



# ARCADIA

The Blockchain Payment System for Metaverse Economies

**WhitePaper**

## Abstract

The Metaverse is a term used to describe a virtual world where users can interact with each other and digital objects in a fully immersive environment. It is a collective space created by the convergence of virtual reality, augmented reality, and the internet.

The idea of the Metaverse was first introduced in Neal Stephenson's 1992 novel "Snow Crash". In the novel, the Metaverse is a fully immersive virtual world where users can interact with each other and digital objects in real-time. The concept of the Metaverse quickly gained popularity in science fiction literature and films.

The concept of the Metaverse also gained popularity in the early days of the internet, particularly in the 1990s. Virtual worlds like Second Life, which was launched in 2003, allowed users to create and customize their avatars, interact with each other in a virtual space, and even buy and sell virtual goods.

In recent years, the concept of the Metaverse has gained even more attention due to the development of advanced technologies such as virtual reality, augmented reality, blockchain, and artificial intelligence. These technologies have enabled the creation of more advanced and immersive virtual worlds that are closer to the vision of the Metaverse described in science fiction.

Today, companies such as Facebook, Roblox, and Epic Games are investing heavily in the development of the Metaverse. They see it as the next evolution of the internet and a new way for people to connect, interact, and do business. The Metaverse has the potential to revolutionize many industries, including gaming, entertainment, education, and e-commerce.

The Metaverse has the potential to offer a wide range of benefits across various industries, including:

**Social Interaction:** The Metaverse can provide an immersive social experience that is not limited by physical distance or location. It can enable people from all over the world to interact with each other in a virtual space, create and customize their avatars, and engage in various activities together.

**Entertainment:** The Metaverse can provide a more immersive and interactive form of entertainment than traditional media, such as movies or television. Users can participate in games, concerts, and other events in real-time, and even interact with the performers or other users.

**Education:** The Metaverse can provide a new way of learning that is more engaging and interactive than traditional classroom environments. Students can participate in virtual field trips, simulations, and other immersive learning experiences that can enhance their understanding of complex concepts.

**Commerce:** The Metaverse can provide a new way for businesses to reach and engage with customers. It can enable virtual storefronts, immersive shopping experiences, and even virtual real estate markets. Companies can also use the Metaverse to offer virtual services or products that are not feasible in the physical world.

**Health:** The Metaverse can provide opportunities for telemedicine, virtual therapy, and other health-related services. It can also offer a way for people with disabilities or limited mobility to engage with others and participate in activities they may not be able to in the physical world.

Overall, the potential benefits of the Metaverse are vast and could have a significant impact on how we interact with each other and the world around us. However, it's important to note that there are also potential risks and challenges associated with the Metaverse, such as privacy, security, and addiction.

The Metaverse is powered by a combination of advanced technologies, including blockchain, virtual reality, and artificial intelligence. Here's an overview of how each of these technologies contributes to the Metaverse:

**Blockchain:** Blockchain technology is a decentralized digital ledger that enables secure, transparent, and tamper-proof transactions. In the Metaverse, blockchain can be used to establish digital ownership of assets, such as virtual real estate or virtual goods. It can also enable peer-to-peer transactions, virtual currency, and smart contracts that can be executed automatically.

**Virtual Reality:** Virtual reality technology allows users to immerse themselves in a fully 3D virtual environment. In the Metaverse, virtual reality can enable users to create and customize their avatars, interact with other users in a virtual space, and engage in various activities, such as gaming or shopping. It can also provide a more immersive and realistic form of entertainment or education.

**Artificial Intelligence:** Artificial intelligence technology can be used in the Metaverse to create more realistic and intelligent virtual characters, automate certain tasks, and provide personalized recommendations and experiences for users. AI can also be used to monitor user behavior and ensure a safe and secure environment for all users.

Other technologies that may play a role in the Metaverse include augmented reality, 5G networks, and cloud computing. These technologies can enable more seamless and immersive experiences in the Metaverse and enable the Metaverse to scale to accommodate millions of users.

Overall, the technologies powering the Metaverse are constantly evolving and advancing, and new innovations are likely to emerge as the Metaverse continues to develop.

The Metaverse has the potential to offer many benefits, but there are also potential problems that need to be addressed. Here are some of the key challenges that the Metaverse may face and potential solutions:

**Privacy:** In the Metaverse, users may be required to share personal information, such as their location or biometric data, in order to participate. This can raise privacy concerns, as this information could be used for malicious purposes, such as identity theft or stalking. To address this challenge, companies developing the Metaverse must prioritize privacy and data security by implementing strong encryption and access controls, as well as providing users with clear and transparent privacy policies.

