DeFi solves five key problems inherent in the current system of finance—centralized control, limited accessibility, inefficiency, lack of interoperability, and lack of transparency—by transforming legacy financial products into trustless and transparent protocols that run without intermediaries.”²⁴

“Every industry will feel DeFi’s impact, because finance is the cardiovascular system of the global economy, the lifeline of all other industries.”²⁵

THE DEFI PARADIGM SHIFT

“Paradigm shift” is a term that’s tossed around a lot and, as a result, has lost a bit of its punch. So, it’s important to reemphasize that paradigm shifts are so disruptive and painful

because they bring into question the deeply held conventions that underlie the existing economic and social models as well as the worldview that legitimizes them.

DeFi represents an enormous paradigm shift. “For the first time in human history, entities need not rely on banks and other third parties to move, store, coordinate and manage value.”²⁶ DeFi represents the democratization of finance, heretofore the unchallenged purview of the few and the mighty to regulate and control.

THE DEMOCRATIZATION OF FINANCE

- DeFi is **permissionless** and **inclusive**: Anyone around the world with a smart phone and an internet connection can participate. Importantly, this means the close to 2 billion people around the world that don’t currently have access to financial instruments can join the global economy.
- DeFi is **transparent**: Running on public blockchains, every transaction is broadcast to and verified by users of the network. Anyone can view network activity.
- DeFi is **interoperable**: Because all DeFi applications are based on open-source code, they are all interoperable, thus solving

the inefficiency of multiple siloed systems that add friction in the form of transaction delays and additional fees for end users.

- DeFi is **without geographical barriers**: Traditional financial institutions are often constrained in reaching remote areas of the globe.

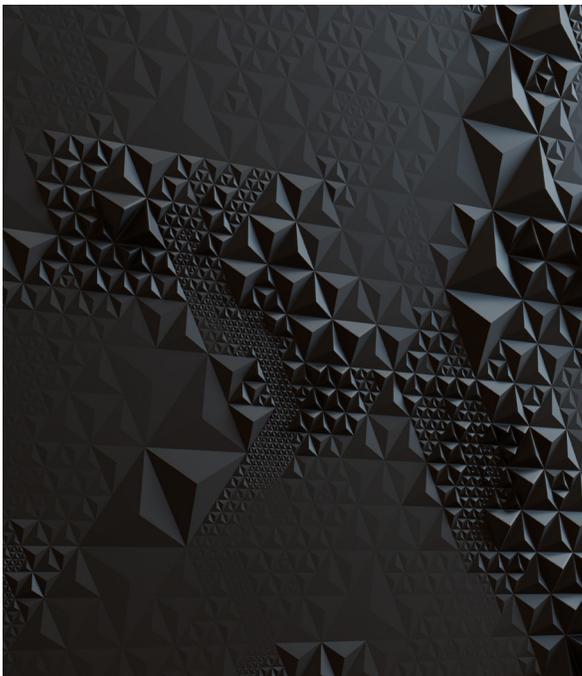
As DeFi matures, the community of developers seeks to replicate and improve upon every financial service. They look to expand both the functionality and the reach of money. Here's a look at the basic components of financial services and the impact of blockchain on them.²⁷

FUNCTION	BLOCKCHAIN IMPACT
Authenticating Identity & Value	Verifiable, robust and cryptographically secured identities will ensure KYC (Know Your Customer) and AML (Anti-Money Laundering) compliance.
Storing Value	Digital payment mechanism combined with a reliable store of value, full transparency and security will make traditional financial safeguards and services obsolete.
Moving Value	Transfer of value in very large and very small increments without intermediaries will dramatically reduce cost and speed of payments.
Lending Value	Parties can issue, trade, and settle debt peer-to-peer, relying on blockchain-based reputation scores; more accessible to the unbanked and the entrepreneurial.
Funding & Investing	New models for peer-to-peer financing.
Exchanging Value	Blockchain takes settlement times on all transactions from days and weeks to minutes and seconds.
Insuring Value & Managing Risk	Using reputational systems, insurers will better estimate actuarial risk, creating decentralized markets for insurance. More transparent derivatives.

THE IMPACT ON TRADITIONAL FINANCIAL SERVICES FIRMS

Centralized banks and other traditional financial institutions (centralized finance, or CeFi) will not become obsolete any time soon. They hold tremendous power by virtue of their regulatory authority, their working capital and their huge customer base. They have, however, begun to evolve in order to harness the irrefutable benefits of blockchain-enabled immutable trust and efficiency.

Many financial institutions, like JPMorgan Chase, are focused on reducing cost, complexity and friction within existing financial



markets by building private blockchains—a permissioned, closed blockchain. And J.P. Morgan, in acknowledgement of the efficiency of tokenized money, has even launched the JPM Coin, enabling instantaneous transfer of payments between institutional clients.

Other traditional players are embracing native cryptocurrency and public blockchains in a more robust way. Fidelity's CEO Abigail Johnson was touting the benefits of Bitcoin as far back as 2014 and the company has been an active miner of Bitcoin for years. Fidelity has launched separate business units, including Fidelity Digital Assets, to create a suite of products and services to make it easier to buy, sell and store digital assets. And in 2018, Fidelity began offering trading and custody of digital assets for large institutional customers.

