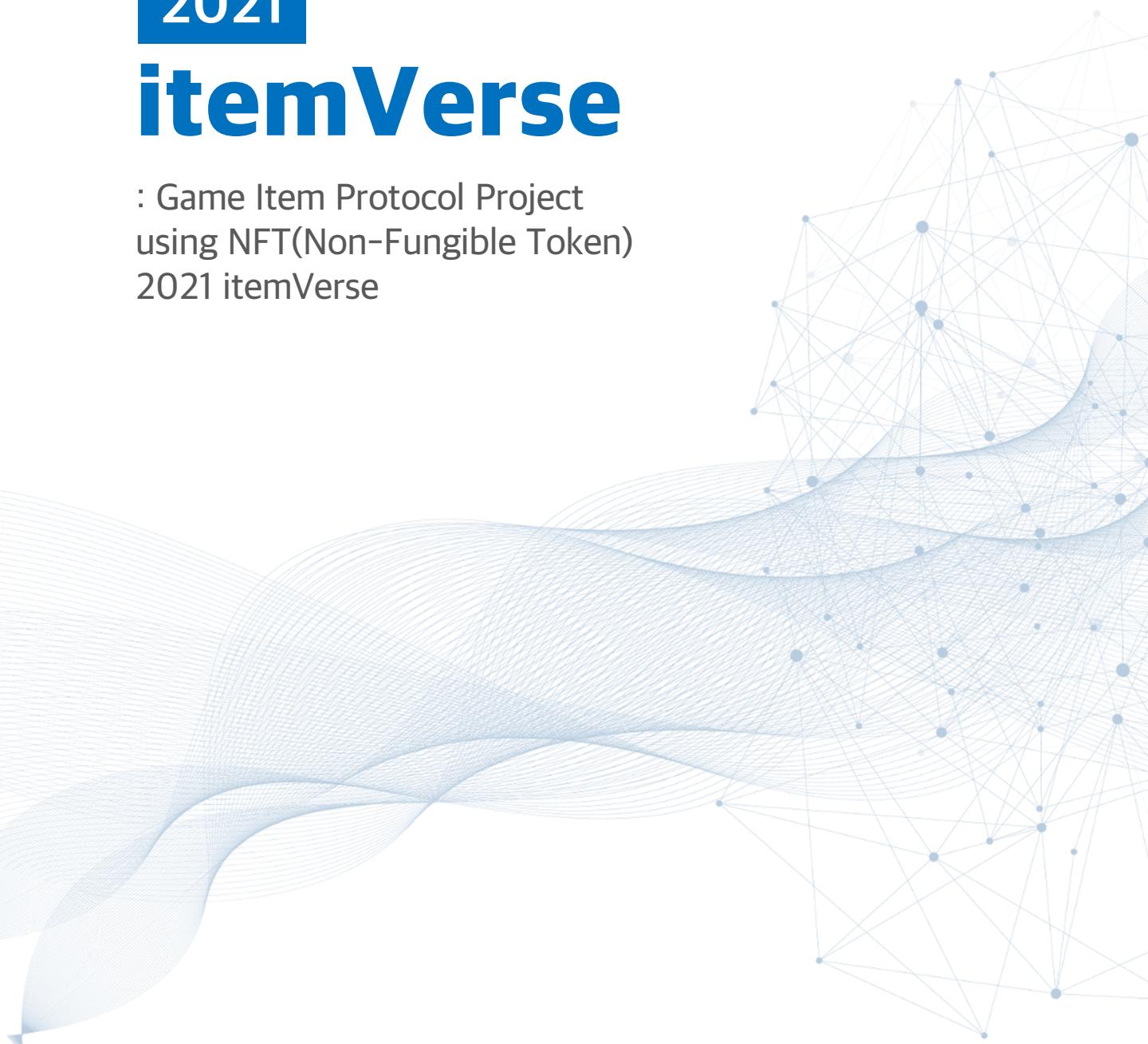




2021

itemVerse

: Game Item Protocol Project
using NFT(Non-Fungible Token)
2021 itemVerse



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Abstract

Currently, there are many problems in the mobile game market, and various attempts are being made to solve them. However, no appropriate solution has yet emerged. itemVerse is a project launched to address these issues and revitalize the mobile game market.

□ Background of itemVerse - Troubleshooting Current Game Market

The problems facing the domestic game industry are as follows:

- **High Platform commission**
- **Emphasis on the issue of rich and poor due to polarization of the game industry**
- **User's dispute over item sovereignty at the end of game service**
- **Massive PR and Marketing Costs**
- **Difficulties in recruiting users and raising funds due to intensifying competition**

The above problems are not the ones that have been highlighted recently. These problems have been accumulated since the mobile game market was formed, but they have yet to find a suitable solution. itemVerse is a project launched to solve these problems.

□ Past Troubleshooting Attempts - New Technology with Blockchain

Game developers made new attempts using Blockchain to address problems in the game market but failed to achieve breakthrough results. Precedents such as "CryptoKitties" and "MyCryptoHeroes", which once accounted for more than 15% of the world's Ethereum transaction ratio, are recorded as relatively successful examples. However,

- **Technology with high entry barriers**
- **High initial cost of introduction**

because of above reasons, it is evaluated as a technology that game developers cannot readily introduce due to such reasons.

□ itemVerse Overview

itemVerse project has been launched to efficiently solve the problems currently facing the mobile game market. itemVerse is a project to unite game market leaders to establish a general-purpose Game Item Protocol (GIP) using Non-Fungible Token (NFT) technology.

The features provided by the itemVerse Platform are as follows:

- **API and SDK to help game developers produce NFT**
- **NFT's free movement between games and itemVerse Wallet**
- **Free NFT Trading Market**

itemVerse proposes NFT Currency (NFTC) as the common currency of the GIP and NFT ecosystem to operate these platforms. itemVerse's attempt applying Blockchain technology to whole game industry is a completely different view from past challenges applying Blockchain technology to a single game.

□ Purpose of itemVerse

itemVerse's top priority is to address the chronic problems of the current mobile game market. In addition, the direction of the project was established to achieve the following objectives.

- **Pursuit a public purpose appropriate to Blockchain's original spirit**
- **Establishment of ecosystem for Blockchain game activation**
- **Funding and technical support to enhance Game Item NFT activation for companies**
- **Discovery, promotion, investment, production support of Blockchain game production**
- **New niche for existing game companies to open new markets**
- **Increasing consumer sovereignty of Game Item**

□ itemVerse Strength Point 1 - Strengthen Sovereignty of Game Developers

NFTC is a game item and a common currency for games in the itemVerse ecosystem, both a payment method in the game and a payment method for NFT transactions. Therefore, game developers can use NFTC as follows:

- **Introducing NFTC, which co-exists with the currency system in the game**
- **Eliminating platform dependencies such as Apple and Google through NFTC**
- **Earning Game Item NFT transaction commission**

Game developers are free to realize their policies and make more profits by reducing platform commission such as Apple and Google. Also, game developers can be free from Game Item sovereignty issues.

□ itemVerse Strength Point 2 - Easy Development Fundraising

Game developers can also use NFT to create new channels for raising development funds by pre-sale Game Item NFT. This results in NFTC funding early in development. NFTC funding is possible for two reasons:

- **Proof of sparsity in pre-saled NFT**
- **Possibility of trading pre-saled NFT**

The quantities of pre-selling NFT are recorded in itemVerse Mainnet, which demonstrates technically the credibility of sparsity. In addition, pre-purchased NFT can be traded among users, resulting in users purchasing NFT as a form of investment, and game developers can raise development funds in new ways.

□ itemVerse Strength Point 3 - Troubleshooting In-game Goods Sovereignty

Games using NFT technology can naturally solve the problem of the sovereignty of in-game goods when the service is terminated.

- **NFT can be moved after service termination if partnership with other game NFT**
- **NFT can be switched to NFC with the Melting provided by the itemVerse Platform**

Through the above function, users can continue to manage Game Item NFT, which they purchased, even if the game service is abruptly terminated. Melting functionality is described in the Business Model.

□ itemVerse Strength Point 4 - A virtuous cycle ecosystem

Lastly, the amount raised using NFT technology will be used for investment, promotion, and production support of new Blockchain game production companies. As the number of games applied with Blockchain increases, itemVerse will become more active, and supporting game developers is essential for a virtuous cycle ecosystem of itemVerse. Considering that Blockchain's original spirit was a public interest purpose using decentralization, itemVerse's move inherits the initial public interest purpose orientation of Blockchain technology.

1. itemVerse Platform

1.1. itemVerse Overview

itemVerse is a platform that supports the distribution and management of Game Items in NFT format. There are two main reasons why NFT technical integration such as itemVerse has not been achieved so far.

- **Limitations of implementing Blockchain, which allows integration of large-scale games**
- **The lack of a central point to integrate large games into a single protocol**

itemVerse solved the above two problems efficiently.

□ itemVerse Technical Overview - Luniverse, SASEUL

First, itemVerse dualized the structure because NFTC should be used on cryptocurrency exchanges.

- **Public Network leverages Luniverse to build on Ethereum**
- **Private Network leverages SASEUL to build as Luniverse's Sidechain**

Next, the Korea Mobile Game Association(KMGA) plays a central role in integrating large-scale games into a single protocol. Most of the Korean mobile game developers are affiliated with KMGA, which already has a human, technical and business network that can unite them..

itemVerse provides four main features for efficient distribution and management of NFT.

