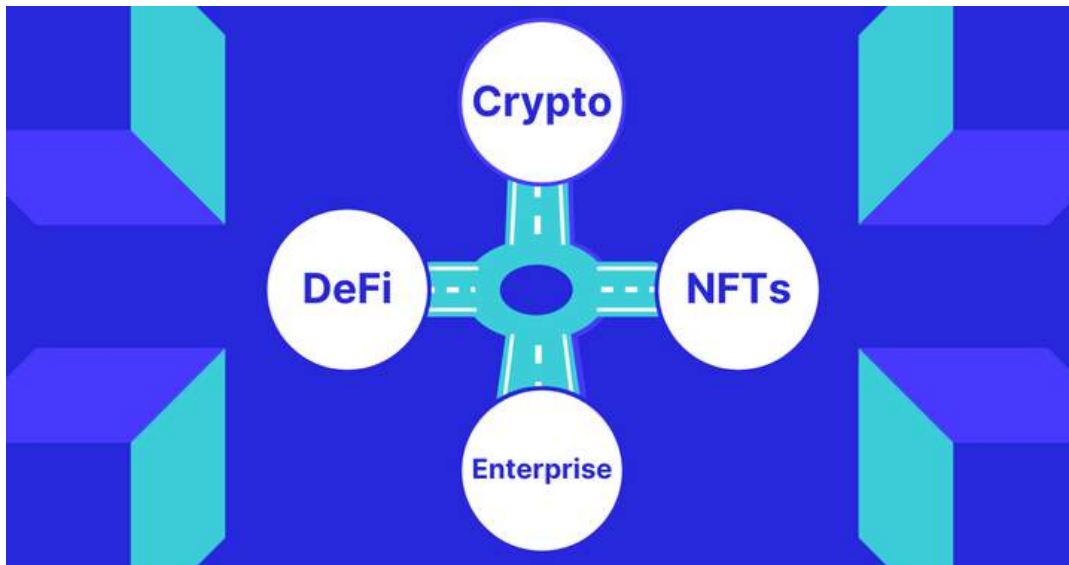


The Big 4 Blockchain Opportunities



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Blockchain Opportunities

Are you keeping up with blockchain innovations? Simply knowing about the technology is not enough to take advantage of it. You may have heard of a few concepts like DeFi or NFTs. But do you know what they mean? More importantly, do you know how your business can benefit from them?

- Cryptocurrencies
- Enterprise Blockchain
- DeFi
- NFTs

We'll explain the four big blockchain opportunities to you. You will understand what they are and what difference they make. You might even recognize an opportunity for implementing these into your own business concept.



Chapter 1

Cryptocurrencies

Cryptocurrencies were the first use case of blockchain. They also remain the biggest, at least in terms of market capitalization. The e-currencies have seen a lot of mass adoption in recent years.

Nowadays, numerous merchants accept cryptocurrency payments. This is made even easier with the growing number of payment processors also adding crypto to their supported payment options.

Cryptocurrency Growth

The cryptocurrency market has seen a significant upswing in the past year or so. Around this time a year ago (May 2020) the total crypto market cap hovered around USD 250 billion. At the time of writing, this amount had grown to USD 2.12 trillion—an increase of more than 750%. Bitcoin itself has jumped from around USD 9k to more than USD 54k, even reaching an all time high of almost USD 65k in April 2021.

A good amount of growth is owed to institutional interest. In October 2020, [PayPal announced](#) they would add cryptocurrencies to their online wallets. This feature [launched](#) at the end of March for users in the US. Checking out with crypto means that users can swap their Bitcoin, Ethereum, Litecoin, or Bitcoin Cash for USD instantly, with no extra fees, and pay with that.

In February 2021, Tesla CEO [Elon Musk announced](#) the company had invested USD 1.5 billion in Bitcoin a month earlier. He has also expressed interest in Dogecoin via Twitter, sending the coin's price soaring.



In the same month, [MasterCard joined the club](#) of payment providers interested in crypto. Only weeks later, [Square invested another USD 170 million](#) in Bitcoin.