Significantly, in early 2022 Fidelity, the nation's largest provider of 401(k) plans, said it would enable participants to put a slice of their retirement money into Bitcoin. This puts millions of people closer to direct investment in Bitcoin without having to set up an account on a cryptocurrency exchange.

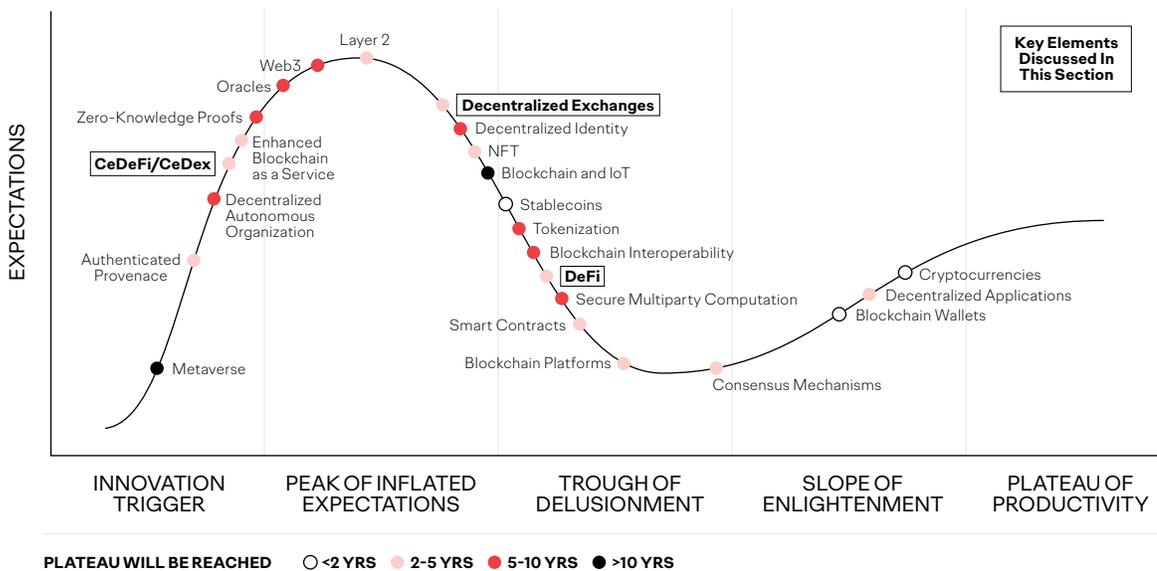
In addition, many traditional institutional investors, in a continual search for higher returns and motivated by a desire to be innovative stewards, are taking a close look at cryptocurrencies for their own and their clients' portfolios. They recognize the power of digital assets to disrupt and are maintaining a future-forward outlook.

CHALLENGES

Despite the promising democratizing effects and operational efficiencies of DeFi, it should be approached with a full appreciation of the risks involved. The space is immature: bugs in code and technological limitations expose participants to cyberattacks and network congestion that can shut down activity without notice, both of which put financial

assets at risk. And the space is unregulated, so there is no governing authority to provide guardrails or recourse in the event of loss. DeFi will have to address issues of scalability and security as it matures. According to Gartner, it'll be at least 2 to 5 years before we see DeFi hit "The Plateau of Productivity." Insofar as it does, we are headed to a hybrid DeFi/CeFi future.

HYPE CYCLE FOR BLOCKCHAIN, 2022



“ ”

Decentralized finance offers new opportunities. The technology is nascent, but the upside is potentially transformational.²⁸



BRANDS, WEB3 & THE CREATION OF VALUE

Brands, Web3 & The Creation of Value

As we transition gradually from Web2 to Web3, a critical shift in our digital lives is underway.

We are increasingly moving beyond merely consuming, communicating and purchasing; we are moving toward exercising robust individual agency in decentralized spaces: transacting cryptocurrencies on DeFi blockchains, creating independent sources of revenue with NFTs, expressing individual identity in virtual worlds. It is an age of distributed participation.

In this environment of individual agency and distributed participation, the central question brands must answer in order to flourish changes, and the relationship between brands and their customers shifts dramatically as does the value derived from that relationship. Momentum is toward empowering customers to co-create value and for them to realize ownership and governance of that value.

	CENTRAL QUESTION FOR BRANDS	RELATIONSHIP OF BRAND & CUSTOMERS	VALUE DERIVED
Web1	How do I inform my customers?	Brands as One-Way Broadcasters <small>Via platform-centric websites</small>	Learning
Web2	How do I engage my customers?	Partners in Conversation <small>Via platform-centric websites, social media and e-commerce</small>	Community, Ecommerce
Web3	How do I empower my customers?	Co-Creators of Value <small>Via multi-faceted digital connections: blockchain-enabled tokens and platforms, websites, social media and e-commerce</small>	Ownership, Governance

What Does it Mean to Empower Customers and Become Co-Creators of Value?

Empowering customers requires an understanding of the forces that motivate behavior. Increasingly, those forces are the desire for democracy, equity, diversity, inclusion and belonging. Delivering relevant utility in furthering these goals is key.