- **SDK & API to help game developers develop games using NFT**
- **Wallet to be used directly by users and used for NFT transactions**
- **itemVerse Admin Console for direct NFT management**
- **itemVerse Market where these technologies combined to trade Game Items freely**

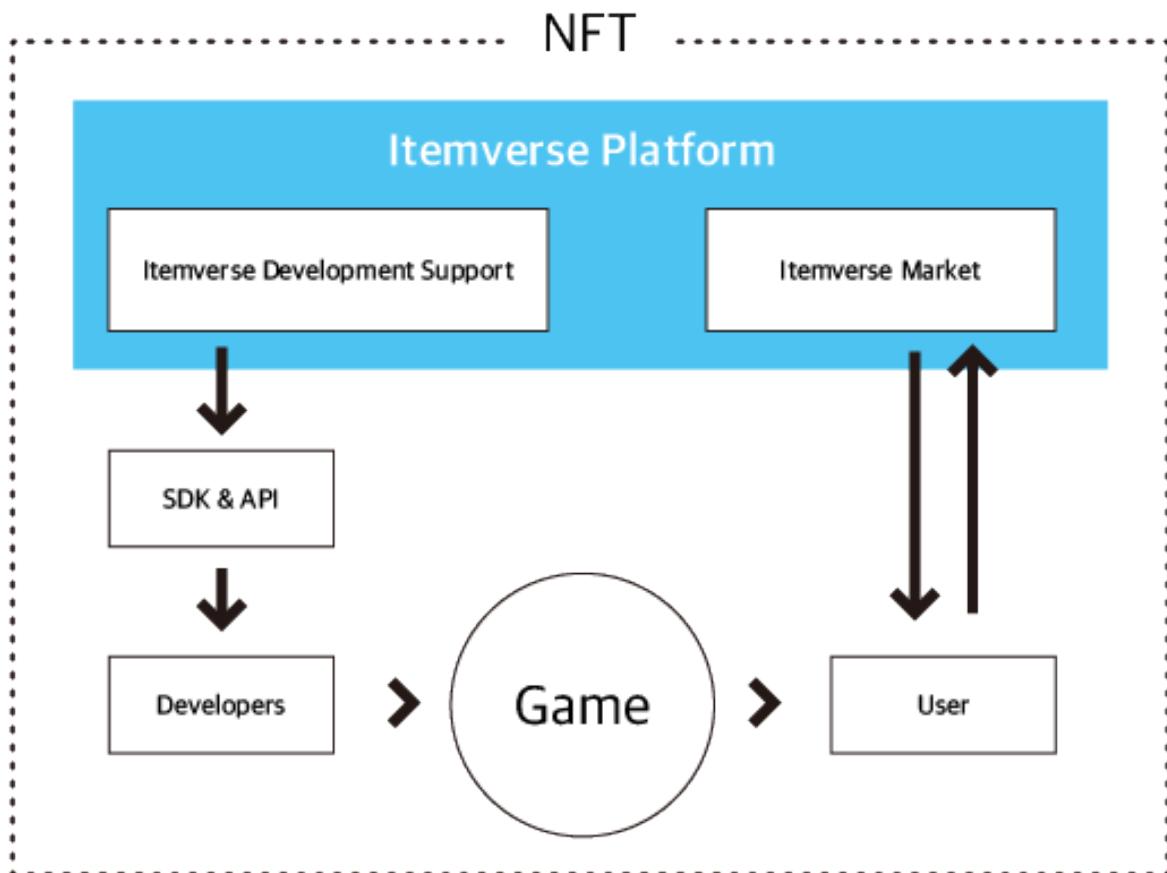
□ Background of itemVerse Emerge 1 - Structural Problems

The background of building the itemVerse Platform is as follows:

- **Fair Trade Issues related to the imposition of extreme commission and payment**
- **Weakening Game developers' sovereignty**
- **Emphasis on the issue of rich and poor due to polarization of the game industry**

One of the alternatives to solving these problems efficiently is the introduction of Blockchain.

However, using Blockchain brings a major problem in fund raising. Due to the generally negative view of Blockchain from each government, there is little government support, making it difficult for game developers to make new attempts with their own financing. Fortunately, the Game Management Committee has recently approved the classification of games using Blockchain, but there is still a long way to go.



□ Background of itemVerse Emerge 2 - Changes of User's Perspective

The change in the user's perspective on games is also the reasons behind itemVerse's emerge.

- **Transition of game from entertainment and leisure to financial means**
- **Occurring cash trades of Game Item at the out of market surveillance**

We don't have to regard these changes of user as only negative. Incorporating their transactions into market surveillance to create a safer and more legitimate market is also an important part of forming a sound game culture.

itemVerse pursue to invest and provide technical support to game developers who want new attempts, claim legitimate sovereignty and incorporate user's changed game perspectives into itemVerse system to form a healthier game market. This objective is also consistent with the pursuing public interest that was ultimately directed from the launch of Blockchain.

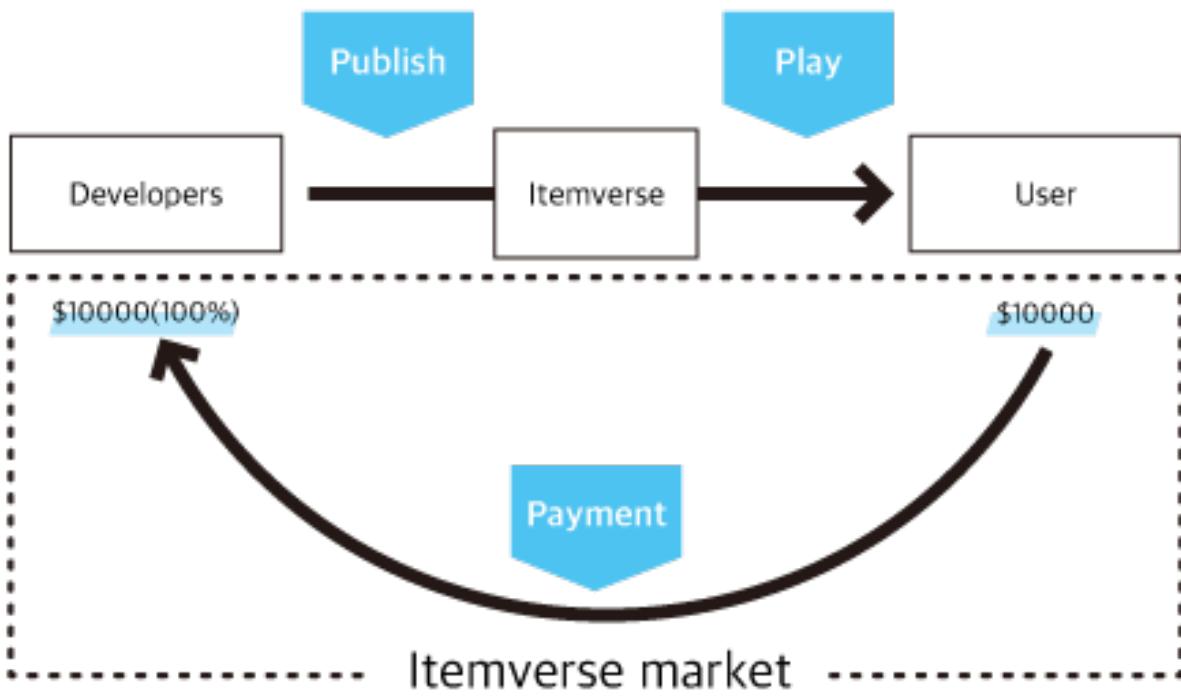
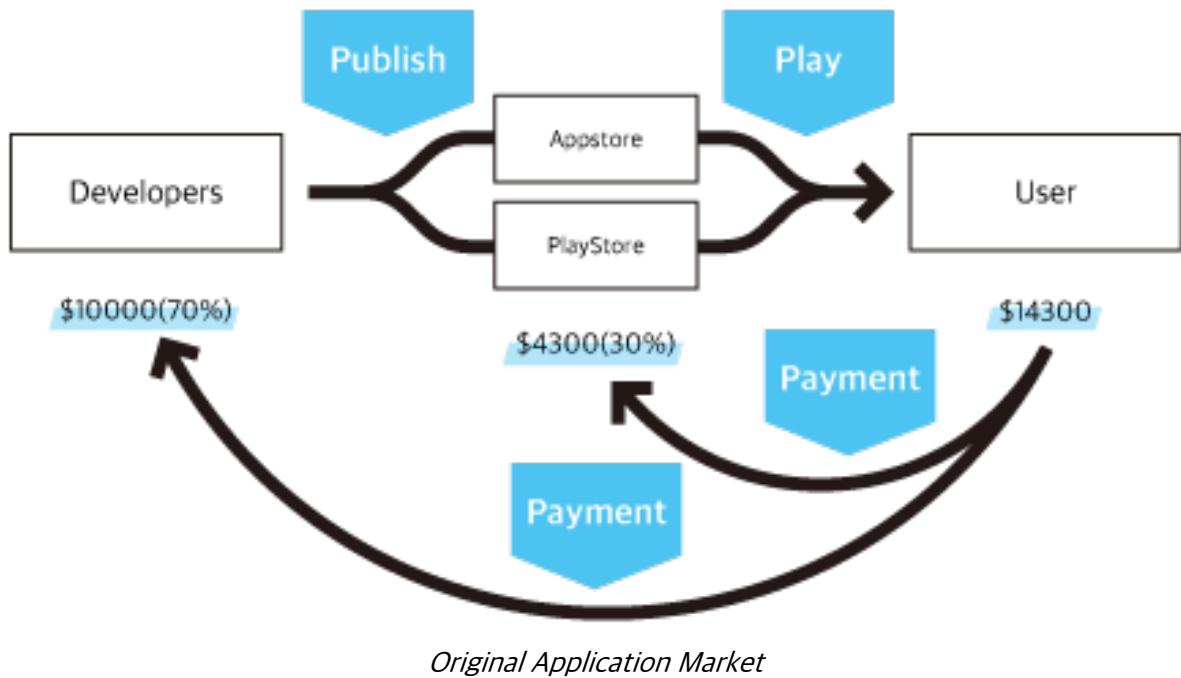
1.2. itemVerse Market

□ itemVerse Market Pros

itemVerse Market allows NFT to be purchased and sold using NFTC and has the following advantages:

- **Technical expansion of existing Game Item trading platforms**
- **Trading all Game Items built on NFT using NFTC**
- **Trading between games through NFTC**
- **Managing users' own game items directly using Wallet**

□ itemVerse Market Structure



itemVerse Market

□ Co-prosperity and Independence from the Existing Application Market

While existing application markets such as Google and Apple have advantages, the following disadvantages also exist:

- **30% higher in-app payment commission**
- **In-game policy abandonment if in-game policy and Application Market policy differ**
- **Weakening game developer's sovereignty because of Application Market monopoly**

itemVerse Market serves as a complement to them.

- **Avoiding high commission if game developers prefer to pay in-app using NFTC**
- **Pioneering a market for games that were not registered in the existing Market**
- **Ensuring the sovereignty of game developers**

However, itemVerse Market is not exclusive to the existing Application Market. Game developers can choose the advantages of each market through increased options and make a win-win structure that complements each other.

