

# WHITEPAPER



# Metaplace.finance

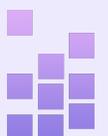
DEC 2021

# Metaplace Marketplace

*Metaplace whitepaper is a living document. This document contains philosophical underpinnings, technical foundations, and the economic model. Any information presented in this document is subject to change and will be updated regularly. The basic structure presented in the document will remain the same, however, any major change will be announced prior to implementation, on social forums and the website of Metaplace.*

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# Foreword

Starting as a cryptocurrency or an alternative payment method, blockchains are now frequently portrayed as a generic technology across a wide range of use cases. Although, from a technical viewpoint, blockchains are meant to be described as recorders of transactions. However, they are often portrayed as platforms or technologies enabling transactions. What started out as a crypto-anarchist dream has now taken its toll to disrupt traditional e-commerce. This paper relies on the technological and behavioral unpinning of a decentralized marketplace, named Metaplace.

The impact of blockchain technology on e-commerce is immensely due to the more reliable alternatives that the technology offers. These alternatives range from trade transparency to liquidity. Where transparency refers to the open-source structure of these blockchains, allowing everyone to add information on the blockchain that will then be visible to all members/viewers. Liquidity on the other hand, refers to the ability of the market to execute a trade without impacting the price of the good. In other words, liquidity refers to the property to sell an asset at its initial price.

Apart from liquidity and transparency, a blockchain-based marketplace has safer transactions and immutable transactions. The throughput of the underlying, supporting blockchain also adds to the efficiency of the marketplace by increasing the speed at which transactions are executed.

The efficiency of a blockchain-based e-marketplace is high due to the aforementioned reasons, as compared to traditional e-commerce marketplaces such as eBay and Amazon. The infrastructure of decentralized marketplaces and the structural lacking of centralized marketplaces will be thoroughly explained later in this paper.



As of now, it is crucial for the readers to understand the need for an alternative to the centralized traditional marketplace. The importance of the latter can only be signified by pinpointing problematic areas in the former e-commerce structure.

In a conventional marketplace, transactions are validated by a third party, in most cases that is a bank or a credit card company that uses an open-loop or closed-loop network structure. Both of these institutions deliberately require detailed personal information of the users. This information includes permanent address, credit card details, and other social security information. All of this information is stored in bid databases which are largely prone to cyber-attacks. Almost all centralized marketplaces have once been targeted by hackers, over the years. Making them more unreliable than ever before.



# Introduction

Decentralized marketplaces are built on blockchain structures that enable peer-to-peer connection in terms of communications and transactions, thus eliminating the need for a middleman authority to administer.

Metaplace is a decentralized marketplace built on the Binance smart chain blockchain. It uses smart contracts to connect its users to make transactions and connect with each other. Aside from providing a seamless sustainable marketplace, Metaplace enhances the transparency of trade by incorporating metaverse on its platform.

The metaverse feature is an additional feature added in this marketplace that provides Metaplace with a competitive edge over its counterpart. Metaverse is a hot feature explored by many projects, leading it to become the most in-demand feature. Many believe the future belongs to the metaverse. Metaplace too is a firm believer in innovation and tries to remain updated with recent technologies to facilitate their users. In this particular case, Metaplace uses virtual reality to enable its users to physically examine products before buying. The products mostly include lands and other high-value assets with physical attributes.

Aside from including metaverse, Metaplace has also incorporated other in-demand features on its platforms that will be briefly discussed in the next section.

As of now, it is of crucial importance to understand the need for a decentralized marketplace instead of an e-marketplace like eBay and Amazon. In this section, we will explain the limitations of the traditional centralized nature of e-marketplaces, and the upgraded features of the decentralized structure.



## Comparison between the centralized marketplace and decentralized marketplaces

In a decentralized marketplace, technology replaces the traditional drivers of the market. The structures responsible for matching buyers and sellers, seamless transactions, and institutional infrastructure are replaced by a network of nodes. Each of these nodes accomplishes the same functionality as that of some centralized market drivers.

A decentralized marketplace holds transactions that are seamless and immutable. These transactions are safer in terms that a decentralized market structure does not include a middleman that can affect transaction security in any way. Perhaps a transaction in a decentralized structure is cheaper because here the buyer directly pays to the seller, with crypto networks validating these transactions.

