



METaverse AND BLOCKCHAIN FOR BEGINNERS





TABLE OF CONTENTS

1. Introduction to the Blockchain
2. Bitcoin
3. Cryptocurrencies
4. Advantages and disadvantages of cryptocurrencies
5. Smart Contracts
6. DeFi
7. NTFs
8. Metaverse
9. Metaverse Application Areas



You can't stop things like bitcoin. It's going to be everywhere and the world will have to readjust. World governments **will have to readjust.**

- John McAfee.

GLOSSARY OF BLOCKCHAIN TERMS

Coinmarketcap: Coinmarketcap is the world's most recognized price tracking website for cryptoassets in the growing for cryptoassets in the growing cryptocurrency space.

Deflation: A phenomenon that occurs when the prices of goods and services in an economy decline for a prolonged period of time. a prolonged period of time (usually two consecutive semesters) causing consumers to see their purchasing power consumers to see their purchasing power increase.

Fiat money: FIAT money (which was already used in 11th century China under the Ming Dynasty) is money that has no value in its own right. that has no value in its own right. It is also not backed by precious metal reserves of its issuer, so its value is It is not backed by the issuer's reserves of precious metals, so its value exists because the law says it has that value.

Exchange: Platform or virtual market in which we can define the exchange as a platform or virtual market in which we can make exchanges of money virtual market in which we can exchange cryptocurrencies, either buying or selling. These serve as an intermediary and facilitate the financial movements of users.

Fomo: The FOMO syndrome (acronym for "Fear Of Missing Out") is associated with technology and social networks. social networks. It is a type of social anxiety caused by the impression that the rest of the world is having rewarding and fun experiences having rewarding and fun experiences and the person who suffers from it, does not

Halving: It is an event integrated within the Bitcoin source code, forming part of the design and operation of this cryptocurrency. design and operation of this cryptocurrency. Bitcoin's halving causes a downward variation of the reward that miners receive for generating blocks the reward received by the miners of the network for generating blocks.

Hodl: It is an investment strategy based on buying assets and holding them in portfolio over time to benefit from their over time to benefit from their appreciation. It is widely used in the area of cryptocurrencies.

Holder: A person who holds one or more cryptocurrencies for a long period of time without selling them. period of time without selling them.



Market Place: It is a great platform where different brands, companies or stores can sell their products or services.products or services. Or, in other words, a kind of online shopping mall.

MetaMask: It is a cryptocurrency software that is installed as a web browser extension. This is used to interact with the Ethereum blockchain platform.

Metaverse: Virtual world to which we will connect using a series of devices that will make us think that we are really inside it. think that we are really inside it, interacting with all its elements.

Mining: The process in which miners use computing power (hashing) to process transactions and obtain rewards in this transactions and obtain rewards, in this case cryptocurrencies.

NFT: Non Fungible Tokens (Non Fungible Tokens), are assigned a kind of digital certificate of authenticity, a series of metadata, which are used as a authenticity, a series of metadata that cannot be modified. These metadata guarantee their authenticity authenticity, the starting value and all the acquisitions or transactions that have been made are recorded, as well as its author.

Node: A computer connected to other computers that follows rules and shares information. A complete node is a computer in the Bitcoin peer-to-peer network that hosts and synchronizes a copy of the entire Bitcoin blockchain. Nodes are essential to keep a cryptocurrency network running.

Opensea: A decentralized marketplace that specializes in trading digital assets, i.e. NFTs. Founded at the end of 2017 by Devin Finzer and Atallah, Opensea is created with the idea of to become the Amazon of digital assets, as they explain that "it would become a sort of Amazon of the trade. Amazon of the trade."

Pool: A liquidity pool is a smart contract that locks tokens to provide liquidity. Augmented Reality: Also known as AR is a technology that allows virtual elements to be superimposed on our view of reality. virtual elements over our view of reality. Increasingly in demand, by 2020 it had become a business business of close to \$120 billion worldwide by 2020.

Ready Player One: Titled "Ready Player One: The Game Begins", in English, is a 2018 American science fiction action film produced and directed by Steven Spielberg. 2018 American action science fiction film, produced and directed by Steven Spielberg, written by Zak Penn and Ernest Cline and based on Cline's novel of the same name.

Virtual Reality: also known by its acronym VR is an environment of lifelike scenes and objects - generated by computer technology- that creates the sensation of being immersed in it. This environment is viewed through a device known as Virtual Reality glasses or helmet.

Satoshi Nakamoto: A pseudonym used by the person or group of experts who developed the Bitcoin cryptocurrency and the the Bitcoin cryptocurrency and all the software that supports it. Satoshi Nakamoto has been one of the most mentioned names most mentioned names because in addition to creating the entire protocol, he disappeared in 2011.

Smart contract: Today a smart contract refers to a contract that executes itself without the intervention of third parties. third parties and is written as a computer program instead of using a printed document with legal language. printed document with legal language. In smart contracts, computers play an active role.

Staking: Staking works in a similar way to a fixed-term deposit. The user "lends or keeps a portion of his cryptocurrencies locked up" in exchange for earning interest. This interest is received in the form of cryptocurrencies. received in the form of cryptocurrency.

Stable coin: A digital currency linked to a “stable” reserve asset such as the U.S. dollar or gold. dollar or gold. This type of coin is designed to reduce the volatility of unbacked cryptocurrencies such as Bitcoin. of unbacked cryptocurrencies such as Bitcoin.

Wallet: They are the bridge that allow us to manage our cryptocurrencies. A piece of software or hardware hardware with which to perform receiving and sending operations through the blockchain network of each cryptocurrency.

Web3: Web3 refers to the evolution of the internet as we know it and its main characteristic is that it will be a decentralized internet. it will be a decentralized internet and for that it will use blockchain technology.

Whitepaper: Currently, a white paper is an informative document that promotes or highlights the features of a product, a solution or a features of a product, a solution or a service that a company offers or will offer.

FOREWORD

The technology that changed the world

Every ten years or so, a paradigm shift occurs in the world, a revolution that profoundly affects society. paradigm shift, a revolution that profoundly affects society.

In the 1970s, computers took over the world.

In the 1980s, credit cards became widespread worldwide.

In the 1990s, it was the massive adoption of the Internet.

In the 2000s, cell phones replaced landlines.

In the 2010s, it was the boom of social networks. And now, in the early 2020s, it was time for the technological revolution of the Blockchain and the Metaverse.

The crypto world is moving too fast

As you have been able to appreciate, around Blockchain, Bitcoin, cryptocurrencies, NFTs, metaverses... everything is going so fast, that we have created this guide thinking of you. So that you don't get lost and don't get left out of the game, so that you can lay the groundwork for everything that's going on.

And most importantly, using language that is easy to understand and, as far as possible, less technical and more friendly.

A CEO, a graphic designer, a Blockchain Advisor and a Financial Consultant.

Written and published by four blockchain technology enthusiasts, this guide is intended to be an is intended to be a help if you are taking your first steps. If you have already been familiar with the subject for some time, we are sure you will also benefit from it, since it contains very current concepts.

Víctor Corvalán (Switzerland), is the CEO of MetaBlock, the first 3D Metaverse Blockchain, developed under NFT and Blockchain technology.

Claudia Montiel (Switzerland), is the founder and Creative Director of Metablock.club with more than 6 years of experience as a graphic designer.

Camilo Yonhson (Chile), is the creator of the agency “Satoshi to the Moon” where he provides Blockchain consulting services for all entrepreneurs.

Manuel David Moreno (Spain), Financial consultant, with more than 23 years of experience in experience in Investments, Stock Exchange, Trading and personalized financial advice.

We hope that the guide “Metaverse and Blockchain for beginners” can be useful for you and you can get the most out of it.

If you like this guide, see you in the private group of Metablock.club (Spanish speaking community).



1. Introduction to the Blockchain

Do you want Bitcoin as a spouse?

You can't talk about blockchain technology without talking about cryptocurrencies. And you can't talk about cryptocurrencies without mentioning the queen of them all: Bitcoin. This is why this Love and marriage between Bitcoin and Blockchain is so solid: one cannot live without the other.