□ Tools for Managing Users' In-game Goods

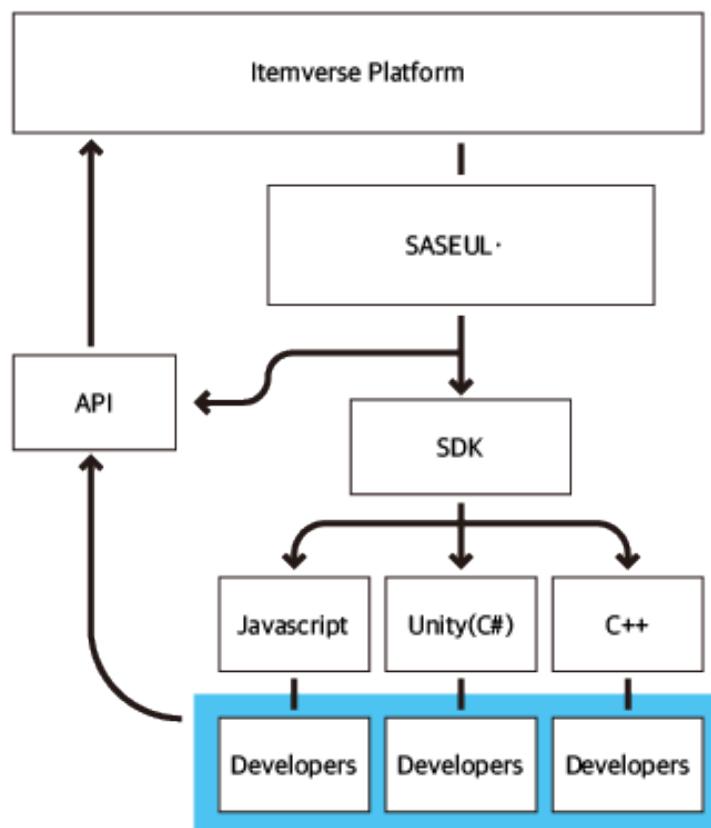
From the user's perspective, they manage their own Game Item directly, and they can switch to other Game Goods at any time, so they don't have to worry about the disappearance of Game Item. Recently, the asset value of game's virtual goods has been increasing, with many users managing their assets using limited edition Game Items. One of the biggest barriers to discouraging these users from consuming is the termination of services by game companies. However, itemVerse Market also plays a role in technically complementing these users' strategies.

1.3. Service Features

1.3.1. SDK & API

New challenges using Blockchain have been made constantly, but companies specializing in Blockchain often fail to release appropriate dApps. Therefore, if itemVerse Platform using NFT is completed and games using NFT are not developed, itemVerse is a name-only service.

□ SDK & API Structure



itemVerse provides SDK and API for game developers to easily implement NFT. itemVerse provides API of the SASEUL engine which makes up the Private Network, laying the foundation for applying NFT to game development more easily. Game developers can create NFT-applied Game Items only with SDK and API provided by SASEUL, even if they do not have professional knowledge about Blockchain.

□ Provide A Developer-Friendly Environment

itemVerse provides SDK for developers who have difficulty using API directly. In order to invoke the itemVerse API in various development environments, encryption modules must be built in advance in different languages, and sufficient technical skills must be supported. itemVerse will provide SDK such as Javascript, Unity (C#), Unreal Engine, Java, C++, and PHP, which are offered by both the Luniverse and SASEUL engines, with ease of use for game developers.

1.3.2. Wallet

□ Wallet Overview

The main features of Wallet to be developed by itemVerse are as follows:

- **NFT management that allows user to manage users' own NFT directly**
- **Market to buy and sell NFT freely**
- **Game Item NFT Presales**
- **Interchain that can be exchanged with other games NFT**

In addition, additional functions such as NFTC remittance and purchase, connecting to external cryptocurrency exchanges, checking transaction details, and setting account information will be added.



□ Wallet Features 1 - Game Item NFT Management

Wallet-managed NFT are kept in the form of goods that can be bought and sold at the Market.

It is easy to think of a structure that is responsible for inventory functions in games. The configuration of the NFT management page is as follows:

- **Total NFTC held by user**
- **NFT List of Game Items in Wallet**
- **Each Game Item NFT Details**

User is free to trade NFTC using his Wallet in the Market.

□ Wallet Features 2 - NFT Presales and Promotions Page for New Games

Wallet provides a space to check information about new games. This makes it easier for game developers to promote new games.

At the same time, by setting up a page to pre-sell Game Item NFT, it replaces the existing pre-booking system and provides opportunities for game developers to raise funds.

□ Wallet Features 3 - itemVerse Ecosystem Expansion with Interchain

In itemVerse, user can use Interchain to convert tokens from other game companies into NFTC. For game companies that have already conducted ICO or have completed game development by issuing tokens on their own, applying NFT belatedly acts as a technical burden. However, itemVerse implements the Interchain feature inside Wallet, allowing other game companies to convert tokens to NFTC, making it easier to expand the itemVerse Platform ecosystem.

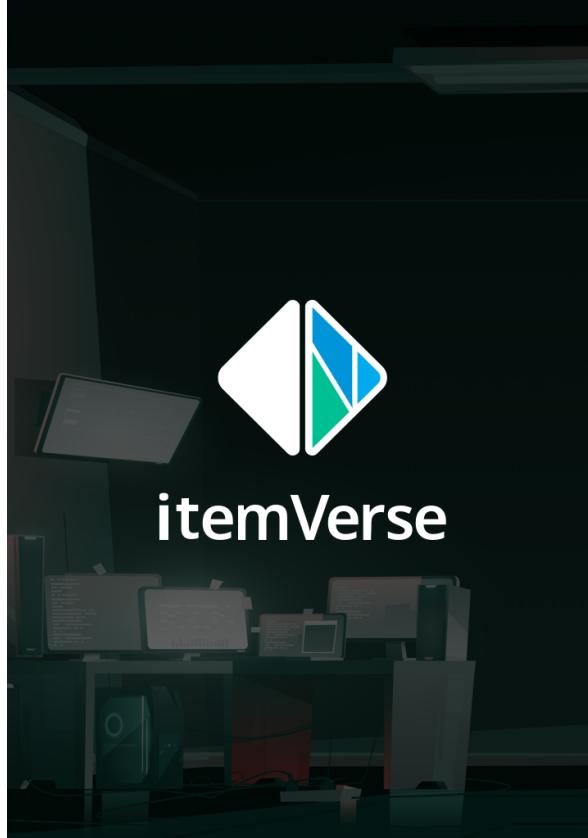
In other words, the Wallet of itemVerse is a blockchain dApp that is both self-complete and scalable.

1.3.3. itemVerse Console

itemVerse Console acts as admin of itemVerse and has the following functions:

- **NFT creation and management, permission**
- **Presales banners management**
- **Market transaction Item management**
- **Block data and transaction data management and inquiry**

Block data and transaction data are used as information for statistics. Due to the transparent nature of Blockchain, itemVerse can see which games are actively traded and who has which NFT items. Based on this, itemVerse can deliver meaningful information to game developers or operators.



Console Login

아이디(이메일)

비밀번호

아이디저장

Login

itemVerse Console example

2. Business Model

itemVerse envisions the following business models.

- **Trying returns for shareholders and investors by NFTC management**
- **Ensuring Validator operational revenue with Block Rewards**
- **Raising money for itemVerse operations through V-NFT sale**
- **Expanding itemVerse ecosystem through partnerships**
- **Managing and transferring user of NFT through Melting**

The above methods enable itemVerse to achieve revenue and promote the shared growth of many shareholders, investors and affiliates.

2.1. Native Coin - NFTC

NFTC is the currency used in the itemVerse Platform and is issued under the ERC-20 token.

NFTC is issued as an ERC token because it is designed to be used with cryptocurrency exchanges outside the itemVerse Platform. To this end, itemVerse has adopted Ethereum-based Luniverse as its Public Network. Simultaneously, it is available inside itemVerse by linking NFTC generated based on ERC to SASEUL, which is responsible for the Private Network.

The initial publication size is fixed at 10 billion, and there is no plan to issue additional NFTC afterwards. However, if it is deemed difficult to operate smoothly due to the natural loss of NFTC during the operation of the service, additional issuance can be made through official procedures through the configured Governance. In such cases, sufficient prior notice shall be given to users of the service and related personnel to prevent any disruptions in the use of the service.

In addition, the published NFTC is sold in some private sales for investors before being sold on public exchanges. The amount raised from the sale under private sale is used to develop the itemVerse Platform.

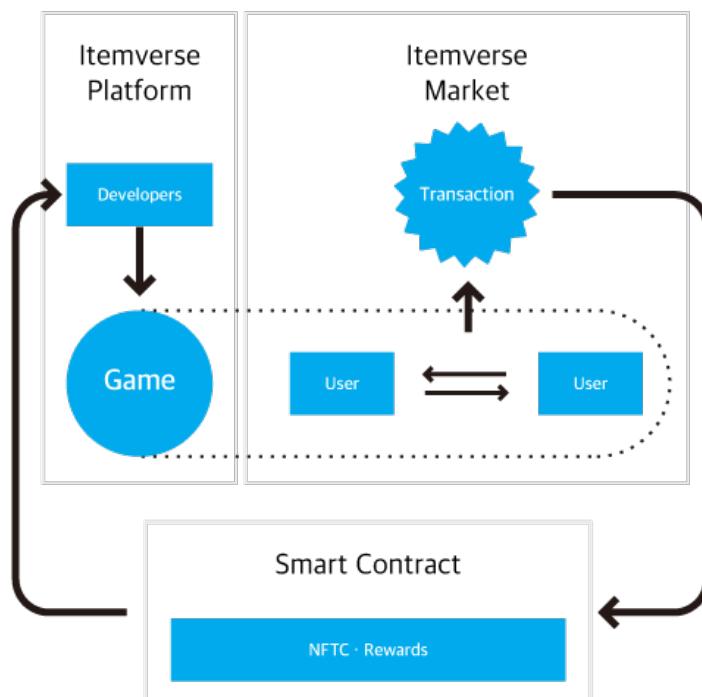
2.2. Block Rewards

In itemVerse, users make NFC transactions with Peer to Peer, and all transactions are recorded on the Block. NFT transactions include Game Item, pre-booked and pre-sales.

In itemVerse Mainnet, a certain amount of NFTC is paid to the Validator Node in the form of a commission each time a block is created. The percentage of commission will be determined by the Coin Policy Committee as a policy.

itemVerse Mainnet defines all policies described above as Smart Contracts.. Therefore, commission paid by Block Rewards are defined as one Smart Contract as a network policy. The policy can be changed, but even if it is changed, it will remain recorded on the itemVerse Mainnet and no one can change the policy arbitrarily.

Korea Game NFT will also operate Validator Node to achieve operating profit through Block Rewards. The Validator Node, which receives Block Rewards, must have a V-NFT issued by ItemVerse. The initial publication volume of V-NFTs is 200, of which 100 are owned by Korea Game NFT.



