



3CO White Paper

Version 1.0

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Introduction

One of the problems with multitasking, such as performing transactions, playing games, smart contracts, NFTs, and using Virtual Reality, has always been the lack of a single token.

Users, to perform any of the tasks mentioned above, nowadays, have to buy the required token and use it when needed. For instance, to buy a piece of land in Decentraland, a Token named Mana, which can be purchased on ERC-20 Network, must be used. In addition, to buy and sell any goods and access the services provided, the users must buy this Token and use it; or the users receive Tokens called \$DG by playing games in Metaverse, or the casino owners in Metaverse keep a reserve of this in their treasury. Furthermore, as another example, users must procure the networks' desired token, and if the transaction is approved, to pay for the transaction cost using the Token. In addition, purchasing NFTs is done in the same manner.

The goal of our team is to solve the above-mentioned problems by introducing and offering a single Token called 3CO, which the users can use to perform various tasks and receive a wide range of services. 3CO is a BEP-20 Token that creates a standard single Token in the Binance Smart chain (BSC). Tokens are a valuable part of any system that is based on Financial System Blockchains, Decentralized Applications (DAPP). In addition, Tokens help raise the value and improve tracking of each and every activity in the Blockchain Network.

3CO intends to provide a user with an opportunity to perform various tasks at the same time but in a completely separate manner by using only one type of Token.

By having 3CO, different and a wide range of tasks can be performed. These tasks include the followings:

- **Playing games**

Provides the Gamers with a platform in which they can undertake some activities and receive a few 3CO as reward.

- **Digital Exchange**

3CO intends to provide the users with an opportunity to use this Token to pay for their transactions and, even, to pay the costs and the Network Fee by setting up a Digital Exchange Office.

- **NFT**

By having 3CO in their possession, the users can purchase other types of tokens or NFTs or put up their Tokens for sale on Digital Exchange sites.

- **Blockchain**

Our team intends to allocate some 3CO as rewards for mining one block, in approval of the carried-out transaction to its miners, by setting up private Blockchains.

- **Metaverse**

The users can be participants in the Metaverse and spend 3CO to pay for things they need and services they use.

- **Decentralized Social Network**

The problem with the Social Networks, nowadays, is being centralized. The team that has developed 3CO, intends to implement privacy and unchangeability of a social network by establishing a decentralized security platform.

1. Game

1-1 Introduction :

The 3CO team has designed an environment called that uses the Binance smart chain to provide an environment where users can monetize experience, content, and applications.

This platform consists of a decentralized General Ledger for the purpose of storing, a protocol for describing the content, and a Peer-to-Peer Network for the users and their activities.

1-2 Foundation of the work :

Developing large centralized private platforms, such as Facebook, has enabled hundreds of millions of users to interact and play with one another or share content. The impact of these networks has contributed to the growth of online communities and gaming companies. These platforms are centrally managed, and network rules are controlled by centralized systems, and these streams generate significant revenue from the network and online communities.

This platform (3CO) allows its users to fully retain the value of their participation, to have it fully available, and to take full advantage of their participation. More user engagement can lead to growth, and this growth should be a decentralized business for the users themselves.

The core infrastructure of the platform will be driven by blockchain and the Binance smart chain, which has grown exponentially in recent years.

Comparing the Ethereum Network with the Binance smart chain, shows this widespread growth in recent years clearly, figure 1-1 has had an upward and positive slope.

Moreover, the maturity of blockchain networks in various industries, such as financial markets (digital currencies) is still evolving, along with side-blockchain networks' efforts to minimize network fees and maximize transaction approval speed.

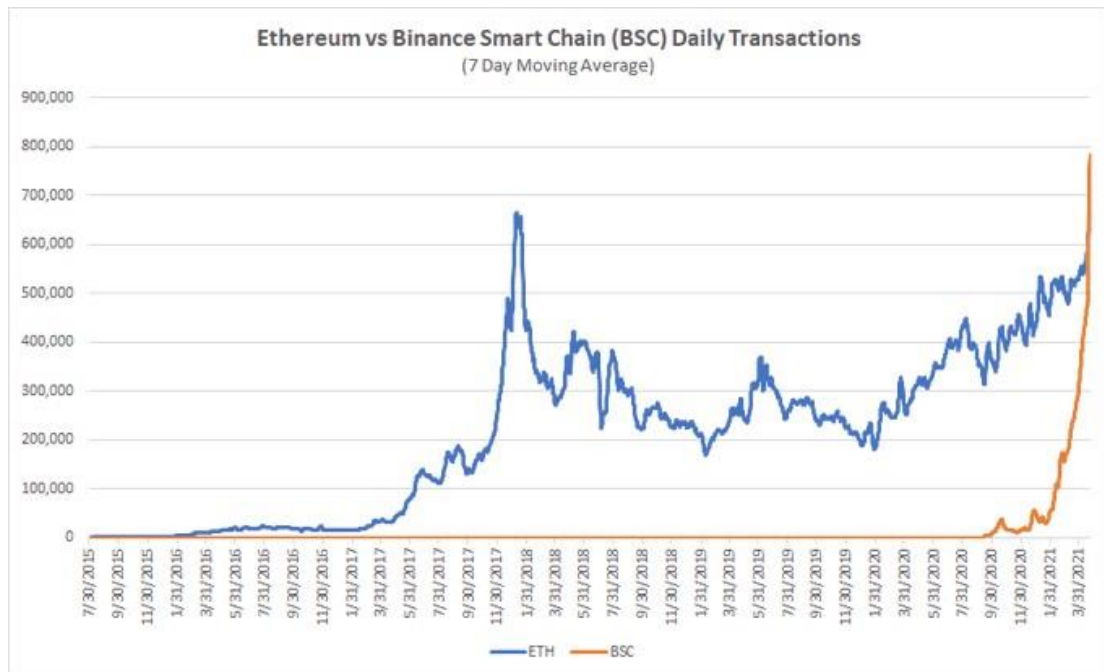


Figure 1-1: comparison of the growth and number of daily transactions in recent years

Centralized solutions can still be responsive, but are directly dependent on system performance, privacy, standardization, and existing rules. 3CO is trying to lower the cost of payments by creating a decentralized environment. In addition, the payments are to be done directly between users, content creators, players or their core business.