Blockchain technology, which we will talk about throughout this chapter, emerged with the development of these virtual currencies, back in 2008, although in actually, the story goes back quite a few years earlier.



Once upon a time there was a blockchain...

The blockchain is the technology behind the well-known cryptocurrency: Bitcoin.
cryptocurrency: the Bitcoin.

While there are antecedents of blockchain technology (Alan Turing in 1936, Stuart Haber and W. Scott Stornetta in 1991, Stuart Haber and W. Scott Stornetta in 1991, Nick Szarbo in 1997, among others), its first application arose as a response to the problem of the first application arose as a response to the problem of double spending associated with Bitcoin in 2009.

Think that when you send an email (or a WhatsApp), what is really happening is that the information that you is that the information you have is **COPYED** and it is this copy that the recipient receives. the recipient receives. Or what is the same, what you send does not disappear, but it **IS COPY**.

Is it possible to digitize money?

Understanding this is fundamental to understanding how the blockchain works. Why? Well, because for many years we have wanted to digitize money, but every time we have run into the same problem: we can **COPY** the information, but we can't make it disappear from the Sender and reach the Receiver.

So far so clear?

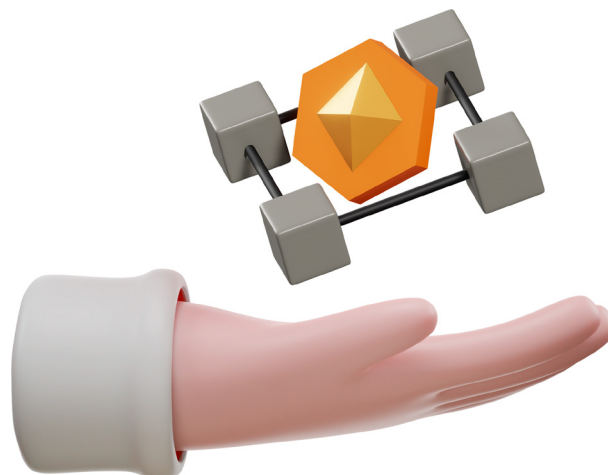
Well, thanks to the Blockchain it has been possible to make certain information available to the Receiver:

1) Encrypt

2) Send

**3) P2P: to achieve the exchange between two people
(P2P = Peer to Peer)**

**4) And, most importantly, achieve decentralization,
avoiding intermediaries.**



What does a decentralized network mean?

Decentralization refers to the fact that it has achieved independence from any national (or international) entity that has from any national (or international) entity that controls or regulates the control or regulate the virtual currency.

In cryptocurrencies there are no banks or other centralized bodies that issue, mint or print the currency at their free will, causing the much-feared inflation. so feared inflation.

But without going into technical issues, which is not the idea of this guide, we can tell you in broad strokes how the technology works "inside". Blockchain.

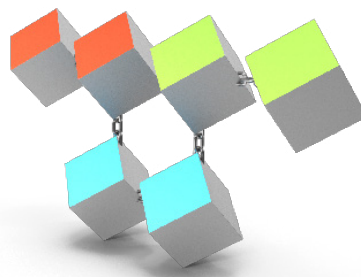
What does Facebook have to do with the Blockchain?

By its very nature, the Blockchain works similarly to a social network like Facebook, but without Mark Zuckerberg. What does this mean? That there are computers connected to each other (nodes) interacting (receiving and sending information) but with no "entity" or "company" that can send information) but without there being an "entity" or "company" that can change the rules of the game.

We have nothing against Mr. Zuckerberg (thanks to him we can connect from anywhere in the world). connect from anywhere in the world), because he has created Meta, which will be a centralized metaverse. But if tomorrow he decided to charge you to use Facebook, Instagram or to send messages via WhatsApp, he could do it.

Why? Well, because it is he who has created the rules of the game. By the way, how many of the users of social networks do you think would pay to continue using Instagram, WhatsApp or Facebook? Probably many.

Well, that can't happen in the Blockchain. The rules of the game are are written, encrypted, immutable (they can't be changed) and everyone who participates in the game decides who participates in the game, decides to respect them. There is no company that wins: here we all win. Yes, you too.



Nodes, transactions and computers

As we mentioned earlier, the decentralized network is made up of thousands and thousands of computers (nodes) and its growth and massive acceptance has been impressive in recent years. This computer network has as many copies of the network as there are members.

A node is any device with computing and storage capacity: a tablet, a server or a personal computer in our home could be a node.

nodes. Now, you are probably wondering: how and why are files exchanged between the different nodes? Well, in exchange for storing this copy of Blockchain information, those who make up the network receive Bitcoins. That's how it all started.

In the blockchain, therefore, the most important thing of all are the transactions that take place. Each transaction carried out between nodes has:

- (a) An address of the person issuing the transaction (A) and an address to which that information is directed (B).
- b) The amount of Bitcoins being sent from A to B
- c) The digital signature through an encrypted code.

The da Vinci Code

Did you see the movie “The Da Vinci Code”? Well, the concept of encryption comes from there and you can understand it very well if you think about that object that Tom Hanks had in his hands and that he could not open.



It was through a sequence of complex riddles that he was able to unveil the mystery to be able to open the “magic” box. In the Blockchain something quite similar happens, although it is true that thanks to encryption it takes thousands of years to be able to obtain the “key” that opens that drawer in which are your bitcoin and other cryptocurrencies.

It is vitally important that we understand that information is not stored or kept in a single place. If it were, we would be dealing with a centralized system and whoever had the information could set their rules or standards in exchange for providing the service of sharing the data. This is exactly what the traditional banking system does, but in the Blockchain this does not happen.

What is important about the blockchain lies in its decentralization or, rather, in its distribution, as it is distribution, since there is no single node in charge of handling and storing all the information and store all the information. Technically, the data is not decentralized, but distributed throughout the network of nodes. But in order not to but to make your life easier, we'll leave that topic for a future ebook.

How the Blockchain really works

If A wants to send bitcoins to B, what A has to do first is to connect to a node in the Bitcoin network. When sending the transaction, the node that receives it (B), stores it and sends it to the nearest nodes.

The transaction automatically reaches all nodes as if it were a computer virus that everyone is using and is updated every X amount of time.

At some point, in a tiny amount of time, that transaction will be available on the node closest to the recipient. The recipient checks on his nearby node to see if there is a transaction for him node if there is any transaction for him. He will immediately see that there is a transaction sent by A, for a certain amount of Bitcoins.

This transaction has been validated by all the other nodes in the network.



I'm a miner...

The fact that the network is decentralized (or rather, distributed), brings some complications to manage the contents, as they are distributed across all nodes. In response to this complexity, Bitcoin developed the concept of blockchain, which works as follows:

When the transaction arrives at a node, it tries to build a block with all the transactions that are coming to it. All the nodes in the network have to solve a really complex mathematical and algorithmic challenge or problem. The first node that manages to solve it will make the block part of the blockchain and, consequently, the block will be validated.

The attempts of the other nodes are discarded. The winner of the challenge will receive compensation for his work in Bitcoins and the transaction is automatically saved or annotated in the Blockchain. This is called mining or mining bitcoins. The blockchain works as that great accounting record ("ledger") where all transactions made by all nodes that send and receive data are recorded.



Final conclusions

In this chapter we have seen how the Blockchain works, in broad strokes. You have also learned about important concepts such as decentralization, nodes and the computational power required to solve the mathematical puzzles that miners manage to unravel with their computers to get bitcoins.

2. Bitcoin

Satoshi Nakamoto and the BTC

On January 3, 2009, what many consider to be the currency of the future was born. Others, its detractors, see it as a scam or a big bubble that could burst at any moment. But the truth is that Bitcoin leaves no one indifferent.

In 2008, someone with the pseudonym Satoshi Nakamoto wrote and published a series of articles describing a Peer-to-peer (P2P) online payment system based on Blockchain technology.