Block Rewards structure

2.3. V-NFT Sale

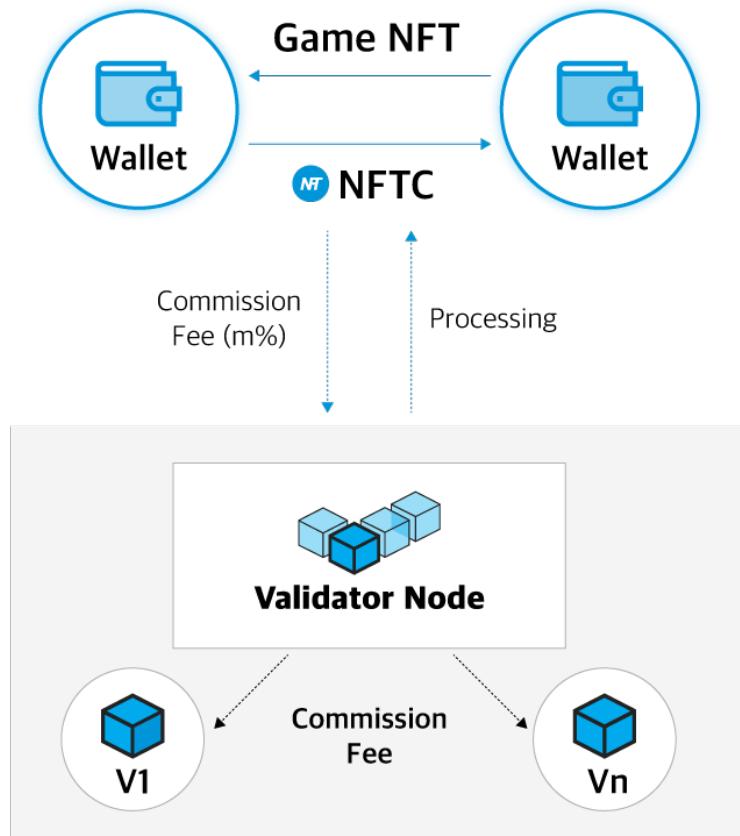
□ V-NFT Overview

itemVerse Platform issues Validator NFT (V-NFT) to grant Validator privileges.

The general features of V-NFTs are as follows:

- **V-NFT deals in the same form as other Game Item NFT**
- **When a V-NFT holder generates a Node, it is recognized as a Validator Node**
- **Those with V-NFT can operate the Validator Node**
- **Validator handles NFT transaction every time it takes place**
- **Receive a commission equal to m% from itemVerse Mainnet in exchange for processing**

The size of the transaction commission is determined by Governance, and if there are many validator nodes, the transaction commission will be divided equally. ItemVerse will produce only 200 V-NFTs.



V-NFT Structure

□ V-NFT Sale

V-NFT is sold first to investors and shareholders. The reason is to prevent indiscriminate operation of the Validator Node so that it can operate the service smoothly. V-NFT can be purchased using NFTC and other payment methods are not permitted.

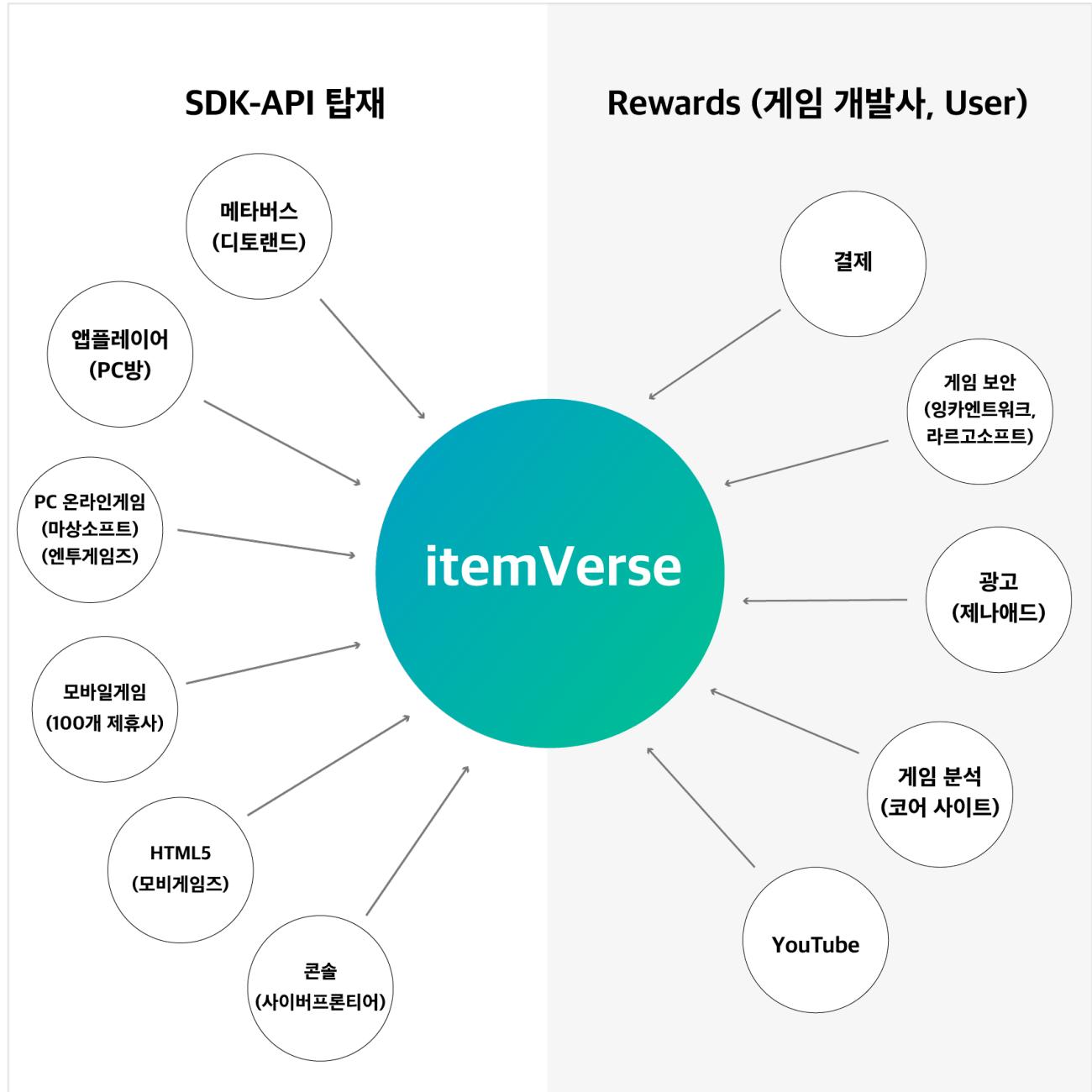
Operators operating Validator by purchasing V-NFT are guaranteed two main forms of revenue:

- **Revenues from transaction commission earned by operating Validator**
- **Staking Rewards from NFTC paid to purchase Validator**

First, the transaction commission refers to the Block Rewards that occur whenever NFT is traded using the itemVerse Platform. The Validator operator earns transaction commission revenue as much as the percentage of the V-NFT it has.

Staking Rewards is paid 1% per month (12% per year) interest on NFTC paid at the time of purchase. All revenue is paid as NFTC.

2.4. Recruiting Affiliates



The recruitment of affiliates consists of two main divisions.:

- Game developers that can connect with itemVerse with SDK and API
- Advertising, security, and analytics companies that can co-exist with rewards

2.4.1. Game Developers

Game developers can easily interact with itemVerse by receiving itemVerse's SDK and API, which can benefit from:

- **Increasing Retention of Users**
- **Game Item NFT Promotional Effects**
- **Auction house automation (commission distribution)**

Games and game-related programs linked to itemVerse provide NFTC to users in proportion to their usage time. Therefore, the retention of users using the game and related programs will increase.

Game Item NFT such as limited quantities can be promoted using pre-sale, and NFT can be resold, resulting in natural promotional effects.

Building an auction house in the game costs a lot of manpower, time, etc. However, NFT allows the use of itemVerse's auction house, and game developers can automatically settle transaction fees whenever their NFT are traded.

2.4.2. Other Partners

Advertising, payment, game analysis, and security companies can also achieve profits through partnerships. Platforms can gather user by paying NFTC to users who use the platform in proportion to the time of use.

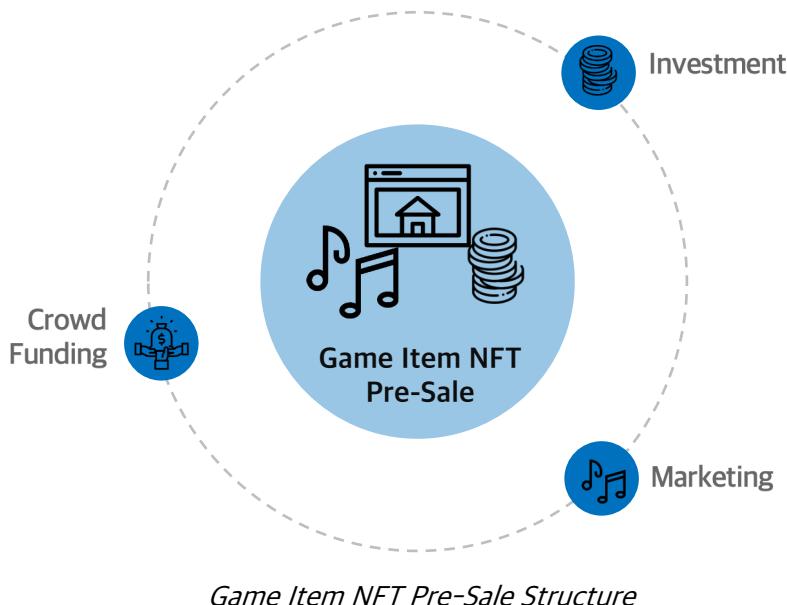
As competition for platforms is intensifying, partnerships that can gather users will work positively for companies. In addition, like games, users can expect high retention, not temporary use.

2.5. Eco-System

2.5.1. Game Item NFT Pre-Sale

Game developers promote and market through the issuance of pre-booking coupons, and the following effects occur:

- **Drag user's attention by promising perks**
- **Increase expectations for upcoming games**



Game Item NFT Pre-Sale, on the other hand, is a method of making a limited edition of Game Item, etc. into NFT and selling it in advance. The published Game Item NFT is recorded on the Blockchain of the ItemVerse Platform, and the published quantity is released. Pre-sales have the following expected effects:

- **Game Item NFT Price Changes based on Game Success**
- **Users purchase Game Item NFT as an investment concept for future value**
- **Game developers raise money for game development and promotional expenses before the game is released**

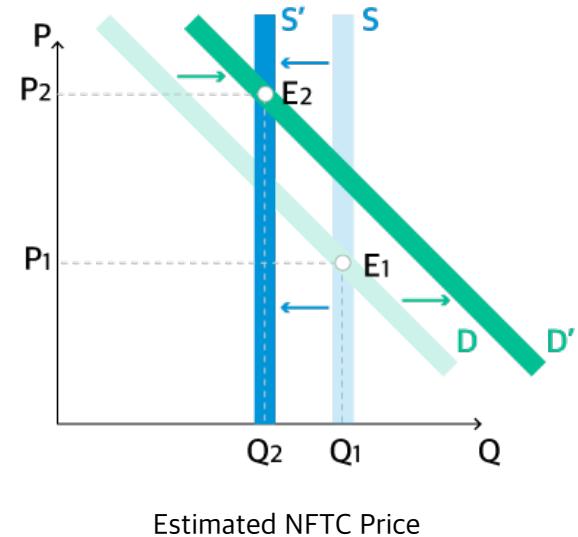
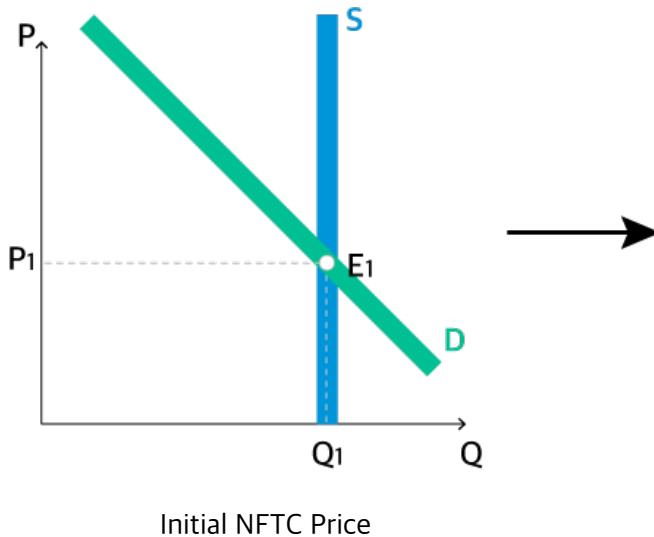
In this process, itemVerse can set a certain commission, resulting in minimal service revenue.