Let's take a hypothetical B2B scenario. Say an international airline has a flight from Singapore to London that the executives from a global bank in London fly frequently, but not always, to the satellite office in Singapore. The airline could sell the bank an NFT that gives permanent ownership of a seat on that route 100% of the time. The NFT is programmed with a smart contract. If the bank executives are not using the seat, the airline is free to sell it to a 3rd party. If that occurs, the smart contract automatically confers 50% of the ticket price to the bank and the airline keeps the other 50%. New value for each party has been co-created through a blockchain-enabled smart contract and transaction.

Imagine how brands—both B2C and B2B—can empower their customers to:

- Collaborate with local and global communities, digitally and physically
- Be compensated for original content and contributions
- Participate in governing the evolution of the brand, its products and services
- Co-author a shared agenda around the brand's purpose
- Explore independent sources of revenue within the brand's ecosystem
- Express their unique identity

A MARKETER'S WEB3 TOOLBOX

New tools in the blockchain ecosystem are emerging as important agents of empowerment. Chief among them are NFTs and DAOs. With them, brands and their customers have the opportunity to co-create entirely new categories of value for themselves, and for each other—value that extends beyond the monetary and that enable more authentic, rewarding and long-lasting relationships.

THE POWER OF NFTs TO CREATE VALUE

NFTS HAVE EXPLODED.

- NFT sales hit \$40 billion in 2021 and as of August 2022 sales have already exceeded that at \$42 billion²⁹
- The digital artist Beeple sold an NFT of his work for \$69 million at Christie's
- NBA's Top Shot has attracted over 1 million users and generated over \$715 million in sales³⁰
- OpenSea, "the eBay of NFTs" hit a record \$5 billion worth of sales in January 2022 alone, with fees topping \$386 million³¹

THE REAL STORY

While most of the current hype around NFTs is focused on the sale of expensive digital collectibles (and arguing the foolishness or genius associated with it), there is a bigger, more important story to be told about the real value that can be created with NFTs based on the technology that underpins them.

NFTs are a completely novel asset class. Each NFT is a unique, non-interchangeable digital item that is assigned a unique identifier, recorded, and secured on a public blockchain. It is a unique asset in and of itself, but it can also represent ownership of a unique digital or physical product or experience, just as a traditional property deed does to a one-of-a-kind physical house. Holders exercise control over the token and can, among other things, authenticate their ownership, digitally transfer ownership, and trace the provenance of the token. Think of an NFT as a token of authenticity.

NFTs are created ("minted") in limited quantities; it is this digital scarcity that creates economic value. As in the physical world, people naturally want what other people want, and if an item is scarce it leads to increase in value over time.

“ ”

Digital scarcity is a genuinely important concept that will open up an entirely new economy of unique digital goods, and we should be patient and open-minded while we wait to see what's going to be built with (NFTs).³²

What makes NFTs so powerful is that they're not just static assets. They are programmable through smart contracts. Smart contract parameters can be embedded at the time an NFT is minted and it's also possible to endow the NFT with features that enable them to expand their purpose over time. For example, an artist could program an NFT to collect the original sale price and to collect a percentage of any future resale of their work, thus building a new business model around a recurring royalty revenue stream. A brand could embed its loyalty program into an NFT and then decide to change the reward structure over time, thus initiating new kinds of interactions with its customers as circumstances change.

In 2022, NFTs are going seriously mainstream. Mass market brands and luxury brands alike are launching NFTs at a dizzying pace. Many of these projects are commercial stunts. But some are interesting and important success stories of brands creating real value for, and co-creating value with, their customers.

THE SUPERPOWERS OF AN NFT— WHAT CAN YOU DO WITH THEM?

Authenticity, scarcity, programmability, and flexibility are a powerful cocktail and fertile ground for brands to experiment in building new business models and co-creating new value for themselves and their customers.

ALIVIA CANCER FOUNDATION

Alivia Cancer Foundation partnered with Ogilvy Warsaw to create a unique “Buy My Cancer” NFT series. The powerful campaign blended science, art, medicine and technology in an effort to save lives. Microscopic photographs of real living cancer cells were used as a basis for artworks created by world-renowned artists. The artworks were minted into unique NFT collections and sold to support research and the treatment of patients suffering from rare types of cancer. This is a potent example of real societal value generated through NFTs.



TIME MAGAZINE

TIME minted NFTs to connect readers with TIME creators—the writers and photographers—and in so doing created a community of symbiotic value. TIME sells the NFTs to readers and splits the profits with their creators. Token holders enjoy a connection with their favorite TIME creators and reward them monetarily if they choose. Holders can also access a community of like-minded people, passionate about the creators. If participation in the community grows and the value of the token appreciates, holders can sell the asset for their own profit. To date, TIME’s Web3 evolution has generated more than \$10 million in revenue and curated a passionate community of over 25,000 artists, collectors and enthusiasts. TIME has created a robust new business model that offers new value for the company, for their creators, and for their readers.

THE HUNDREDS

The Hundreds is a popular streetwear brand that sold NFTs themed around their mascot “Atom Bomb.” They’ve announced they will pay royalties, in the form of in-store credit, to owners of the NFTs associated with some of their clothing collections. They’re sharing real value with fans in a way that leads the community to further engagement and loyalty.