In addition to providing smooth transfer of data and money, decentralized marketplaces are comparatively more efficient in matching buyers and sellers due to their inherent nature of providing unmodified access to information. All goods are listed through the blockchain thus eliminating any human error in product and price listing. Aside from that, product search results are entirely organic and reliable.

Moreover, decentralized marketplaces have a coherent institutional infrastructure. Thus enforcing buyers and sellers to adhere to market norms and the rules of the trade. It does so with the help of programmable contracts facilitated through a set of networked nodes.

In addition to the aforementioned advantages of a decentralized marketplace, there are a few other points to be noted while evaluating a centralized and decentralized market structure. This will be briefly explained in Figure 1, given below



Marketplace features	Decentralized marketplace	Traditional e-marketplace
Trust through contract enforcement	Distributed validation, including proof-of-work mechanisms or proof-of-stake mechanisms. The network enforces the contract between seller and buyer. The network validates reputation ratings, including reviews and feedback mechanisms	For Third parties (such as a bank, certifying authority, promissory note, transfer systems, or other forms of contractual mechanisms). Usually controlled by the firm. Potential for significant alteration.
Transaction time	Fast, due to efficient network validation Delays can be mitigated through using PoS or proof by consensus algorithm	It uses promissory notes, letters of credit, and letters of acceptance that can take up some time.
Value	The network can pay back users through its utility tokens or third-party tokens	Banking alternatives, currency, underwriter, etc.
Sustainability	Executes transactions fastly and cheaply	Transaction execution requires time due to legal requirements
Safety	Unbiased and un-altered immutable structure	Centralization of market and creation of a market monopoly

Source: 2018\_01\_CACM\_DecentralizedBlockchainMarketplaces

*Concluding remarks:* Decentralized marketplaces provide many advantages to all market participants, including security, trust, privacy, lower transaction costs, and transaction integrity. Decentralization alters the paradigms of today's conventional marketplaces in which a large intermediary firm that controls the platform is able



to control every aspect of a trade, from product listings to price discovery, product search, logistics, and the customer experience.

## Comparison among decentralized market structures

### A case study on OpenBazaar

OB deviates from the traditional client-server model used by nearly all e-commerce marketplaces, such as Amazon and eBay. OB is not a browser-accessible website, but rather a peer-to-peer application powered by a decentralized network of nodes run by the platform's individual users. To use the OB marketplace, users must first visit its website and download an OB server and an OB client, both of which must be installed locally on the user's machine. 64 "All stores and listings are hosted on the vendor's own computers and "reseeded" by other network users," according to the vendor's website. As a result, unlike Amazon or eBay, which do not require parties using their platform to maintain the infrastructure underlying the platform, OB associates participation in the marketplace with its upkeep – one cannot transact on OB if an OB node is not running. The primary benefit of this is of configuration in the network's technical resilience, which is extremely difficult to shut down or interfere with. The absence of centralized servers, which are potential points of failure or interference, ensures this. Furthermore, individual users have technical control over their nodes, accounts, and transaction data. The disadvantage of this structure is that sellers who operate shopfronts must keep their computers online at all times. While technical solutions to this "problem" exist, they do necessitate a relatively high level of computer literacy.

OB supports two payment methods: direct and "moderated." Buyers send bitcoin directly to vendors in the case of direct payments. According to OB, this method is "risky" because once bitcoins are sent, the payment cannot be reversed and recourse against dishonest vendors may be impossible. After all, both parties are permitted to register under fictitious names, and discovering the IP address may



not be sufficient to identify the defaulting counterparty. As a result, OB recommends this method only if the seller trusts the vendor and the transaction is small. OB also encourages buyers to leave vendor reviews and advises users to contact the other party before making a purchase "to confirm they are responsive, both within OpenBazaar and through other means, e.g. email." 68 In the case of moderated payments, buyers include a third party, known as a moderator, in the transaction to assist in the event of a dispute. The price of the goods is paid into escrow in moderated payments, which are practically synonymous with OB's dispute resolution method.