March saw [Goldman Sachs relaunching their crypto trading desk](#) following increased client interest. Sources report that [Morgan Stanley is launching access to Bitcoin](#) for their wealthy clients. Bitcoin is not the only crypto that has garnered interest. Ethereum is also soaring thanks to [big players entering its market](#).

With institutional investors recognizing cryptocurrency advantages, coins are quickly becoming more widely accepted. But what about the price?



Should I Be Worried About Price Swings?

This is one of the most common questions about cryptocurrencies. It is true that huge swings are not unheard of. However, price swings in 2021 cannot be compared to earlier changes due to increased institutional interest. This introduces two main aspects to the cryptocurrency market:

- **It acts as a price stabilizer.** With large players consistently using cryptocurrencies, the price is less likely to undergo drastic changes. It will still fluctuate, but this interest is proof that the market is maturing.
- **It proves cryptocurrencies are there to stay.** Institutional interest gives the cryptocurrency space the type of solid backing that can't be otherwise found.

Price swings are a part of any asset—the difference is that they're more visible in cryptocurrencies. Extreme increases are often followed by brutal corrections. However, we can safely say it will not spell death for the assets.



Ease of Use

Many were wary of trying cryptocurrencies because they seemed too hard to use. This is why MasterCard and PayPal offering cryptocurrencies will help bridge that gap. Those who are still insecure can now get access to coins through companies they trust. Once they feel familiar with the concept, they can move on to a more independent approach. This can also act as an incentive for international customers, who can skip exorbitant conversion fees that banks charge for fiat.

The same is true from the business side of things. More user friendly crypto solutions mean an easier implementation of such payment options. More international customers can mean spreading their reach beyond their current market. With a growing number of crypto payment processors, you do not have to deal with setting up wallets, remembering many keys, etc.—unless you want to.



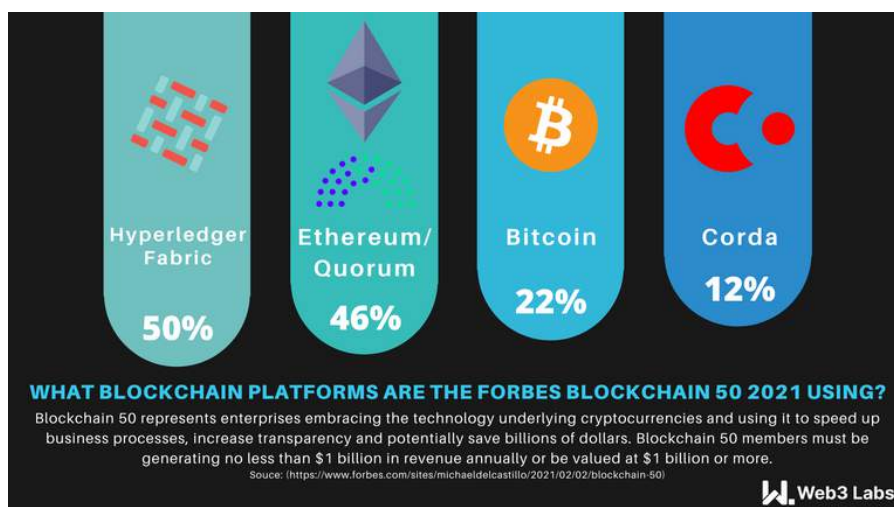
Chapter 2

Enterprise Blockchain

Many big companies have already recognized blockchain's strengths. They either have a live product or are piloting an implementation of the technology.

If blockchain can address one or more pain points of your own business, deciding not to use it can hurt you in the long run. This article will show you how enterprise blockchain is already used. We will also look at alternatives to a full blockchain implementation.