STEP’N

STEP’N, a crypto fitness project, is another example of really innovative use of NFTs in co-creating an entirely different kind of value – a healthier, wealthier community. To become part of the community, members download an app and buy a sneaker NFT. Daily activity is logged on the blockchain through the app and smart contracts govern the disbursement of crypto according to how far the user has walked or run. STEP’N turns exercise into a rewarding, seamless experience and may turn non-crypto users into daily crypto enthusiasts. It’s just one of a number of “Move-To-Earn” crypto initiatives.

“ ”

ARE NFTs ACTUALLY VALUABLE?

Just because it exists in a virtual space doesn’t make it less real for the person who owns it. It’s a question of ownership and how I assign value to that. And the younger generations see value in owning digital assets. It’s a bit of a revolution.³³

NFTs: A Taxonomy of Value

At least ten types of value can be created through NFTs that range from monetary to psychological, from personal to collective. Exploring a taxonomy of value can help brands focus on their objectives for using NFTs and devise a deliberate strategy that aligns with business goals, brand strategy and the type of relationships it seeks to develop with customers.

01

STORE OF VALUE: Actual market price, investors and speculators hope it improves

02

SIGNALING VALUE: Social currency, “I got this!”

03

IDENTITY VALUE: Authentic expression of non-digital selves in digital spaces

04

CONSUMPTION VALUE: Pure enjoyment of the subjective qualities of the digital or physical item or experience associated with the NFT

05

REMUNERATIVE VALUE: Ability of entity selling or endorsing to monetize their brand

06

COMMUNITY VALUE: Entrée into and participation with a community one cares about

07

COLLABORATIVE VALUE: Opportunity to ideate and build with community members

08

COMMERCIAL VALUE: Monetization by an individual of iterative ideas built within the community, advice and feedback, personal data generated from online activity

09

REPUTATIONAL VALUE: Aggregation of tokens of achievements that, taken together, become personal and professional bona fides

10

SOCIETAL VALUE: Achieving an individual and/or group goal that benefits society as a whole (i.e., treating cancer, advancing healthier lifestyles, protecting the environment)

For all the attention and investment, NFTs are still emerging as a commercial instrument. And they are not without harsh detractors that point, quite correctly, to the many instances of fraud and scams. Right now, Gartner places them at the very height of “Inflated Expectations”. There will be challenges and disillusionment over the next 2 to 5 years before NFTs emerge on the “Plateau of Productivity.”

Yet, new asset classes don’t come around that often. It’s incumbent upon forward-thinking brands to examine the powerful characteristics of NFTs and the value that they can generate.

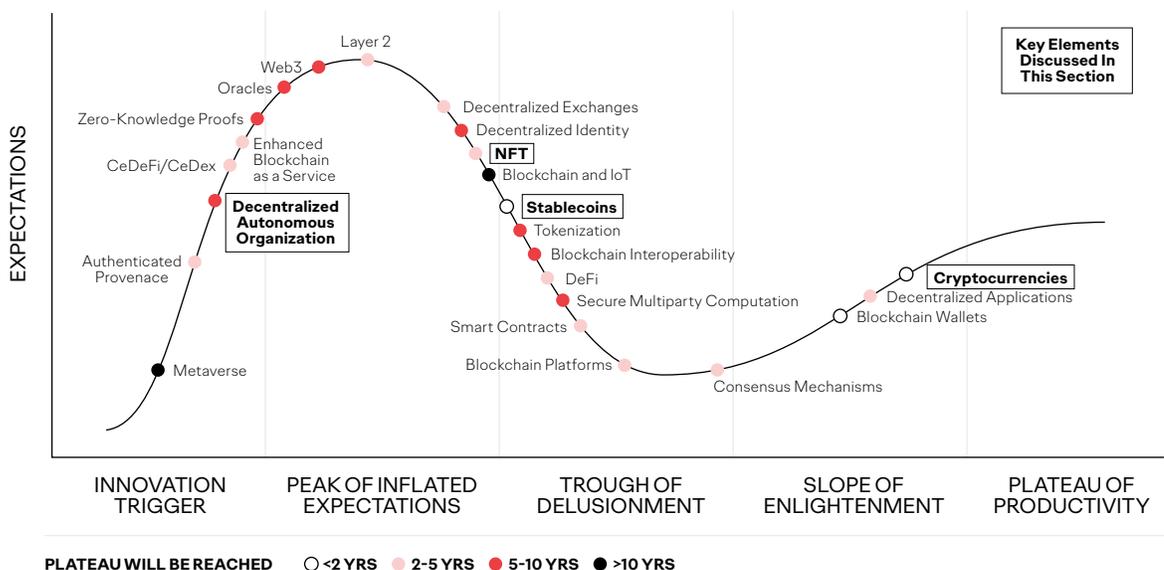
CHALLENGES FOR BRANDS USING NFTS AT “THE PEAK OF INFLATED EXPECTATIONS”

- Bad actors in an unregulated space tarnish NFTs’ image
- Risk of associating with energy-gobbling NFTs before Proof of Stake consensus mechanism has been adopted by Ethereum
- Early market confusion that dampens participation: digital wallets and interfaces are not necessarily user-friendly
- Extreme volatility of cryptocurrencies in which NFTs are priced

“ ”

It’s likely that the most valuable applications of NFTs haven’t even been envisioned yet.³⁴

HYPE CYCLE FOR BLOCKCHAIN, 2022



THE POWER OF DAOs TO CREATE VALUE

As of this writing, there are over 4,800 DAOs with over \$13 billion in their treasuries.³⁵ And the total market capitalization of all DAO tokens is around \$24 billion.³⁶ From art to sports, crowdfunding to gaming, these online groups are proliferating at a rapid rate. What's it all about and what value can they hold for businesses, brands and their customers?