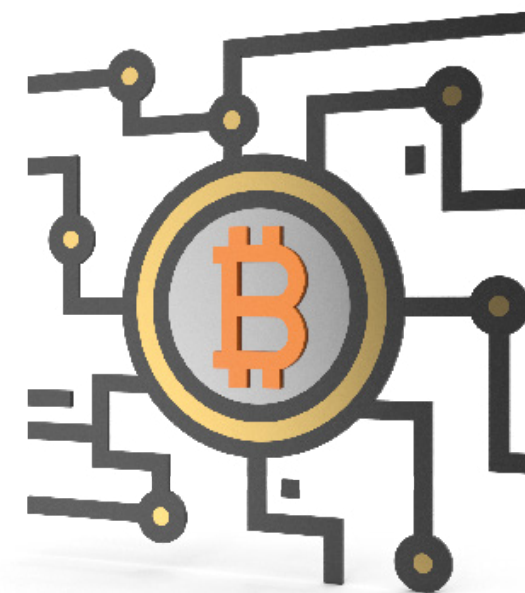
Although what Satoshi really did was to collect the most important ideas of certain visionaries who had already been working on the subject, his contribution was decisive.

But what is a Bitcoin and what is it for?

Bitcoin is a financial asset that allows us to make monetary transactions between members of a community that accept its value.

It is nothing more than an accounting system, a way of recording transactions and values in a ledger distributed among all the nodes that make up the community.

It is we, the users of the community, who give it a value for its use, so that the more people accept and use its technology, the higher its price will tend to be in the long run.



When it was programmed, its creator decided, as with any other currency, that every few years new units would come onto the market. new units would come to the market from time to time. Unlike FIAT money, bitcoins are not printed when central banks so decide, with the consequent increase in inflation.

What banks do through the massive printing of bitcoins is to make their currency inflationary, or what is the same, causing its value to decrease over time. Just the opposite of what happens with Bitcoin. Every 10 minutes new bitcoins come to market through mining. To avoid inflation in the main crypto-currency, it was programmed so that:

- (a) Every 10 minutes... mining.
- b) And the rate of BTC creation is regulated through halving.

Blocks and Halving

Think of a construction site where a wall is being built. The workers are placing the bricks, one by one, using concrete to support them and prevent the wall from falling.

This metaphor will help us to understand perfectly two fundamental concepts: blocks and halving. fundamental concepts: the blocks and halving.

The blocks

Each brick that the worker places is like a mined block. For making that wall, the worker gets paid money and there are many workers working, right? Well, imagine that the builder tells the workers that for the first 210,000 bricks they lay he will pay them X amount and they commit to do that job for 4 years. For the next 210,000 bricks he will pay them half, $X/2$ and so on consecutively $X/4$, $X/8$ etc... Do you understand the concept?



Halving

The same is true for Bitcoin mining. Each time the miners solve complex mathematical algorithms, they receive their reward when they manage to place a new block on the blockchain.

And when 210,000 blocks are mined among all miners, the reward received is halved, which happens approximately every 4 years. This is why Nakamoto's creation is comparable to a great masterpiece, since halving allows the cryptocurrency to be deflationary.

This means that, unlike FIAT money, bitcoins are not “minted” infinitely, but there is a finite number of them, as we will see below.
as we will see below.

21 million Bitcoins

At its creation, Satoshi Nakamoto established the rules governing bitcoin. By programming with computer code, these rules are immutable, so they cannot be changed in the future. New blockchains can be added, but the written rules cannot be changed.

And one of the most curious rules that was programmed into the code and written in the so-called white paper is that the supply of bitcoins is limited to 21 million units.

According to these calculations, the last BTC will be mined by the year 2140. As defined in the previous paragraph, the supply of bitcoins will increase more and more slowly, thanks to Halvin, but at all times it will be controlled.
will be controlled.



Market capitalization

More than 744 billion dollars, or what is the same 744 followed by 6 zeros. That is the amount (in dollars) of market capitalization that Bitcoin has, at the time of writing this guide (March 2022).

In other words, there are people all over the world buying and selling BTC worth that dizzying figure.

If you want to be updated on the market value or price of bitcoin or other cryptocurrencies, we invite you to visit coinmarketcap.com portal where you will have access to real-time prices of the crypto market.

El Salvador and Bitcoin

In September 2021, the government of El Salvador, presided by Nayib Bukele, announced that Bitcoin would be admitted as legal tender throughout the country.

Approximately 70% of the citizens of the Central American country do not have a bank account, and if they do not have a bank account, they will not be able to use it. have a bank account, and if we add to this alarming figure the high cost of transactions cost of transactions between accounts, it is logical that Bitcoin has been adopted as legal tender throughout the country. Bitcoin has been adopted as legal tender.

In fact, to encourage its use in a country where the majority of the population does not have access to the internet, the Salvadoran government invited its citizens to download a new digital wallet application that gives away US\$30 in bitcoins to all those who have it.

El Salvador's president, Nayib Bukele, announced on Twitter that his country bought the first 200 bitcoins to store wealth and be able to nurture all citizens who start operating with the first cryptocurrency.

This innovative news set a precedent and most likely many countries in the Americas (such as Paraguay), Africa (such as Nigeria) will follow in the footsteps of El Salvador, encouraging the mass adoption of its citizens.



Final conclusions

New projects come out every day and it is inevitable to come across scams and exciting projects that promise a lot, but then boooooom! disappear as if by magic. That is why we have decided to bring out this guide: to inform you and make it clear that you must educate yourself first, with clear information and data before investing.

It has been proven with numbers and hard data that investing for emotion will make you lose your money quickly.

There have been cases of people betting their entire patrimony on a project that seems to bring them good returns and then, Pium, it disappeared?

The conclusion and recommendation we make is: first of all educate yourself, get informed, do your research, read this ebook, reread it, learn from experts from experts, look for a mentor.

It is essential that, before investing, you establish a plan of action with clear goals and action plan with clear and easy to achieve goals and objectives in the short term (save \$50 a month, for example to buy USDT), medium term (for example: invest this year in 3 crypto projects) and long term (attend one crypto event a year and invest in your education every year, as well as increase your portfolio of crypto projects).



3. The cryptocurrencies

Blockchain, Bitcoin y mucho más

Could the Blockchain exist without Bitcoin? Yes, but Bitcoin could not exist without the Blockchain. And when we talk about Bitcoin, we talk about cryptocurrencies, in general.

We can say that cryptocurrencies (also called cryptoassets, digital currencies or virtual currencies) are one of the main applications within the Blockchain.

According to the ECB (European Central Bank) we can define a virtual currency as “a type of unregulated, digital money, issued and usually controlled by its developers, which is used and accepted among the members of a specific virtual community”.

Definition of cryptocurrency

The Oxford dictionary definition of cryptocurrency is “a digital currency that employs encryption techniques to regulate the generation of currency units and verify the transfer of funds, and that operates independently of a central bank”.

In short, we can define a cryptocurrency as an asset created outside the instances of a traditional financial system, which is based on trust and acceptance by the users who use it. They are obviously secure insofar as they are created according to a cryptographic system that allows us to carry out monetary transactions between members of the community.

The cryptocurrency ecosystem

In 2015, the ECB published the first study on cryptocurrencies. In the aforementioned report, the 4 figures needed for a cryptocurrency to exist were defined:

1) Programmer

First of all, a programmer is needed, who is the person who creates the virtual currency itself and also develops the entire system.

2) Rules

Once the network on which the cryptocurrency will operate has been created, the rules for the creation of new units in circulation must be established, if this is contemplated.

3) Mining

Through mining activity, new digital currencies are produced. Mining consists of verifying blocks of data sent by users belonging to the community.

4) Conservation

A miner, who is the one who has obtained the new digital currency, can decide whether to keep, trade or exchange the obtained cryptocurrency for FIAT money (coins/notes issued by a central bank).

Where do I buy and store my cryptocurrencies?

Cryptocurrencies record transactions in public ledgers (similar to ledgers) known as blockchains and are the first form of digital money in which no intermediary is required to send funds from one person to another.

Just as you store your money in the bank or invest it in a financial product, cryptocurrencies are also stored. The difference between FIAT money and crypto is that cryptoassets have no physical location.

You can buy (store or sell) cryptocurrencies through a “crypto bank” which is called an exchange. Some of the most important ones are: Binance, Coinbase or Kucoin.

