

# LITEPAPER

MetaClass.market





#### **Foreword**

Metaverse is a decentralized hotline technological network of 3D virtual worlds subjected to converge physical, augmented, and virtual reality in a shared online space powered by an open blockchain technology that encompasses digital assets and digital identities. Being pioneered to lead an expansive, innovative digital economy, Metaverse has already manipulated prominent tech giants towards customizing their platforms with 3D functionality and digitizing their assets such as rare goods, intellectual property, and right to return financial instruments.

Blockchains- a central structure to Metaverse- provide a transparent solution for digital proof of ownership, digital collectability, transfer of value, governance, accessibility, and interoperability: the key factors upholding the virtual ecosystem in the discussion. While the Metaverse is wildly protruding within a world of hi-tech by connecting standalone stores of value to an internet of value via smart contracts, ecommerce is taking itself on a troll, launching a novel concept to Metaverse- the first craigslist to Metaverse known as the 'Metaclass'.



**Disputable** 









**Escrow** 



Staking



**Featured Ads** 



Orders

### Introduction

The Metaclass is the first decentralized classified Metaverse platform built on Binance smart chain: a multi-chain protocol that offers its clients cheaper yet faster transactions. Metaclass has rooted its credibility amongst its target clients by enriching them with a one-stop-shop experience that is seamless, immutable, and secure; it is determined to provide its users uncensored advertising opportunities via privacy-protected, community-driven, e-commerce. The users, in addition to posting advertisements for jobs, garage sales etc, can stake their Metaclass native tokens on the platform, making Metaclass the first Auto-compounding and Auto-staking platform that provides an attractive APY of 205, 8975.56%. Coupled with numerous distinctive properties, and inevitable design structures, Metaclass intends to expand its platform with the incorporation of Metaverse.



## The indulgence of Metaverse

Metaverse has formulated Metaclass into a platform prioritized above other advertising platforms such as Altimark or Gumtree. The innovative e-commerce platform provides access to a diversity of products ranging from financial assets such as NFT's, in-game assets, consumer goods, virtual real estate, all of which are subjected to a virtual examination before the purchase- thanks to the Metaverse. A 3D examination preceding a purchase eliminates all sorts of frauds and discards the chances of buyers interacting with the sellers advertising for shoddy products. Thus, in precision, Metaverse corroborates a strong, secure foundation for both buyers and sellers.

## **Trading On Metaclass**

Metaclass has greatly advantaged its target market. It has equipped the sellers with control over dictating the terms of their businesses: their audience, their products, and the currency they're willing to be paid in. There is no cost levied on the sellers for putting an ad; instead, they are only required to hold a certain number of Metaclass native tokens in their wallet- a number which initially will be decided by the platform but the policy is expected to change through governance decisions. The buyers, in turn, can proceed with the payments in various cryptocurrencies such as BUSD, BNB, or the native token \$Metaclass. The buyers on Metaclass are promised security and anonymity in return for their trading activism.

## **Staking on Metaclass**

Apart from providing decentralization to classified ads, Metaclass is bringing to its users the staking opportunities with high, flexible returns on the native tokens staked. The metaclass is a leading platform equipped with Auto-Compounding and Auto-Staking features for its target market, ensuring a high passive income for its users.

The native \$Metaclass token-the BEP-20 token- can be purchased from Pancakeswap and the holders are then required to connect their wallets; Metaclass is currently only supporting MetaMask and Binance wallet for staking \$Metaclass tokens. The staking contract has to be approved manually which allows the transfer of tokens on the holder's behalf. The amount of tokens to be staked is chosen and the transaction is authorized. The staking of \$Metaclass provides a Daily interest rate (DPY) of 2.1% and compounding 205, 8975.56% annually.

\*The starting APY will be 196,868.1% % and can drop to a minimum of 19.68% if 100% of the holders stake.

Metaclass applies an auto reinvest policy to boost APY for its users; the Metaclass tokens staked earn profits continuously thus increasing the capital efficiency of the platform. The following formula is used on Metaclass to calculate the APY which is subjected to change with respect to the number of token holders involved in staking.

$$APY = (100\% + \frac{R}{N})^{N}$$

Where R is the APR, N is the compound frequency which is the number of times we reinvest per year.