1-3 Industry :

The game market system is very unfair and unjust. Most of the money earned will be lost through intermediaries, app stores, social networks, and advertising. However, we should not accept this situation and should, constantly, be trying to find better solutions.

The buyers are not aware of the new games; therefore, many games fail and many of the developers end up losing a great deal of money. ("I am an unknown developer with a quality game, but my rival is a shovel that buried me under a green light in one day)", the complaint of an unknown developer who is talking about unfairness of the game markets in the gaming industry. Approximately, 30% of the valuable games that are produced in the current market will never generate revenue. Furthermore, exclusivity of the markets has limited the users' choices. Those who control the markets will never point the consumers towards the new experiences. In addition, 30% of the shares or the sale price offered without support to the consumers will not be fair.

These words are all about the developers of a digital distribution service who do not agree with the 30% share of the Steam. Steam is a Digital Distribution Service of video games that was launched in September 2003 as a standalone software to provide a way for the third-party games to be updated and expanded as a standalone software client. However, game developers outside of this platform are not delivering what they have promised; and prefer to offer and gain experience on their custom platforms or providing game packages. However, the distributed digital computer games are still growing and the revenue earned from this gaming software shall reach Millions of Dollars. To a large extent, gamers are turning to downloading digital games, thanks to Steam. In figure 1-2 one can see the growth rate of digital games in comparison to game packages as well as the market growth rate of the two and conclude that downloading has placed offering game packages under a great deal of pressure. Therefore, the developers spend huge sum of money on advertisement so that they survive.

CONSOLE SOFTWARE PACKAGE GAMES VS DIGITAL GAMES

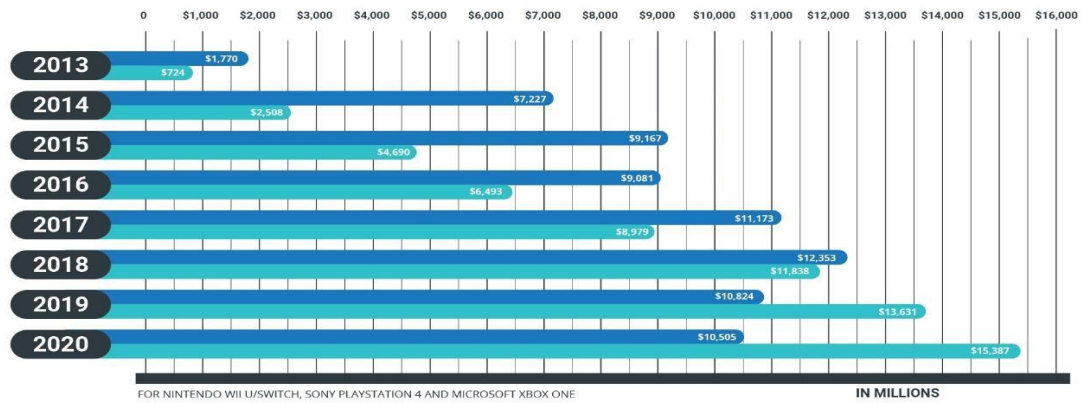


Figure 1-2: Comparison of digital game markets with packaged games (in the diagram, light blue represents digital games and dark blue represents the packaged games).

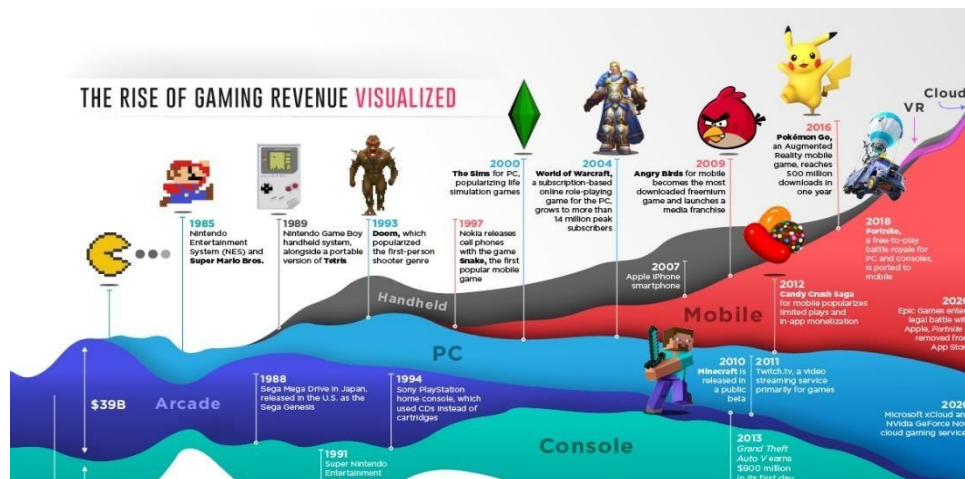


Figure 1-3 : one can see the types of games separately according to the desired year and make a comparison.

3CO seeks to expand the business and craft of digital games in its gaming platform by providing services based on digital games and rewards such as 3CO to users, participants, and content producers and expand the Digital Game Market Industry.

1-4 the market :

Nearly one in three people on earth is playing video games, which means, at least, 2.1 billion people play games every month. The average profile of a gamer with a PC is 35 years and the game life is 13 years, which has, almost, a high purchasing power. In 2021, there were approximately 1.48 billion gamers across Asia, making Asia the largest video game market in the world, with Europe ranking second with 715 million gamers.

Gamers are made up of a very valuable population that has always been difficult to reach, as they have, basically, abandoned the traditional and old media and pay more attention to the in-game communities. Therefore, in recent years, based on the available digital advertising statistics, especially in the offline mode, according to Figure 1-4, it has grown a lot; whereas, media advertisements such as (radio, television, etc.) have remained constant.



Figure 1-4: *displays the growth in Digital Advertisement*

1-5 Overview :

3CO has opened a window for a new look at the game industry by creating a specialized platform for gaming. 3CO, also, intends to expand its platform in the future to eliminate the

market monopoly for tokens and services as well as offering games for its users, so that users, developers, and even the content producers can fully maintain value of their participation, have full access to it, and take full advantage of their participation; in a way that:

- **Create new revenue streams :**

Developers and gamers can take advantage of a wide range of opportunities for earning income

- **Establish a rich economy based on Token :**

Strengthening the referral rewards, Digital Goods, prizes, and other bonuses

- **Fairness of the market towards the users :**

3CO intends to provide its users suitable services; for example, a user can participate in the token platform They can receive free tokens and, if they wish, can use the tokens all on playing games, or convert them to various forms on other 3CO platforms, for example, buying digital assets or convert them into other types of tokens.

