

# Minepay Whitepaper 2024

## Introduction

Blockchain technology has revolutionized the way we think about decentralization and trust in digital systems. While cryptocurrencies like Bitcoin have garnered significant attention, the true power of blockchain lies in its ability to distribute authority and empower individuals to participate directly in decision-making processes that shape our world.

Blockchain aims to create a world where everyone's contribution matters, fostering a sense of inclusivity and collective ownership. However, the harsh reality is that the current Web3 ecosystem is highly centralized, with a mere 0.1% of participants truly understanding the underlying technology. The complexity of this space has erected substantial barriers, excluding the vast majority of people from engaging with and benefiting from this transformative innovation.

## The Problem: Centralization of the Web3 Ecosystem

Despite the promises of decentralization and democratization, the Web3 ecosystem has become increasingly complex and exclusive. Many project founders and traders have merely followed the hype without truly comprehending the technology's intricacies. This lack of understanding has led to the creation of overly complicated systems, further increasing the entry barrier for the average user.

Accessing decentralized exchanges (DEXs) or participating in the ecosystem often requires a significant investment of time and resources, effectively limiting participation to a privileged few. The core principles of rewarding user participation and empowering individuals have been overshadowed by the concentration of power and resources in the hands of a select group.

Furthermore, activities such as Bitcoin mining require specialized hardware and significant computational resources, rendering participation impractical for the vast majority of people without access to substantial financial and technological means.

## The Solution: Minepay - Mobile Blockchain Application for Users

Minepay addresses the accessibility challenge head-on by removing the entry barriers to the Web3 and blockchain ecosystem. Through the Minepay Mobile Application, users can join the Minepay Blockchain, a blockchain specifically designed for mobile devices. This innovative approach empowers individuals to contribute to the Web3 ecosystem using their smartphones, becoming nodes on the Minepay network.

Users can mine Verse Coin, the native currency of the Minepay ecosystem, using Uni coins (Minepay's ecosystem coin). Minepay's currencies are pegged to native Central Bank Digital Currencies (CBDCs) of their respective countries, enabling users to store and transfer CBDCs directly through the app.

Minepay has developed a new consensus model called Proof of Transaction (PoT), optimized for mobile devices. Unlike existing blockchain consensus models that are computationally intensive, PoT is designed to be lightweight and efficient, enabling seamless participation from smartphones.

Additionally, the PoT consensus model eliminates gas fees, making transactions on the Minepay Blockchain gas-free.

By leveraging the collective resources of mobile devices, Minepay creates a massive, optimized, and secure blockchain network that can provide affordable and efficient cloud storage solutions to startups and companies. This innovative approach reduces the cost of cloud storage by up to 99% compared to traditional providers, while ensuring resilience and decentralization.

## Proof of Transaction (PoT) Consensus Model

The Proof-of-Transaction (PoT) consensus model is at the heart of Minepay's technology, designed to address the critical challenges of Stability & Scalability within transaction systems. Its primary objective is to enhance protocol implementation and scalability, thereby facilitating more efficient transaction processing.

PoT operates as a **dual-coin-based** Blockchain system, incorporating two distinct coins: **Uni and Verse**. Key functionalities of PoT include exceptionally high throughput, rapid finality, and user-friendly features. By enabling seamless participation of all users in various Blockchain processes, PoT empowers individuals to make significant contributions to the Blockchain ecosystem.

The efficiency of the PoT consensus model improves as more nodes join the protocol, distributing the workload more effectively and enhancing the system's throughput. This behavior resembles the efficiency enhancement observed in Direct Acyclic Graph (DAG) systems.

## Tokenomics

### Uni Coin

Uni Coin is the network coin that serves as the backbone of the Minepay ecosystem. It determines the mining speed and probability of a user being selected as a validator. Transactions involving Uni Coins are prohibited; their sole function is to influence mining speed. Holding more Uni coins increases the likelihood of being chosen as a validator.

Uni Coins can only be earned as rewards by users for demonstrating trust in the network through increased activity and transactions. However, they cannot be transferred or received through transactions. The distribution of Uni coins among users is governed by a specific algorithm.