A Decentralized Autonomous Organization (DAO) is basically a group that organizes and mobilizes around a common mission. Consensus defines a DAO as a “governing body that oversees the allocation of resources tied to the projects it is associated with and tasked with ensuring the long-term success of the projects.”

The distinguishing characteristic is decentralization. DAOs aren't run by top-down leadership within corporate structures. Instead, decisions are made by the community from the ground up. DAOs leverage the power of blockchain technology, and specifically NFTs, to coalesce members, manage resources and make decisions. Ownership of a DAO's NFT admits one to the community. And because NFTs are programmable, they can confer a range of specific commercial and governance rights on owners including equity shares and voting participation.

DAOs have advantages over more traditional organizations in that they are transparent by virtue of their blockchain infrastructure, more democratic because the entire community can vote, and more nimble because they are single-mindedly focused on their specific mission.

So, the key to understanding the value and power of DAOs is to think in terms of the core principles they further:

- Democracy
- Equity
- Diversity
- Inclusion
- Belonging

DAOs, BUSINESSES & BRANDS

According to The Harvard Business Review, “A business model that can link a new technology to an emerging market need is the key to industry transformation.”³⁷

DAOs are the link between blockchain (the new technology) and consumer demand for democracy, equity, diversity, inclusion and belonging (emerging market need). They are the transformative business model for Web3.

A Wide Spectrum of DAOs³⁸

Different types of DAOs offer different ways for businesses to think about tapping into this transformative business model.

AMM (AUTOMATED MARKET MAKER)

DAOs: Use smart contracts to bring decentralized financial services to users. MakerDAO launched the DAI stablecoin. Currently, over 1000 projects on Ethereum integrate the DAI stablecoin into their own unique apps.

COLLECTOR DAOs: Acquire high-ticket cultural collectibles for its community. PleasrDAO is well known for purchasing the only Wu Tang Clan album, “Once Upon A Time in Shaolin,” for its members’ enjoyment and shared ownership. In doing so, PleasrDAO democratizes high-end collecting.

ENTERTAINMENT DAOs: Are collaborative commons where the artist in all of us can come together to build exciting projects. The Bored Ape Yacht Club inspires members to build content and backstory off of their NFT Apes. “Jenkins the Valet,” a BAYC NFT avatar is the hero of a community-generated book and has, in fact, become his own brand that has just been signed to a contract with CAA.

GRANT DAOs: Create a grant pool into which the community donates funds and collectively votes on their allocation. Aave Protocol is one of the most prominent, funded DeFi projects.

INVESTMENT DAOs: Make it possible for anyone to own a piece of something that almost no one could afford to own by themselves.

ConstitutionDAO was formed to buy the US Constitution, raising over \$40 million in the attempt. The Krause House DAO calls themselves a “community of hoop fanatics just crazy enough to buy an NBA Team.”

MEDIA DAOs: allow content to be driven by the community and reward content creators in their native token thus removing central control of content and advertisers from the equation. The Forefront DAO is a community dedicated to educating members about social tokens and incubating projects without central control or advertising.

SOCIAL MEDIA DAOs: organize around topics and sidestep social media giants like Facebook (and their advertisers) by running on independent servers. Blockster is a decentralized social network focused on crypto enthusiasts.

SOCIAL DAOs: form around communities with particular interests and values. Friends With Benefits is a DAO that unifies artists and cultural writers promoting ways for them to collaborate and network, both digitally and physically.

SOCIAL ACTIVISM: are mobilized around societal challenges. Andrew Yang, former Presidential candidate, formed Golden DAO dedicated to Asian American and Pacific Islander Issues.

AND IN A MIND-BENDING FLIP...

Jeffrey Kauffman, Founder Parachute and JUMP Into Web3 DAO, asks: How long will it be before a DAO buys a brand? Not so far-fetched when you think about the amount of new capital DAOs can raise and the passion they have for their missions. If that passion were aligned with a brand's purpose...

As if in answer to this provoking question, in early 2022 BlockbusterDAO was formed, not by former executives but by a group of brand fans nostalgic for the days of renting videos from physical stores. Their goal is to create a blockchain-based, decentralized streaming platform for movies, TV and games. They're crowdsourcing funds to buy the Blockbuster name and intellectual property from Dish Network which bought the Blockbuster assets over 10 years ago.

“ ”

There's so much talk in the marketing and advertising industry around NFTs and crypto. But don't sleep on DAOs.⁵⁹

A brand could successfully employ a DAO:

1. To further brand purpose
2. To accelerate creativity
3. To empower and reward its community

HOW CAN A BRAND USE A DAO?