- **smart contracts with companies :**

The companies can, based on their needs, enter the platform and place their digital advertisements. A contract based on smart contracts will be concluded with them.

- **Being fair with the content creators :**

Content creators can provide or participate in production of the digital content required by the platform and receive 3CO tokens as rewards.

1-6 How to play and participate :

Gamers, in the shortest possible time, can enter the desired platform and start playing and receive 3CO tokens by participating in tests and viewing advertisements by creating an account. They can also access secondary services, such as contests, game items, and other services by spending 3CO. they can observe exclusive contents and witness a valuable and creative community. They can also be rewarded with receiving 3CO by upgrading their level.

1-7 Advertising mechanism :

This technology, along with the extensive experience in industry, enables us to be more successful in using the marketing tools effectively and promote games successfully by using the facilities every day. 3CO advertising program and technology will be categorized as follows:

- Content publishers can operate and promote their products more effectively in a completely decentralized manner and display them on game and Metaverse platforms as well as content sharing platforms for public viewing around the world.
- Developers can also spend 3CO tokens use 3CO ads. Advertising tariffs will be announced more accurately
- Users can view ads within the platform and for doing so, receive 3CO from us.
- Our users in the exclusive Metaverse world, can rent their spaces or related facilities for a certain period of time and according to the relevant content by using smart contracts to content producers or other users or game developers, depending on the location and availability and facilities allowed, and receive 3CO in return.in addition, we will allocate different zones for our users to place ads related to their business.

2. Digital exchange

2-1 Introduction :

Exchange offices are usually divided into certain categories with the advent and development of digital currencies. Those that deal with Fiat currencies and those that will be in the realm of cryptocurrencies. Our main focus will be on cryptography and digital currencies. One of the reasons for the development and pervasiveness of digital currencies can be considered to be their purity. Although the number of digital exchanges is still small, in the near future there will be many times as many such exchanges as the Fiat-based exchanges, which will undoubtedly play an important role in the world finances. 3CO, also, intends to be part of this progress by having its own digital exchange and try to solve the problems in the existing exchanges.

In addition, with your help, a good future can be predicted for the dedicated exchange of 3CO, which can play an important role in the financial future of currencies and will help strengthen the predicted future. We will now look at the problems that exist in digital exchanges realm.

2-2 Existing problems :

- **Weak technical structure :**

Most exchanges are established quickly by good technicians. However, these expert technicians have very little experience in the financial aspect or little experience setting up digital exchanges. They will often use the simplest methods to set up their system, while this may be good at first with low levels and number of transactions, but the system will no longer be able to withstand the increased load of transactions. Digital exchanges must first be engineered considering parameters such as security, efficiency, speed, and scalability. This

way, it may take longer to create and initially develop a digital Exchange, but by taking the effective parameters into consideration will guarantee long-term success.

Our team intends to use all its experience in the field of structuring and basis of financial markets and the knowledge of maintaining them for establishing digital exchange so that the work is done in the most accurate, secure, and reliable way.

- **Poor customer service :**

When it comes to the user in the field of digital exchange, it should be borne in mind that users of digital exchanges are basically traders, so as a result, they have a different mentality. Understanding the mindset of traders is crucial to running a successful exchange. Some exchanges serve their users as if they were running a social network. The delay of a few **seconds in updating your friends** profiles may not be a significant issue, but in exchange offices, these few seconds are very valuable and this is the cause of many users' complaints.

In addition to technical knowledge, our digital exchange tries to provide services; and intends to provide excellent support from each of the existing departments, such as financial and other departments so that when a trader gets into trouble, will directly get support and answers directly from someone who knows the system well and not someone who just reads a question and answers it.

- **Poor liquidity :**

The market of professional traders or ordinary users will be severely affected by the issue of liquidity. Lack of proper supply and demand and having a low order list means slippage in transactions, which will be very expensive for both users and traders

Our team has been working in the financial field for many years, especially in cryptocurrencies; and is trying to expand its network. Furthermore, the team tries to benefit

from the extensive research on various exchanges, which will be of outmost importance and play a vital role in establishing Exchanges.

- **Unsafe platforms :**

There are a large number of exchanges that have been kept from being active due to hacking. Our platform is established on high standards and various penetration tests will be performed on it. We also try to meet the highest security standards and to ensure security first.

2-3 Introduction of Exchange and Overview :

Today, due to the prevalence of blockchain networks in the world and success of cryptocurrencies, one of the most important issues in most exchanges, due to the high number of transactions, is the issue of approval of transactions in shorter time. We try to confirm all transactions in the shortest possible time.

- **Features :**

3CO Exchange tries to support all types of transactions, which include:

- 1- Spot trading
- 2- Margin trading
- 3- Futures Trading
- 4- Decentralized transactions
- 5- NFT market trading and more...

- **Support and list of coins :**

We try to support the following coins at first

- 1- BTC
- 2- ETH
- 3- ADA
- 4- BNB
- 5- 3CO

As well as other tokens and coins that have high liquidity and strong credibility. In addition, we intend to support the market for the tokens other than 3CO in the near future.

2-4 Our services for customers :

- 1- Web-based platform
- 2- Android-based platform for customers
- 3- IOS-based platform
- 4- PC-based (Windows)receiver service
- 5- RESR API
- 6- A trading robot that automatically gives the customer service

2-5 Income model :

source	remarks
Transaction fees	To perform each transaction, we will receive a fixed fee of 0.2%. if this fee changes, the users will be notified
Withdrawal fees	We may receive a small fee for every withdrawal
Listing fees	If your coin or token is approved for listing in the Exchange, we will receive some fees.
ancillary fees	If some loans are obtained from the exchange when trading on the margin, a fee will be received from the paid amount
Other fees	Some fees the platform, if services are rendered, will charge you

2-6 3CO :

We intend to present our token with a limitation.... This token will be executed automatically on the basis of Binance smart chain. This token will be natively placed on the Binance smart chain and BEP-20 Network. Motivation and Purpose of 3CO is using a single token in various fields and blockchain platforms. In addition, with this token on hand in the exchange, you can easily pay for transaction fees, withdrawal fees, listing fees, ancillary fees, and other fees. The unit price of each 3CO shall be 1 cent.