Additionally, Uni coins function as a virtual credit score within the Blockchain. Locked balances of Uni Coins serve as collateral, fostering trust among users. In instances where a user is identified as malicious by other nodes, their locked Uni coin balance is forfeited. This feature enables various financial applications built on the Minepay network to leverage Uni coin balances for various purposes.

## **Verse Coin**

Verse Coins serve as a collection of **CBDCs** worldwide. Each Verse Coin can be converted to the native CBDC of a country by redeeming it. Verse Coin acts as a universal currency for CBDC exchange, solving the interoperability challenge among different CBDCs.

Verse Coin is the native coin used for transactions on the Minepay ecosystem. It can be transferred and received by anyone, facilitating seamless exchange within the network. Verse Coin is pegged to different CBDCs, allowing for efficient cross-border transactions and value transfers.

### **Total Supply:**

- *Total number of Uni coins is infinite.*
- *Total number of Verse coins is 8 billion (approximately the world's total population).*

## **Ecosystem Working with PoT**

The PoT consensus model employs specific protocols and methods for node selection:

**Timestamp Server:** A timestamp server generates a hash of a block of items to be timestamped and widely disseminates the hash, e.g., through a newspaper or Usenet post. The timestamp serves as evidence that the data must have existed at the time of hashing to be included. Each timestamp incorporates the preceding timestamp in its hash, forming a chain and reinforcing previous timestamps.

**Network:** All data must be broadcasted to every node within the network. Nodes are responsible for aggregating data into blocks, ensuring proper storage by the timestamp and specific hashing algorithm.

**Transaction Fees:** Gas fees are **Zero** on the Minepay Blockchain, eliminating a significant barrier to entry and enabling widespread participation.

**Mining:** In the Minepay ecosystem, mining refers to users agreeing to share a small portion of their storage and data with the network through their mobile devices. The mining decision is entirely up to the users, who have full control over providing their resources at any time. The mining cycle on the Minepay network runs for 24 hours, during which users mine Verse Coins by rendering their storage and data to the Minepay ecosystem in exchange for rewards. The mining speed is calculated using Uni Coins (the network coin).

**Ecosystem Working:** The Minepay ecosystem comprises two main components: Validators (mobile users who are mining) and Startups and companies (in need of cloud storage).

The blockchain ecosystem operates across these two entities. When a user joins and connects to the Minepay Blockchain, they receive a default balance of 0.04166 UNI coins and 0.00 Verse coins. As explained in the tokenomics section, Uni coins help in mining Verse coins and determine the probability of being chosen as a validator on the network. The more Uni coins a user holds, the higher their chances of earning more on the network through mining.

When a user starts mining, they render a small amount of storage and data from their mobile device to the Minepay Blockchain. As more users join the network and share their resources, a massive, strong, and optimized blockchain network is created, ensuring efficiency and scalability.

The Minepay Blockchain then offers its resources to startups and companies as an affordable and more efficient solution for cloud storage. Companies pay in Verse Coins to the ecosystem, and the rewards are distributed to nodes based on their contribution to the network. This entire process runs on the Proof of Transaction (PoT) consensus model.

Each block in PoT reserves 10% of its capacity for transactional data (transactions involving Verse Coin, not CBDC transactions), while the remaining 90% is allocated for storing provided data. This data can encompass any encrypted information stored on the Blockchain. Transaction data is stored using the Roll-up method to optimize efficiency. The immutable storage of data on the Blockchain is ensured, as any alteration requires consensus among the majority of nodes.

## Technicalities

### Halving of Coins

- **Uni Coin:** The supply of Uni coins never halves. Its distribution is decided through an algorithm running across the chain, calculating the difficulty across the network and taking distribution decisions accordingly.
- **Verse Coin:** The Verse Coin halves every time 10% of its supply has been distributed. The distribution period is not fixed and will be determined by the supply and demand dynamics.

### Post-Mining Ecosystem Sustainability

After the mining of Verse Coins is completed, the Minepay ecosystem will continue to operate, with the mining rewards for validators shifting to other sources, such as transaction fees from decentralized applications (DApps) built on the Minepay Blockchain environment. The ecosystem will generate multiple revenue streams to sustain its operations.

