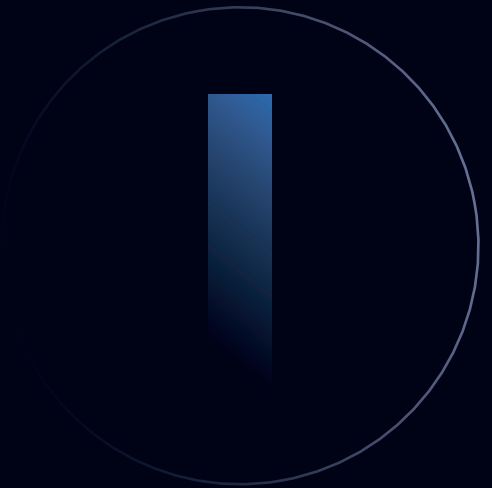# PIST TRUST

A High-Performance Mainnet for Digital Assets, and Decentralized Applications
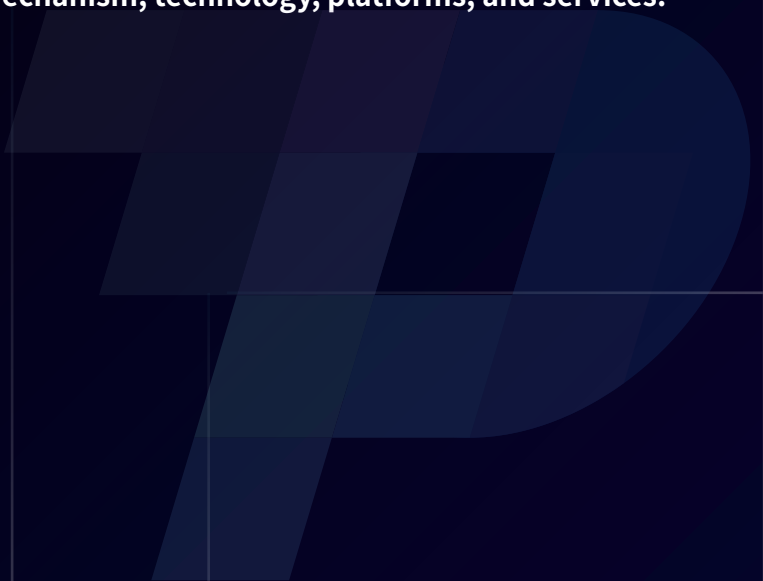
Abstract

PIST TRUST is a high-performance Mainnet supporting various digital assets, decentralized applic ations and blockchain services. PIST Mainnet will introduce a new paradigm for Mainnet ecosystems building the interoperable application infrastructure to Centralized Finance (CeFi) Decentralized Finance (DeFi), Non-Fungible Tokens (NFT), Game-Fi and Metaverse along with interoperability via built in cross-chain bridge.

With PIST Mainnet as the core base of blockchain network operations, the two-token system of "PIST" coin and "P Pass" stablecoin enables sustainable expansion of PIST ecosystem and serves as a link bridge to the real economy.

This paper explains the PIST Mainnet of its mechanism, technology, platforms, and services.

Contents

1. Introduction

PIST is a Mainnet platform project that builds and unifies the protocols of CeFi, DeFi, NFT, Game-Fi, and Metaverse on a single blockchain network to perform as one service platform. Each of the protocols are decentralized services and applications offered on the PIST blockchain network.

The goal design of the PIST Project is to operate a variety of decentralized services on the network and build multiple layers of service protocols to work independently and interworking to create a whole new service paradigm for blockchain applications.

1.1 Existing Problems

The current state of blockchain technology is still in an early development stage, and its development has been exponentially fast in 2021. The advance of blockchain technology and its trends have also rapidly changed. Although many decentralized applications, network ecosystems, and technology protocols have been developed, there are still technical limitations, lack of safety regulations, and interoperability between network applications is not yet possible. As such, there are still many problems to be solved to be used for real-life applications. Solving this problem requires a blockchain ecosystem with network scalability, safety regulations, and interoperable decentralized applications.

• Inexistent of a scalable Mainnet platform with interoperating decentralized applications

The current Mainnet ecosystems of blockchain network run countless decentralized applications, protocols and blockchain platforms, with the main example being the Ethereum network.
The decentralized applications can be accessed and utilized by using the native coin of the network, but decentralized applications themselves do not interoperate with one application to other and the transaction is slow on the Ethereum network. The lack of interoperation between decentralized applications, slow transaction speed lead to problems in blockchain standardization.

• Limitations of Asset Management and Asset Custody

There are many problems in asset custody of the traditional banking systems of today, some of the problems consists of transaction delays, missing footnotes, and possibility of bank failure, when a bank can't provide its financial obligations to depositors, and creditors.

As for the asset management of the current financial system, it is hardly accessible to many people, and it is difficult for people to utilize to earn revenue and interest, which hinders the growth of the overall economy around the world.

• Inflexible system of Crypto-Fiat conversion

The conversion of crypto and fiat money is only available through central exchanges of digital assets or any other 3rd party exchange methods. The process is inconvenient and lacks efficient safety measures to keep assets safe. As of now there had been cases of conversion failure due to regulations, exchange system failure and delay in the customer service department.

• Lack of KYC compliance and proper regulations built in blockchain systems.

The absence of a Know-Your-Customer (KYC) or anti-money laundering (AML) process does not prevent or reduce financial risks and money laundering, also limiting the expansion of DeFi asset management onto the real economy and its asset management capabilities.

2. Solutions

The PIST Project will address the existing problems with the following technologies and protocols.

2.1 PIST Mainnet

The PIST Mainnet is an independent blockchain network linked with traditional bank systems and is the operation base of PIST project's decentralized applications, token economics, and services.
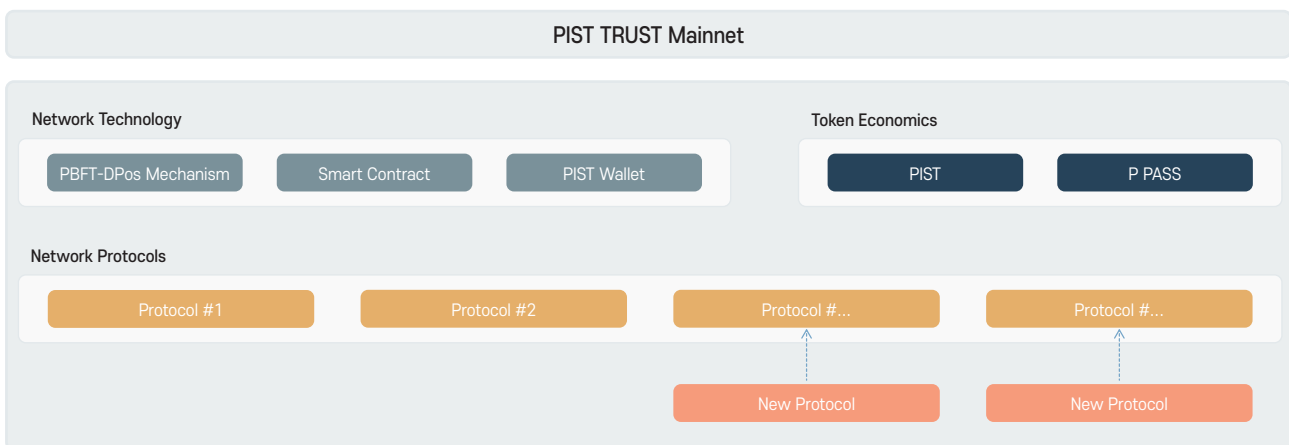
The Mainnet is structured to constantly develop and operate various decentralized applications, various protocols, cross-chain bridges and HyFi financial instruments to create a perpetual expanding Mainnet ecosystem.

Interlinked Protocols of Decentralized Applications

The Mainnet serve as the control tower that manage and unify the various protocols of the network (CeFi, DeFi, Game-Fi, NFT and Metaverse).