The principles furthered by DAOs—democracy, equity, diversity, inclusion and belonging—dovetail quite closely with the values of a modern brand. And the behaviors of a DAO—to energize around a mission, to collaborate in community, and to exercise individual agency—align with the near universal marketing objectives to further brand purpose, accelerate creativity and empower customers.

Intriguing examples of businesses employing DAO-inspired business models to empower and reward their communities are beginning to emerge. Consider the B2B case of Braintrust. Braintrust is a global, decentralized, user-owned talent network whose mission is to spread economic opportunity more equitably around the world by matching freelance tech providers with Fortune 1000 companies.

Ownership and governance in Braintrust are represented by the BTRST token, which is an incentive rewarded to community members for building the decentralized network, inviting and vetting talent and referring clients. BTRST, a utility token for use inside the network vs. a speculative investment token, provides owners access to higher visibility profile listings, free and discounted software, products, and career resources. It also enables owners to vote on transaction fees. By aligning incentives with community goals Braintrust enables co-created economic and professional value.

Perhaps most interesting is the power of a DAO is to further brand purpose while at the same time returning great value to its community with full transparency.

Imagine an eco-friendly outdoor clothing and equipment brand is launching its first national initiative to substantially clean up the nation's waterways both at the national level and in the localities where they have brick and mortar stores. They've decided to enlist the energy and passion of environmentalists across the country through the formation of a DAO. In so doing the brand is opening up the brand/customer relationship to co-creation and symbiotic exchange of value.

Here are the parameters:

- Instead of selling its NFTs, for a period of time product purchases over \$200 come with an NFT which includes governance rights
- Community members will vote on the name for the initiative and logo design.
- Community members will be rewarded with the DAO's token for their creativity in:
 - › Sharing ideas on how each store can contribute to cleaner local waterways
 - › Contributing content to the brand's social media platforms
 - › Nominating national environmental organizations dedicated to clean water to receive a brand donation

Community members essentially become shareholders in the environment. The more robust the community of token holders is in pursuit of their environmental mission the more valuable their tokens become

as perceived value in being part of the community rises. So, incentives are aligned for the brand and community members to work and create together.

The brand has created a symbiotic exchange of value. For community members, the brand has created a connection between passion and profit, as well as passion and ownership. That's powerful value in terms of self-actualization. And the brand has created a way for members to contribute to a higher purpose beyond themselves. Again, powerful value in terms of self-transcendence. Self-actualization and self-transcendence for the community—according to The Harvard Business Review, two of the highest forms of value a brand can offer and ones that lead to a major goal of brands—greater brand loyalty.⁴⁰

Perhaps, here at Ogilvy, we've just created the blueprint for the first **“Decentralized Autonomous Brand (DAB).”** Consider the immense combinatorial power of brand purpose, community passion and blockchain-enabled decentralized participation and ownership. At Ogilvy Consulting, we believe the types of symbiotic value that can be generated at this intersection, within a Decentralized Autonomous Brand, can fundamentally shift the relationship of brands and customers to one of partnership; partnership that is mutually compelling and long-lasting.

From these wells, optimism and opportunity spring.

The background is a complex, low-poly geometric pattern in various shades of blue, ranging from light sky blue to deep navy. Overlaid on this are several thin white lines: a large, irregular polygonal shape in the upper half, and two large, overlapping circles in the lower half. The text is centered in the middle-left area, rendered in a bold, white, sans-serif font.

TOWARD A STRATEGIC ROADMAP

Toward A Strategic Roadmap

Blockchain-enabled DeFi and decentralized blockchain tools—including NFTs and DAOs—are emerging as important levers of value creation and growth. The metaverse is rising on decentralized Web3 infrastructure, opening virtual worlds of opportunity. Forward-thinking executives will realize the need to define a strategic approach that harnesses the power of these distributed instruments to extend their brand purpose and support their business ambition. In so doing, there are a number of good questions to be answered.

A GOOD QUESTION

A good question is not concerned with a correct answer.

A good question cannot be answered immediately.

A good question challenges existing answers.

A good question is one you badly want answered once you hear it, but had no inkling that you cared before it was asked.

A good question creates new territory of thinking.

A good question is the seed of innovation in science, technology, art, politics, and business.

-Kevin Kelly
Former Executive Editor, WIRED



Twelve Good Questions

1

How can a single, immutable place of truth address your most pressing challenges?

2

How can your brand be made more relevant through immutable trust, security, transparency, authenticity and credibility?

3

How do decentralized capabilities and distributed participation enable us to authentically extend our brand purpose and support our business ambition?

4

How can we uniquely empower our customers to co-create value?

5

How can our brand strategy genuinely align with the various types of value that can be created with NFTs?

6

What opportunities do the different types of DAOs represent as a business model and/or as a way to further brand purpose?

7

What are we already doing that could be improved by migrating to a decentralized environment?

8

What are low-risk ways to experiment?

9

How will we define success and what kinds of value-creation are included in our KPIs?

10

How will we identify the right development, environment, platform and crypto partners to work with?

11

What technical and legal infrastructure do we need to create distributed operational models that enable collaboration and commerce?

12

Does our organization even have the right talent to identify and assess and execute decentralized opportunities?