Exchange Vs Wallet

Although you have to go through a centralized company to buy them, you can store your cryptos in virtual wallets can store your cryptos in virtual purses or wallets. The difference between an Exchange and a wallet is that in the first one you are the one who keeps and safeguards your coins, while in the latter it is you who has the “access key” and the responsibility for your cryptocurrencies and the responsibility for your cryptocurrencies. These keys are cryptographic keys (or seeds or random words) that serve to protect your cryptoassets to protect your cryptoassets. Once the wallet is created and the random words are written down in a safe place, you will be able to words in a safe place, you will be able to access your cryptocurrencies at any time and from any device. any device to your cryptocurrencies stored there, once the wallet is created and written down in a Once the wallet is created and annotated in a safe place, it allows its user to access their cryptocurrencies cryptocurrencies.

The world's largest social network

The larger the cryptocurrency network, the more uses it can be put to. Obviously, the larger the size of the network, the higher the value of the cryptocurrency because more people believe and trust in the project.



Thus, we can say that cryptocurrency ecosystems are the largest social networks ever created.

Now the question arises: what is a cryptocurrency ecosystem?

We will answer that question shortly, but first, keep in mind this chilling fact:

The web 3.0 and cryptocurrencies

A report by Electric Capital in January 2022, which analyzed nearly 500,000 open source repositories and 160 million code commits on Web3, reflects that:

65% of active Web3 developers joined in 2021.

What does this mean?

Well, we are currently in a boom moment in everything related to Web3 or Web 3 point zero (Web 3.0), which is the third generation of Internet services for Web pages and easily accessible applications.

Passwords out

Think, for example, that every time you have to access your email, today you are asked for a username and password. Every time you access a social network, your bank's application, a new job portal, etc., etc., you must do the same.

Web 3.0 will eliminate all this and will allow you to access all the sites you browse by simply

you browse, simply by identifying yourself through your MetaMask wallet, for example.

Web3 development is at its peak, in terms of the number of developers involved, that is, people who are CREATING. While it is true that we should not forget that we are still we should not forget that we are still at the beginning of a whole new era, in which new era, in which cryptocurrencies will be the fundamental piece of exchange.



The main cryptocurrency ecosystems

An ecosystem is a blockchain platform used to manage assets such as cryptocurrencies. assets such as cryptocurrencies. Although they can also be used to manage supply chains, notarizations and property registries, among others.

The precursor was Ethereum

Proposed by Vitalik Buterin when he was just 22 years old, Ethereum has been the pioneer project in terms of ecosystems.

The idea was born in 2013 and managed to launch a year and a half later, in 2015. All all thanks to the crowdfunding for a total of 30,000 BTC.

Its main feature resided in the proposal of "smart contracts" or Smart contracts, which are executed automatically and exactly coded, with no possibility of downtime.

More than 18,400 monthly active developers are working on the creation of code in cryptocurrency projects. And keep an eye on this data: a report reveals that more than 4,000 of them (over 21%) work in the ecosystem of Ethereum, while the number of developers working on Bitcoin exceeds 680.

The two main cryptocurrencies

Both Bitcoin and ether (the cryptocurrency of the Ethereum network) go beyond being an investment instrument and a store of value. We are talking about a new technology that changes the rules of the game, and not only for the financial sphere.

But not only BTC and ETH exist. According to coinmarketcap.com there are more than 18,160 cryptocurrencies at the time of writing this ebook (March 2022).

We will cite below some very robust and fast-growing cryptocurrency ecosystems.

Polkadot, Cosmos, Solana, Near, Neo, Terra, Fantom, Avalanche, Kusama, Algorand are, to name a few, ecosystems that are growing faster than others, in terms of the number of developers working on them.

4 final tips or advice

1. Learn more before you invest. Try to read more and inform yourself about blockchain first, to understand the technology that is revolutionizing the new era.
2. If you are more risk averse and/or are starting out in the crypto world, you can start with solid projects such as Bitcoin and Ethereum and complement your investment portfolio with a stablecoin, such as Tether (USDT).
3. Diversify as you learn. Learn to analyze projects before putting your money into them. Avoid fads and only decide to bet on technology and consolidated projects.
4. Fourthly, once you consider that your risk aversion is somewhat higher, you can consider studying other projects that, although not yet so consolidated, can give you a lot of joy, such as NFTs or new tokens related to the Metaverse.

Final conclusions

Bitcoin is the first cryptocurrency that was created, although today there are more than 18,000 crypto projects listed on Coinmarketcap.com.

While it is true that Blockchain is a technology that is revolutionizing the market, today it is associated with cryptocurrencies, although it has many other uses.

We can consider that cryptocurrency ecosystems are like large social networks, much larger than Facebook or Instagram.

Web 3.0 is already here and it is here to stay. Very soon you will stop typing your username and password every time you enter your email or browse the web. Instead you will simply log in through your Metamask wallet or similar.

4. Advantages and disadvantages of cryptocurrencies

You'll love cryptocurrencies!

Cryptocurrencies have been seen as a possible alternative to the current monetary system. current monetary system. This is a fact. But they are not only assets that can rise stratospherically in price and, thanks to that boom, allow you to go from zero to millionaire. from zero to millionaire. No. Cryptocurrencies are not for you to become a millionaire, they are for much more.

Thanks to their innovative technology and the multiple advantages they offer, they have been considered a determining factor in transforming the way transactions are carried out around the world since their implementation.

No administrators, no governments, no banks

One of the main advantages that cryptocurrencies offer is that they do not require an administrator. In other words, they are assets that do not depend on governments, banks or any other institution to function and grow.

The question that arises at this point is: why is there so much talk about decentralization, and why is it so important for the economy to be decentralized?



Firstly, because it allows independence from recessions and economic crises, thus obtaining the highest market price so far. and economic crises, thus obtaining the highest market quotation so far. Secondly, dependence on banks and governments is costly for society, for two main reasons: firstly, because it allows for independence from recessions and economic crises, thus obtaining the highest market price so far. governments is costly for society, due to two main reasons:

1) The first is that in banks, the systems for sending and receiving money between individuals living in different countries or continents are expensive. between individuals living in different countries or continents are expensive. By cryptocurrencies reduce commissions and eliminate interest on transactions. operations carried out.

2) And secondly, the government cannot distort or interfere with the accounts by printing more money, leading society itself to inflation as we suffer today.

No to inflation

Without going into technical concepts, we can define inflation with the following example:

If on January 1 you have \$100 in your bank account and the CPI is 7%, at the end of the year, your \$100 will be worth 7% less, that is: it will be worth \$93. Or in other words, if today with U\$100 you can buy 100 coffees, in 1 year you will be able to buy 93.



As of January 2022, this is the CPI (Consumer Price Index) in some Spanish-speaking countries. in some of the Spanish speaking countries.

Argentina: 50.7%.

Paraguay: 9.3%.

Uruguay: 8.9%.

Dominican Rep.: 8.7% Dominican Rep.

Chile: 7.7% Spain: 7.6% Chile: 7.7% Spain: 7.6% Spain: 7.6%

Spain: 7.6% Mexico: 7.3% Spain: 7.6% Mexico: 7.3% Mexico: 7.3% Mexico: 7.3%

Peru: 7% Colombia: 6.9% Colombia: 6.9% Colombia: 6.9% Colombia: 6.9% Colombia: 6.9% Colombia: 6.9%

El Salvador: 6.7%.

In this case, we have not mentioned Venezuela, whose case is out of the ordinary, given that it has an inflation rate of 340.5% as of January 2022.

Bitcoin is deflationary

Instead of printing more and more banknotes (as in the case of the dollar), the number of bitcoin (to cite the main cryptocurrency) is limited in time, which makes it a scarce commodity and therefore tends to be worth more over time.

This is why we speak of a deflationary currency (the opposite of inflation) as its issuance is reduced over time and can never exceed 21 million.

At the time of writing this guide, the 'Circulating Supply' of BTC is 18,982,231 bitcoin, or in other words, almost 19 of the 21 million to be mined in total have already been mined. Due to Halving, which we discussed in a previous chapter, it is estimated that the last BTC will be mined in the year 2140.