On the Mainnet, different protocols of decentralized application, asset management and platform exist on the network and each of the protocols are interlinked and operate independently. The CeF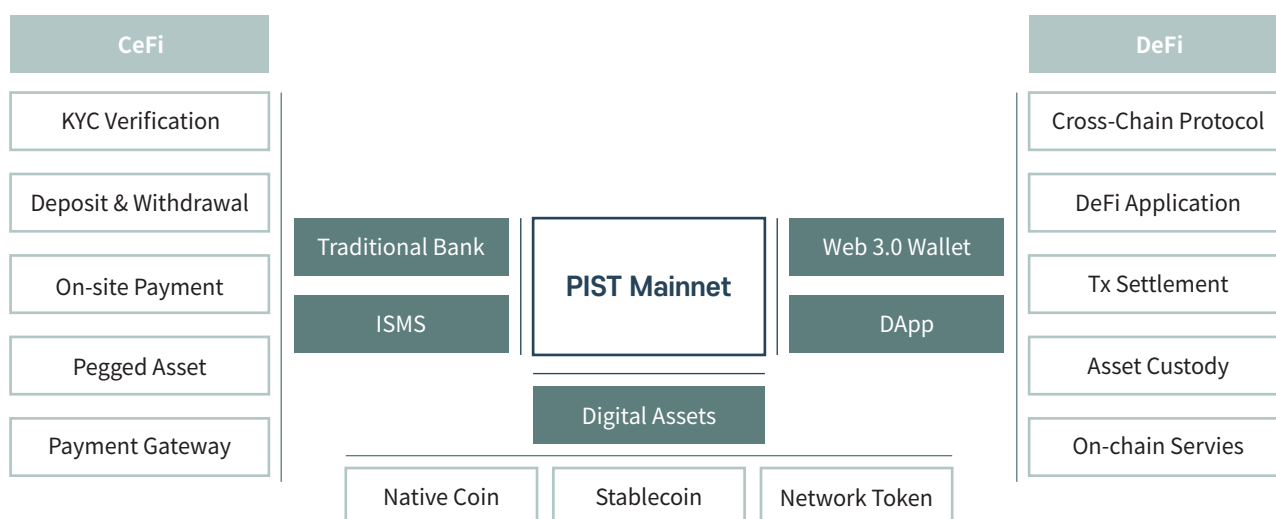i-DeFi protocol manages the digital asset management of the network and provide decentralized financial instrument throughout the network.

The platform protocols consist of Game-Fi network, NFT Marketplace and Metaverse and provide unique services on its platforms and its platform services are shared through the system network.

2.2 Hybrid Finance Ecosystem, Converged Protocol of CeFi and DeFi

The systematization of Hybrid Finance is built on the PIST Mainnet and is a digital asset management of DeFi protocol combined with centralized finance infrastructure with KYC & AML process.

CeFi				DeFi
KYC Verification				Cross-Chain Protocol
Deposit & Withdrawal				DeFi Application
On-site Payment	Traditional Bank	**PIST Mainnet**	Web 3.0 Wallet	Tx Settlement
Pegged Asset	ISMS		DApp	Asset Custody
Payment Gateway		Digital Assets		On-chain Servies
	Native Coin	Stablecoin	Network Token	

The HyFi Protocol of the PIST Mainnet consists of:

- The DeFi protocol of the network consists of custody of digital assets, transaction settlement, liquidity pool yield farming, built-in DEX, and Staking mechanism.
- The CeFi protocol is enabled by linking the PIST Mainnet with the traditional bank system. The protocol enables crypto-fiat conversion, on-site payment, and ATM withdrawal of fiat money.
- The HyFi protocol will act as the link bridge between blockchain and the real economy, enabling the decentralized applications, services, and platforms to operate on blockchain network and on the real economy.

The full functionality of HyFi protocol is governed by the smart contract of PIST Mainnet and can be accessed from our self-developed Web 3.0 digital wallet "PIST Wallet".

2.3 BLUECUS NFT Marketplace

BLUECUS NFT Marketplace is the central marketplace for trading & sale of non-fungible tokens (NFT). Additionally, the Marketplace will support the NFTs from Game-Fi network, PIST Metaverse and various other types of NFTs issued from the PIST chain.

At BLUECUS artists, creators and developers will have the choice to freely showcase their arts and creations as NFTs and commercialize their creations through trading & sales on the Marketplace.
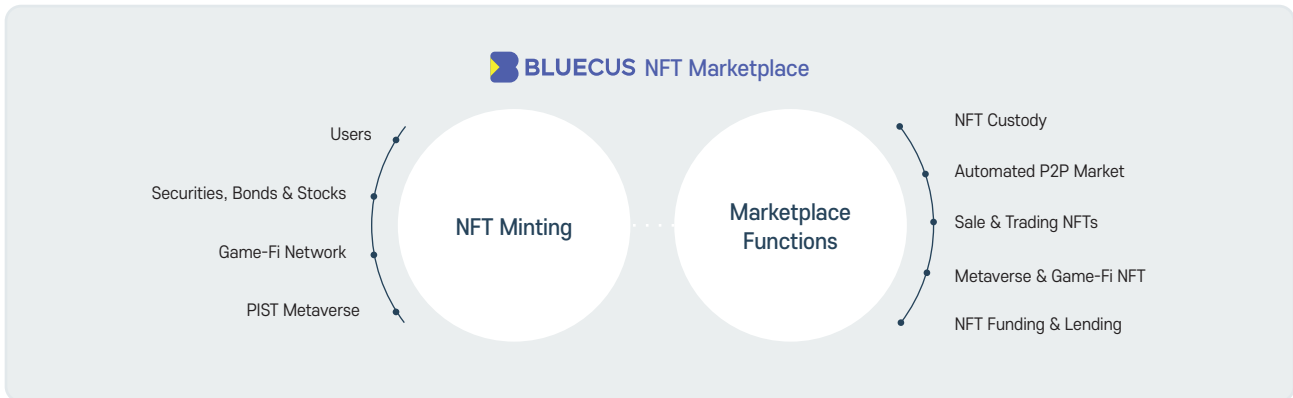
BLUECUS NFT Marketplace Functions:

NFT Minting: Tokenization of art, music, videos, gifs, images and various materials into NFT

NFT Custody: Ownership and custodian of the non-fungible tokens

Peer-to-Peer Market: All Marketplace functions are automated by smart contract

Sale and Trading of NFTs: Purchasing & Selling of NFTs

Metaverse & Game-Fi NFT: Sale and trading of Metaverse & Game-Fi Items

NFT Funding & Lending: Sale of tokenized bonds, stocks, and securities

The goal of the BLUECUS marketplace is to provide an art community platform, where the marketplace provides the necessary security, transactions methods, and custody of NFTs to complete a peer-to-peer art platform for users, and artists.

2.4 PIST Game-Fi Network
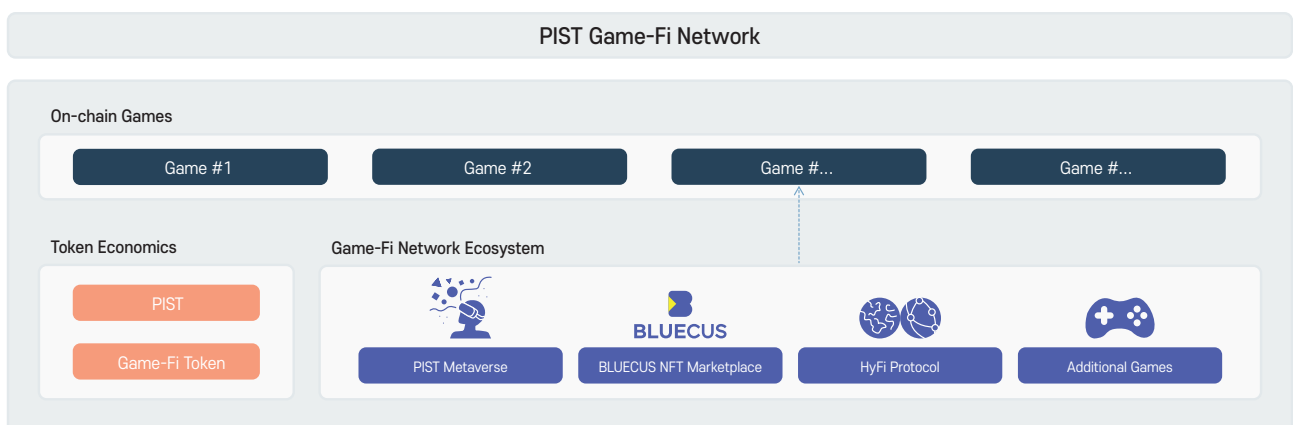
PIST Game-Fi Network is a network protocol operating on the PIST Mainnet to form a unique financial ecosystem for games. The Game-Fi network will have multiple games added on-chain, along with an independent token economics and Game-Fi Token issued from the PIST Chain. With the independent Game-Fi token economics, non-fungible tokens and implementation of HyFi protocol, it will create a blockchain financial ecosystem for traditional games.