You will get a significant discount by paying your fees using 3CO.

	1 st year	2 nd year	3 rd year	4 th year	5 th year
discount	50%	25%	12.5%	6.25%	No discount

Every 3 months, we will use some of our profits to repurchase and destroy 3CO until we get back the 50% of the initial publicly offered shares. All repurchase transactions will also be announced on the blockchain network. In fact, we will eliminate 50% of the tokens provided

in the initial supply to maintain supply and demand, and eventually 50% of the initially offered tokens will remain.

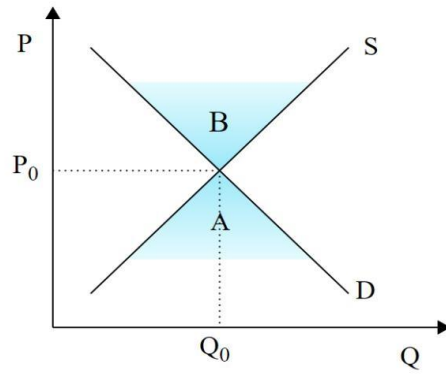


Figure 2-1 : (S-P Diagram)

2-7 sharing :

partners	Amount (IRR)	%
ICO	300,000,000	30
Founding team	200,000,000	20
Private offering (Sales)	200,000,000	20
Referrals and Bonuses	200,000,000	20
Technical team	100,000,000	10

2 -8 Initial release of the token (ICO) :

Initial release of this token will occur in all major and accredited platforms, as it has been the case with initial offering of tokens such as Ethereum Bitcoin and other tokens. Ethereum started its first sale in July 2013 and officially launched in 2014. They made good money from the initial public offering of their coins. Selling ICOs has gained good popularity since 2017.

date	Programs
	Project 3CO was approved and officially launched
	The initial White Paper was written and given to the investors
	The main design of 3CO has been announced and shall be available to public in the initial offering of ICO
	Start of the initial offering in the announced platforms
	Publishing the first version of 3CO platform
	Conclusion of the initial offering

The initial public offering will start on the specified date Investors can purchase 3CO in five stages based on preference until 1,000,000,000 tokens are sold. With the start of each new phase of this token program, the price of each unit will increase. Investors will receive it instantly after purchasing any amount of token. As mentioned, 3CO will be offered in five stages. According to the table below, a certain amount of this token will be sold in each stage.

Stage	Quantity
1	200,000,000
2	100,000,000

2-9 Decentralized Exchange :

Our ultimate goal is to create a decentralized exchange in which 3CO will be its main asset. In this platform, 3CO will also provide the cost or consumption fuel for miners, transaction costs and other costs

3. NFT

3-1 Introduction :

In a blockchain ecosystem, any type of asset that can be exchanged and transferred digitally between individuals will be referred to as a token. Tokens are basically a value or credit that can come from a company or a work of art. As we know, another feature of tokens is the lack of the need for a dedicated blockchain system. They can be placed on any blockchain and use it. Nowadays, Ethereum hosts the most tokens. Usually, startups or large companies create their own tokens in the framework of business strategy, for example, 3CO can be used for payments, purchase of digital assets and other items or for using NON-DAPP applications.

As we know, tokens are composed of different types such as

- valuable tokens (Security Tokens)
- Utility Tokens
- Payment Tokens
- Equity Tokens

that each type of token has different uses in different circumstances, which getting into it is beyond the scope of this discussion.

However, the methods of using tokens as an asset or shares of a company, even as a special value, are important and very useful, which will be categorized as follows:

- The method of payment between the two parties in A contract
- Ownership of a digital asset (property, stocks, products)
- Asset Accounts and using as an asset
- Ensure network security
- Create an entry for receiving additional services

3-2 Network and Blockchain Governor :

As we know, to use these tokens, we require blockchains such as ETH, BNB, XTZ, and EOS or it may be better to say, we need blockchains that possess smart contracts.

As it was said, nowadays, Ethereum hosts the most tokens, while the smart chain Binance is also growing very well by providing differences in network standards, which we will address later, and increasing the number of transactions per day compared to Ethereum.

- **Standard ERC-20**

ERC-20 is a shortened expression for Ethereum Request for Comments, and the number 20 is just a number that has been assigned to set it apart from other networks.

The first ecosystem to be launched and implemented for smart contracts in the Ethereum network was the Ethereum ERC-20 network, which contains a set of terms and conditions that help you launch a smart contract with its tokens on the Ethereum blockchain platform.

This network will contain important parameters for token production, the most important of which usually contain the following six clauses:

- Token name (must be unique)
- A symbol or a special symbol
- Token controllability and divisibility (how divisible it is)
- Total number of tokens
- Equilibrium (the amount of the returned value)
- Transfer (the amount to be deducted from total token storage)

Tokens formed on this platform are usually changeable, tradable, and transferable.

- **Standard BEP-20 :**

As it was said, BEP-20 is a standard for creating tokens on the smart Binance chain (BSC), an acronym for Binance Smart Chain Evolution Proposal. The number 20 has been assigned to its BEP.

In fact, it is dedicated to being a smart contract platform, which runs parallel to the main Binance chain. This standard is similar to ERC-20 in many ways and expands it in a different way.

BEP-20 instils rules that all of the created tokens have to follow them. The main parameters of this standard to create tokens can be divided into four groups:

- **Can mint :**

This parameter indicates whether new tokens can be created over time or not.

- **Can Burn :**

It is a parameter that prevents and reduces inflation and determines whether tokens can be burned or not, so it leads to reduced supply over time.

- **Black List :**

This parameter will allow you to disable malicious URLs.

- **Can Pause :**

This parameter is useful during malicious attacks or events that damage the platform. It determines whether the token can be stopped in the event of an attack or not, this parameter is centralized because the user address for which the same authority is defined has the ability to stop completely.

If you want to create a token on the Binance smart chain, you are required to follow all the above parameters.