Metaplace, on the other hand, enables its users to physically examine products



through virtual reality; in an attempt to avoid any scams on the seller's ends.

Moreover, the payment method used by Metaplace is escrow. This payment method relies on the three-party signature mechanism, a bitcoin specific multi-signature address. This multi-signature address is then collectively



controlled by buyers, sellers, and moderators. In order to avoid any last-minute payment scams.

## Multilayered platform

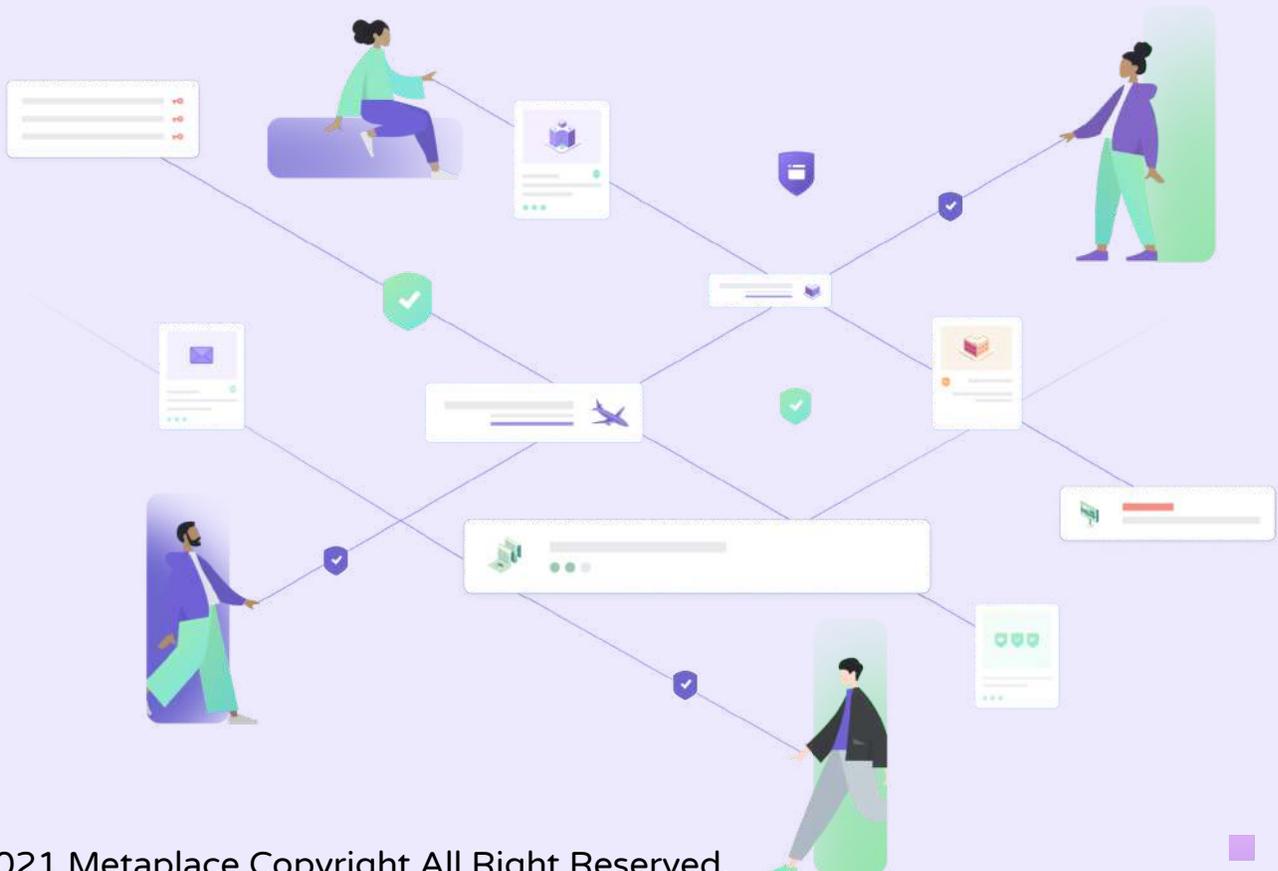
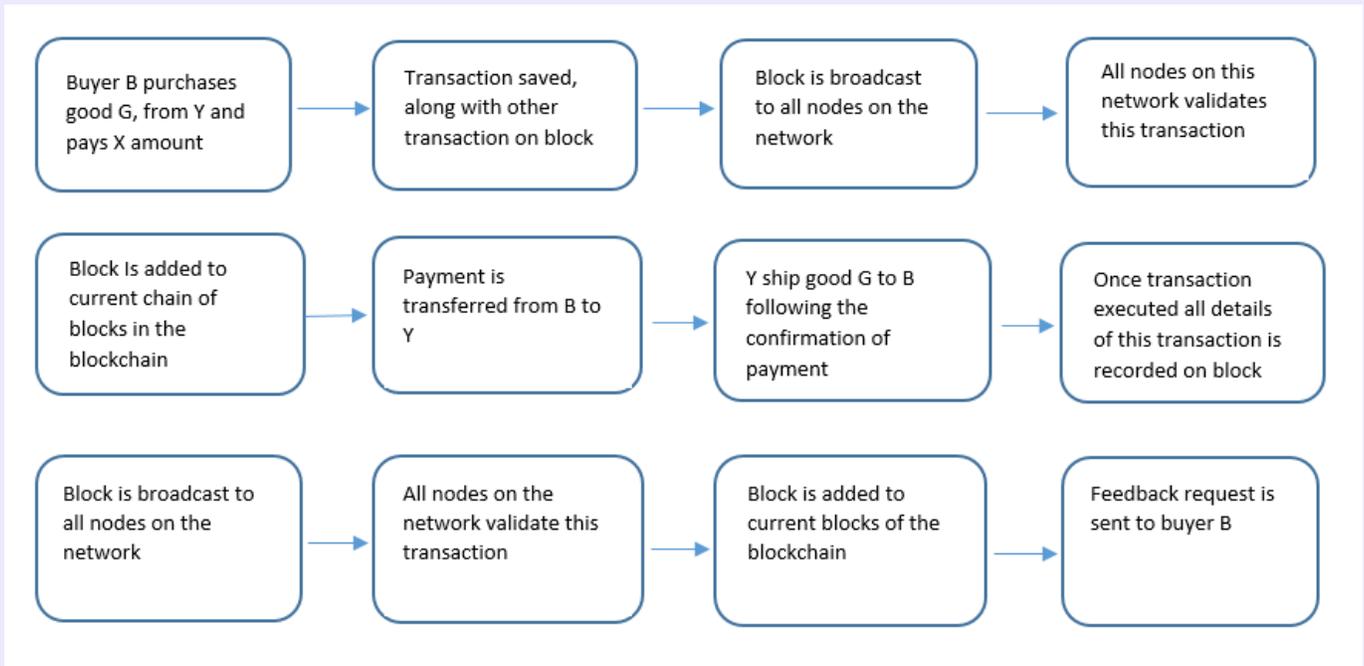
Figure 1 depicts the architecture of a decentralized e-marketplace, with Layer 1 consisting of network infrastructure consisting of hardware nodes and client software. The client software provides product listings, and each node runs a local copy of the network's blockchain, which includes its own product listings. Layer 2 is the mining software that is used to generate new blocks of data made up of network transactions; newer tokens of value are issued into the network based on mining algorithms. Layer 3 software is in charge of validating network transactions and storing validated transaction records. A peer-to-peer marketplace or a seller logistics marketplace could be distributed applications at layer 4. (such as the electronic data interchange interface and reputation models). Layer 5, or the quality-of-services layer, is where the customer relationship management functionality of a marketplace is implemented. Reputation models are intended to increase buyer and seller trust.