2.5.2. NFTC Price Forecast

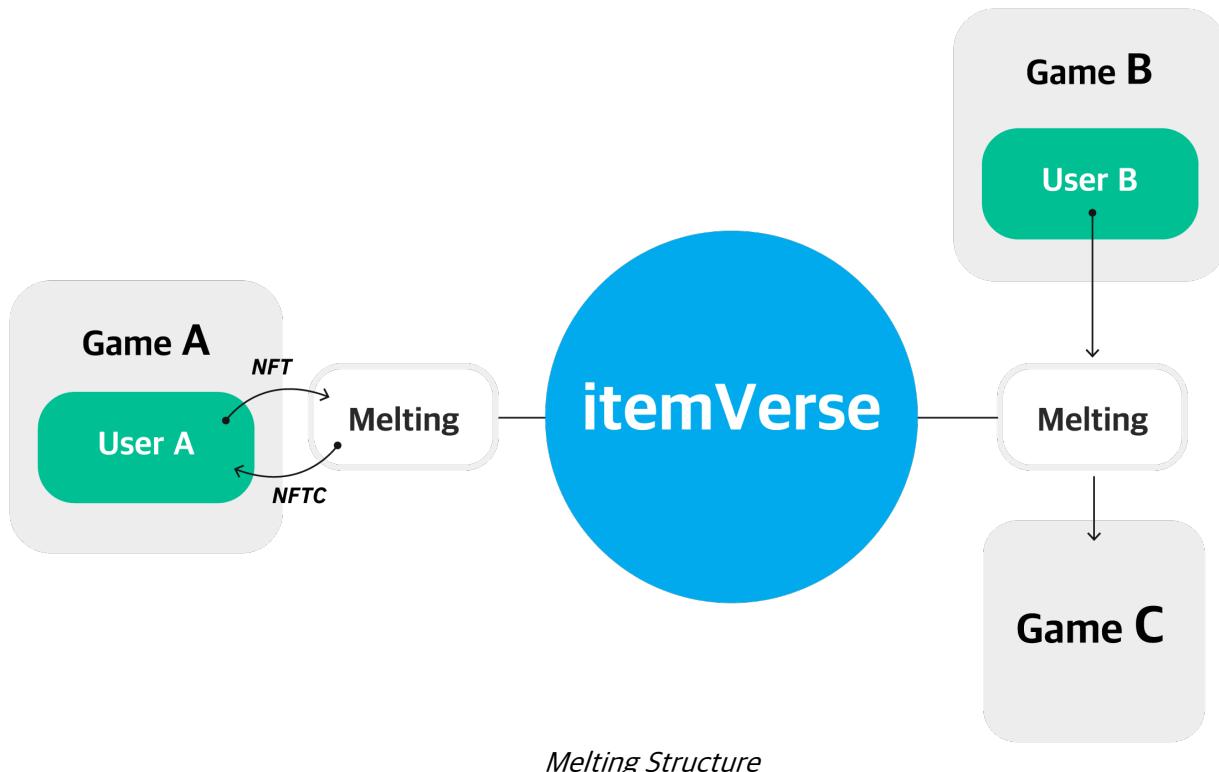
The price of NFTC used in itemVerse is determined through an open exchange. However, with the operation of the service, NFTC's price will increase over time. These predictions are illustrated based on the demand and supply curves of traditional economics.

- Increase NFTC role with itemVerse activation
- NFTC demand increases as itemVerse Platform becomes active
- NFTC supply fixed and additional non-issuance
- NFTC failure occurs as itemVerse Platform operating period increases
- Increased number of people holding NFTC for speculation reduces NFTC distribution

The number of NFTC issued is fixed at 10 billion, but the actual NFTC distribution felt by users for the above reasons is less than this. Therefore, as itemVerse project is completed and the operating period continues, NFTC's price will continue to rise.



2.6. NFT Melting



Melting is a way to recycle Game Item NFT that are no longer available. When the game service is terminated, NFT loses its value of use. However, it guarantees minimal value by using Melting.

- **Send NFT to itemVerse Platform and receive NFTC in return**
- **Switch to Game Item NFT for other affiliated games and transfer user to that games**

User can choose one of two methods.

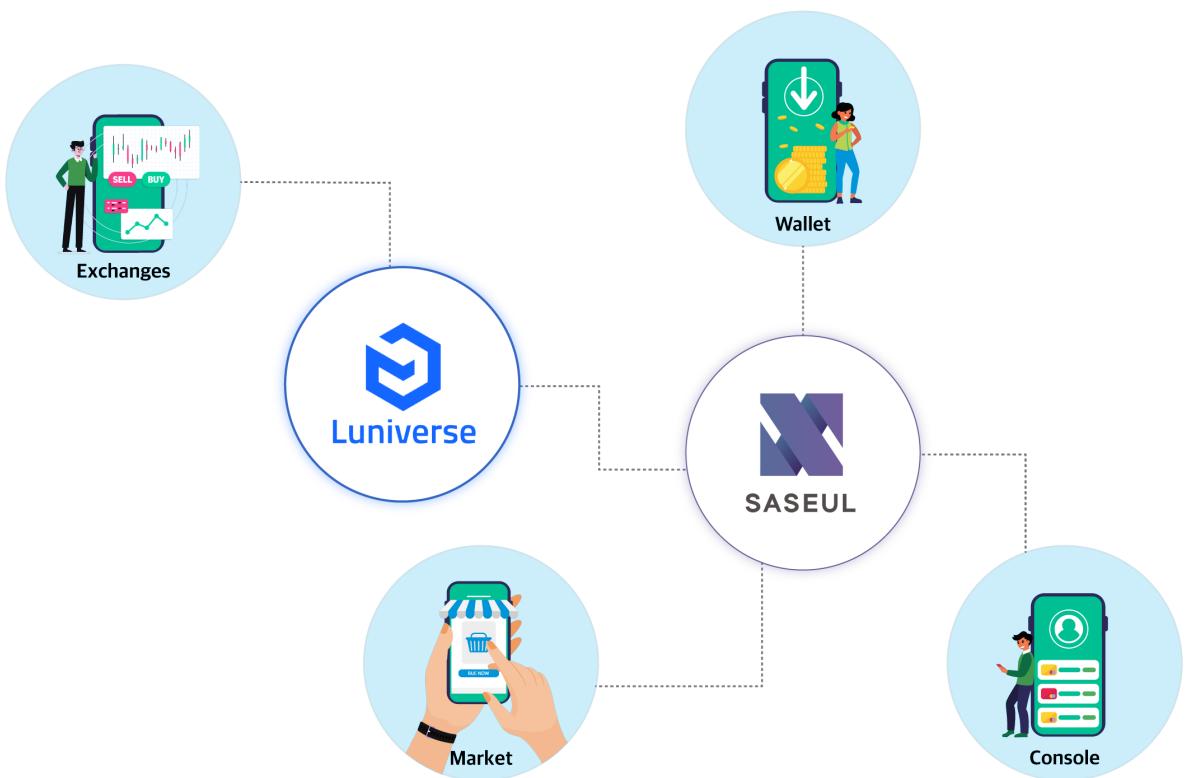
First of all, NFT that have no use like Game A can be replaced with NFTC to minimize damages. Alternatively, Game B continues to play Game Item NFT as another game affiliated with Game C. In the latter case, it is a great benefit for Game C's operators because it is a Paying User movement.

3. itemVerse Mainnet

itemVerse consists of the following:

- **Public Network - Luniverse for interworking with cryptocurrency exchange**
- **Private Network - SASEUL for being utilized in in-game**

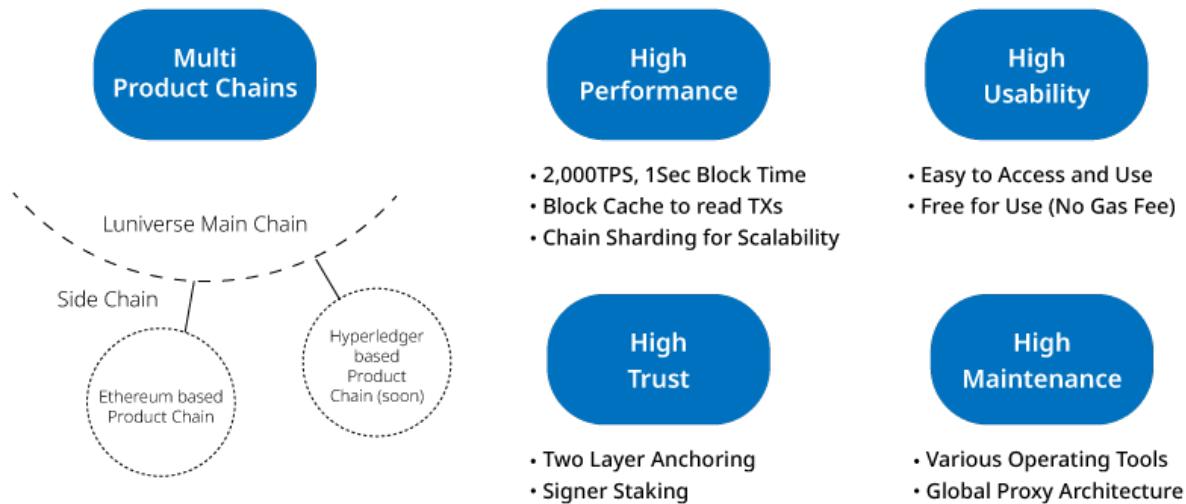
Public Network is based on Ethereum using Luniverse, which is one of the pillars of the Korean Blockchain industry running BaaS. Private network to be utilized in in-game is developed and built on SASEUL, and NFTC is managed by Sidechain.



itemVerse Mainnet Structure

3.1. itemVerse Mainnet Spec.