The Forbes Blockchain 50





[Blockchain 50](#) is an annual list by Forbes, showcasing companies with a revenue of more than USD 1 billion that are using the technology. These companies are mostly using the following types of blockchains:

- **Public blockchains.** Some companies, like Cargill, CONA Services, and Daimler use Ethereum, for example. This is especially useful for those who need public access. Depending on business type, they may offer their services to the public or need information stored on a public blockchain. For reasons like these, companies are often prepared to handle the cons of using public blockchains, like lower throughput, network congestions, and price oscillations.
- **Private, permissioned blockchains from a blockchain provider.** The three of the best blockchain providers—Hyperledger Fabric, ConsenSys Quorum, and R3 Corda—are very common names on the Blockchain 50 list. They are well-established enterprise blockchain providers who can handle the technical aspects of setting up the technology for you. With years of experience working with huge corporations and their specific needs, all three of these can handle anything you may need from them.
- **Their own blockchains.** Building your own blockchain is difficult, but not impossible. For businesses that can see blockchain becoming an important part of how they function, this may be a good solution. It is, however, costly and needs a full team available to handle anything to do with the technology. In most cases, shifting an existing company to the blockchain to the point where it warrants its own solution means reimagining a lot of existing processes.

These three categories are not the only ones. They're more like points on a spectrum, where your own needs may fall anywhere in between them. This is why, in most cases, you may notice that the companies on this list use more than one blockchain. This allows them to use some of them actively, pilot others, while researching even more.

This may not be possible for businesses that don't have this sort of revenue, though. Generally, we recommend using private, permissioned blockchains from the aforementioned providers. They don't need a lot of technical knowledge, but they can address any pain points your business might have. In other words, you can get all the perks of blockchains without the pain of doing it yourself.



Blockchain as a Service Offerings

It is also possible that you don't have any technical knowledge at all. You may be disinclined to learn, it may not seem worth it, and it may not make a difference for your business. This is where Blockchain as a Service (BaaS) products come in. They are designed to bridge the gap between the highly technical world of blockchain and non-technical users. In these offerings, the provider acts like the host and manager of your blockchain. In many cases, a BaaS is using one of the three enterprise-level blockchains that we mentioned. The difference is that you have even less of a contact with the blockchain itself, other than to use it for its intended purpose.



One of the biggest advantages of BaaS is that it is cloud-based. This means you do not have to host the blockchain infrastructure yourself. Your provider will handle all the tasks that keep blockchain functional in the background. Of course, you will need to pay some setup fees, but these tend to be lower than the cost of setting up a whole new blockchain all by yourself.

The three best-known BaaS providers are Microsoft Azure, Oracle Blockchain, and Blockchain on Amazon Web Services (AWS). All three of them are widely used thanks to their ease of access and availability. Creating your blockchain network takes only a few minutes, but you don't have to compromise. You can choose the details of your implementation without skipping anything important to you. Plus, many of your existing software solutions can be connected to your new blockchain for smoother coordination.

Blockchain has a lot of potential for implementation, regardless of industry, [as evidence shows](#). Businesses that could use the perks offered by enterprise-level blockchain solutions can look closer into one of the three providers listed. On the other hand, those that don't need the whole blockchain to themselves, so to speak, can try Blockchain as a Service.



Chapter 3

DeFi

Decentralized finance (DeFi) is a common blockchain-related buzzword. With its rapid rise in the past years, it quickly turned heads of everyone interested in fintech. This type of finance removes intermediaries and instead uses smart contracts to offer various financial instruments.

What is DeFi?

DeFi is a very wide concept, as it covers any type of finance that is decentralized. Instead of using third parties like banks, brokers, and exchanges, it uses blockchain-based smart contracts. This lowers the amount paid in fees and commissions, but also the risk of fraud and manipulations. As everything is written in the software, this does not permit the all-too-common fine print that can harm one party. With all participants aware of exactly what each smart contract does, everyone can make informed choices.

The rise of DeFi has introduced new concepts to the blockchain and cryptocurrency industry. One of the most widely known ones is yield farming. In short, this means you give your crypto temporarily to a decentralized application (DApp), which earns you more crypto. Yield farming means moving your crypto around to get the best returns.

Another relevant term is liquidity mining. You provide liquidity for an application, and the application gives you a new token plus the usual return. This helps everyone: you by earning you money, and the application by stimulating usage, which in turn can increase the value of the token—which circles back to you, where you profit off that token.

Finally, we need to explain the idea behind liquidity pools. As their name implies, they provide liquidity through funds locked in a smart contract. We will get more into liquidity pools in the next part.