### Figure 1      Multilayered architecture of a decentralized market

Layer 1	Network infrastructure
Layer 2	Mining software
Layer 3	Blockchain
Layer 4	Decentralized application
Layer 5	Quality of service



# Transactions flow in a decentralized marketplace



## #Marketplace

Unlike a centralized marketplace that is administered by a middleman, Metaplace is a decentralized structure.

## #Buy/Sell Assets

Buyer and sellers across the globe can register themselves online and eliminate the need of a middle man.

## #Trade MPC

All payments on Metaplace are made through the native token of the platform. Users can acquire \$MPC through converting their digital currency into our native token.

## #Limitless Shopping

Metaplace is a decentralized online marketplace that offers you a diversified shopping experience through your desktops.

## #Staking

Metaplace offers staking services, where our users can stake their \$MPC in any of our liquidity pools to earn a 500% APY annually.

## #Passive Income

Metaplace users will be able to generate passive income through Ads on their site.



## NETWORK & PARTNERS



# BINANCE

## SMART CHAIN

### The Binance Network

Metaplace will be built on the Binance Network. Metaplace is delighted to be supported by Binance and is proud to announce that the project has secured investment from Binance.

Binance is the most active layer-2 BNB scaling solution that exists in the market today. The Metaplace team has decided to build on Binance due to its high speed, low cost transactions and the overall compatibility of the network. This will allow us to connect, develop and most importantly develop at scale on the Binance network. The power of Binance is that it provides a credible layer of trust for users. It has significant advantages over other networks allowing scalability, security and overall better user experience.



## Other features of Metaplace

### *Decentralized marketplace*

Unlike a centralized marketplace that is administered by a middleman, Metaplace is a decentralized structure. The main distinguishing feature between a decentralized and centralized structure is the need for a middleman for administering the market. Where a decentralized marketplace like Metaplace is self-regulating, meaning that the market drives itself towards equilibrium and in any case, if it does require assistance, it has a DAO governance model where all members contribute towards decision making.

### *Online marketplace*

Metaplace is a decentralized online marketplace that offers you a diversified shopping experience through your desktops. It eliminates the need of gathering buyers and sellers in a single place to initiate trading. Buyers and sellers across the globe can register themselves online and initiate trading.

### *Diversified market structure*

Metaplace specializes in multiple different products including regular goods, real-estate, and financial tangible and intangible tokens. We are the first marketplace to offer such diversified products in a single platform, that too, with integrated metaverse.

Now either you want to purchase an electronic device or a piece of property, you can physically examine or visit the site. Our virtual reality will make it possible.



## **Binance smart chain**

Metaplace is constructed on Binance smart chain blockchain. Binance smart chain is a fully fledged multi chain system that combines the best of Ethereum and other sovereign blockchains.

## **Safe marketplace**

A centralized marketplace is often subjected to malicious threats. The theft of goods or other claims on the property is a very frequently occurring problem faced by buyers in centralized markets. Metaplace caters to both aforementioned issues. Firstly, goods are not subjected to theft due to being traded digitally. Secondly, goods are not damaged or flawed as examined physically prior to purchase. Thirdly, there will be no other claimants on the property bought due to its ownership transfer occurring on a blockchain.

Metaplace is an open-source marketplace constructed on a blockchain that enables buyers and sellers to add data on the Metaplace protocol while remaining 100% safe with their good's data or other personal information.

## **Social communication**

Metaplace enables its online buyers and sellers to communicate with each other through different communication modes, including messaging, live chat, and meetings through virtual reality.

## **Immutable transactions**

Transactions on Metaplace are immutable meaning that there is a log for each transaction recorded and it cannot be reversed once embedded on the blockchain.

## **Cross chain interoperability**

Metaplace also offers cross chain interoperability. It supports multiple chains.



## **Featured ads**

Metaplace users will be able to market their products on this large platform through signing up for our featured ads section. Sellers can market their product by featuring their ads by signing up through a certain fee on the platform.

An ad is accepted to be featured on the platform through a proper channel of governance on the platform. The seller must first.

## **Revenue distribution**

A certain predetermined ratio of revenue is distributed monthly among all members on the platform.

## **Payment method**

All payments on Metaplace are made through the native token of the platform, \$MPC.

Users can acquire \$MPC through converting their digital currency into our native token. For this purpose, they require a Metamask wallet.

## **Zero fees**

Metaplace charges zero fees on any transactions made on the platform. Thus the price of products remains the same and is not altered by transaction fees.

## **Staking**

Metaplace offers stake services, where our users can stake their \$MPC in any of our liquidity pools to earn a 499.9% APY annually.