2.5 PIST TRUST - Metaverse

PIST-Metaverse is an independent virtual reality platform powered by PIST Mainnet to provide an immersive virtual environm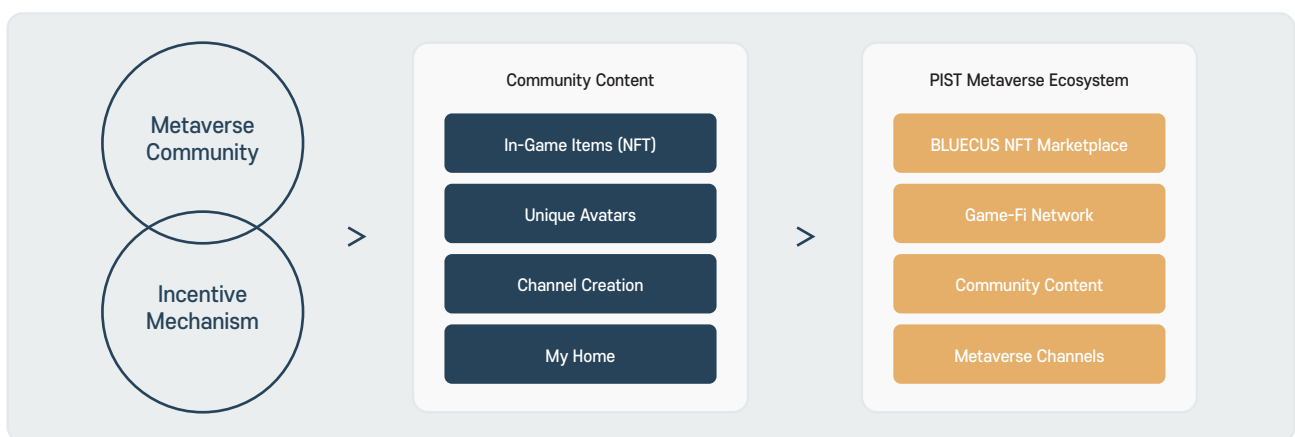ent for the community. In the PIST Metaverse, people will have control over crafting in-game assets, content production, and community expansion.

To function as a community driven metaverse, in-game assets will have NFT properties to endow asset-ownership and to be able to be listed for sale on the Bluecus Marketplace. Also, a mission system and Game-Fi token will be implemented on the PIST-Metaverse to act as the incentive mechanism to drive the community expansion and immersion of the PIST Metaverse.

3. PIST Mainnet Architecture and Technology

3.1 PIST Mainnet Architecture

Network Architecture
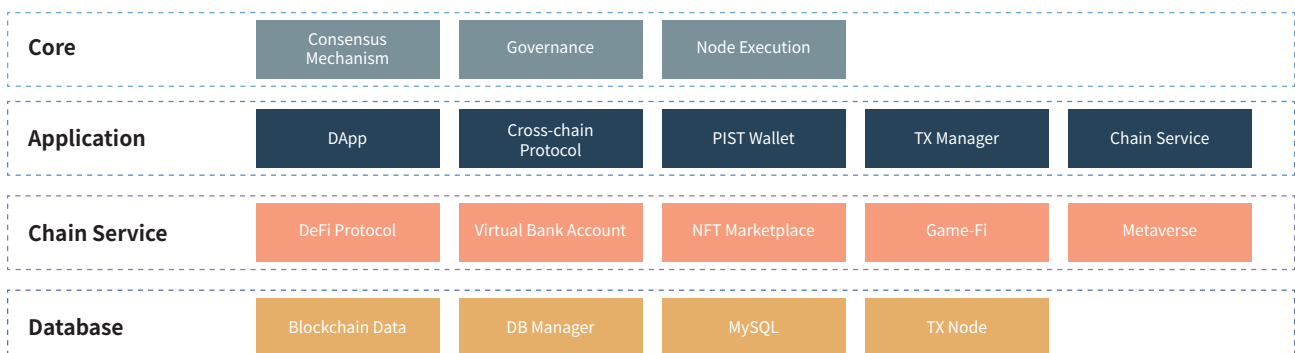
The PIST Mainnet architecture is designed for expansion and interaction between the decentralized applications and as the link bridge to traditional bank systems.

The core principle of the PIST Mainnet system are interoperability, security, scalability, composability, and data reliability.

Interoperability

The cross-chain interoperability is achieved through accommodation of multiple tokens and the PIST bridge based on the EVM protocol. The PIST Mainnet can issue PIST based tokens identical to the ERC-20 to support different network tokens in the PIST ecosystem. The issued PIST Mainnet based tokens will be supported with asset exchange in PIST Wallet and form a bridge between the PIST Mainnet and other blockchain networks.

Scalability

The speed of transactions and scalability of PIST Mainnet is secured through the PBFT based DPoS consensus mechanism. The efficient consensus mechanism handles block verification & creation to guarantee the scalability of the PIST network. The multi-core processor allows for parallel execution of the transactions, accelerating the transaction speed up to ten-thousand transactions per second.

Composability

Refers to the principle for multiple components of the blockchain technology and protocols to intercorrelated and work together to execute fully extensible blockchain functions, platform services and decentralized applications

Data Reliability

Through distributed ledger technology of the blockchain all the event-driven transaction data are automatically processed and recorded. All the data on the chain are accessible for audit and reliability of the data is secured with the consensus mechanism of the network.

3.2 Smart Contract

Ethreum Virtual Machine (EVM)

Solidity Code → compile → Ethereum Compiler → EVM Bytecode → Block #0 ← Block #1 ← Block #2 ⋯⋯⋯ Block #n
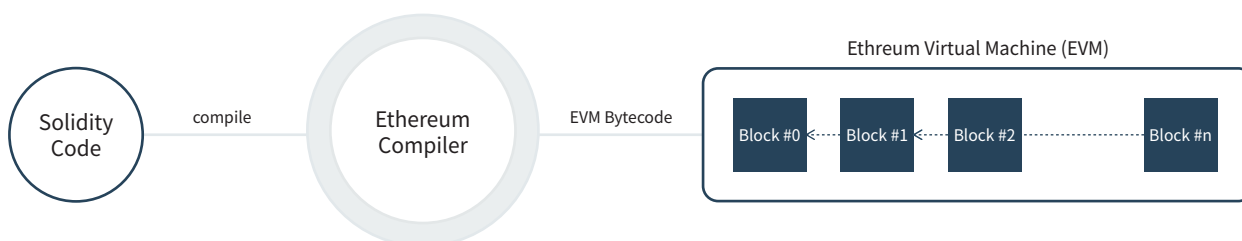
The smart contract of PIST network is the transaction protocol to automatically execute, control, and record all the transactions & applications on the network. The smart contract structure is built based on the EVM module to support solidity code based smart contract design and execution, allowing for PIST network to add new decentralized applications to perpetually expand the functionality of the network. As for the creation, execution and invocation of smart contracts is governed by the EVM module and creates the autonomous environment for PIST project's service protocols.