The Verse Coins distributed as mining rewards will not be newly minted coins but rather coins already in circulation that are returned to the Blockchain rewards system.

### Pegging with CBDCs

As mentioned earlier, all countries are working on their own Central Bank Digital Currencies (CBDCs). The Verse Coin is designed as a collection of CBDCs, meaning it can be used to trade with any CBDC available on the network. The trade value will depend on the current trading value of the Verse Coin.

### Stability of Verse Coin

The Verse Coin itself is pegged to Uni Coins, meaning the Supply & Demand of this coin are controlled through the mining reward mechanism for Verse Coin. When the network difficulty

increases significantly, the reward mechanisms for validators may be adjusted to maintain the coin's price and ensure stability.

The Minepay Blockchain ecosystem aims to maintain stability in the Verse Coin's value to prevent volatility in its pegging with CBDCs, which could lead to trade-off instability.

## **Future Development and Goals**

Minepay is an ambitious project with no limitations. As of 2024, it is in the Layer 0 and Layer 1 development phases. Each blockchain is built on multiple layers, with Layer 0 (also called the hardware layer) involving the connection of devices across the chain to create the network, and Layer 1 involving the development and implementation of protocols on the network.

Minepay aims to achieve Layer 0 and Layer 1 development by the end of Phase 1. After completing Phase 1, Minepay will embark on Phase 2, which will involve further layer development, such as Layer 2 and Layer 3, enabling the creation of decentralized applications (DApps) by users and other advancements.

Minepay's ultimate goal is to make the Web3 ecosystem so accessible that users can seamlessly integrate it into their daily lives using their smartphones. As time progresses, Minepay will also focus on creating solutions for interoperability between the Minepay network and other blockchain networks.

## **Applications Layer**

As part of its roadmap for Layer 2 and Layer 3 development, Minepay aims to provide beneficial features to developers for building DApps on its platform. Some of these features are:

### **Credit Balance (Uni Coin)**

As discussed in the tokenomics section, the Uni Coin is a network coin that provides a locked or staked balance for users, acting as their security or trust in the network. DApps created on the network can leverage this balance for various purposes, such as granting loans, settling trades, and more. This feature will give developers an essential tool to address the common pain point of establishing user trust, especially in the FinTech space.

### **Development Environment Powered by AI**

As Minepay evolves, it aims to develop its own AI-powered Development Environment for developers. The goal is to provide an efficient and straightforward tool to help developers create and launch their DApps in a seamless manner.

### **Coding Language**

Minepay plans to develop its own coding language, designed to be easy to understand and code. With the development environment powered by Artificial Intelligence (AI), the process of creating

DApps will become seamless and accessible. The coding language will be a high-level language optimized for human comprehension.

## Roadmap

Minepay has divided the project into two phases:

1. **Phase 1: Engagement & Community Building**
2. **Phase 2: Mainnet Launch**

Each phase consists of smaller goals and milestones that Minepay aims to achieve.

### **Phase 1: Engagement & Community Building**

This phase focuses on spreading awareness and building a community around Minepay among users. As discussed earlier, Web3 and blockchain technologies can be complex and require understanding from users. To address this, Minepay launched its app to provide users with a first-hand experience of how the ecosystem works and how they can become a part of it using their smartphones.

Users have the opportunity to mine the initial coins of the Minepay Blockchain during this phase. Approximately 10% of the coins will be offered to users during this phase. Users are encouraged to mine and enjoy the benefits of early mining of these coins. Once the mainnet is launched, these mined coins will be transferred to their respective accounts.

Minepay has set several goals within this phase, including CBDC integration and gathering user feedback and insights.

### **Phase 2: Mainnet Launch**

This phase represents a significant milestone in the Minepay journey, marking the start of the cloud storage rendering on the Blockchain. During this phase, the proper application through which startups and companies can access affordable cloud storage on the Minepay Blockchain will be launched.

For countries that have not yet developed their own CBDCs due to a lack of resources, Minepay will provide the necessary resources and assistance to create their CBDCs. In the interim, these countries can use the Verse Coin as their native currency.

By the end of Phase 2, a significant part of Minepay's journey will be completed, paving the way for further growth and development.