Decentralized Exchanges or DEXes



Another major aspect of DeFi are decentralized exchanges (DEXes). Uniswap is one example: called an automated market maker (AMM), it is always willing to buy your coins and sell what it already has. It works with the already mentioned liquidity pools. When a trading pair is created, the provider sets the price and an equal supply of both assets. Automated market makers like Uniswap are made up of any number of liquidity pools that work like that.

Uniswap hosts a large number of Ethereum-based tokens (also known as ERC-20 tokens), and anyone can add new ones, as long as they provide the liquidity. This means they have to add the new token and an equivalent amount of another token. There is no listing process nor background checking—Uniswap aims for decentralization, censorship resistance, and security.

At the time of writing, Uniswap had more than 72k liquidity providers and USD 258 billion in all time volume. It has tens of thousands of transactions in 24 hours, and the daily volume can go into billions by itself. Additionally, a [Stanford analysis](#) showed that it remains stable under a wide range of market conditions. Its consistent popularity and trading volume proves the need for decentralization and censorship resistance in a large number of sectors.

Innovations: Aave and Chainlink



Decentralized exchanges and yield farming are far from the only innovations happening in the DeFi space. There are two examples that we will cover in this article to give you an idea of what is happening in this industry.

Aave is a decentralized, peer-to-peer lending system running on Ethereum. Users can both borrow and lend through the protocol, as well as earn interest on deposits. This means that depositors provide liquidity and are rewarded with passive income. Borrowers, on the other hand, evade the usual potential censorship and high fees that are part of traditional finance. The usual loans have negligible fees (0.00001% of the loan amount), while Flash Loans (almost exclusively geared towards developers) charge 0.09%.



Chainlink is another big project in the DeFi space. It acts as a bridge between blockchain and the real world through so-called oracles. As blockchains, by design, cannot access real-world data, they need to have it provided by someone—or something—else. In this case, these bridges are called oracles. Chainlink employs a decentralized network of oracles. This means that, for data to be deemed correct, there must be a general consensus among them. If an oracle is found to be consistently trying to feed bad information into the system, it is punished. Chainlink calls itself blockchain-agnostic, meaning it can run on any blockchain. This enables a much wider spread of use cases than usual.

Although these examples are far from the only ones, they show what the DeFi space is capable of.

The DeFi space boils down to one question: how many things can we do directly with one another, without intermediaries? The answer seems to be incredibly many, with the number constantly growing. Lower fees and lessened risk of censorship can also attract many new users. For businesses dealing with finance and third parties, a foray into DeFi may be a good choice.



Chapter 4

NFTs

Non-fungible tokens (NFTs) have been the most recent talk of the industry. In most cases, they act as collectibles. They're a unique approach to blockchain's immutability: owning an NFT is proof beyond dispute that you own whatever it represents. Their recent rapid rise in popularity shows that they added a whole new dimension to digital art ownership, for example.

What are NFTs?

How are NFTs used?



Short for non-fungible tokens, NFTs are, in other words, one of a kind. Unlike currency notes which can be swapped for equivalent notes without changing their value, NFTs are set apart from each other. This uniqueness makes them especially suitable for collectibles.



One of the first examples of NFTs were so-called CryptoKitties. They took the world by storm around 2017, congesting the Ethereum network on which they ran. Some CryptoKitties sold for hundreds of thousands of dollars. Still, the real NFT interest boom happened in 2020, when its market value tripled to over USD 250 million.

NFTs are pretty straightforward: stored on the blockchain, they are provably unique, and their ownership is indisputable. We have already covered the [strengths of blockchain](#): one of those was [records of ownership](#). NFTs are an example of this principle in action. The shared ledger shows that an NFT belongs to you, but it also shows who created it and when, how much you paid for it, etc. This is why they're nowadays most often used as digital art collectibles.

Digital art has many problems that traditional art does not face. For example, nothing is holding you back from simply screenshotting a pretty image, regardless of who created it. Although there are plenty of piracy laws in effect, these are often hard to implement when it comes to visual arts. NFTs, however, let you own digital art outright. This way, you support an artist and you get some basic usage rights, for example to use it as your profile picture online.

But why buy an NFT if you can right click and download the same image? An oft used parallel is like owning a Monet print—which anyone can either buy or print out themselves—and owning the original painting. Only one person can have the original (and potentially sell it, but often simply collect and display it somewhere).