In this scenario,

N= 365\*1 as the compound frequency is once is 24 hours thus 365 times annually. As N is much larger than the R the above-mentioned formula is reduced to:

$$APY = ((100\% + \frac{R}{N})^{\frac{N}{R}})^{R} \longrightarrow e^{R}$$

## **Calculating the Staking Reward**

Based on the product of effective collateral and time, ERC2917-a new standardization for on-chain calculation of staking reward- calculates the reward a user can get at any time, and realize the real decentralized DeFi. Here below is the formula for the calculation of reward for a user U:

$$RewardU = \begin{cases} \sum_{i=1}^{n} \frac{\Delta p_i}{\Delta P_i} \times \Delta G_i \end{cases}$$

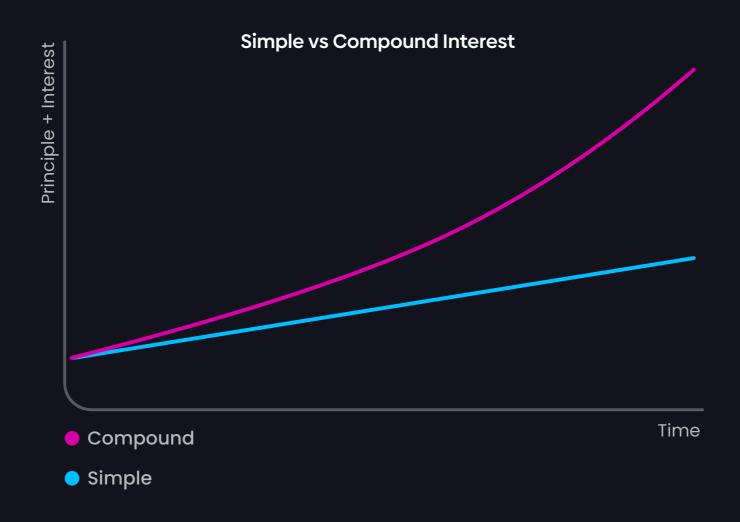
Where  $\Delta$ pi denotes individual productivity of the user U between the consecutive block numbers ti-1 and ti,  $\Delta$ Pi denotes global productivity between the consecutive block numbers ti-1 and ti, and  $\Delta$ Gi denotes gross product between the consecutive block numbers ti-1 and ti. The formula ensures that there is no benefit in case of

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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.

## **Compound vs Linear Interest**

Compound interest is an excellent way to snowball wealth exponentially. Coupled with automation using smart contracts, the power of compound interest is the core value proposition for seamlessly maximizing users' yield. Simple interest, on the other hand, guarantees a linear growth of interest.



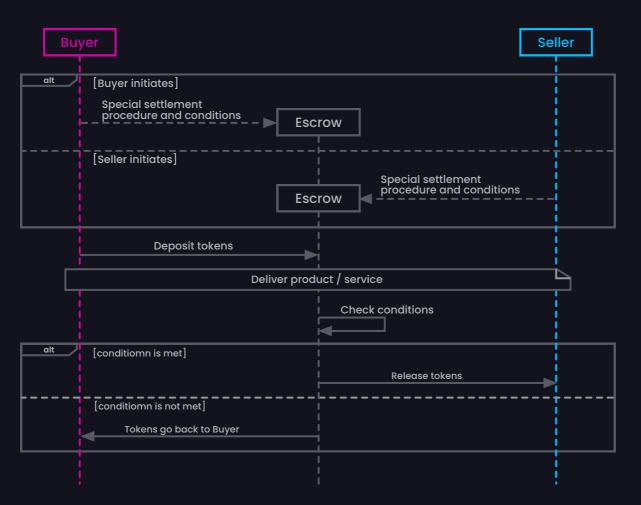
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### **Security and Governance Reforms**

The Metaclass is a business platform that involves the active participation of both buyers and sellers and it's not too rare that the interaction between both parties could lead to a dispute. Handling all sorts of clashes during transactions and purchases was an evident challenge, and, thus, to combat such a crisis while making certain a friendly business activity, Metaclass introduced a system of escrow and arbitrators.