3.3 The PBFT-DPoS Consensus Mechanism

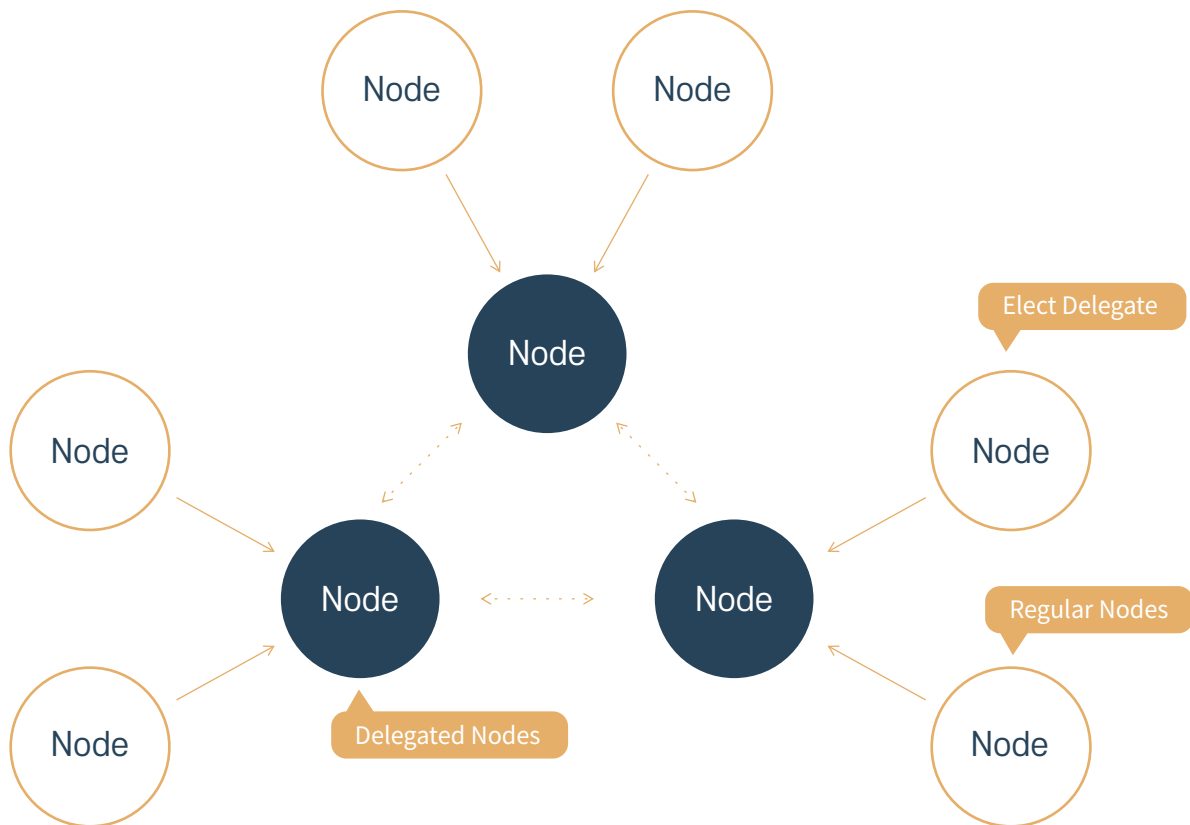To ensure the scalability and the stability of the PIST Mainnet, we have adopted a Delegated Proof-of-Stake mechanism and incorporated the Practical Byzantine Fault Tolerance scheme to handle the validation, creation and attachment of the block onto the PIST network.

PBFT based DPoS includes optimization of PBFT algorithm and leader node selection based on an integral voting system. The optimized PBFT algorithm linked with DPoS mechanism reduces communication time between nodes and improves consensus efficiency by grouping and limiting the number of consensus nodes. The leader node is selected through the integral voting system and the system is based on the comprehensive evaluation of node behavior and voting rate. The higher the staking value, the greater the probability of being selected as the leader node and inefficient leader node is replaced with the next efficient delegated node.

Combining the PBFT algorithm with DPoS consensus mechanism, the decision tree algorithm of the smart contract is used to evaluate and classify the efficiency of the participating nodes. It is assumed that the nodes are efficient and numbered as {0,1,…,M-1} according to the level of efficiency.

The consensus process of PBFT based DPoS

(1) Delegate Consensus: All the nodes in the network are eligible to be a delegate. The twenty-one delegates are selected from the highest staked node. Then the leader node is selected to produce and verify blocks through a DAO voting algorithm. The node in the group sends the request to the leader node, after receiving requests for verification, the leader node sends the request to the delegate for verification.

(2) After the request passes the consensus verification process of the sub consensus group, the second PBFT consensus confirmation will be conducted in the main group. The nodes in the main group elect a leader node through the integral reward and replacement mechanism. If there is no new request from the subgroup within the designated time, the node will package an empty block and send it to the consensus uplink of the main group and then proceed to the next election.

(3) After the block has passed the consensus of the main group, the leader node will digitally sign the block and collect digital signatures from other delegate nodes, indicating the authenticity and validity of this block. Then, the block attached to the digital signature set of the delegated nodes are sent to all the nodes in the network to be uplinked to the blockchain network.

(4) With verification from the delegated nodes, the nodes verify the digital signature set attached to the block and is processed whether the block has passed the consensus verification of the delegated nodes. If the verification fails, it is considered that the leader node is inefficient or has malicious behavior, and this illegal operation can be reported, achieving the role of upward supervision from the other nodes on the network. If the verification is successful, the requested transaction block can be executed, and the block is recorded and uploaded on the network.

3.4 PIST Wallet – Web 3.0 digital wallet
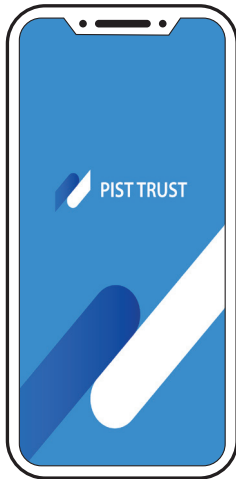
PIST Wallet - Start page   PIST Wallet - DApp   PIST Wallet - Staking   PIST Wallet - Mapping
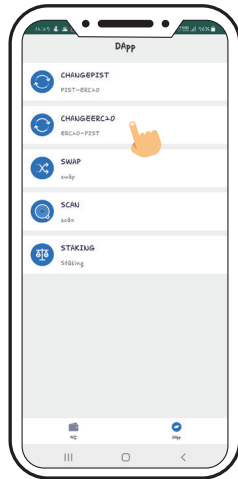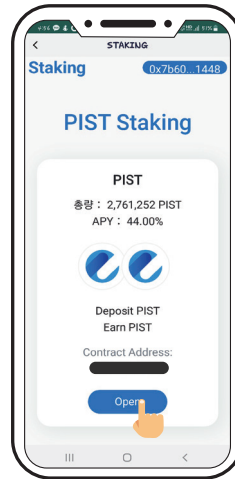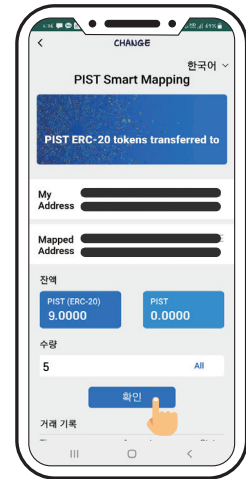
The PIST Wallet is a self-developed Web 3.0 cryptocurrency wallet to utilize and access decentralized applications offered on the PIST Mainnet.

The wallet supports custody of various digital assets, decentralized applications, decentralized financial instruments and management of digital assets.