More advantages

Another advantage of this digital currency is that it can serve as a safe haven security. It provides a great opportunity for people to diversify their portfolio of products correlated with FIAT money (investment funds, savings products, etc.). correlated with FIAT money (investment funds, savings products, etc.), so it means that investors can “not put all their eggs in one basket”.

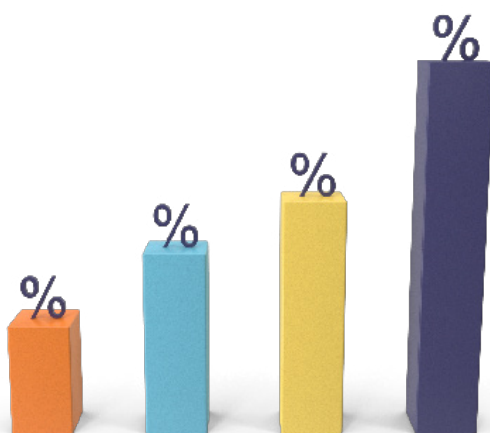
It also allows investors to “save their capital” and keep it intact in the event that the financial system continues with the current indecisiveness in the markets or that liquidity is needed in the event that the financial system is markets or if liquidity is needed to carry out a transaction (e.g. buying a house).

Since cryptocurrencies can be made liquid (they can be exchanged for FIAT money) at any time, it gives them an unparalleled advantage.

Not all are advantages

Digital currencies are very much about speculation. For better or worse, there are many people who see cryptocurrencies as a way to make quick money through buying and selling in short time margins, instead of paying attention to the projects behind each of them.

It is true that they can bring a lot of joy if, given the high volatility, they allow an investor to generate a x10 (multiply your investment by 10) or x20 in a matter of hours (something that has been seen especially during the Year 2022). However, if we only use cryptos for speculation, we are failing to appreciate the greatness of the Blockchain technology on which they are based.



Betting all on the red part

Many are those who, as if it were a virtual casino, bet all their money on a cryptocurrency. They treat cryptocurrencies as casino chips, which can make them millionaires overnight, forgetting what is really important, which is the long-term vision of the projects.

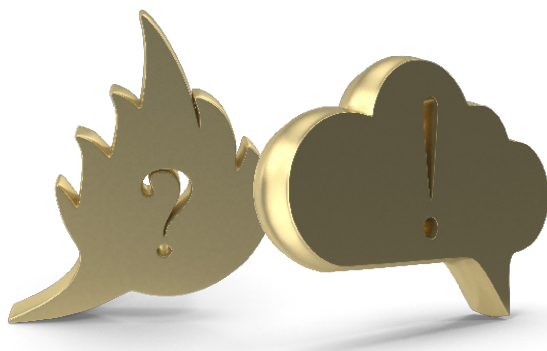
Although the value of all currencies is very volatile, due to the innovative nature of the market, for those who bought at the beginning, it has meant a profitability of 9,000,000%. The following images show the volatility of the most important digital currency, the Bitcoin, over time.

From extreme fear to FOMO

Cryptocurrencies, as we can see, have a great instability, especially because we are dealing with a technology that is still very unknown especially because we are facing a still very unknown technology. While it is true that in the long term they tend to increase in price, BTC for example was from 2018 to the end of 2020 in a downward or sideways trend.

In November 2021, the BTC price reached its all-time high (\$69,000 per BTC) and a few weeks earlier, the market went into FOMO (short for 'Fear Of Missing Out') or fear of missing out. This happens when the market feels a collective hysteria or anxiety because they see how others are buying and making a lot of money and they are not.

They want to 'miss out' on the party and buy for fear that the price will continue to rise. On the other side of the majority of speculators who, without being traders, buy without an established strategy or plan, are the holders. These are long-term investors, people who have studied a project, have seen it as ideal according to their investor profile and have dedicated a part of their portfolio to invest in it. The act of investing for the long term as a holder is called hodl or hold dear.



Emotional roller coaster

In April 2021 the FOMO was at unusual values (is BTC going to reach 1 million and I am going to miss it?) and in a few days it went from FOMO to extreme fear, as prices began to plummet. In the case of BTC it went from 64,854 (April 2021) to 28,805 (July 2021) in less than 3 months.

And shortly thereafter, history repeated itself, reaching a new all-time high (69,000) and then another big drop. This shows that markets are cyclical.

We cite this concept of FOMO and Extreme Fear as a disadvantage, because psychologically it is impossible that if you are not prepared as an investor, you will not be affected in your psyche by so much movement. Imagine that you are not prepared, it does not affect your psyche. Imagine that you have bought at record highs (when the BTC was at 64,000 and a few days later you see that your investment is reduced by half).

You have to be very prepared not to "suffer" anxiety if this happens.

I forgot my passwords

One of the disadvantages of cryptocurrencies is that the wallets where they are stored require keys (12 keywords or seeds) to be able to access the deposited funds.

In January 2022 the New York Times published a curious piece of news related precisely to this topic. Stefan Thomas lost the paper where he wrote the password to his bitcoin wallet years ago. Now he has only two attempts left to find them out or lose the more than 250 million dollars in which his 7,002 BTC are valued.

The bitcoins are stored on a small encrypted hard drive, called an IronKey. It is a flash disk that offers security and privacy. And also 10 attempts before formatting and deleting the content.

Thomas has already tried eight times some of his most used passwords, but none of them worked.

So you, dear reader, make sure you have your wallet passwords well written down and in a safe place, so that what happened to Stefan Thomas doesn't happen to you.



Final conclusions

Cryptocurrencies are said to be an alternative, safe and efficient way to exchange goods or services that positively affect the global economy due to their decentralization, high liquidity and flexibility. However, given the high volatility of the market, it is necessary to know well and train yourself very well in order not to fall into the mistake of getting carried away by FOMO, extreme fear or investing (thinking you are trading) without being a trader.

5. Smart Contracts

What is a “Smart Contract”?

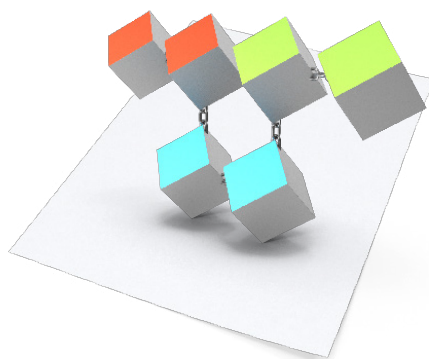
The scheme of a smart contract is really simple:

“If we assume this -> then this other will happen”.

For practical purposes and from the traditional point of view, we would be talking about a standard contract that contains different clauses that can be executed or not, depending on the specific case of each individual.

Let's give you an example to make it very clear. I can bet you 10 dollars that my soccer team will win this weekend. You can accept the bet and put those 10 dollars in case your team loses and mine wins. But in the end, it's all talk. That is, if at the end of the game, one of you decides not to pay the other, you might not.

Through smart contracts, this bet could be programmed and connected directly to the wallets of both of us, so that if your team wins, 10 USDT would come out of my wallet and go to yours (and vice versa). No need for handing over money or possible intermediaries. Do you see how powerful this is?



Let's learn a little history

The smart contract concept was defined by Nick Szabo in a paper called “Smart Contracts” written and published in the 1990s. An American of Hungarian descent, Szabo is a computer scientist, jurist and cryptographer recognized for his research in digital contracts and also in their application within the blockchain. In the aforementioned paper, he considered how the digital revolution could change the way contracts are formalized (so far on paper), even questioning whether traditional contracts, such as buying and selling a house, buying a car or marriage, would make sense in a digitized future.

In short, smart contracts are scripts (or self-executing programs) written in programming language whose lines of code replace the clauses and terms of a traditional contract.

They are executed automatically without the need for mediation by a third party (lawyers, judges, governments, state...).

But what are they really for?

Apart from the financial sector, smart contracts currently have limited practical application. While it is true that in an increasingly digitized and interconnected future, they will be a fundamental building block, offering great possibilities in multiple sectors.