“ ”

With all the hype amplifying the (decentralized) ecosystem, the divide between its current state and its potential will only widen before it begins to close. It means that progress lies ahead. But to close the gap requires vision and execution toward innovative possibilities and solutions.⁴¹



“ ”

You can do homework from now until doomsday, but you will never win fame and fortune unless you also invent big ideas.

– DAVID OGILVY

Ogilvy Consulting is here to invent big ideas with you. We're passionate about unlocking your brand's unique ability to empower your customers and create entirely new forms of value with and for them. Our brain trust of executives steeped in brand innovation, emerging technologies and growth strategies will be your partners to accelerate creative thinking, identify business-building potential and drive results across the unfolding, urgent and promising landscape of decentralized opportunity.

Let's start today.

Glossary

BLOCKCHAIN

A distributed ledger and database that is used to maintain a continuously growing list of records, stored in blocks, which are secure from tampering and revision

BLOCKCHAIN TECHNOLOGY

The protocols that govern how data is encrypted, packetized, addressed, transmitted, verified, routed and stored on the blockchain

BLOCKS

Groups of immutably linked transactions on the blockchain.

BITCOIN

Digital token representing digital currency that operates on the Bitcoin Blockchain.

BITCOIN BLOCKCHAIN

Distributed ledger and database designed to facilitate transfer of digital assets including but not limited to Bitcoin. Any item of value that can be digitized can be transferred on the Bitcoin Blockchain—a land title, a share of stock, a vote.

DECENTRALIZED APPLICATIONS (dAPPS)

A decentralized application is an application that can operate autonomously, typically through the use of smart contracts, that runs

on a decentralized computing, blockchain system. Like traditional applications, dApps provide some function or utility to its users.

DECENTRALIZED AUTONOMOUS ORGANIZATION (DAO)

A virtual organization that is governed entirely by smart contracts on the Ethereum blockchain.

DECENTRALIZED DIGITAL LEDGER

An open, public accounting of transactions that forms the backbone of the blockchain.

DECENTRALIZED FINANCE (DeFI)

A new global financial system that relies on blockchain technology to establish trust for peer-to-peer transactions, rather than rely on traditional financial intermediaries.

DECENTRALIZED VERIFICATION PROTOCOLS

The technical standards that govern how digital transactions are authenticated on a public, decentralized ledger

DIGITAL CURRENCY

A balance of money stored on the blockchain. Digital currency is not under control of any one central national government.

DIGITAL TOKENS

A digital file that carries indication of digitized value.

DISRUPTIVE TECHNOLOGY

A technology that attacks a traditional business model with lower cost, higher value propositions and can overtake incumbent businesses quickly.

ENCRYPTION

The process of encoding a message or information in such a way that only authorized parties can access it.

ETHER

A digital token representing digital currency that rides on the Ethereum blockchain.

ETHEREUM

A public blockchain known for its flexible development platform.

FOUNDATIONAL TECHNOLOGY

A technology with broad potential to change the fundamental underpinnings of our economic and social systems.

HARD FORK

The adoption of a change in blockchain protocol that results in the creation of a second blockchain, or “hard fork” off of the original blockchain.

METaverse

A network of virtual worlds for a vast array of human activity: playing, working, connecting,

collaborating, learning, and buying. Built on the bedrock of blockchain technology and enabled by Web3, DeFi, 5G, AI, AR and VR.

MINERS

Companies or people who establish nodes on the worldwide network of nodes that govern decentralized blockchains. In return for solving the complex algorithms that verify transactions, they are awarded freshly-minted, predetermined amounts of digital currency.

MULTI-SIGNATURE AUTHENTICATION

A process whereby the execution of smart contracts is independently verified by a party other than the contracting parties.

NATIONAL FIAT CURRENCY

Currency established as money by a government.

NODE

A single participant computer on the world wide network of computers that govern decentralized blockchains.

NON-FUNGIBLE TOKEN (NFT)

A unique, non-interchangeable digital item that is assigned a unique identifier, recorded and secured on a public blockchain.

PRIVATE BLOCKCHAIN

A blockchain that is exclusive to specified members and requires permission to join.

PROTOCOLS

Technical standards that govern operations and capabilities of technology.

PSEUDONYMOUS

Representation of personal and transactional data with minimal attributable information and in such a way as to protect the identity of the parties. While not anonymous, pseudonymous information can only be revealed through an enormous amount of triangulation of data.

PUBLIC BLOCKCHAIN

A blockchain that is open and public and requires no permission to join.

REMITTANCES

Money sent from emigrants to their families in their native countries.

REMITTANCE FEES

Fees charged by financial middlemen to transfer money from emigrants to their families in their native countries.

SMART CONTRACTS

Software code, programmed directly onto the blockchain, which enforces and executes terms of legal agreements. Smart contracts are dynamic in that they can interact with databases and other sources of information to make determinations.

TCP/IP PROTOCOLS

Transmission Control Protocol (TCP) and Internet Protocol (IP) specify how data should be packetized, addressed, transmitted, routed and received on the Internet.

WEB3

A decentralized online ecosystem enabled by blockchain technology. The promise is of a user-centric, interoperable, transparent and safe internet.

Acknowledgements



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Laura is a senior business and brand strategist, focusing on transforming brands into profitable, growth-oriented, multi-platform businesses in the face of digital disruption and relentless change.