#### **Escrow**

Escrow is a legal concept that describes a financial instrument whereby an asset namely securities, funds, escrow money etc is held by third party-the arbitrators- on behalf of two other parties that are in the process of completing a transaction. The funds of any order placed through Metaclass will be held in the escrow until both parties agree fully to the fulfillment of goods or services, thus ensuring safe and trustworthy exchange of merchandise on the platform.



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As learned in the figure above, a smart contract can be installed to play the role of an escrow that holds the funds until payment conditions are satisfied. It takes place in four simple steps.

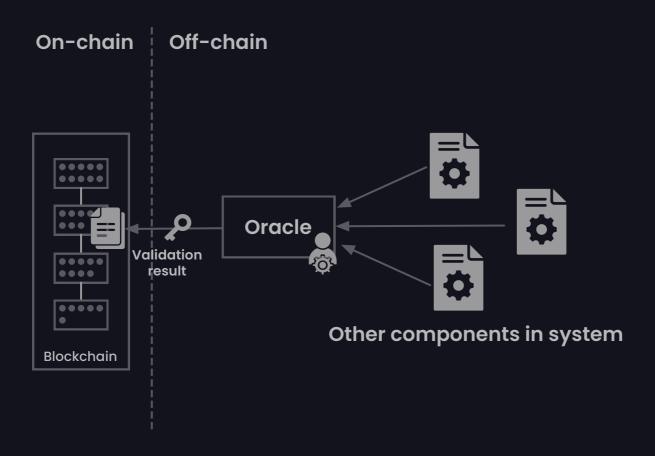
- 1. Either the buyer or the seller deploys and specifies the settlement procedure and conditions on a smart contract.
- 2. The buyer transfers the tokens to the escrow smart contract.
- 3. If the token release conditions are met by providing the desired product or server, the respective event is informed to the escrow smart contract.
- 4. The escrow validates the pre-defined conditions and releases the tokens to the seller. However, if the respective event is not informed to the escrow within the stipulated time or the event indicates that the product/service was not delivered as per the agreed terms, the tokens are sent back to the buyer.

The payment conditions depend either on on-chain data or external data both of which will have independent, distinct pathways for passing delegations to the escrow. If the payment conditions rely only on on-chain data then a delegated call will be made to the escrow contract, informing it of, for example, the delivery of a product or service. On the other hand, if there is an involvement of external data like the shipment of a product, the oracle pattern must be observed to direct desired data to the escrow.

Smart contracts employ intense security to escrow functionality due to the smart contract code which is immutable once deployed on the blockchain, thus confining confidence within the parties involved in the transaction of not being cheated during the trade. Furthermore, extensive care must be taken to ensure that the specified settlement conditions provided to the smart contracts are unambiguous.

### **Oracle Pattern**

When external systems are introduced into the closed blockchain execution environment, the oracle pathway is observed to direct desired data to the escrow. An oracle queries and verifies the data sources and then relays it onto the blockchain in the form of a transaction forming an authoritative record of data. The independent, third-party service-the oracle- connects the closed execution environment of blockchain with the external world; it will query and verify the external data needed by a smart contract function and then submit that data to the smart contract using a transaction. The data inserted by the oracle is considered trustworthy by the respective smart contract due to the authenticity of its identity and the digital signature of the transaction.



#### **Arbitrators**

The arbitrators are the third party aforementioned in the escrow voted through governance. During a quarrel, the arbitrators will have the ability to voice for either the seller or the buyer; as a result, the funds from the escrow will be transferred to the party elected. For the services performed by the arbitrators, the platform will reward them with native Metaclass tokens. To be chosen as an arbitrator, the user must succumb to the following three conditions:

- 1. Must have completed a 100 transactions on Metaclass
- 2. Must have a possession of an NFT
- 3. Must undergo a Governance selection process

## **Metaclass Buy and Sell Fee**

On Metaclass, the transaction fee is charged to the seller and none to the buyer. The returns are generated via trading revenue with respect to featuring ads, and the transacting fee which is utilized effectively to maintain and expand the Metaclass. The income is distributed in the following way:

#### 1. Buy Back and Burn of Tokens

To ensure the long-term sustainability of the protocol and high passive revenues for the token holders, Metaclass will proceed to the burn of tokens and buy back when prices drop thus promising a steadfast price pool during the course.