PIST Wallet Functions:

Asset Custody: Custody of various digital assets and Non-fungible tokens (NFT)

Staking: Users can earn interests by staking "PIST" coin or other digital assets

Scan: PIST Blockchain explorer tool to help navigate pending, or confirmed transactions

Swap: Built-in DEX of PIST, P Pass and other digital assets

Mapping: Conversion function of PIST coin and PIST token (ERC-20)

PIST Bank: The Crypto-Fiat conversion system; exchange window for crypto and fiat money

PIST Wallet Security - Multisignature

To ensure the protection of digital assets, Multisignature protocol is available as a second layer of security in the PIST Wallet. The security protocol is executed at every transaction for authentication, and it requires two or more private keys for transactions to proceed. By requiring two or more authorization of the transaction, it divides the point of transaction failure.

The advantages of Multisignature security
• Prevent loss of account from a single key
• The removal of single point of failure
• Responsibility of transaction authorization is divided

4. Hybrid Finance Protocol Structure and Mechanism (HyFi)

The HyFi Protocol refers to the financial instruments offered in the form of decentralized application on the PIST Mainnet. The HyFi structure is designed based on the combined protocols of DeFi and CeFi to allow borderless and trustless digital asset management.
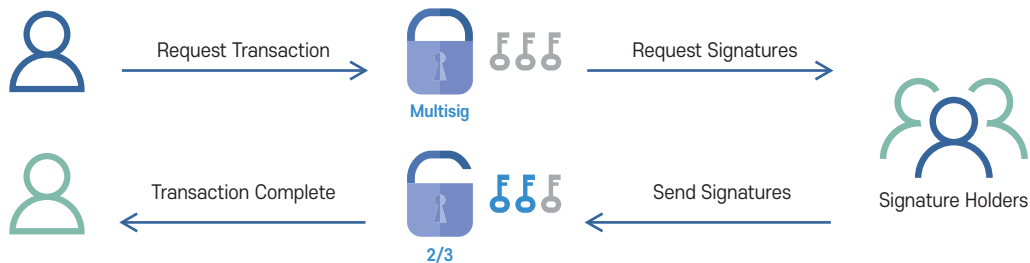
• Decentralized Finance Protocol (DeFi)

The DeFi protocols refer to the DeFi services and decentralized applications offered in the PIST Wallet, and Game-Fi Network. In the PIST decentralized financial ecosystem, users are the custodians of their own assets instead of a central authority like banks.
On the PIST Mainnet has decentralized services and applications such as peer-to-peer asset transfer, transaction settlement, lending of assets and digital asset & NFT staking for yields.
The direct custody of asset is provided with our "PIST Wallet", and the DeFi Protocols are governed by the smart contract of the PIST network.

• Centralized Finance Protocol (CeFi)

The CeFi protocol refers to the crypto-fiat conversion system, on-site payment and the KYC compliance on the PIST Mainnet. The CeFi protocol's core mechanism is "Crypto-Fiat system", which is the conversion of cryptocurrency with fiat money. Through the Crypto-Fiat system, it builds a link bridge between blockchain ecosystems and the real economy and adding flexibility of exchanging crypto to fiat and fiat to crypto.

The Crypto-Fiat system is available in the PIST wallet to allow the exchange of fiat money to native coin "PIST" and stablecoin "P Pass" to Fiat by utilizing the virtual bank system and mainnet system linked to a traditional bank with an added layer of KYC to prevent financial risks and money laundering.

4.1 DeFi Protocol Mechanisms

Transaction Settlement

Transaction settlement is transfer of ownership and payment of digital assets offered in real time on the blockchain network. It is offered by utilizing the distributed ledger system and the smart contract of the blockchain technology.

When a transaction is executed, a message will be sent between the two nodes on the network and the smart contract will execute necessary protocols to complete transfer of ownership, transaction records, and payment process.

Transaction data necessary for the transaction is listed below.

components	Description
Nonce	The amount of value (in tokens) to be transferred
Gas Price	The amount of the transaction fee that the sender wants to pay
Gas Limit	The maximum amount of transaction fee the transaction is allowed to use.
To	The cryptographic signature generated by the sender to let the receiver obtain the sender's address.
Value	Value of Gas transferred from sender to receiver.
V,R,S	The cryptographic signature generated by the sender to let the receiver obtain the sender's address.
Data	Transaction, communication, and address

Built-In DEX

The built-In DEX is the swap mechanism of digital assets in the PIST network. With the built-in DEX in the network, various digital assets available in the PIST network can be exchanged with one another.

The built-In DEX utilizes the Automated market maker mechanism and the liquidity pool of tokens to provide a stable number of tokens to be exchanged in real-time value.

PIST TRUST - Liquidity Pool

To facilitate the built-in DEX, a liquidity pool will lock various digital assets in the pool in pairs of equal value to enable token exchange on the network.

The liquidity pool of the PIST network will be pre-funded and will enable the deposit of additional tokens to the LP pool to be a liquidity provider. The liquidity providers will receive a token, which will prove the ownership of locked tokens and will be entitled to partial transaction fees made in the Built-in DEX.

Staking Mechanism

The staking mechanism empowers the PBFT-DPoS mechanism to allow for DAO governance of the network and award the nodes for participation. Through the staking module, staking nodes will earn yields and will be able to elect a delegate node responsible for the validation, creation, and attachment of the block onto the PIST network.

ERC Mapping (PIST<>ERC)

The ERC Mapping is the function available in the PIST Wallet DApp and enables mutual conversion of the native coin "PIST" with the ERC-20 based "PIST".

4.2 CeFi Protocol Structure

Virtual Bank Registration - KYC
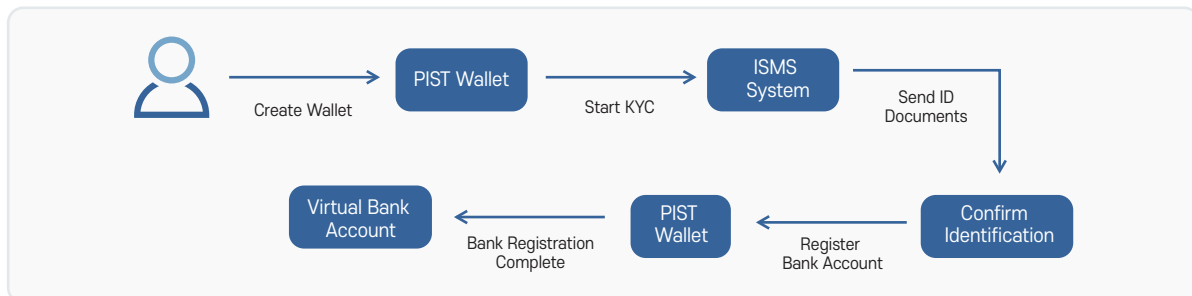
Crypto-Fiat System
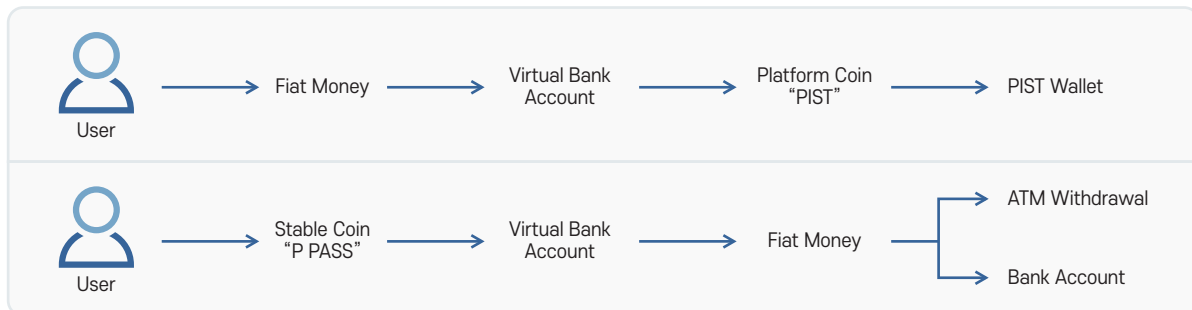
The Crypto-Fiat system adds flexibility of exchange between fiat money and digital asse and fiat money. The system is supported on the PIST Mainnet with incorporation of the central bank system. The KYC compliance is incorporated in the Cryptos-Fiat system to prevent and assess financial risks.