- **BEP-20, ERC-20 :**

Since BEP-20 has been designed after ERC-20, their similarity is understandable, such as the Total Supply, Balance, Name, Symbol, Decimal, and Transfer functions. In many of the other functions, common features can be found. However, some of the differences between these two are as follows:

- Get Owner function It is a function that will determine a series of needed unique features that can only be found in BEP-20.

- the name, symbol, decimals functions are optional in the Ethereum Network; whereas, these functions are mandatory in the Binance Smart Chain.

3-3 unparalleled tokens :

Non-exchangeable tokens or unparalleled tokens are a non-exchangeable and untradable units that are stored in the relevant blockchain. They are a type of assets registered in the digital books which can be used to mark digital files such as music, film, photograph, and a wide range of digital assets like collections or even properties, and register them under our own name.

Basically, the mechanism of NFTs and the related platforms is based on smart contracts and network governors that will produce tokens on the based on non-reproducibility or indivisibility. Therefore, that they can only have one owner at a time of the transaction and no one will be able to change their ownership history and their security will be provided by the Ethereum blockchain and they will remain unique.

The Governor of the ERC-721 Network is the same.

The conditions for creating tokens are the same as the previous standards introduced, but there are some very important differences, as the tokens created on this standard are nontradable tokens and represent digital assets that possess unique profile and include (serial number, name, official token ID).

3-4 Dedicated 3CO Platform :

Imagine you can get a digital asset or a digital work of art at a very reasonable price in a very simple way from a dedicated platform and receive a unique NFT that can prove you are the owner of that property or piece of art. Currently, NFTs have created a big storm in the digital art world. Many artists thanks to the widespread sales to the age of technology audiences and art enthusiasts are in the process of changing their lives.

Have you ever been to a digital artist's painting gallery or have you ever enjoyed listening to the best quality digital music? The concern of many novice or even experienced artists is sharing their work or even selling and transferring ownership of their work, a problem that today, thanks to blockchain technology and heterogeneous tokens and Smart Contracts is almost resolved.

3CO is trying to create its own dedicated platform for NFT assets so that not only the Digital Artists can easily share their works but general public can also create a digital asset for themselves a put it up for sale.

Suppose you are a gamer and you want to make a video of the interesting moments of your game and register it under your name. You can easily enter the 3CO dedicated platform, register your work and share it with all your fans, or you can even sell it. Or assume you are going to work and a beautiful sunrise can be seen in the sky. You can easily and very quickly

convert the photo you take from this beautiful scene into a digital asset and register it under your name on the dedicated 3CO platform. 3CO can display your artwork, based on your request and for a very small fee in your digital exchange for general public and the fans of the cryptocurrency world to view. By entering the dedicated 3CO platform, you can select your favorite categories such as games, music, paintings, and easily select your favorite works and then buy them. Even in our platform, you can buy avatars or the items you need for your avatars, such as clothes, shoes, and even their appearance, such as existing hairstyles from the existing NFTs and benefit from them in the Metaverse.

3CO is trying to provide a space for artists and the public to convert whatever they want into a digital asset and sell it or keep it with them. You can pay the costs by having a 3CO token in your wallet. Our platform allows its users to connect their wallets to the website by scanning a QR-Code and have easy access to it whenever they want and participate in the competitive market of NFTs purchase.

3-5 buy or sell on the platform :

When buying or selling a token, we will sign a smart contract with the parties to the transaction that the parties can refer to. These contracts will be placed in the blockchain network and the General Ledger. As smart contracts can create the rules of governance between any type of transaction, they can be enforced automatically when these contracts are called.

In general, our goal in implementing and designing this platform is to support the art community, register and publish works of art, establish convenience and accessibility for the general public, simplify use of the desired works in the world of Metaverse, sell or even buy all works in the easiest possible way.

4. Blockchain

4-1 Introduction :

Exporters and owners of digital assets are trying to add new decentralized features to their assets or introduce any kind of government and social activities. Despite the large volume of daily transactions and the high number of transactions, digital asset owners want higher speeds and lower transaction costs. Executing a smart contract may also slow down the transaction and add uncertain factors to the transaction. In addition, with the games and/or digital files being placed on blockchains and/or recovering files from a DHT, this issue has gained more importance. Our goal is to create a completely dedicated blockchain that can be used on all 3CO platforms and be accompanied by speed, security, less cost for users.

4-2 3CO Blockchain :

In the dedicated 3CO blockchain, we will use a globally distributed general ledger that can move digital assets in seconds and with minimal transaction costs. These assets can be of any value, provided they are digital only. The entire history of all transactions will be stored in the General Ledger, and we will use smart contracts to change any ownership or credit.

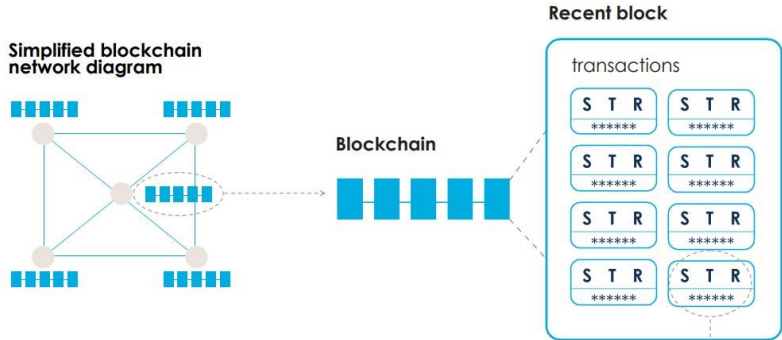


Figure 4-1: The dedicated 3CO blockchain will work as follows:

- Perform a transaction
- Execute smart contracts
- Approve or reject the transaction
- Create blocks
- Block validation
- Getting added to the Blockchain
- Token production/token making
- Data Storage

Here, we will briefly describe the seven main axes required above for the evolution of the specialized 3CO blockchain.

- **Perform a transaction**

The "sender" creates a transaction and sends it to the network. The transaction message includes the recipient's ID details, the recipient's address, transaction value, and a digitally encrypted signature that verifies the transaction.



Figure 4-2 : In the figure above, you can see an example of a created transaction

- **Smart Contracts**

3CO intends, just like Binance, to offer an independent blockchain parallel to its blockchain for its smart contracts. In fact, two blockchains will be launched to provide services.