A smart contract can reflect any type of data-driven logic. From something as simple as buying a computer over the Internet to actions as complex as serving as collateral for the two parties making a loan.

Some of the fields in which smart contracts may have applications are: financial transactions, copyright management, payment systems, transfer of rights and obligations, automation of inheritances and donations, logistics, etc.



But will they be as important in the future?

The possibility of using smart contracts raises many questions. For example: how can a smart contract guarantee the custody of real assets such as money or shares of a company I own? Can a computer be trusted to execute the contractual terms in a neutral manner?

In this regard, we should mention that thanks to the emergence of Bitcoin in 2008, solutions began to be provided to certain problems raised beyond its use in cryptocurrencies.

However, it was the Ethereum network (and its cryptoasset Ether) who was the pioneer in the implementation of Smart Contracts.

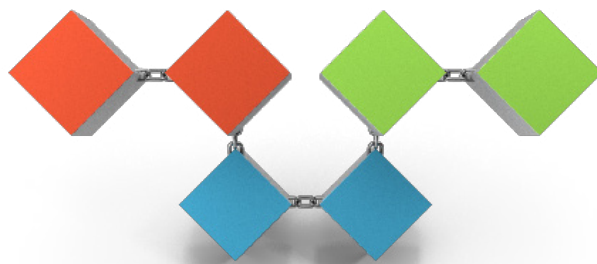
In short, Ethereum took what BTC had already created and added a new component to it: smart contracts, and this “simple fact” transformed everything. Ethereum has been the forerunner and visionary of such implementation.

Are they really intelligent?

Playing at guessing the future, a few years from now, we could be faced with a case similar to this one. You go to the dealer to buy your new car and decide to buy it by paying a down payment and financing the rest. At the time of signing the contract, everything is done through the blockchain via a ‘Smart Contract’. So far, so normal.

Imagine that your smart contract, obviously linked to your cryptocurrency wallet, in the wallet, in month 4 runs out of funds. If you don’t have enough to pay the monthly the smart contract algorithm can automatically instruct the vehicle not to start. instruction to the vehicle not to start.

Something that may sound like science fiction, is more than likely to happen in the not so distant future.



Final conclusions

We should not forget that smart contracts are scripts that are executed on a blockchain, such that when a specific event foreseen in the contract occurs, those script operation codes are self-executed following pre-programmed instructions.

Without going as far as the need to become experts on the subject, the reader is encouraged to investigate and investigate further reader to investigate and inquire further into the many opportunities that revolve around ‘Smart Contracts’ since, in the near future, they will be part of our daily lives.

6. DeFi

Why are DeFi so attractive?

The year 2021 saw a massive increase in investors interested in decentralized finance, with a 6-fold increase in investments in DeFi.

But why is this type of finance so attractive? We will see in this chapter.

The massive arrival of investors in the DeFi sector has meant, for obvious reasons, that many people have jumped into a new market without understanding the rules that govern it.

Too many people have ventured into DeFi for the first time without proper training, so too many people have lost money, not knowing what or how to do.

That is why we are writing this guide for them. We will try to explain in an easy and simple way, in this chapter, how decentralized finance works.

What is Decentralized Finance?

DeFi (read 'difai') or Decentralized Finance is born as an alternative to traditional investments. Using the blockchain for its operation, DeFi is the alternative to equity loans, investment funds and other financial products that, to date, could only be financial products that, to date, could only be granted by large banks large banking institutions.

Blockchain is a secure, transparent and decentralized system, making it the best place to develop a whole revolution within the financial ecosystem. This is DeFi, a vehicle free of intermediaries (banks) that using cryptocurrencies, can allow anyone anywhere in the world and with a minimum of capital (from 10 dollars can be accessed) to enter and benefit from this technology.

Decentralized finance has arrived to change the global financial world. The fact of removing in one fell swoop the intermediary that until now had the financial monopoly and making it possible for the users themselves to receive, lend, exchange, and sell their own funds receive, lend, and exchange cryptocurrencies without intermediaries, is absolutely absolutely transgressive.



DeFi and the soda machine

Think of DeFi as a soda can vending machine. If you deposit a coin and press the right button, a “machine” exchanges your coin for the can of the refreshing beverage you want. Decentralized finance works in a similar way. You have one currency (cryptocurrency in this case) and you can exchange it (called making a “swap”) for any other.

In this case, it is programmed to do the can dispensing machine is called a “smart contract” or smart contract and think of it as similar to a program that is programmed to do something when a certain event happens. For example, if someone enters 0.01 BNB and clicks on the swap that exchanges that cryptocurrency for the Ethereum network’s own cryptocurrency, automatically their BNB becomes ETH and is deposited into their wallet.

Another advantage of DeFi is that if you have two coins (A and B) you can lend them and receive an automatic passive income (without you having to do anything else).

With DeFi you are the bank

This is how you become a Market Maker or what is the same, you become the “bank” that lends its money in exchange for more money.

Continuing with the example above, if you had currencies A and B and you lend them out using DeFi, someone may want your currency A in exchange for a “swap” with their currency C or someone may want your currency “B” in exchange for swapping their currency D.

The Smart Contract stipulates how long you will contribute your coins and how much you will receive. At the moment you wish, you can disinvest and that’s it. You have no commitment of permanence as when you change your telephone company.



Relax, it's all in the Smart contract.

Thanks to DeFi's own smart technology and smart contracts, once the parameters stipulated in the contracts are met by the users, the technology automates the protocol. Through the blockchain, the money returns to its destination, i.e., to your pocket.

Another great advantage offered by the exciting world of DeFi is that it allows you to borrow from other users you can borrow money from other users. For example, you are an entrepreneur who needs liquidity to start up your business. Until now, one of the options to get it was to go in person to your bank, tell them about your project, present them with a report and a lot of documentation so that they could study it and, if necessary, give you their verdict.

At the end of it all, you were at the mercy of a financial entity so that they could grant you a loan ("and we are going to charge you X interest for doing you the favor of advancing you this money") or maybe in the end they decided that for whatever reason, they were NOT going to give it to you.

Well, thanks to decentralized finance, it is no longer necessary to go to a bank, because now you have the option to go to a DeFi platform and directly request the loan from another user who offers it there.

Financing your project

Imagine that you are "A", an investor with BTC in his wallet, who needs money to finance his project. User B has his cryptocurrencies invested for the long term (he is a holder) and, instead of keeping them stored without earning anything, he decides to lend them in exchange for receiving more (initial capital + interest).

You see, B acts just like a bank does today, but without being a bank and without the need to personally know the person to whom he lends the money, since they have total peace of mind that their money is safe.

Since the transaction is done through a smart contract that is registered in the blockchain, the lender and the borrower are at ease because both parties are going to fulfill their part of the contract. There are no possible irregularities, defaults, etc., since everything is in the blockchain.

Advantages of DeFi

There are many benefits and advantages of decentralized finance but we can highlight the following 6:

1) **Security:** the blockchain technology itself assures the parties that the operations they are doing are secure. Thanks to the use of cryptography and the algorithms of some of the most relevant cryptocurrencies, you can be very confident that the operation to be carried out (a loan between individuals, providing liquidity to a pool, etc.) is secure. liquidity to a pool, staking, etc.) is guaranteed.

2) **Innovation:** since the latest technology is used, which is totally transparent, based on the blockchain. transparent, based on blockchain, you are taking part in something totally revolutionary and innovative. If you ever thought of being at the beginning of something big, welcome because this is the time.



3) Trust: closely linked to the two previous characteristics, DeFi does not have to be based on the trust that one party has in the other (the bank trusts that you are going to pay, so it grants you the loan). The trust is, in this case, between users using the cleanest, most transparent and immutable technology that exists, which is the blockchain.

4) Free: decentralized finance does not require intermediaries to decide whether a transaction is carried out or not. For example, today a bank, after doing a study of ratings and so on, may decide that you, as an entrepreneur, do not meet the necessary qualities (according to its parameters) to be able to grant the loan. In this case, being a totally decentralized financial system, the power lies with the users themselves.

5) International: possibly one of the most important characteristics is that it is an international method. Any person anywhere in the world, as long as he/she has an internet connection, can participate in DeFi. This is unfeasible today in the banking world, mainly because of the abusive commissions charged by some banks for “moving your money” from one point to another on the planet.
the planet.