3.1.1. Luniverse Spec.



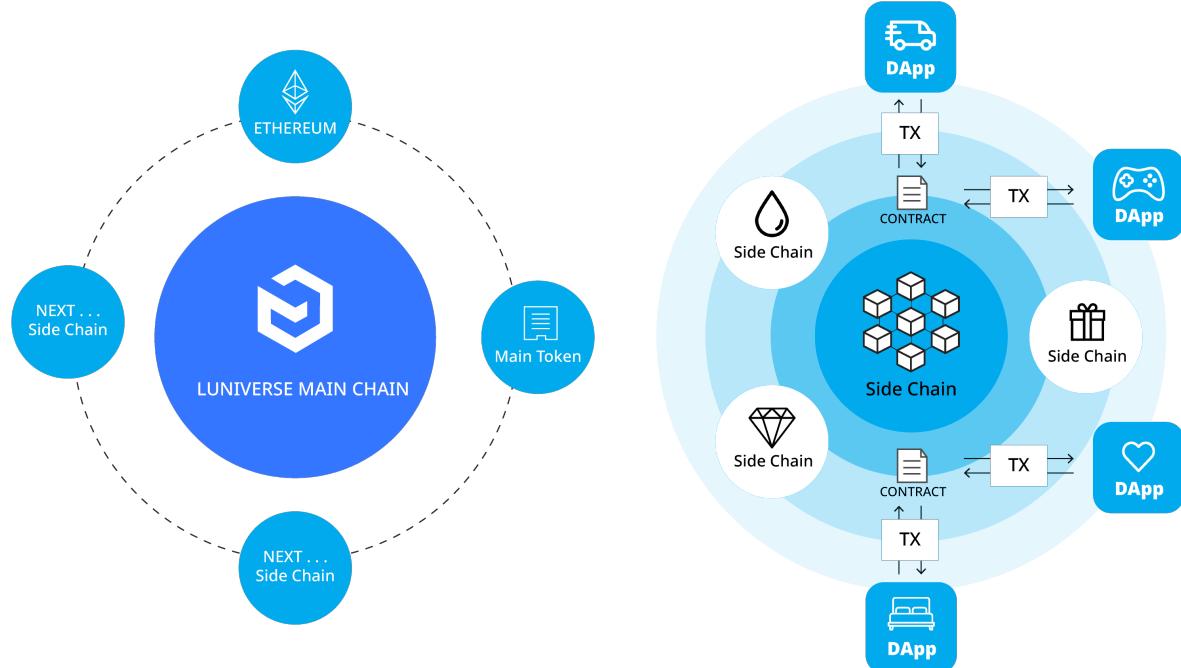
3.1.2. SASEUL Engine Spec.

	SASEUL	ETHEREUM	COMOS	HYPERLEDGER	EOS
Finality	1~5 seconds	1.5 Min	3~7 seconds	N/A	less than 1 seconds
Speed	1,000 tps (global scale), 3,000 tps (Asia Scale), 10,000 tps (local)	- 15 tps -	- 1,000~3,000 tps -	- N/A -	100,000 tps, 3,800 tps (Proven)
Consensus	PoR (HAP-2)	Pow	Tendermint	PoET (Elapsed Time)	dPos
Virtual Machine	SASEUL Commit Engine	EVM	-	Various	EOS VM
Demonstration	AWS SASEUL BaaS	Main-net	Main-net	No publi use cases	Main-net
Architecture	Multi-Blockchain	Single-Blockchain	Cosmos Hub	Modular complex architecture	Parallel processing

3.2. Public Network Engine - Luniverse

Luniverse is a blockchain network and BaaS developed by Lambda256, a research subsidiary specializing in Blockchain of Dunamu Corporation, which develops and operates South Korea's largest cryptocurrency exchange "Upbeat." Luniverse shares its trajectory in terms of direction with the development goal of a practical blockchain pursued by itemVerse

□ Easy Connection with Sidechain



Luniverse main chain can be configured based on Ethereum or Hyperledger Fabric. However, Ethereum and Hyperledger Fabric have their own drawbacks:

- **Ethereum: Slow processing makes large-scale service applications difficult**
- **Hyperledger Fabric: Decentralization by Ordered Queue**

itemVerse adopted Ethereum and actively uses sidechain sharding supported by Luniverse to solve Ethereum's speed problem. Sidechain sharding reduces the burden of main chain and enables smooth dApp service.

□ Lambda256 BaaS Features



Until now, companies had to develop and operate Blockchain themselves to apply Blockchain technology to their services. However, even with the already widely used Ethereum and Hyperledger protocols, it is not easy to transform them into forms that can be utilized in Blockchain DApps.

- **For Ethereum, there is a language barrier called Solidity.**
- **Hyperledger limits access to companies due to the difficulty of technology.**

Luniverse, provided by Lambda256, is the most powerful alternative to addressing the above challenges for companies. Luniverse provides users with the following functions:

- **Connectivity to Cloud such as AWS, GCP, MS Azure, and others**
- **Leverage more blockchain protocols**
- **Apply this to the development platform at once**

This allows customers of Luniverse to focus only on developing DApps and distributing services and enable more efficient resource distribution.

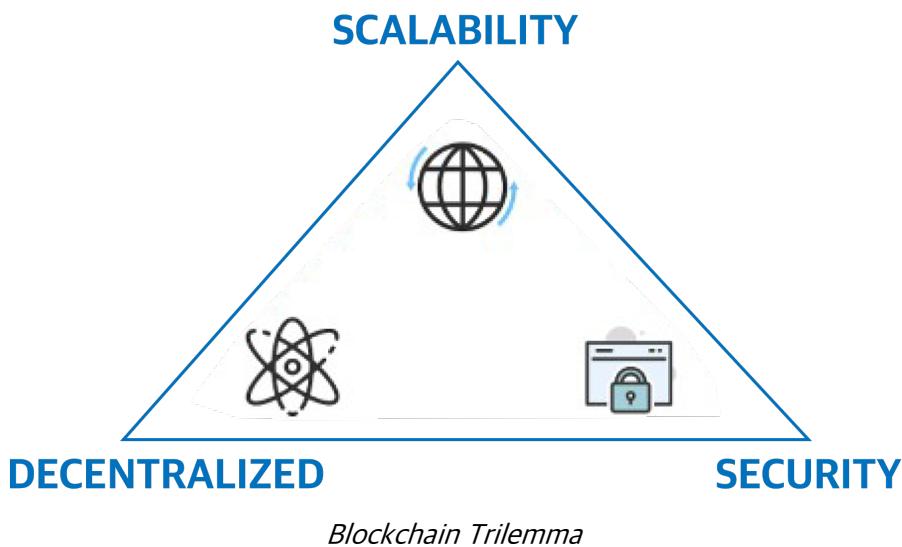
3.3. Background Engine - SASEUL

itemVerse uses SASEUL as a blockchain to implement NFT and GIP. Rather than developing all technologies from scratch, itemVerse Mainnet can be configured using an already equipped Blockchain engine, which describes the advantages and characteristics of SASEUL and scrutinizes SASEUL's differentiated features.

3.3.1. Description

Blockchain is a decentralized system-based data transfer/storage technology that stores network records and others in the form of unmodifiable blocks, based on the concept of creating blocks containing data at regular intervals and then connecting previous blocks like chains. In other words, it is also called a public transaction book by all (node) participating in the transaction distribute, store, and chain data into blocks, and is considered a key technology to improve data reliability and stability.

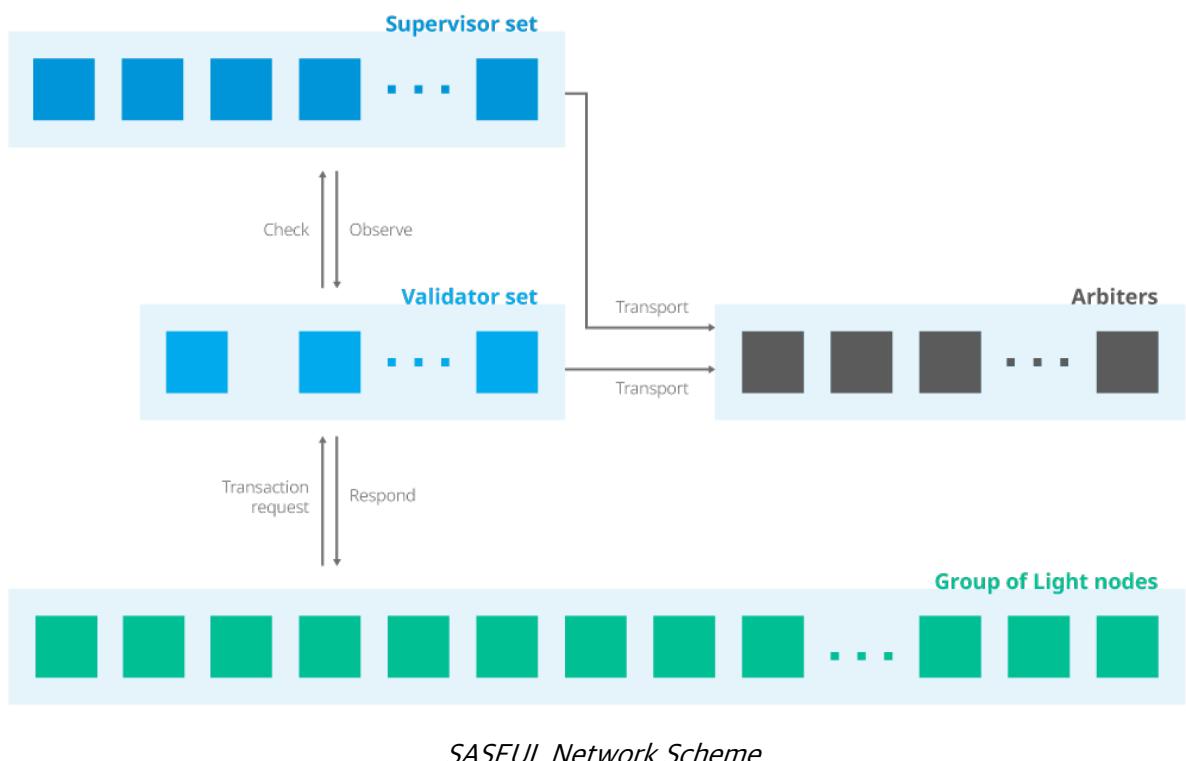
□ Limitations of Existing Blockchain Technology - Trilemma



Few existing blockchains feature all three characteristics: decentralization, stability, and performance. This is known as the Trilemma of Blockchain. SASEUL is a blockchain with stability and performance without compromising the first value of a blockchain.