Following formula is used on Metaplace to calculate the staking reward

$$Reward_U = \sum_{i=1}^n \frac{\Delta P_i}{\Delta p_i} \times \Delta G_i$$

where  $\Delta p_i$  denotes individual productivity of the user U between the consecutive block numbers  $t_{i-1}$  and  $t_i$ ,  $\Delta P_i$  denotes global productivity between the consecutive block numbers  $t_{i-1}$  and  $t_i$ , and  $\Delta G_i$  denotes gross product between the consecutive block numbers  $t_{i-1}$  and  $t_i$ . The formula ensures that there is no benefit in case of exiting earlier or entering later in the computation. The reward a user can get for a period is based on his total productivity during that specific time. The formula has been simplified through Solidity and generalized design to make it available across all DeFi products.

The function shows the total return user a will get, depending on the tokens staked by user b at a given time in any staking pool on the platform

### **Metaplace revenue model**

Metaplace generates revenue by charging a commission transaction fee of 0.5 to 1% on each transaction. The sale of utility tokens is another method of generating revenue. The utility token sale function is based on constant intertemporal utility and positive marginal utility. The fee model, on the other hand, includes the function

$$\int_0^{\infty} e^{-\delta\tau} X(f + \kappa\tau) dt$$

Where the fee charged  $K$  should be less than or equal to  $F-f$ . The fee functions like a tax that increases the price consumers pay and decreases the equilibrium quantity to  $q_d X(f+K\tau)$ . And  $\delta$  is the interest rate,  $d$  is the subscript of the inverse demand function.



# Roadmap

## ➤ Q4, 2021

- Website launch
- Social media presence
- Whitepaper release
- Staking Pools live
- Explainer video
- Airdrop
- SC Audit
  - CG & CMC listing
- Private sale / Presale

## ➤ Q1, 2022

- Decentralized marketplace (beta-testnet)
- CEX Listing (Binance/gate.io/kucoin)
- DAO Platform
- Strategic Partnership
- Onboard Influencers
- Airdrop distribution
- Mobile App (beta-testnet)



## ➤ Q2, 2022

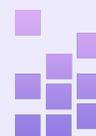
- Decentralized marketplace (Mainnet)
- Escrow service integration
- Live feature ADs
- Metavers (beta-testnet)
- Cross-Chain Interoperability
- Research and Development
- Mobile App (Mainnet)
- Onboard Strategic Advisors

## ➤ Q3, 2022

- NFTs marketplace integration
- Real estate integration
- Ad integration with real-time bidding
- Marketing and advertising
- Digital Assets Tokenization
- P2P Marketplace Scalability

## ➤ Q4, 2022

- Media collaboration
- Dapp studio integration
- Real-world asset tokenization
- Improvement of dispute rates
- Expand team Worldwide
- Educate/reward blockchain community



# Tokenomics

## Total Supply: 100 Billions

30% Pre-sale

20% Liquidity (locked for 20 years)

20% Staking pool (3 months reward duration)

10% CEX liquidity (Provide liquidity to Centralized exchange gate.io/binance)

6% Marketing and development (locked for 6 months)

5% Strategic partnership & Airdrop (locked for 6 months)

5% Private Sale

2% Team tokens (1 year lock)

2% ILO fee



# Mission and vision

Metaplace aims to elevate traditional e-commerce through revolutionizing the e-marketplace by bringing similar features to a decentralized blockchain structure. Metaplace also adds other crypto features that include staking and metaverse to enhance user experience.

Our mission is to create a decentralized marketplace for the future. A one-stop-shop for all goods and services ranging from crypto assets to real estate. Our users will be able to find anything and everything here.

Our community standards will be mentioned on the platform, and regularly checked based on user engagements. We aim and hope to provide a safe community with extraordinary services.

## References

*Araletal.-2020-ReliabilityManagementforBlockchain-BasedDecentralizedMulti-Cloud.pdf*

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*2018\_01\_CACM\_DecentralizedBlockchainMarketplaces.pdf*





# Thank You

Visit our website for more information and update on Metaplace

[www.Metaplace.finance](http://www.Metaplace.finance)