6) Efficiency: not to mention the time it can take to complete a transaction.
operation. For example, if you transfer \$100 from country A on Friday afternoon to your friend in country B, he may receive it on Wednesday or Thursday afternoon.
Wednesday or Thursday of the following week. Using DeFi, you can transfer money from country A to country B in a matter of seconds or, at most, in minutes and for a minimal amount of fees (7 or 8 cents in some cases).

Final conclusions

Before the Blockchain, you depended on financial intermediaries such as banks or savings banks to finance you as an entrepreneur. Bank loans, international transfers, exchanges from one currency to another, etc. can now be done directly thanks to DeFi.

Decentralized finance allows you, among other things, to act as a bank to provide liquidity (market maker). to provide liquidity (market maker), make staking with the cryptocurrencies that you have in your and receive passive incomes much higher than those that any bank offers you for depositing your bank offers you for depositing your money.

7. NFTs

Why are NFTs so popular?

Non fungible tokens (NFT= Non Fungible Token) are digital assets that are based on blockchains, which are capable of representing a tangible and intangible product.

Each NFT (read "enefti") represents a property of something inherently different and that cannot be duplicated. Think for example of a picture painted by Picasso. Since it is a unique and unrepeatable work and highly valued in the market, it has a certificate that recognizes that it belongs to the person who acquired it. Its value, if sold, can be very high.

Well, imagine that this painting is broken, burned in a fire or damaged in one way or another. The loss would be irreparable, right? Well, this is precisely what an NFT is intended to prevent. Since they are digital files, there is no risk of loss or deterioration and, in the case of wanting to sell it to someone else, thanks to the Blockchain, it is possible. Ownership can be exchanged in a matter of seconds if buyer and seller decide to go through with the transaction.

Fungible Token Vs Non Fungible Token

In the world of NFTs we can find different assets such as digital artworks, digital clothes for Metaverse avatars, digital books, etc.

One of the big differences between fungible tokens (FT) and NFTs is that the former can be split into smaller units.

For example, you can accumulate tokens of a certain project and, just as the dollar is divided into 100 cents, when you collect a significant number of FTs, you can exchange them for 100 cents. of FTs you can exchange them for another token.

They are usually based on the ERC20 or QRC20 standard and are used when you want to issue digital currencies. Cryptocurrencies such as Bitcoin, Litecoin or Ether are fungible, i.e. they can be exchanged for others.



Tokens that cannot be split

NFTs, on the other hand, are indivisible. Can you break the picture in the previous example into small parts and then put them together like a puzzle? You can't, can you? Well, the same is true for Non-Fungible Tokens.

While fungible tokens can be traded on centralized and decentralized cryptocurrency exchanges and can be on decentralized cryptocurrency exchanges, NFTs can be traded on exchanges such as OpenSea, Rarible or the new NFT marketplace of the Binance exchange.

What are NFT Markets?

Imagine a market where you can buy, sell or exchange your clothes, shoes or utensils that you no longer use. Well, similarly there are NFTs markets, where you can buy, sell or exchange your Non Fungible Tokens.

Maybe you have bought a pair of sneakers for your avatar and, a few months later, their price has multiplied by 20. If you decide to sell them, possibly there is another user willing to pay you for them. Well, there is a place where you can make these exchanges.

NFT marketplaces are platforms where NFT sellers can present their collections of non-fungible tokens. Sometimes they are Market Places (a concept similar to Amazon) where buyers and sellers exchange their digital files or where buyers can purchase something that has just been released.

Another detail to keep in mind is that many NFT marketplaces allow their creators to mint their creations and sell them. For example, this guide could very well be sold as an NFT on the MetaBlock.club Metaverse.



Current NFT markets

There are currently three main and important non-fungible token markets important non-fungible token markets:

OpenSea

As of 2017, it has just over 120,000 users. It is one of the largest NFTs marketplaces today. Users can do business with non-fungible tokens such as collectibles, gaming items, works of art.

Rarible

It gives us the possibility for any user without the need for coding skills to create their own NFTs and sell them. The platform has its governance tokens, called RARI, which allow its users to vote on how the future of the platform will develop future of the platform.

Binance NFT Marketplace

The creation of the Binance NFT Marketplace comes at a very opportune time.

The idea is to provide a space for artists, creators and even cryptocurrency enthusiasts.

How can you buy your NFTs?

You must take into account that in order to acquire an NFT you must meet certain requirements.

The first thing you must do is register on the chosen platform (where the NFTs you want are located), have a cryptocurrency wallet compatible with the blockchain of the market where you want to buy or sell.

Another small detail is the issue of transactions. To purchase Ethereum-based NFTs, you need to have some dollars in ETH in the wallet to be able to pay for the transactions.

Each blockchain has its native token. For example, Binance Smart Chain has the BNB token; Polygon has MATIC, MetaBlock has the MTB token, etc.



Final conclusions

While Fungibles are tokens that can be split into other tokens, NFTs are tokens that cannot be split.

They are digital files that can be bought, sold in market place or specific markets for NFTs and, depending on their level of 'rarity' can reach exorbitant prices, as happens in works of art made by great painters or sculptors.

8. METAVERSE

Facebook, Meta and the Metaverse

After Facebook was renamed Meta in October 2021, there was a new buzz around the word “metaverse” new buzz around the word “metaverse”. Although few people who know for sure what it is really all about.

There has been much speculation in recent years about how the Internet and technologies will develop over time. Internet and technologies will develop over this decade. The feeling is that everything is moving so fast that it is impossible to guess what will revolutionize the world next.

While it is true that we talk about Web1, Web2, Web3 when we refer to the different evolutionary stages of the Internet, right now we have the Metaverse as the main protagonist of the era to come.

And from everything we are seeing, this will be neither a video game nor a fad, but a new era that is here to stay.

The metaverse was born 30 years ago

The term Metaverse was not created by Mark Zuckerberg in 2021, it comes from the science fiction novel “Snow Crash,” written and published by Neal Stephenson in 1992. Yes, yes, 30 years ago.

If we look back in history, back in 2005 and well ahead of its time, “Second Life” became the first social network in the Metaverse.

At that time, terms like virtual reality or augmented reality were still in their infancy.

Oculus and Ready Player One

It was in 2015 that virtual reality finally took off and it did so at the hands of the company Oculus, a true pioneer. A few years later, Oculus was bought by Facebook for a whopping \$2.3 billion.

In 2017, Steven Spielberg brought “Ready Player One” to the big screen, based on the bestseller that Ernest Cline wrote 6 years earlier, in 2011.

Based on a world in 2045, in which humans connected with other citizens through virtual reality, “Ready Player One” reflects how our life may be in the near future.



3 characteristics of the Metaverse

The Metaverse offers the option of replicating the real world in a virtual one. To achieve this, 3 fundamental characteristics are required:

- 1) Interactivity: users must be able to interact with their environment, produce actions and have reactions, just like the real world.
- 2) Embodiment: it is accessed in the first person, either through the use of a computer, mobile, virtual reality (VR) or augmented reality (AR).
- 3) Persistence: in the Metaverse, the actions we do, their reactions and the reactions and what it contains, must persist after our exit from it.

The 4 Metaverses

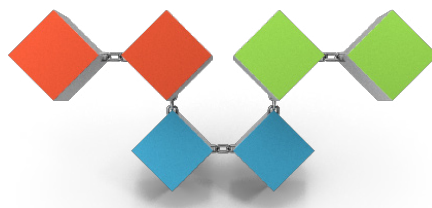
There are 4 types of worlds within the Metaverse:

Virtual worlds: the most common and that are going to allow us to do such incredible things as teleworking, remote meetings, training as we have never seen it before.

Mirror worlds: these are those that are a 1:1 reflection of the real world. For example Google Earth.

Augmented reality: it is a mixed world where the real environment is mixed with the virtual one. It can serve as a guide or show us holograms.

Lifelogging: the “Big Data” of the human being. This is already the basis for 50% of the world's and will become 90% in the next 10 years.