- Independent blockchain :

Technically, we have a standalone blockchain whose many technical functions must be self-sufficient in order to run well even if the original blockchain is down for a while. This blockchain will move separately but in parallel with the main blockchain and will be connected using communication bridges so that they can provide the necessary information to each other if needed.

- Compatibility with Ethereum and Binance Smart Chain :

As we know, Ethereum is the first practical and widely used platform for smart contracts, which has placed many tokens on its portfolio, followed by the Binance smart chain. We are trying to choose our programs and forums and take advantage of: those that are compatible with the Ethereum core network or the Binance smart chain. In terms of hardware specifications as well as nodes, our nodes should be or slightly better than the nodes of these network to improve or upgrade these 2 Networks

- Consensus and governance:

Our smart contract blockchain consensus is based on a stock-proof consensus that will provide more flexible options for the community management. This function consensus should allow faster blocking and higher transaction capacity to the network.

- Chain connections:

Both blockchains must be interconnected. The communication protocol must also be two-way, decentralized, and reliable. It must also focus on asset movements between the smart contracts and the main blockchain.



Figure 4-3 : A sample of smart contracts

- **Approve or reject the transaction :**

After creation, a transaction will be sent to all nodes and they will validate the message by decrypting the digital signature. After the transaction is reviewed, it is placed in the pool.

- **Create blocks :**

The suspended transactions are placed side by side in an updated version of the general ledger called a block by one of the network nodes and then at a specified time interval, the node distributes the blocks to the network for validation.

- **Block validation :**

Network validation nodes receive the proposed block and share it to validate it through an iterative process that requires the consensus of the majority of the network. Different blockchain networks use different validation techniques. We will also use a stock proof mechanism for validation. The common denominator is that they are ensured that every transaction is valid and fraudulent transactions are made impossible.

- **Getting added to the block :**

If all transactions are validated, the new block is connected to the blockchain and the newer current state of the general ledger is spread over the network. The whole process can take 3 to 10 seconds.

- **Token production/token making**

If you are a startup owner or a large official company and we want to offer a portion of your stock as an initial public offering or you have a personal business that needs to attract investors, 3CO will allow you to implement your token on a dedicated 3CO blockchain platform for a small fee, or you can view your smart contract with individuals or companies on the dedicated blockchains of 3CO smart contracts.

- **Data storage:**

We want to set up a peer-to-peer network on our own blockchain that allows anyone to store and retrieve data over the Internet, and internal policies ensure that files are continuously and in a trustworthy way, for as long as the user specifies, are saved and recovered.

No single company or organization controls the existing storage capacity and pricing for file storage and retrieval. Instead, our data storage system allows anyone with Internet access to save their files and recover them. This will be done by cryptography. This network will be based on providing storage space and stable customers so that they can trade on the network and help maintain the stability of the blockchain network. Regardless of your field of expertise or level of expertise, there will be many ways to help us. Users can trade through their browser or they can install the app on their node, create their first wallet, and start maintaining the blockchain. In addition, we will share our API accesses so that developers can use it and place their applications on our storage system. We will not only focus on data storage, but also on a vibrant community of content creators and providers around the world. We will also focus on interactive learning.

4-3 Consensus mechanism and quorum of credibility :

Based on the design of the blockchain of 3CO, the Consensus Mechanism will be done to improve the following bases and principles, which are as follows:

- Transaction rejection time should be very short, 5 to 10 seconds
- Confirmation of finality of the transactions should happen in a short time, about 1 minute
- Miner's reward, in case of mining one block, will be paid with 3CO.
- Makes the system as compatible with the Binance intelligent chain as possible

4-4 Stock-proof Mechanism :

Although the work proof mechanism has been approved as a practical mechanism for implementing a decentralized network, it is not environmentally friendly; and for maintaining security, it requires a large number of participants.

Ethereum and some other networks, such as MATIC Bor, TOMOChain, GoChain, xDAI, use Proof-of-Authority (PoA) mechanism or its various types in different scenarios, including the experimental network and the main network. PoA. will provide greater defense against 51% of the attacks with improved performance and tolerance of certain levels of safety. However, this mechanism will be criticized for being not as decentralized as the POW, the nodes that will create the blocks will have all the authority and will be prone to corruption and security attacks. other blockchains such as EOS and COSMOS introduce different types of proof of stock (DPoS). They both allow holders of tokens to vote and choose a validation set. We try to use a more accurate stock proof mechanism in our blockchain.

4-5 Validation Quotas

In the creation phase, several trusted nodes are implemented as the initial validation set, and after starting to build new blocks, anyone can participate in the competition to approve transactions, be selected as a confirmation node, and receive an award. The status of the

stocks will determine which nodes have the highest stocks as a confirmation set in the next 24 hours, and this process will be repeated every 24 hours. The token that we will use to share in the dedicated blockchain will be 3CO

In order to make our blockchain network more compatible with Ethereum and Binance smart chain, we will do the following: We will put a dedicated stock verification unit for our smart chain in the main blockchain that accepts shares from 3CO holders and calculates the highest stock limit; and then selects a set of nodes with the highest stocks and select them as the decision makers. Every day, it will introduce a group of verifying nodes to the whole network. During the formation of a block, they will check whether it is on the main chain or not, if approved, they will update the system at a certain time interval.

4-6 Reward

All of our validations in the current validation suite will be rewarded with transaction gas cost in 3CO, as 3CO is not an inflation token. No extraction bonus as it exists with Bitcoin and the Ethereum network, and the gas cost is the main reward for validations. Also, BNB is functional tokens with other uses, the agents and approvers will still enjoy other benefits of 3CO.

5. Metaverse

5-1 Introduction :

Based on Metaverse's own definition: Metaverse is a blockchain project that will provide the basic infrastructure for social and organizational needs. The company aims to build a world in which digital assets (smart token MST) and digital identities such as avatars will be created with the help of mediating blockchain called "Oracle". Therefore, a new blockchain ecosystem will be created that will be very revolutionary. Human society will allow introduction of a new reality.

Nowadays, we have all probably heard the name "Metaverse" once or have heard about it from different people who may not have the necessary technical knowledge. However, so far, have you read about the basis of this project or have you experienced the presence of a new reality? Metaverse has set its basis and main pillars of its values to be perspective of creation, relationship between human beings, and relationship between people and assets.