#### 2. Development of the platform

A proportion of funds will be dedicated to the development of the platform: introduction of advanced features, partnerships with other leading marketing firms, or increasing incoming traffic to the platform.

#### **Revenue Model**

Metaclass levies a transaction fee of 0.5%-1% on each transaction made and the fee model involves the following mathematical function:

$$\int\limits_{0}^{\infty} e^{-St} \, \mathbb{X} \, \left( \, \text{$\mathbb{f}$} + \text{$\mathsf{KT}$} \, \right) \, \mathsf{dt}$$

According to the above mentioned formula, the fee charged K should always be less or equal to F-f. The fee functions like a tax that increases the value the consumers, specially the sellers, pay and decreases the equilibrium quantity to qdX(f+Kt).8 is the interest rate while d is the subscript of the inverse of demand function.

## **Additional Features of Metaclass**

#### - A Decentralized Classified Metaverse Ads platform

The Metaclass is a decentralized classified ad platform integrated with Metaverse. It provides advertising opportunities to its users and helps them bring intense traffic to their businesses. The buyers are offered a 3D examination of the goods prior to them being bought, thus eliminating the chances of fraud or dishonesty.

#### - Diversified Market Structure

Metaclass specializes in advertising for multiple different products including regular goods, real estate, financial tangible and intangible tokens, NFTs in a single platform that too with an integrated Metaverse.

#### - Binance Smart Chain

The Metaclass is constructed on BSC which is a multi-chain interoperable system consisting of diverse applications built on a value transmission network featuring a comprehensive yet basic infrastructure.

#### - An uncensored communication

Metaclass allows its online buyers and sellers to communicate with each other in a safe, uncensored way via messaging, live chats, and meetings through virtual reality.

#### - Payment Method

The payments on Metaclass are made through various currencies such as BUSD, BNB, or the native token \$Metaclass which are temporarily locked into the escrow until both the parties agree to the fulfillment of goods or services.

#### - Zero Fees

The buyers on Metaclass are not charged any transaction fee; instead, the transaction fee is directed to the sellers. This assures high traffic on the platform due to the leverages it equips the customers with.

#### - Staking

The users can stake the native token \$Metaclass to earn an APY of 196,868.1% via an auto-staking and auto-compounding feature.

#### - Governance

Token holders of Metaclass native currency are eligible to vote for various policies such as organizational policies, selection of arbitrators, the introduction of probable features etc, thus making the users an active participant in the entire ecosystem.

#### - Holding NFT's

The users can use their \$Metaclass tokens to buy NFTs-the non-fungible tokens that represent digital certificates of ownership. In addition, on 50 completed trades, the user will receive a trusted/verified badge while on a hundred completed trade orders, he will be entitled to collect an NFT which can be traded in the marketplace to earn profits or used as an updated profile picture. The purchase and resell of NFT's will provide a passive income to the users hence enhancing user credibility.

## Roadmap

## 2021 - Q3

- Fair Launch (no-presale)
- Staking
- Governance
- Exchange Listing

## 2021 - Q4

- Classified ad platform
- Featured ads
- Escrow
- Marketing

## 2022 - Q1

- 100K users on platform
- Mobile application and wallet

## 2022 - Q2

- 2 Million Users
- 5 Million Monthly Pageviews
- 3 Million Monthly Sessions
- 1 Thousand Daily Posts

### **Token Economics**



## **Mission and Vision**

The metaclass is a craigslist of Metaverse that aims to become one of the top classified marketing websites in terms of traffic across the globe. Every year, Metaclass spends \$19 billion on advertisements for an overall impact of more than \$300b+ in terms of business across its users. To enhance user experience, Metaclass is involved in presenting other crypto features such as the trade of NFT's and autostaking, auto-compounding of native Metaclass tokens. Metaclass intends to broaden the scope of the platform for both buyers and sellers and thus is actively utilizing generated funds for new development projects.

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