For NFT issuers, most often artists, NFTs can be a source of income. Aside from the income from the initial sale, many NFTs can be set up with smart contracts so they pay out royalties to the artist when they change hands. These royalties are often just a percentage of whatever price it goes for.

How Can NFTs Help My Business?

One of the most obvious advantages is that you can earn money by selling NFT-based art. Some [Formula 1](#) teams are already selling exclusive images of their cars as collectibles. If your NFT grows in popularity, the royalties you receive can also generate an income. You almost don't need too much blockchain-related knowhow: there are plenty of tutorials on how to create your own NFT. If you already have the artwork, you can turn it into an NFT in a few simple steps that depend on your marketplace of choice. Of course, on an enterprise level, you could always hire a team of artists and developers to join forces and represent your company in the best possible way.

However, an important question on everyone's minds is if there is enough interest for NFTs. But the answer is simpler than it may seem. The assets are selling for incredible amounts of money: a Beeple NFT sold for USD 69 million at a Christie's auction only a few months ago. NBA Top Shots is the name of NFT-based trading cards, where a [LeBron James](#) highlight sold for around USD 200,000. But these are often resale prices: many NBA NFTs went for as low as USD 9 when first sold.



Are these prices realistic? Probably not. But while the prices may seem over the top, they're proof that there is real demand for NFTs. Even if the prices don't stay as high as they currently are, during the hype, there is still a very real market for digital art collectibles. For a business looking to connect with crypto enthusiasts, issuing NFTs can make all the difference.

NFTs are another blockchain opportunity that is too good to miss. For businesses that can connect with their users and fans through art collectibles, blockchain-based NFTs bring a new dimension to the concept of ownership. The process itself is pretty straightforward and likely the simplest of all [four blockchain opportunities we presented](#). Just upload your artwork to an NFT marketplace, and with a few clicks, you're good to go. (Creating said artwork may not be quite as simple, however.)



Chapter 5

Common Objections!

All four of these categories can bring some sort of innovation into your business. The type you get depends on what you need. Let's take a look at some of the most common objections.

- **Crypto:** there will be a correction! This is true. Corrections in cryptocurrency prices can be brutal. Price swings can wipe out trillions in total market cap of the industry. However, crypto now has a superpower: institutional interest. With big names taking advantage of the benefit crypto offers, the industry is not going anywhere.
- **Enterprise blockchain:** who is using these, anyway? Here's a list of the [top 50 enterprise blockchain users](#). To get on this list, these companies had to have a revenue of USD 1 billion or more. This is not to mention smaller companies that didn't make it on the list. Check out our articles on [mainstream adoption](#) and [industry use](#) to learn more!
- **DeFi:** nobody would use this when you have the comfort of centralized exchanges. This isn't really true. The aforementioned Uniswap has a 24-hour volume of USD 1.28 billion. Its total liquidity exceeds USD 9 billion. There are hundreds of thousands of transactions occurring within 24-hour time frames. The situation is similar with PancakeSwap, another popular decentralized exchange: USD 1.47 billion has been traded in 24 hours at the time of writing. Its total liquidity is approaching USD 3 billion.



- **NFTs:** what is the point when I can just download the art? It's true, but you can also print out a Monet—but you still won't own the original. The very fact that NFTs go for crazy amounts of money shows that the interest is real. Recently, a Beeple NFT [sold for USD 69 million](#) at a Christie's auction!

What Can I Do?

This depends on your business needs. Accepting cryptocurrency payments could bring you more customers. Implementing a blockchain solution could speed up your internal processes. Using DeFi solutions could facilitate trust between you and your customers. Even just offering NFT collectables can set you apart from the crowd as someone who recognizes opportunities in blockchain innovations.



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It also works with leading blockchain companies and protocols to develop their ecosystems and platforms. The organisations Web3 Labs has worked with include ConsenSys, R3, the Ethereum Foundation and ICON.

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"Web3 Labs are our preferred partner for Quorum and Besu support due to their significant contributions to these projects and their wider contributions to the web3 and enterprise landscapes."

Madeline Murray, Group Manager at ConsenSys Protocol Engineering