**Security:** The Metaverse may be vulnerable to cyberattacks, such as hacking or distributed denial of service (DDoS) attacks, which could compromise user data and disrupt the Metaverse experience. To mitigate this risk, companies developing the Metaverse must implement robust security measures, such as multi-factor authentication, threat detection and response, and regular security audits and testing.

**Addiction:** The Metaverse may be highly immersive and engaging, which could lead to addiction or compulsive behavior in some users. To address this challenge, companies developing the Metaverse must promote responsible use and provide users with tools and resources to manage their Metaverse usage, such as time limits or parental controls.

**Inclusivity:** The Metaverse must be accessible to all users, regardless of their abilities, socio-economic status, or geographic location. To promote inclusivity, companies developing the Metaverse must prioritize accessibility, such as providing closed captions or text-to-speech capabilities, and consider the needs of diverse user groups when designing the Metaverse experience.

Overall, the challenges facing the Metaverse are complex and multifaceted. Companies developing the Metaverse must take a holistic approach to address these challenges, prioritizing user safety, security, and privacy while promoting inclusivity and responsible use.

As virtual worlds and Metaverses become increasingly popular, the need for a secure and efficient payment system within these digital economies has become more pressing. Arcadia, a blockchain project designed specifically for use in Metaverse economies, aims to fill this gap and provide a seamless payment solution for users and businesses alike.

Arcadia is a decentralized blockchain payment system that is designed to enable transactions between users, businesses, and developers within Metaverse economies. The platform utilizes blockchain technology to create a secure, transparent, and decentralized payment network, allowing users to conduct transactions without the need for intermediaries.

The platform is built on the Ethereum blockchain, which provides a robust and reliable foundation for secure transactions. Ethereum also enables the use of smart contracts, which are self-executing contracts with the terms of the agreement directly written into code.

Arcadia operates through a network of nodes, each of which contributes to the security and reliability of the platform. Users can create digital wallets on the platform, which they can use to send and receive payments in various Metaverse economies.

Arcadia also provides businesses and developers with the ability to create their own tokens, which they can use as a form of payment within their specific Metaverse economy. This allows for greater flexibility and customization, as well as the ability to create unique rewards systems and loyalty programs.

In addition to supporting transactions within specific Metaverse economies, Arcadia also enables cross-chain transactions between different blockchain networks. This allows users to conduct transactions between different Metaverse economies, as well as with other blockchain-based platforms and applications.

One of the primary benefits of using Arcadia is the security and transparency provided by blockchain technology. Because transactions are recorded on a decentralized ledger, they cannot be altered or tampered with, providing a high level of trust and reliability.

Arcadia also provides a more efficient payment system within Metaverse economies, as transactions can be conducted without the need for intermediaries or third-party payment processors. This reduces transaction fees and processing times, allowing for faster and more cost-effective transactions.

Finally, Arcadia enables greater flexibility and customization within Metaverse economies, allowing businesses and developers to create their own tokens and reward systems. This can help to incentivize users and drive engagement within these digital economies, ultimately leading to greater growth and success for these platforms.

As virtual worlds and Metaverse economies continue to grow and evolve, the need for a secure and efficient payment system becomes increasingly important. Arcadia provides a blockchain-based solution that is designed specifically for use within these digital economies, providing users with a secure, transparent, and efficient payment network.

By leveraging the power of blockchain technology, Arcadia is able to provide a high level of security and reliability, as well as greater flexibility and customization for businesses and developers. As Metaverse economies continue to

gain popularity, Arcadia is poised to become a key player in the development and growth of these digital economies.

Arcadia, to be clear, we do not build a Metaverse.  
Arcadia is a system built into and utilized by the Metaverse.

Arcadia plans to collaborate with various Metaverses, platforms, and blockchains to be used as payment methods and advertising methods in their systems.

### **That's why we plan to complete the mainnet.**

We plan to utilize ERC-20 as a payment method for our initial MVP and our own platform as an advertising vehicle, but our ultimate goal is to land us on their platform.

When the mainnet is complete, we can more easily connect our own platform to them.

This is not limited to companies and not just to partners.

If you want to use our platform for various reasons such as individuals, businesses, and universities, you can use our platform easily at any time.