KYC compliance

The know-your-customer (KYC) compliance is a required process built in the PIST Wallet to prevent and assess financial risks, it verifies the personal information of the users. The KYC guidelines of the verification process and the personal information are regulated by the information security management system (ISMS) of the network and the entire process is required to access Crypto-Fiat conversion system.

P Pass-to-Fiat Conversion

Stablecoin "P Pass" can be exchanged to Korean won through the DApp "PIST Bank". Once the fiat money conversion is processed, "P Pass" will be deducted to the equal value of the fiat money and the fiat money is sent to the designated bank account.

Fiat-to-PIST Conversion

The platform coin "PIST" can be exchanged with fiat money in the DApp "PIST Bank". The exchange is made by depositing fiat money in the virtual bank account and once fiat money is entered into the virtual bank account, an equal value of PIST will be transferred to the pre-designated wallet address.

On-site Payment

The On-site payment is a system to allow "P Pass" stablecoin to be used as payment of real goods and services. The on-site payment system is enabled by the payment gateway and the virtual bank system connected to the PIST Mainnet.

When the payment is requested, conversion of fiat currency is applied to the "P Pass" in the wallet and P Pass is deducted in the PIST Wallet. The converted fiat money will be stored in the wallet's virtual bank account and the requested payment will be sent through the payment gateway to pay for the product or service.

ATM "P Pass" Withdrawal

"P Pass withdrawal" is a system of withdrawing fiat money in ATMs. In the "PIST Bank" DApp, "P Pass" can be exchanged into fiat money and be deposited in the virtual bank account. Then the fiat money in the virtual account can be withdrawn from the ATM.

5. BLUECUS NFT Marketplace Structure and Services

5.1 Types of NFTs on the BLUECUS Marketplace

In the NFT marketplace, it supports various arts, creations, and other forms of art to be tokenized into NFTs including the NFTs from Game-Fi network and Metaverse.
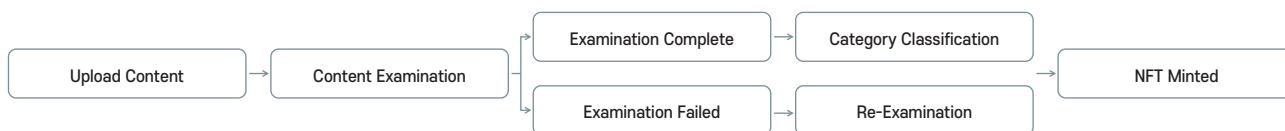
Music Soundtracks	Photography	Calligraphy	Building Certificate
Song lyrics	Social Moments	Novels	Computer Program
Movie tickets	Vides	Poems	Map
Scripts	Gif	Thesis paper	Architecture
Lecture notes	Illustrations	Webtoons	Exclusive game items
Theater ticket	Arts & Crafts	Blueprint	Concert Ticket

5.2 Functions of the BLUECUS Marketplace

All the services on the NFT Marketplace are offered through PIST smart contract protocols to provide a complete autonomous peer-to-peer NFT trading platform.