Metaverse creates capabilities through built-in Smart Contract or BSIC in digital assets, digital identities, Oracle and smart tokens exchanges. The 3CO team intends to open new windows in the new reality by following the example of Metaverse on its token and benefiting from the use of the most up-to-date knowledge and employing specialists in fields such as smart materials or medical sciences.

We intend to use blockchain as an integrated information system, which is a quick way to build and expand applications on the blockchain system.

5-2 Entering a new reality :

As we know, with the daily emergence of new technologies and daily expansion of the Internet, the way people communicate with each other has changed. People are increasingly spending more time both for work and for leisure browsing in the virtual world. This is generally done in 2D interfaces such as the mobile web, etc. However, the transferable 3D world puts the components together so well that significantly enables the physical clusters of communities (it will turn the virtual world into a physically perceptible state). Unlike Social networks and communities, our platform will not be controlled by any single or central organization and there will be no single agent that can change the rules alone (platform content, economy, currency or prevent others from entering the platform). We are trying to set up an extensive infrastructure to support a virtual world, or a new reality in which users can operate extensively so that other users do not need several different platforms to meet their needs. In the past, the development of large platforms such as Facebook has allowed hundreds of millions of users to interact with each other, share content, play games and get together. Undoubtedly, their development has had its effects on the development of online communities and various companies, including gaming companies, and has led to the development of these communities, but all of these platforms are centrally controlled and the rules and procedures will control the content, however, as mentioned above, our platform will be completely decentralized and the goal is to create and develop a network where content producers and users can fully participate and fully Maintain value their participation.

5-3 The passable world :

3CO tries to create a completely real world similar to the world we live in today, so that the slightest difference in comparison to the real world can be felt. Suppose you work in an office

and are in daily contact with many people, both at work and elsewhere. We will give you exactly the opportunity to enter a real world while sitting at home. You will be able to enter your workplace with your personal avatar or digital identity that you have created for yourself and interact with your colleagues, you can earn money, and receive 3CO, which you can directly spend all the earned tokens there or in the 3CO related platforms.

Research has shown that digital games today provide a steady stream of cash to people around the world, as well as online businesses that many have developed today. In addition, people also want to spend their time, live, and earn money in the virtual world. Even education is no longer offered in the way it used to be. While we do not yet have a single platform for our new world, we have many projects similar to Metaverse, but each has its own characteristics. 3CO tries to provide a comprehensive platform according to the daily developments and advances of the new world, which in the next part, we will be fully acquainted with its various stages and parts. This gives its users the right, due to the existing integration, to operate, in the simplest and most convenient form possible, on all available platforms and be able to take care of all of their needs comprehensively.

5-4 3CO community and the world :

As mentioned, 3CO intends to achieve a single integration by having platforms on the basis of its original token with the exclusive name of 3CO, so that it can, at the same time, cover the needs of its users widely. 3CO intends to provide the following platforms to its community in the Metaverse project

- **Game Platform :**

In the game platform described fully above, players can earn a steady income, and receive

3CO tokens for their activity and game. Players can earn avatars, from a certain time period onwards, and play with their own avatars and receive gifts and do things as done in the Metaverse.

- **Virtual World :**

We intend to offer a digital world in our 3D world in which the social values are combined with the digital currencies, NFTs, and virtual properties. In this platform, the players play an important role. In addition, the NFT artists can display their work in virtual exhibitions or meet the players needs, such as clothing (clothes, shoes, and hairstyles) and offer tools and items used in the game, or offer virtual collections to those interested in collecting. Users can own their personal property by spending 3CO and start expanding and cultivating their personal land. By obtaining the necessary privileges, they can own their own business and set up recreational, educational and work places.

- **Architecture :**

The protocol of the 3CO virtual world will consist of the following 5 parts:

- **Consensus mechanism :**

This mechanism will help prove your assets and prevent fraud originating from buying and selling, which will be stored in our dedicated blockchain system. This will be done with the help of nodes and will be stored in the general ledgers.

- **Content :**

Users can purchase and download the required content using a decentralized distribution system on a dedicated 3CO blockchain.

- **Connection :**

You can allow other users access to look at you and communicate with each other. You can create interactions, get connected and participate in activities, games, etc.

- **Payment channels :**

3CO tries to provide speedy and low-cost transactions on its blockchain platform for its users.

These transactions include any and all transactions in the new world of 3CO.

- **Identity Authentication system :**

Ownership of any land or asset in the platform will be considered as a kind of identity authentication. If any property or asset is purchased, its letter of authentication and accreditation will be available and stored in the blockchain system using smart contracts.

• **Economy :**

3CO will, first, introduce two digital assets by launching a new era in the virtual world. In the future, it will offer a variety of digital assets by expanding its world. At first, it will offer Decentraland that are a kind of non-parallel and unchangeable tokens and then will offer 3CO for staking the assets or purchasing goods and services. The lands will be beneficial based on their proximity to other significant centers, their ability in hosting programs, and their reserves. Developers as well as content producers can apply for land so they can build on it and attract their target audience. For example, a painter can build his/her own gallery in the city and display his/her work and earn money and sell his/her work, display them to the public from anywhere in the world.

As mentioned, each land has a different price depending on its conditions, but a piece of undeveloped land can be purchased at the same exchange rate. The price of each piece of

undeveloped land is equal to 1000 3CO. On the other hand, 3CO is also a criterion for valuing land. In addition, services and goods in the virtual world will create useful value for land. 3CO also intends to provide good rewards to developers and content producers in the event of a quick launch of services, such as stores and so on. We also plan to offer art creation competitions, music concerts, games, and similar services in our world. Our users can receive good rewards from us if they participate. we give new users grants to launch and participate in the economy so long as they attract developers and users independently.

- **Challenges :**

P2P content distribution over the network will face two fundamental problems. The first problem is the download speed. As we know, the graphic files will be very heavy and loading and downloading them will be very slow in existing systems. 3CO also will try to solve this problem by using new technology and new shared files.

The second issue is the accessibility of the content, ie all users will receive the shared content in a completely identical form.

- **Script :**

Scripts will be the most important element used for a valuable user experience on our platform. To this end, its APIs must benefit from sufficient security and safety so that the users could keep their private passwords and be able to validate their payments repeatedly. Furthermore, convenient access will be provided for the users and developers.