A multi-billion dollar industry

Large companies such as Microsoft, Google and Facebook are already investing impressive amounts of money in the Metaverse, positioning themselves as pioneers in creating everything that, in a few years, will be our new “reality”.

Google, for its part, wants to unseat Facebook and its virtual reality glasses “Oculus” by offering the “Google Glasses”. On the other hand, “Meta Quest” are the best-selling VR glasses on the market.

Horizon and the end of social networks

Little by little, Facebook, Instagram and WhatsApp networks will be joining, first to the virtual ecosystem and a new Metaverse called Horizon. If you are not yet familiar with this name, very soon it will start to ring a bell, since Horizon will eventually “swallow” Facebook, IG and WhatsApp.

It is the metaverse that is currently being created, its purpose being to unify and unite everything we know today. Zuckerberg thought: if I can unite everything in one place (profiles, photos, text chat), what’s the point of them being separate?

Many advocates believe that the perfect futuristic version of the metaverse would be a single platform in which the persona, identity and services of the platform are connected and in which many worlds are created and can be accessed.

Final conclusions

Don’t panic if you hear more and more often that the Metaverse is going to transform the world you know today. Thanks to special Virtual Reality (VR) glasses you can immerse yourself in an underworld in which you can do business, network, create, buy and sell NFTs, as well as wander through incredible virtual cities.

To do this you will have to create an Avatar, which is a character that will allow you to navigate in the metaverse of your choice, either a centralized one like Meta or the decentralized metaverse that the entire MetaBlock.club team is creating.

9. AREAS OF APPLICATION OF METAVERSES

Not everything is a game

As we have already seen, most of the platforms created and called “metaverse” are currently focused on virtual events, virtual meetings and, above all, games. But there are many more options and areas of application for metaverses, not everything is gaming.

In this chapter we are going to show you some of the main options you have when it comes to immersing yourself in the virtual worlds referred to as metaverses.

Platform (world) for social interaction

As in “Second Life”, in metaverses it is possible to interact with others and create social interactions through immersion. Users can see others through virtual spaces and worlds. They can interact with each other and also hold social gatherings.

This approach takes social media to the next level as we move from asynchronous information sharing to a combination of asynchronous and synchronous (live) interaction.



Immersive video games

An important use case is, of course, the creation of immersive video games. Immersive video games. Think of the “Sims,” a video game in which you become a character with a real life in that world. Character with a real life within that world.

You can play in virtual factories, create your own journey, play with your personal quests and much more. The VR (Virtual Reality) technology with haptic feedback will allow for even deeper experiences where you can feel the environment and a host of other new features that we will be able to enjoy that we will be able to enjoy in a few years, which will make us feel totally in a parallel reality. parallel reality.

Digital markets and business models

As mentioned in previous chapters, it is important that the market and the entrepreneurial ecosystem work. Marketplace and business ecosystem to function. This would also enable the creation of fully digital marketplaces and purely digital transactions in metaverses.

Auctions could be experienced from anywhere in the world. Everyone could have access to the works of art in the Louvre museum in Paris, the pyramids of Egypt or the Chinese wall, without having to get on a plane and sitting comfortably on the sofa at home.

Imagine also if you could go to the Amazon web store and experience the products there as if they were right in front of you. Isn't this mind-blowing? Obviously new digital and disruptive business models are going to be created, as metaverses propose an absolute revolution of the 3D world we live in today so that we can immerse ourselves in a fully digital world.



Spaces for art and culture

To date, countless virtual events have already been held in metaverses, but what about virtual concerts? No doubt, very soon we will go from being able to watch a live broadcast of a concert to feeling like you are actually inside the concert thanks to metaverses. concert thanks to metaverses.

You will be able to interact with the people next to you while the singer performs on stage or even be able to chat with the people next to you when you go to a virtual museum.

Creating digital equivalents of events, museums or art exhibitions on the Internet could allow many more people around the world to consume art and culture in a whole new way. Seeing Michelangelo's David in Florence, walking among the capitals of the Greek Acropolis could be possible thanks to the recreation of these within the metaverse.

Digital artistic creations

"Roblox" and "Minecraft" are great examples of how users can use a virtual universe to create their own world.

Giving users the freedom to design, shape and create worlds as they please could give many more people the freedom to be able to make their creations.

The NFTs we talked about in previous chapters will undoubtedly play a very important role in this environment, as people will also want to own digitally created art.



Augmented and virtual work environments

Instead of seeing people on a screen with blocks of video, you could be in the same virtual space brainstorming, writing on a whiteboard, and even changing the space as needed.

Augmented workspaces will combine these functions and allow both entrepreneurs and potential customers to participate virtually in a physical meeting.

This would lead us to another seemingly futuristic concept that will soon be an everyday reality: augmented workspaces.

holograms, which will soon be an everyday reality.

You will be able to have holograms in your living room, talking to you, teachers giving you Pilates classes, interacting with you as if they were right there.

Virtual travel and tourism

What would it be like to travel the world without leaving your living room? In times when travel is restricted and climate change is a pressing issue, creating virtual worlds could be an interesting option. problem, the creation of virtual worlds could be an interesting option.

Imagine game-like environments where people experience the Swiss Alps, climb the Himalayas or stroll through a market in Istanbul, isn't it mind-blowing?

In the virtual worlds that will be created in the different metaverses, it would even be possible to visit other planets, virtual worlds like the one recreated in "The Lord of the Rings" or many other places that we cannot imagine today.



Education and schools

How about a virtual school classroom? Interactive walls, learning games, virtual experiences and much more.

Especially in education and schools, an interactive world can be a great asset. When teaching about our solar system, it would literally be possible to be in space, zoom in to planets and get facts about them just by clicking on them virtually.

The more fun the interaction with the learning environment, the easier it would be for children to learn.

The metaverse could also play a crucial role for rural areas or remote locations. For example, while there are people living in places that are far away from big cities, thanks to the metaverse they will be able to have access to the same elite education as others.

Final conclusions

Metaverse is not only a video game, it is much more than that. In this chapter we have seen that very soon it will be possible to travel to dream places, walk through distant cities or be at a concert, thanks to the metaverse concert, thanks to the metaverse.

Today it sounds like a science fiction movie that you can sit in your living room while a projected hologram of your pilates teacher gives you classes. Pilates teacher gives you classes, but it's something that will soon be commonplace. Get ready to travel to the Himalayas or the Louvre, without leaving your home, thanks to metaverses.

Acknowledgments

We are so excited to see that more and more people want to learn about the Blockchain, cryptocurrencies and the Metaverse that writing this guide was almost an obligation.

We are aware that nowadays the crypto world is advancing by leaps and bounds and in a very fast way, so whoever does not keep up to date is left behind. We are also aware that there are many professionals who pretend to teach what they know using hyper-technical and highly difficult to understand language.

This was the second decision to take the action of capturing in this guide everything that is important to know, but from an accessible and crypto-friendly point of view.

When in December 2021 we started the project together with Claudia Montiel, Founder and Creative Director of MetaBlock, we were very clear that it was going to be a challenge to find the best professionals to create a really powerful and highly qualified team.

and highly qualified team. But today, although there is still a long way to go a long way to go, we can proudly say that the people who make up the team are very professional in their field.

Camilo's arrival was like love at first sight, since he has created something incredible. The agency "Satoshi to the moon" helps too many people to understand the crypto world and the fact that he is part of the team, fills me with satisfaction.

Shortly after, when Manuel David Moreno and I met on social media and I told him about the project, I quickly noticed that he had a lot to bring to MetaBlock. Someone like him, a Financial Consultant with more than 23 years of professional experience in the financial world, was undoubtedly a great addition to the team.

For that and for many other reasons, I am grateful to God and to life for having dreamed big and imagined MetaBlock some time ago.

some time ago. Now that we are making reality all that was thought some time ago, I must tell you, dear reader, that I am very

I must tell you, dear reader, dream big! Don't forget to dream big because as Napoleon Hill said, "whatever you can imagine, you can create".

imagine, you can create".

Víctor Corvalán
CEO of MetaBlock.club

Get to know our MetaBlock.club project by scanning this QR Code