NFT Minting – Tokenization

To upload art on the Marketplace, users are required to request their art to be tokenized into NFTs and verify their NFT for illegal, explicit, or inappropriate materials

```
Upload Content → Content Examination → Examination Complete → Category Classification → NFT Minted
                                      → Examination Failed → Re-Examination →
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Once the art is requested to be tokenized into NFT, it goes through the examination process along with the art information provided by the artist. The examination process checks for illegal, explicit, or inappropriate materials. After the examination process, the art is tokenized by the smart contract on the PIST Mainnet. Lastly, the NFT is provided to the artists wallet and ownership of NFT is recorded on the PIST network.

NFT Buy & Sell:

Tokenized NFT works can be directly sold and purchased by users on BLUECUS. Users on the marketplace are given three methods of sale (Fixed Price, Public Auction and Private Auction)
The purchases and sales of NFTs in BLUECUS, NFT asset transfers and transactions are handled and processed by the network smart contract.

Auction (Public & Private):

The NFT auctions can be opened as public or private and users can set a starting price for the NFT. The auction can be opened for a maximum of 60 days (set by the user) in the marketplace. Once the set time of the auction is passed, the final bidding price will be decided, and the transaction will be processed.

NFT Item Box:

The "NFT Item box" is a box with multiple NFTs such as exclusive NFTs from collaboration events, blockchain games and Metaverse. The "NFT Item Box" contents are selected as random when opened and will only be available for a limited amount of time.

The content of the "NFT item box" is determined once the purchase is through, but the box will not open immediately after purchase of the NFT item box. The NFT item box will be stored in the users PIST Wallet and can be opened or sold in the Marketplace NFT collection tab.

5.3 Security tokens – NFT

BLUECUS Marketplace offers the sale of security tokens (ST-NFT), which represents tokenized security assets such as bonds, stocks, real estate, and other real value assets. The tokenized securities will provide liquidity for illiquid investment assets to be freely traded between people and lower the entry of investment for investors.

The tokenized security assets will be available for sale as NFTs and the value of the security asset will be divided by the predesignated number of NFTs to lower the overall entry cost.

The process of fund collection, distribution and management will be handled by the smart contract on the PIST network.

5.3.1 Security Token NFT - Architecture
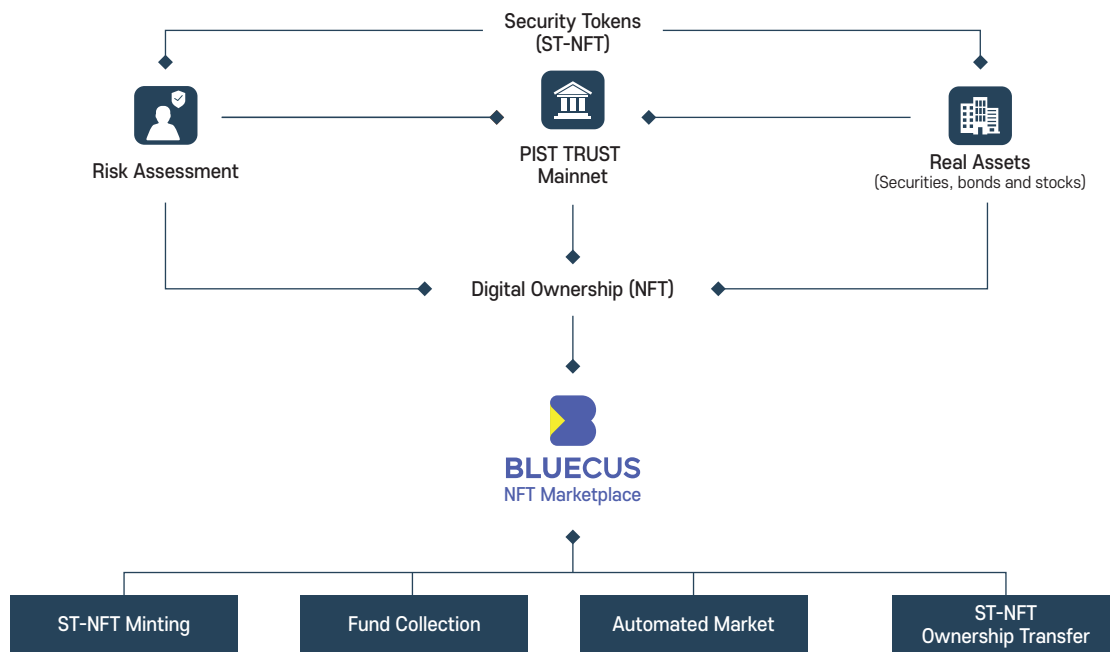
The Security Token NFT architecture is the incorporation of traditional financial system with blockchain technology.

5.3.2 Categories of Security Token NFTs

In the marketplace, ST-NFT is provided in 5 different categories.

Mining Rights: Representation of property rights to exploit an area for mineral it harbors

Real Estate: Representation of property ownership bestows rights to use, possess and earn income

Lending: Representation of lending of resources to an individual or an entity

Stocks: Type of security that represents the ownership of a corporation in fractional parts

Crowdfunding: Funding of a project or venture capitals

5.3.3 Process of Security Token NFT

1. ST-NFT Risk & Information Confirmation	2. ST-NFT Registration	3. ST-NFT Information & Structure
• ST-NFT information • Collateral Ratio • Risk Assessment	• Mining Rights • Real Estate • Crowd Funding • Lending • Stocks & Securities	• Amount of Structure • Token Information

4. Collection of Funds	5. ST-NFT Distribution	6. ST-NFT Management
• Investment information • Fund Collection • Investment (PIST/P PASS)	• ST-NFT Minting • ST-NFT Distribution	• Interests & Dividend • Distribution • P2P Trading of ST-NFT

1. ST-NFT Risk & Information Confirmation

The assessment and confirmation of financial product information are provided by the 3rd party and information confirmation is handled by an accredited authorized figure (ex: Lawyer, fund manager). After the confirmation of information, the risk assessment of the asset is complete.

2. ST-NFT Registration

After the Risk assessment and information confirmation, security tokenization and the asset registration are managed by PIST TRUST platform.

3. ST-NFT Information and structure

Security Token Information Structure

1. Investment Information
- ST-NFT Grade
- Repayment period
- Funding Status

2. Security Info
- Lending Amount
- Token Type
- Security Value
- Repayment Method
- Use of Funding

3. Funding Details
- Lending Balance
- Collateral Balance
- Platform Loan

4.Collateral Details
- Address
- Current Value

5. Borrower Details
- Age
- Credit Score
- Monthly Income
- Monthly Credit Card fee
- Current Loan Balance

6. Information Check (Lawyer)
- Identification
- Collateral Owership
- Check Balance
- Credit Score
- Eligibility and Repayment

7. Security Token Settings
- ST-NFT Price
- Number of ST-NFT
- ST-NFT Type
- Interest value

The information confirmed by the 3rd party and the risk assessment report is entered into the security token profile information to properly provide all the necessary information to the investors of the ST-NFT.

4. Collection of Funds

Security token is available in the NFT Marketplace with all the information of the security token. The information of the investment and risk assessment report can be accessed on the profile page of the fund. To invest in the security token, it is necessary for the users to stake an equal amount of "PIST" coin to receive the ST-NFT. Security token purchase will not immediately go through until goal of the funding is reached.

5. ST-NFT Distribution

Distribution of NFT commences when the funding is complete. Once the funding is complete, the security token is minted by the PIST smart contract and security tokens will be sent to the investor's designated wallets.

6. ST-NFT Management

The management of the security tokens are governed by the security token holders through their PIST Wallet. The security token holders have the rights to receive interest & dividends monthly on the marketplace or sell the security token on the NFT Marketplace.

6. PIST Game-Fi Structure & Mechanism

6.1 Game-Fi Network Structures

• Interconnected Game-FI Network

The Game-Fi network is operated on the PIST Network and on the PIST Metaverse with its independent game token economics. Multiple games will be added on-chain and with blockchain properties of built-in DEX, non-fungible tokens, smart contract protocols and HyFi asset management.
The blockchain properties added onto traditional games creates a new innovative gaming platform for players. The players will have the ownership of in-game assets and capabilities to trade and sell their in-game assets through the NFT marketplace.

• Independent Game-Fi Token

The Game-Fi token is issued from the PIST Mainnet to form a independent token economics to tie all the games on the Game-Fi network. The token establishes the incentive mechanism of the network and can be earned by playing the game, NFT staking and be swapped with our platform coin "PIST" to utilized other services on the PIST Mainnet.

• Tokenized In-Game Assets

The games on the Game-Fi network will have NFT value added items. Unlike traditional games, in-game assets which are items that can be obtained in the game are available in the form of NFTs. The tokenized in-game assets will give ownership of in-game assets to players. The Players will have custody of their NFT game item in the PIST Wallet and ownership is proven by the on-chain ledger system.