Our payment method provides various functions such as blockchain wallet, real-time price information, deposit, withdrawal, quick trading, as well as blockchain coins.

You can use all of these features or just some of the ones you need.

These features will increase the convenience of users, increase the value of your platform, and increase the value of Arcadia as well.

## Arcadia Blockchain Configuration

Arcadia's mainnet was developed as a master node-based POW coin in consideration of future scalability and accessibility, and each API was implemented to implement and use each service based on the basic functions of ARC.

Individual transaction information is stored in the ARC block, and such transaction information may also include personal information.

For transactions, one ARC block is created at least every minute, and rewards are paid to the mining pool immediately upon block creation.

Block rewards are given differently according to the half-life cycle,

The block reward according to the halving is as follows.

### Block Reward

Block 1 : 252,000,000 ARC (Premine)

Block 2 - 2,100,000 : 200 ARC (Reward for each block is 200 ARC)

Block 2,100,001 - 4,200,000 : 100 ARC (Reward for each block is 100 ARC)

Block 4,200,001 - 6,300,000 : 50 ARC (Reward for each block is 50 ARC)

from block 6,300,001 going is 25 ARC (Reward for each block is 25 ARC)

ARCADIA uses the ERC-20 base for various reasons, such as platform system specifications, internal development issues, exchange wallet support issues, and mining pool support issues, but only ARC will be used for Metaverse utilization.



## TOKENOMICS

### ARCADIA

In order to use the service of ARCADIA, through the ARCADIA app (iOS and Android)

You must go through the registration process. Additional information must be entered to meet global KYC and AML regulations,

According to regulations, the use of some users may be restricted during the registration process.

ARCDA and ARC do not represent the ownership or rights of the ARCADIA App and its products.

The ultimate goal of ARCADIA is to enable users to conveniently use their crypto assets for payment without distinguishing between numerous Metaverses around the world.

ARC, a cryptocurrency issued on the ARCADIA network,

2,100,000,000 ARCs have been issued and will be unlocked sequentially according to ARCADIA's roadmap.

The issued ARC and ARCDA are allocated according to the purpose, and the purpose and quantity of each distribution are as follows.

1. Pre-Public Sale
2. Public Sale
3. Mining Pool
4. Liquidity & Staking
5. Community Engagement
6. User Acquisition
7. Team
8. Partners
9. Marketing

Items 1, 2, 7, and 8 described above are distributed in the pre-mining phase and there are no rewards for subsequent mining.

All distributions are distributed as ERC-20, ARCDA, and will be swapped to ARC according to the announced lock-up period and distribution schedule.

## RoadMap

### 2023

#### 1.ARCADIA Erc-20 Token Release [ARCDIA]

- ARCADIA tokens are issued on the Ethereum blockchain and can be traded on exchanges.

#### 2.ARCADIA Mainnet Release [ARC]

- ARCADIA Blockchain Mainnet is released.
- New smart contracts are added and security is enhanced.

#### 3.ARCADIA mainnet blockchain upgrade

- The ARCADIA blockchain will be upgraded for faster speed and stability.
- New features are added according to the development of blockchain technology.

#### 4.ARCADIA smart contract development tool release

- A development tool will be released to help developers easily write smart contracts on the ARCADIA blockchain.

## **2024**

### 1.ARCADIA dApp release

- A decentralized application (dApp) based on the Arcadia blockchain is launched.
- A new innovative service using blockchain is provided.

### 2.ARCADIA DAO release

- Decentralized Autonomous Organization (DAO) is launched.
- DAO ensures transparency in voting and decisions, and is highly secure.

### 3.ARCADIA mainnet blockchain upgrade

- The ARCADIA blockchain will be upgraded for faster speed and stability.
- New features are added according to the development of blockchain technology.

## DISCLAIMER

This document provides general information and should not be used as legal advice.

If a legal problem arises, always seek professional legal advice.

[**Arcadia International**] provides [**ARCADIA / ARC / ARCDA**] using blockchain technology.

Accordingly, we provide the following disclaimer:

1. Due to the nature of blockchain technology, [Arcadia International] is not responsible for the suspension, failure, or restriction of service use that may occur due to some force majeure.
2. [Arcadia International] is not responsible for wrong transactions, errors, forgery, tampering, etc. that may occur due to problems with blockchain networks and smart contracts due to the nature of blockchain technology.
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**ARCADIA**

**E.O.D**