3.3.2. Consensus Algorithm - PoR

SASEUL uses Hypothesis Acceptance Protocol (HAP) to unify the data in the network, among which it uses a more stable HAP-2. The key to this algorithm is to view future block data as one hypothesis, and to determine it as a block after a process of merging all hypotheses. In addition, if there is a block that has already been created, it is also considered as a hypothesis, and each Node determines self-centeredly whether to accept it or not. We propose PoR as a term meaning that the criterion of the decision is viewed as a rule and that it must be demonstrated in accordance with the rule to be recorded in the block. This has an advantage in that even if the number of validators increases, the network speed does not decrease, and bottlenecks do not occur compared to PoS. It can also address the phenomenon in which nodes with high computing power have an advantage, as in PoW.



3.3.3. Node Configuration

□ Light Node

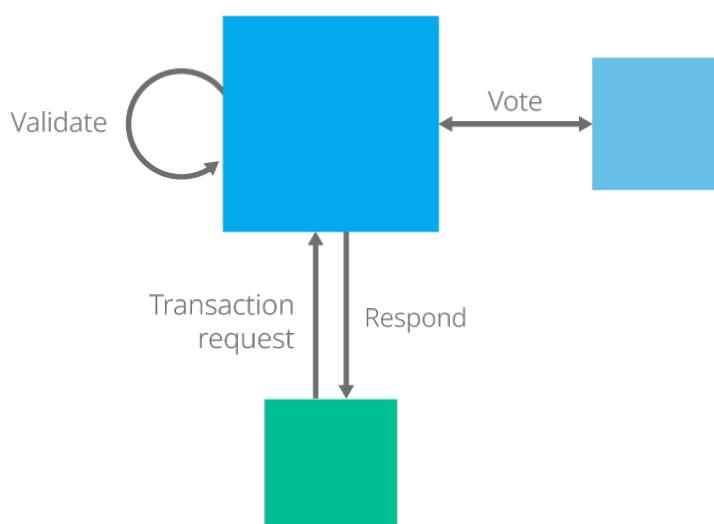
It is the most basic node included in the network and is mainly used by service end-users such as wallets. Node includes its own private key and tracker, which allows transaction creation, requesting, and checking results.



Light node generates and transmits transaction requests.

□ Validator

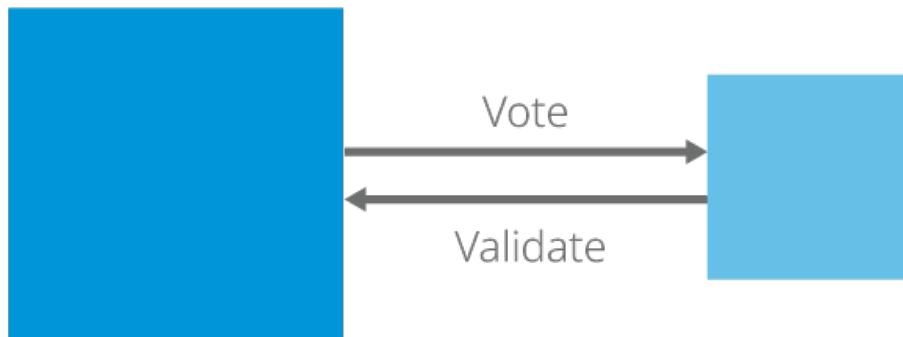
It is a node that synchronizes with all existing blockchain and is approved to participate in an agreement. Validator receive transaction requests from the network, agree on approval and rejection, and generate block-shaped data. The agreement proceeds according to the policy code (Policy Smart Contract) pre-designed by itemVerse, communicates directly with the Light node, hashes the generated blocks periodically and transfers them to the arbiter.



Validator is directly involved in the processing of transactions and performs the functions of transaction request approval, validate, vote, and response.

□ Supervisor

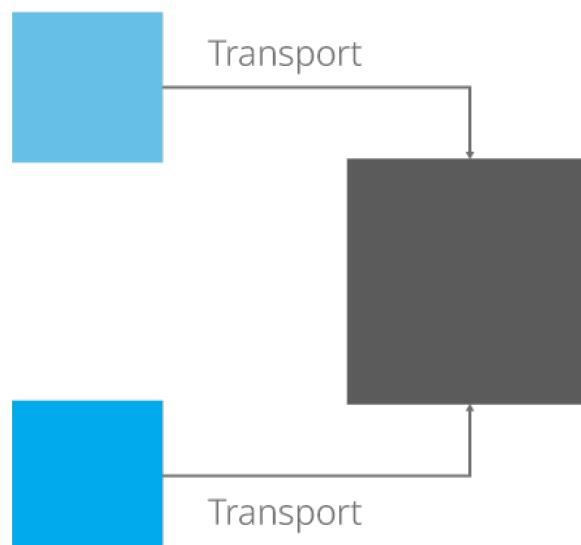
It is a node that serves as a watchdog to ensure that the network generates the correct blocks and stores them. It is possible to detect problems such as false hash generation, but it does not perform functions that directly affect the network, such as directly generating transactions for verification and punishment.



Supervisor checks all consensus and determines if it is correct. This can be referenced by the Validator as a basis for judgment.

□ Arbiter

A node that stores all blockchains. It is a node that exports data so that historical records can be contrasted against validation requests from Validators without engaging in decision-making and solves much of Blockchain's book storage space problem.



Arbiter receives and stores data at the end of the chain lifecycle.

4. Team & Partners

"Korea Game NFT, Inc." was established to pursue the public interest purpose of revitalizing the Blockchain game market and was established as a democratic corporate system in which all shares owned equal shares without major shareholders.

4.1. Core Members

- | | |
|--|---|
| <ul style="list-style-type: none">▪ 김학민 (CEO, Business Lead)• Encom Holdings, CEO• Bitlink Director• Amusebank Founder, CEO | <ul style="list-style-type: none">▪ 이정우 (CTO, Development Lead)• Undergraduate., Dept. of Mathematical Science, KAIST• Woowa Brothers Infrastructure Developer.• Technical Adviser of ArtiWealth• CEO of ArtiFriends Inc. |
|--|---|

4.2. Core Developers

- | | |
|---|--|
| <ul style="list-style-type: none">▪ 이용재 (Developers)• B.S. in Computer Science, Kaist• Former Developer in JPCOMPANY• Former Developer in Artifriends Inc. | <ul style="list-style-type: none">▪ 이재인 (Developers)• B.A. in Asian History, SNU• B.S. in MOT, SNU• Former Developer in M&J• Former Technical Adviser of Midam• Former SSAFY (Samsung SW Academy)• Developer in Artifriends Inc. |
| <ul style="list-style-type: none">▪ 한솔(Developers)• B.A. in Aesthetics, SNU• Former Developer in ATOZ• Developer in Artifriends Inc. | |

4.3. Stockholders (A Total of 35 People)



▪ 황성익 회장

- 現 (사)한국모바일게임협회 회장
- 現 (사)한국블록체인콘텐츠협회 회장
- 現 (사)부산인디커넥트페스티벌 집행위원장
- 現 국회 대한민국게임포럼 공동의장
- 現 인디크래프트KGF 조직위원장
- 現 (유) 법무법인 신원 고문

황성익(한국모바일게임협회 회장, 한국블록체인콘텐츠협회 회장), 김현규(게임업계 : 라티스글로벌
부사장, 협회 수석부회장), 엄대훈(회계사 : 삼덕회계법인 상무, 협회 감사), 김진욱(변호사 : 협회
고문변호사, 법무법인신원 대표 변호사), 박영곤(게임업계 : 넥셀론 대표), 김도형(게임업계 :
버프스튜디오), 맹상영(게임업계 : 엔클라우드24 대표, 협회 부회장), 장목환(게임업계 : 오르고소프트
대표, 협회 부회장), 정철화(게임업계 : 제이앤컴퍼니 대표, 협회 부회장), 김효상(게임업계 :
블록체인미디어 어댑터, 시니스트 대표, 빗썸상장, 협회고문), 배성곤(게임업계 : 스프링컴즈 고문, 협회
고문), 이택수(언론인 : 데일리게임즈 대표, 한국게임전문미디어협회 회장), 장승렬(게임업계 : 슈퍼박스
부사장, 협회 자문위원), 박경재(게임업계 : 스카이피플 대표, 미네랄코인, 코인원 상장),
권재륜(투자업계 : 한국기업투자 대표), 양영호(게임업계 : 해외 몰타 법인 대표), 이주찬(게임업계 :
엑솔라코리아 지사장, 협회 부회장), 이강용(블록체인업계 : 온버프대표, 협회 부회장, 업비트 인도네시아
상장), 유재범(블록체인업계 : 몬스터큐브대표, 비트베리 지갑 서비스, 소다코인운영, 빗썸상장),
최강배(게임업계 : 라이크코퍼레이션, 본 협회 이사), 이민준(한국블록체인콘텐츠협회 부회장 :
트라이엄프엑스 대표, 빗썸 글로벌 상장), 임정훈(변호사 : ADC 코인대표, 포블게이트 상장),
강삼석(게임업계 : 마상소프트 대표, 한국게임산업협동조합 이사장), 노홍균(블록체인업계 : 프로빗 대표),
아티프렌즈(메인넷 플랫폼 개발사), 한국모바일게임협회, 이대형(파티게임즈 설립자), 흥성주(前
다음게임 대표이사, 現 펠어비스 감사), 장봉석(매그니스 대표), 윤순직대표등 총 35명

4.4. Partners

4.4.1. itemVerse Partners (About 100 Companies in the Korean Game Industry)



SKY PEOPLE





playworks

UbiFun

파이낸셜뉴스

The **financial** news



4.4.2. KMGA Partners (About 1,000 Domestic and Foreign Game Companies)



4.4.3. Partners' Games (About 300 Games)

 아케인M	 에이스온라인-듀얼X	 Dkonline Global
 AsdalGlobal	 AceOnline Europe	 AceOnline Japan
 아스트로네스트	 데카론	 라그하임
 DK온라인	 프리스톤테일	 건즈
 콜오브카오스	 에이스온라인	 출조낚시왕
 스키드러쉬	 능력자X	 Strikers 1945m
 Strikers 1999m	 GUNBIRDm	 TENGAI M