She has engineered success for global blockchain technology companies, including Bitfury and Diamond Standard, by creating relevant, relatable and compelling brands in a what is a complex and misunderstood space.

Laura is focused on how blockchain technology enables new powerful ways for brands to tell their stories, to deepen customer relationships and to amplify relevance. She is the WPP Atticus Award-winning author of “UNBLOCKED: The Power of Blockchain Technology to Establish Trust, Build Brands & Transform Business.”

With deep experience as a Chief Marketing Officer, Laura has engineered success for such marquis brands as Hallmark Channel, AMC, Discovery Channel, Samsung, Intel, IMAX, and Disney Consumer Products.

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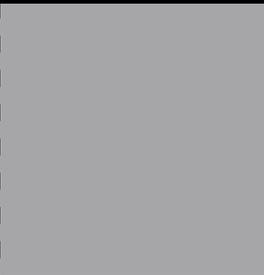
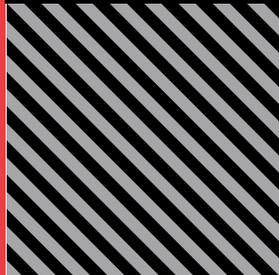
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Sources

1. DeFi Pulse, August 11, 2022
2. CoinMarketCap, August 11, 2022
3. Globenewswire.com, June 14, 2022
4. CB Insights
5. Grayscale Investments, Metaverse Report, Nov 2021
6. "The Trust Machine." The Economist. Oct 31, 2015
7. Tapscott, Don and Tapscott, Alex, Blockchain Revolution, How the Technology Behind Bitcoin is Changing Money, Business and the World. Penguin Random House, 2016. Page 6.
8. Tapscott, page 65
9. Broussard, Bruce. "Blockchain, Transformational Technology For Healthcare." LinkedIn.com. Aug 8, 2016
10. "The Trust Machine." The Economist. Oct 31, 2015
11. Popper, Nathaniel, and Lohr, Steve. "Blockchain: A Better Way to Track Pork Chops, Bonds, and Peanut Butter?" The New York Times. Mar 4, 2017
12. PwC 2017 CEO Survey
13. Tapscott, Alex. "Digital Asset Revolution: The Rise of DeFi and the Reinvention of Financial Services." Blockchain Research Institute. Dec 2021
14. CoinMarketCap.com
15. Harvey, Campbell R., Ramachandran, Ashwin, Santoro, Joey. "DeFi and the Future of Finance." Wiley 2021. Page xi
16. CoinMarketCap.com
17. Chow, Andrew R, "The Prince of Crypto Has Concerns" Time Magazine. Mar 28 – Apr 4, 2022. Page 56
18. CoinMarketCap.com
19. Readwrite, "Blockchain Interoperability: Why It Matters & How To Make It Happen" by Steven Tse. May 5, 2021
20. Adapted from: Tapscott, Alex. "Digital Asset Revolution: The Rise of DeFi and the Reinvention of Financial Services." Blockchain Research Institute. Dec 2021
21. Roose, Kevin. "The Latecomers Guide To Crypto." The New York Times, Sunday Business. Mar 20, 2022
22. Tapscott, Alex, Financial Services Revolution. Barlow Books. 2020. Page 7
23. DeFi Pulse.com
24. Tapscott, Alex. "Digital Asset Revolution: The Rise of DeFi and the Reinvention of Financial Services." Dec 2021. Page 8
25. Tapscott, Alex. "Digital Asset Revolution: The Rise of DeFi and the Reinvention of Financial Services." Blockchain Research Institute. Dec 2021. Page 6
26. Tapscott, Alex, Financial Services Revolution. Barlow Books. 2020. Page 4
27. Adapted from: Tapscott, Alex, Financial Services Revolution. Barlow Books. 2020. Page 23
28. Harvey, Campbell R., Ramachandran, Ashwin, Santoro, Joey. "DeFi and the Future of Finance." Wiley 2021. Page 7
29. Chainalysis, "NFT Transaction Analysis" May 5, 2022
30. Fastcompany.com Aug 23, 2021
31. Dune Analytics
32. Roose, Kevin. "The Latecomers Guide To Crypto." The New York Times, Sunday Business. Mar 20, 2022
33. Cathy Hackl, Chief Metaverse Officer, Futures Intelligence Group
34. Kaczynski, Steve and Kominers, Scott Duke "How NFTs Create Value". Nov 10, 2021
35. DeepDAO.com
36. CoinMarketCap.com
37. Kavadias, Stelios, Ladas, Kostas and Loch, Christoph. "The Transformative Business Model" Harvard Business Review Oct 2016
38. Adapted from: Ledger.com "Your DAO Guide – The Most Important DAO Categories Defining The Space."
39. Lenderman, Max. US Campaign "The Purpose(s) of DAOs" Jan 24, 2022
40. "The Elements Of Value." Harvard Business Review. Oct 2016
Solis, Brian. "Building On The Future Of Web3 To Deliver A Future Of Utility, Value and Empowerment That Benefits Everyone" Forbes.com, Apr 4, 2022
41. Solis, Brian. "Building On The Future Of Web3 To Deliver A Future Of Utility, Value and Empowerment That Benefits Everyone" Forbes.com, Apr 4, 2022

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