The NFT game items can be obtained from playing the game or be bought from the BLUECUS NFT marketplace. The NFT items can be transferred to the BLUECUS Marketplace for sales and players also have the choice of purchasing NFT game items on the BLUECUS marketplace as well.

The property of PIST Game-Fi Network

In-Game Asset Ownership : Game items are in custody of the players, and not on the game servers
Investment Opportunities : Earn real value by, token rewards, NFT staking and NFT trading
Security & Uniqueness : Distributed ledger system of blockchain technology ensures security of the network
Transparent Environment : Transactions of items are recorded, and its records are accessible to everyone

6.2 Game-Fi Network - DeFi

• NFT Staking

Similar to staking in DeFi services, the Game-Fi network supports staking of non-fungible tokens. The NFT staking is the locking of NFT items in the smart contract to earn additional yield and revenue.

• Built-In DEX

The game-FI network allows the conversion of the following assets through the function of Built-in DEX:

1) Mutual conversion of In-game currency to Game-Fi tokens.

2) Mutual conversion of Game-Fi token to platform coin "PIST"

6.3 BLUECUS Marketplace – Game NFTs
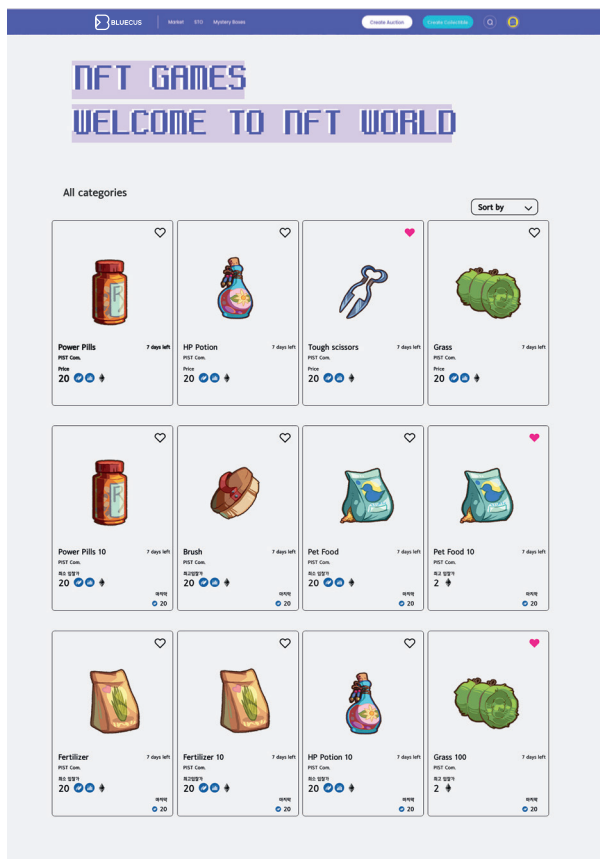
PIST Game-Fi network will be linked to the BLUECUS NFT Marketplace via PIST Wallet. Enabling the Game NFTs from various games on the Game-Fi network to be sold and purchased on the BLUECUS Marketplace.

7. PIST Metaverse Structure & Mechanism

7.1 PIST Metaverse Structure

The PIST Metaverse ecosystem is structured to expand with the PIST decentralized applications, platforms and community contributions.

Avatar

The players will be able to create their unique avatars as an NFT token, which will be a representation of the player in PIST Metaverse. The players can further customize their avatars through various NFTs, animation set, and avatar editor.

My Home

All the players in the PIST Metaverse will be given a virtual space for them to decorate and use at their convenience. In "My Home" players can place their creations, NFTs, interior design, invite players and share on social media.

Theme Parks

Theme Parks are different channels of the Metaverse with different themes, environment, and services. Each channel of the Metaverse will have its own individual concept, different themes, and mechanisms.

• Main hub

The main hub is the central channel of PIST Metaverse. In the main hub the players will be able to interact with other players, access "My Home", access different channels and access NFT Marketplace.

• Environmental hub

The Environment hub will be split into different environments of the world such as forests, dungeons, volcanic parks, icy mountains, cities and many others. Players will be able to explore different environmental hubs equipped with unique challenges for players to tackle and solve.

• Gaming hub

In the Gaming hub, the players have the access to play community created games and the games available on the PIST Game-Fi Network. The gaming hub will feature weekly challenges to push participation and competition among the users. The challenges will feature top scoreboards, challenges, unique missions, and rewards.

• Player Generated hub

The "Player Generated hub" refers to hubs created by players and the community. Players can design and create their very own channels to be shared and enjoyed by other players. In which the environment of this virtual space will be specifically designed and uploaded by the community. To support and accelerate the expansion, channel creators will receive small incentives for their work, and they can sell the created hub as NFT on the BLUECUS Marketplace.

Missions

To further immerse players and community in the virtual platform, various missions will be available to earn rewards. Through the mission system players will be able to earn exclusive NFTs, PIST coin, and in-game assets. With the mission system, it will accelerate the community expansion, metaverse immersion, player experiences and player participation in PIST Metaverse.

Missions will consist of the following

Limited time Missions	Metaverse Asset creation
Community NFT hunt	Exploration & Scavenger Quests

BLUECUS NFT Marketplace

In the PIST Metaverse, a virtual hub of BLUECUS NFT Marketplace will be available to buy & sell the Metaverse items. Users will have the option to sell player-created items or resell the items purchased on the BLUECUS Marketplace.

8. PIST TRUST Token Economics

PIST TRUST's token economy is designed to support and create a sustainable infrastructure to expand its Mainnet operations, applications, and platform management.

8.1 PIST Mainnet Token System

PIST

"PIST" is a mainnet coin that has been generated by the network's independent smart contract. The platform coin "PIST'' is the main form of payment in the PIST Network. The PIST coin can be used in digital asset management services, gas fee payment, conversion with P Pass, and other platform service fees.
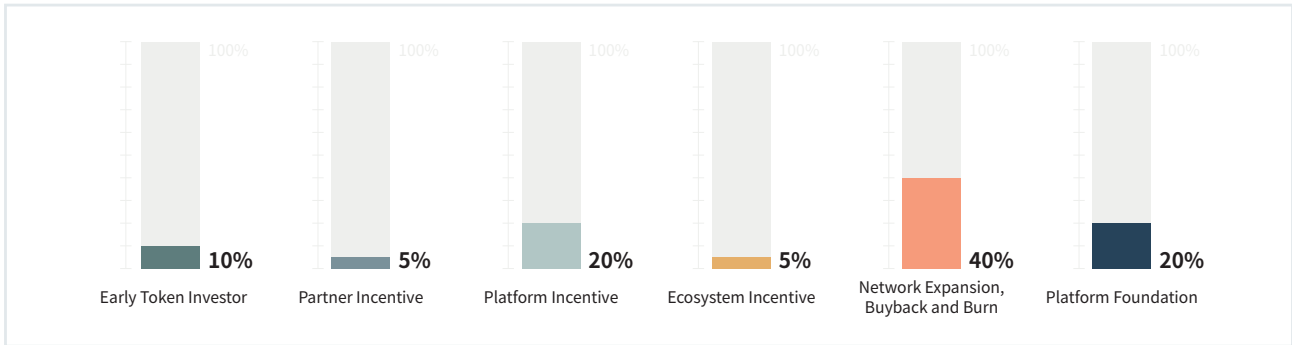
P Pass

P Pass is the stablecoin and has a collateral value of one-to-one ratio with Korean Won. The collateral value is reached through the Korea traditional bank partnership. The usage of P Pass is in the online/offline payments, withdrawal of Korean Won, and digital currency of PIST in the real economy.

PIST and P Pass Conversion

In the PIST Wallet, it supports mutual conversion of PIST and P Pass. The mechanism of PIST and P Pass swap function is based on the automated market maker, and unlike the existing traditional convergence method, the mechanism has a real-time price oracle and swap services for digital assets through a liquidity pool and a fixed multiplication algorithm of ($x \times y = k$).

8.2 Token Distribution

10%	5%	20%	5%	40%	20%
Early Token Investor	Partner Incentive	Platform Incentive	Ecosystem Incentive	Network Expansion, Buyback and Burn	Platform Foundation

※ Early Token Investor: 10%

   These tokens are assigned to early investors including venture capital firms to proactive investors.

※ Partner Incentive: 5%

   These tokens are rewarded to project partners and strategic cooperation incentives.

※ Platform Incentive: 20%

   These tokens are used for operations of the PIST Network.

※ Ecosystem Incentive: 5%

   These tokens are used for community development, airdrops and Market activities and subsides for various wealth management products launched on the Platform.
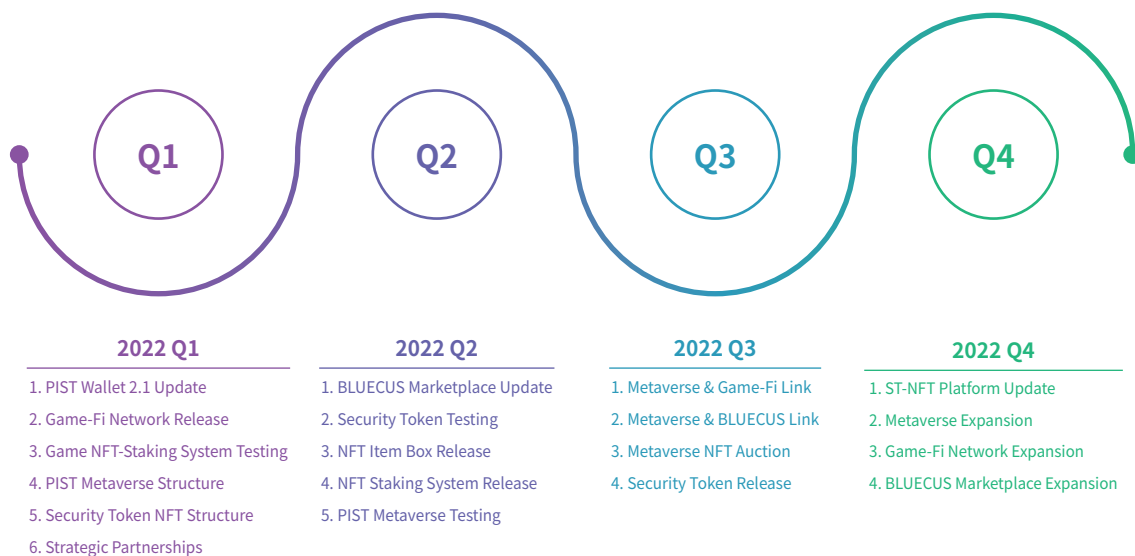
※ PIST Network Expansion: 40%

   These tokens are used to expand Game-Fi network, Metaverse and other PIST blockchain platforms and ultimately burned to prevent coin inflation.

※ Platform Foundation: 20%

   These tokens will be used to operate financial derivatives such as staking, lending and other DeFi services.

* 40% of tokens are ultimately scheduled for buyback and burned

9. PIST Project Roadmap

2022 Q1
1. PIST Wallet 2.1 Update
2. Game-Fi Network Release
3. Game NFT-Staking System Testing
4. PIST Metaverse Structure
5. Security Token NFT Structure
6. Strategic Partnerships

2022 Q2
1. BLUECUS Marketplace Update
2. Security Token Testing
3. NFT Item Box Release
4. NFT Staking System Release
5. PIST Metaverse Testing

2022 Q3
1. Metaverse & Game-Fi Link
2. Metaverse & BLUECUS Link
3. Metaverse NFT Auction
4. Security Token Release

2022 Q4
1. ST-NFT Platform Update
2. Metaverse Expansion
3. Game-Fi Network Expansion
4. BLUECUS Marketplace Expansion

PIST TRUST