Strikers 1945 SAGA



Strikers 1999 SAGA



GUNBIRD SAGA



TENGAI SAGA



디토랜드



로그유니버스



리볼트



오션헌터® : 매치3 퍼즐



퍼즐의 숲



Project XD



매드포댄스-탭



Villains robot battle royale



블록 드래곤 킹



야광벽돌 Glow



야광벽돌 lite



글로우서클



글로우핑퐁



글로우디펜스



글로우 락



글로우 무브



글로우 퍼즐



갤럭시 러시



활 히트



블럭쌓기



용사는 타이밍 VIP



미스틱 가디언 VIP



테마 솔리테어 PV



언더월드 오피스



갤럭시 아이돌 PV



용사는 파티중 PV



마이 오아시스



세븐데이즈



갤럭시 아이돌



꿈꾸니까 로맨스인 거잖아



용사는 타이밍



용사는 진행중 어드밴스드



마이 컬러링



미스틱 가디언



용사는 진행중



스와이프롤링



테마 솔리테어 트라이피кс



아르고의 선택



언더월드 오피스



세븐데이즈



용사는 진행중 어드밴스드



용사는 파티중



용사는 진행중



머지 레이싱 2021



몬스터 피싱 2021



피싱앤파이프



Space Rider 2019



볼링 클럽



리얼 아처리 2021



피싱시즌



마이시티



2048 낚시



Poly Star



솔리테어



워드 랜드



댄싱퀸 : 클럽 퍼즐



픽셀워:포토



드랍 더 넘버®



후르츠 마스터



스푸키즈 팝



캔디프렌즈 포레스트



미로찾기 : 루키



쥬얼 헌터® 로스트 템플



버블헌터



양떼목장 키우기



빙고 베이™



쥬얼랜드®: 매치3 퍼즐



슈가헌터: 매치3 퍼즐



벽돌깨기왕



캔디 프렌즈®



헬로캔디 블라스트®



후르츠 마직®



쥬얼스 정글™



블록 퍼즐 팝



슈가팝®



버니 블라스터®



쥬얼스 마직 쿼스트



캔디 스위트 팝



후르츠 팝™



아이스크림 매니아



쥬얼 블라스트®



쥬얼 캐슬



쥬얼스 매직 램프®



캔디앤쿠키™



쥬얼스 파라오®



스타링크 Free



후르츠 가든



쥬얼스 가든®



헥사 스타링크



블록 퍼즐 킹



골프 히어로 3D



클래식 블라스트™



컬러링크 퍼즐



브릭스 브레이커



드랍 머지



슈퍼브릭스



던전메이즈.io



젤리크루 파라다이스



런닝매니아



슈퍼 아이돌®



블록 헥사 퍼즐



쥬얼 페어리랜드



Bricks Breaker Shooting



벽돌깨기 갤럭시슈터



솔리테어 라이프!



마이솔리테어: 카드놀이



보석 퍼즐 킹

4.5. Coin Policy Committee

It consists of about 10 policymakers, including itemVerse's NFTC Block Rewards, and the company's policy-making body. The main roles of the Coin Policy Committee are as follows:

- **Set the NFT transaction commission**
- **NFTC Block Reward policy determination**
- **Price management for V-NFT**
- **itemVerse Platform satisfaction survey**

Policy decisions at this Coin Policy Committee are carefully made and aimed at maintaining as little variation as possible. The main policy-making bodies for this project are as follows.



4.6. Advisors (About 70 Representatives in the Game Industry)



■ 김인숙 대표

- 카이스트경영대학원
- 前 오리온프리토레이(주) 마케팅본부
- 前 NHN 주식회사 전사/한게임마케팅팀 marketer
- 前 Electronic Arts Korea (유) 마케팅/사업개발/퍼브리싱 상무
- 現 유니티테크놀로지스 코리아 (유) 한국지사 대표



■ 박영목 대표

- 前 마이크로소프트 차장
- 前 엔씨소프트 경영전략실 상무이사
- 前 블리자드 엔터테인먼트 상무이사
- 前 NHN 게임본부 이사
- 現 폴투원코리아 대표



■ 홍성주 대표

- 前 온네트 대표이사
- 前 다음게임 대표이사
- 現 펄어비스 감사
- 現 팀오투(카모아) 대표이사



■ 전선익 대표

- 前 파이낸셜뉴스 도쿄 특파원
- 前 파이낸셜뉴스 LA 특파원
- 現 파이낸셜뉴스 그룹경영기획담당 부사장
- 現 팩트블록 대표이사



■ 구창식 대표

- 前 한국후지쯔주식회사
- 前 일본후지쯔주식회사
- 現 (주)사이버프론트코리아
- 現 (주)씨에프케이 대표이사



■ 최삼하 교수

- 現 서강대학교 게임교육원 교수
- 現 게임물관리위원회 기준정비위원/등급재분류위원
- 現 게임문화포럼 위원
- 現 Gen.G-ELite아카데미 수석고문
- 現 4K&Co esports education company co-founder



▪ 양선우 대표

- 중앙대학교 첨단영상대학원 박사(수료)
- 前 한국전자통신연구원 연구원
- 現 찰라브로스(주) 대표이사
- 現 (주)버드레터 대표이사



▪ 김홍석 대표

- 서강대학교 일반대학원 커뮤니케이션학 박사(수료)
- 前 엔씨소프트 재팬 사업개발팀장
- 前 서강대학교 게임교육원 교수
- 前 한국VR산업협회 사무국장
- 現 스토익엔터테인먼트(구 케이크테라피) 대표이사



▪ 김철환 대표

- 現 라르고소프트 대표이사
- 現 블록체인벤처스 어드바이저
- 現 모바일게임협회 부회장사
- 現 한국저작권보호원 자문위원

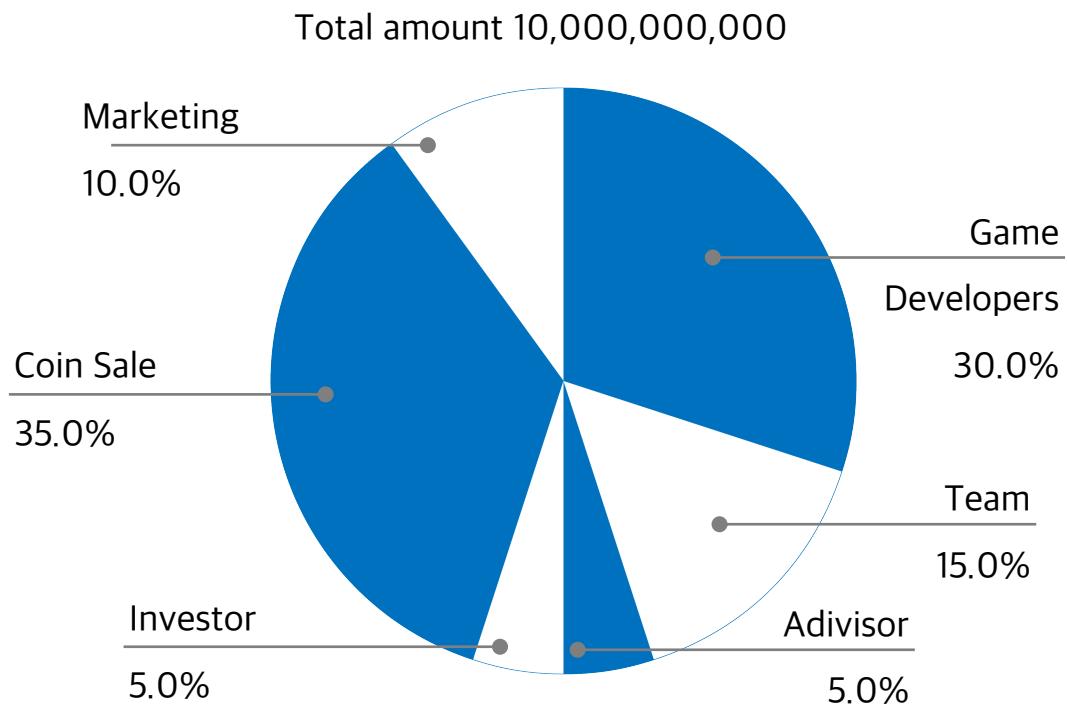
그 외

윤선학대표(중원게임즈), 김환기대표(에이앤게임즈), 서양민대표(안드로메다게임즈),
최명일대표(아이오아이게임즈), 송원영대표(모비게임즈), 강백주대표(머스트게임즈),
조영종대표(플라게임즈), 이태환대표(그레고리글로벌), 강병종대표(아름게임즈),
함익현대표(브레드해머), 조도연대표(쏘뉴), 이종하대표(디디디게임), 조민혁대표(로우핸즈),
김성수상무(한영회계법인), 김경묵대표 (지디넷코리아), 최삼하교수(서강대학교 교수),
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*전기형대표(미스터게임즈)

* 미확정

5. Project Plan

5.1. Token Allocation



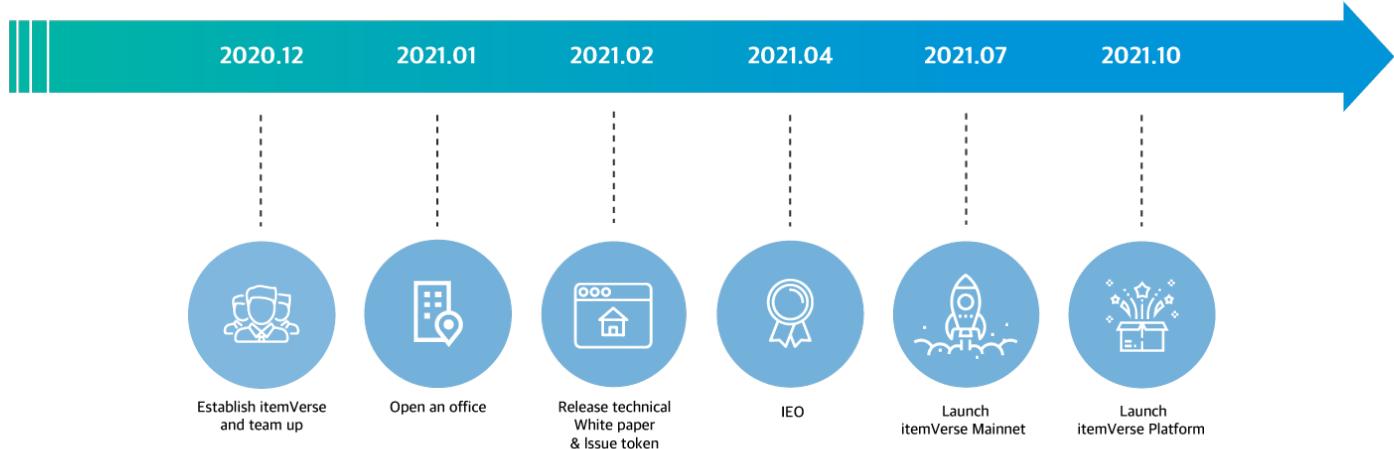
5.2. Token & Coin Sale

Method of Sales	Price
Private sale	Only for V-NFT buyer & Stockholders
Pre-sale Phase I	TBD
Pre-sale Phase II	TBD
Estimated Listed Price	TBD

5.3. Milestones

Milestone

2020.12 Business Setup



- **January 2021: ItemVerse Team Configuration**
- **February 2021: Whitepaper distribution and Token issued**
- **February 2021: MVP Test Version External Open**
- **June 2021: NFT Global Standard Upgrade and Open (NFT 2.0)**



itemVerse

: Game Item Protocol Project using NFT(Non-Fungible Token)
2021 itemVerse