- **Content Management :**

It is very difficult to solve the problem of filtering content for various age groups or issues such as pornography, violence, etc. in a decentralized network. 3CO will try to implementing a system based on artificial intelligence and information received from users tackle this issue

and execute necessary automate control. In addition, the more users prove their competence, the more authority they will have and the more points they will earn.

- **Technology**

The most up-to-date futuristic technology present is the video games in which the virtual reality glasses technology is utilized, which can be used to bring the most real experience to the Metaverse. However, the necessary studies on the user experience show weaknesses in them. 3CO tries to use the latest technologies and medical sciences, as well as experts in various fields to be able to provide experience closest to the real world for Web users so that users can have the closest as well as the most comfortable experience by using the simplest tools, such as eye lenses or sensors mounted on the everyday clothes they wear. The users can tend to their work for hours, play games or train and attend classes, even, experience social or emotional relationships in a completely realistic way.

6. Decentralized social network

Social networks and popular messengers that you probably know, such as Facebook, Twitter, Instagram, Telegram, WhatsApp, LinkedIn, etc., all have exclusive networks. This means that all the data on which the network infrastructure is built is exclusively at the disposal of the manufacturer and the company has absolute power within the network. Some of these networks, such as WhatsApp also use proprietary software on the user end, which is doubly bad, but even networks where the official software has been released to the public, such as Telegram or through APIs that are offered, public user interfaces for them by the community (such as Instagram and Twitter) are not a good choice for the community; and their use is more in the interest of the capitalists behind these networks than in the public interest. There are many decentralized social networks based on public data. These include Mastodon (replacing Twitter), Matrix, replacing messengers such as Telegram or WhatsApp, Pixel Fed (replacing Instagram) and Peertube (replacing YouTube)

6-1 Centralized network problems :

- **Espionage and data mining :**

major proprietary data networks hold in possession the network content, visits, and communications. These networks will obviously use this data to influence ads, but that is not the end of the story. These networks are obliged to provide information to the host governments upon request. Companies can sell this information or use it to scrutinize public opinion and interfere in elections. There is evidence of such interference, but so far companies have not formally acknowledged this.

- **Censorship :**

In proprietary networks, it is the owner of the network who chooses what content to put on the network, and for reasons such as government laws or cultural and political strategies, the content you want to be put on these networks may be removed by the network administrator. Even if the network administrator does not delete you, your membership in this network will boycott the voice of the network owner's company.

- **Power Gaining of companies :**

Having a large network is a big advantage that makes the owners visible and empowers the owners. Whereas, this power could be distributed among the community, however, by joining these networks you have helped to consolidate power and wealth.

Complete solutions to the above problems are- somewhat- provided by platforms such as Discord. This platform has given users more authority and freedom. Telegram has also taken half-measures in this regard and placed its servers in various jurisdictions. Thus, private conversations in Telegram cannot be censored.

All of this marks the beginning of a structural shift to decentralized, user-centered platforms. Much efforts have been made by other platforms to reform the social media space. Mastodon, for example, is a decentralized platform that does not use the Chinese blockchain, and has taken significant steps in this direction. This platform is a kind of platform for small blogs where advertising is free and tries to connect users with one another having different interests. This platform is not centralized and each user can choose a specific server according to their circumstances. These servers work independently. This model is very similar to the model that Twitter is going to use in the future

In this plan, 3CO tokens are used within the social network, and users will receive rewards for producing content as well as collaborating in development of the platform. On the other hand, it is possible to define benefits for 3CO owners within the network.

6-2 Benefits of a decentralized social network

The most important benefits of blockchain for social networks include:

- **Users not being a commodity :**

Social media is full of user information. Users' likes on Facebook, Instagram and Twitter reflect the dense information that these companies use to better target their users in advertising and marketing. Considering the terms of use of these companies, one should learn that when they upload their content on the site, social networks allow access to this content to achieve their own goals. It does not matter if the content is text, photos or videos and even likes. As Facebook claims, you own the content you post. The fact is that the content that users receive is used for advertising purposes and their personalization.

- **Producing appropriate content :**

Social media, with a focus on blockchains, should use decentralized methods. By getting released from the bonds of a centralized control, there won't be a centralized control center to control the content created by the users. The main goal of the producers of Obsidian, while creating a messenger in the blockchain, was based on Stratis.

- **Increase security :**

By gathering information and targeting users based on what you think, it's pretty good to know that social media, like Facebook, has been accused of eavesdropping on their users by smartphone microphones. Most people may be worried, but some People are paranoid about their privacy. Hearing these conversations causes them not to join any of the social networks. Accordingly, social media has done very well in networking, collaboration and brainstorming. Another feature of blockchain is the privacy and security of decentralized systems.

- **Freedom of expression :**

There are many benefits to using blockchain for social media, which can lead to secure and anonymous authentication. According to messaging services such as I- Message, WhatsApp, etc., which have global encryption, the problem starts at the point where the metadata changes with the message and leaves Bread Crumb. A third party can benefit from it. Accordingly, in eavesdropping, given that the content of the message is encrypted, but where it comes from and where the destination is, are unknown. Platforms like obsidian do not shy away from such monitoring and censorship.

- **Method of payment :**

Apart from messaging application, peer-to-peer communication has been discovered through social media. BlackBerry, to revitalize Blackberry Messenger Application, has used peer-to-peer blackberry messenger networks in some Asian countries, such as Indonesia. Facebook network is executing payment operations using messenger. Considering this, there is an

inconsistency in the regulations and terms of use of messengers and payment platforms, which can be easily removed through the Chinese blockchain.

Given that digital currencies are based on blockchain, the users can easily move their digital tokens and currencies through social networks. Through smart and purposeful contracts, the performance of social networks can be turned into more secure networks, in which case, users can move and exchange digital currencies that have been encrypted as well as executed smart contracts. These features and capabilities are for people who are looking to integrate and streamline their transactions and target communities.

- **Group investment capability :**

According to the popularity and fans of capital sites point to startups, such as Kickstarter and Indiegogo Apps. It is also good to pay attention to how ICOs sell their capitals in the form of tokens. In fact, a virtual network is placed on the blockchain and will allow users to raise capital. Similar networks that can support digital currencies can make collective investments without the need to implement separate payment structures within the network.