Treasureverse PROJECT

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Chapter 1. Overview

Treasureverse is an integrated platform for the diamond industry that upgrades the distribution, consumption, and base culture of diamonds. It draws a new trajectory of the diamond industry through TVS Global's history tracking and trading system and trust network blockchain technology.

Treasureverse Platform(TVS)

Treasureverse project is to recreate a transparent and safe distribution environment, such as tracking the origin of diamonds that are exposed to forgery, certifying quality and design. Through this, the goal is to solve the unfair problem of diamond distribution and create an ecosystem that forms a virtuous cycle structure within the platform.

The Treasureverse platform establishment based on a blockchain represents a new direction to the time-consuming and costly problems of traditional distribution irrationality.

The solution presented by the Treasureverse project is to issue a certificate of origin of diamonds as NFT through a platform built on the blockchain, store genuine certificates issued by the Gemological Institute of America (GIA), and register and manage information on details that can verify quality, such as diamond color, cut, size, and transparency. In addition, by issuing NFTs for each jewelry design, it intends to give value of scarcity and strengthen ownership to revitalize the market.

Life Style Finance

Treasureverse aims to become a "life-style finance platform" beyond just a platform that serves as a marketplace for diamond trading. Investment opportunities are given, such as distributing rate of return to investment by funding imports of Rough stones or Loose stones (cutted but not set in jewelry) in the form of one combination investment product. It plans to gradually provide various diamond-mediated financial services such as auctions and diamond mortgage loans for rare diamond works.

In order to accomplish this, a Utility Token that can benefit from various transactions on TVS will be issued to ensure liquidity. It will revitalize the ecosystem through a Treasureverse Token (TVS) linked to TVP points, which play the key role of TVS platform, and help users, products, and digital assets form a virtuous cycle. In addition, by operating a membership system in the platform ecosystem, we intend to expand the business area to a platform that curates various lifestyles for all users on the TVS platform through deductible or returnable membership products.

Treasureverse Platform

- Diamond Marketplace
- Country of origin NFT Minting



Figure 01. Treasureverse Project Outline

Chapter 2. Background

The diamond industry is in crisis as many mines and polishing centers have closed due to the COVID-19 pandemic, and global economic instability is eating into demand. Small mining companies such as Petra Diamonds, Domion Diamond Mind, and Mountain Province shut down some of their mines due to the spread of COVID-19, which disrupted the supply of loose diamond stones.

In addition, jewelry fairs held annually in several countries around the world have been canceled, and diamond distribution and diamond jewelry trade have not been carried out properly. As a result, the global loose diamond stone markets and diamond jewelry markets are facing a sharp drop in sales.

The jewelry industry began to be directly affected by COVID-19 in March 2020. Sales have plummeted and transactions have not recovered normally. More importantly, offline companies' sales have fallen more than online companies due to differences in sales volume depending on the type of distribution.

According to Bloomberg and others, the global diamond market was almost "stopped" in the first half of 2020. This is because most jewelry stores closed after the COVID-19 pandemic, and consumers cut back on luxury goods. However, sales in China and the U.S. have soared since the second half of 2020. According to CNN, sales of jewelry in the U.S. in August 2020 amounted to \$5.25 billion, up about 10 percent from the same period last year.

De Beers, the world's largest diamond producer, said sales of rough diamonds rose 18% in the first period of 21 from the same period last year, and sales of diamond ore increased further after the COVID-19 pandemic.

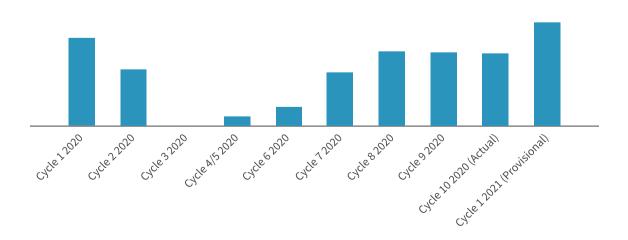


Figure 02. The increased rough diamonds sales of De Beers before COVID-19 (Source: De Beers)

A new report from market research solutions company, Reports and Data estimates that the global diamond market will reach \$113.63 billion by 2027. According to Grand View Research, a global research consulting firm, the global luxury jewelry market will grow at \$37.4 billion by 2020, averaging 8.2% annually from 2021 to 2028.

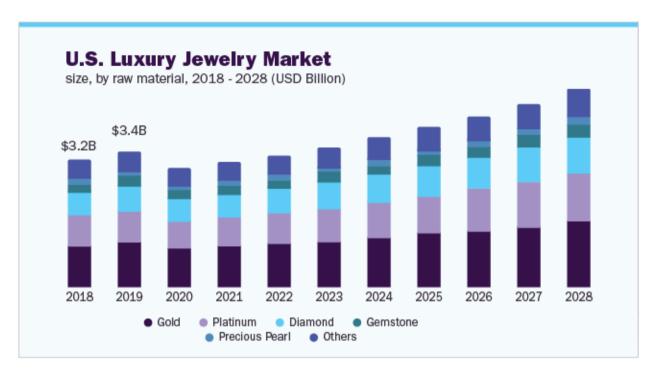


Figure 03. Luxury Jewelry Market Size & Share Report, 2021-2028(Grand View Research)

According to Rapaport statistics, exports of loose diamond stones in June 2021 were the highest since 2019. The import of rough stones nearly tripled to \$1.01 billion, and the export of rough stones quadrupled to \$1.09 billion. In the first half of 2021, the total import and export amount of rough stones was \$10.4 billion, up 11% from the same period in 2019.

RapNet Diamond Index (RAPI™)					
	Мау	Year to date Jan. 1 to Jun. 1	Year to date Jan. 1, 2020 to Jun. 1, 2021		
RAPA 0.30 ct.	0.9%	0.6%	8.0%		
RAPI 0.50 ct.	1.2%	-1.3%	15.4%		
RAPI 1 ct.	0.8%	5.1%	18.8%		
RAPI 3 ct.	1.6%	4.5%	13.9%		

Figure 04. Rapaport Diamond Index(Rapaport Diamond Report, 2021)

The atmosphere of the diamond market in the first half of 2021 remained positive thanks to increased jewelry sales in the U.S. and China. Supply shortages and a rapid recovery in demand also supported loose stones prices. The RAPnet diamond price index for one carat loose diamond rose 0.8%. The diamond market rose due to a shortage of supplies. However, in the diamond rough market, supply shortages occurred, and prices rose.

India continues to purchase large amounts of raw stones despite the decrease in polishing production due to the re-diffusion of COVID-19. India imported \$1.7 billion in rough stones in April. This is a significant increase from before the pandemic. In addition, demand for 0.30-0.50 carats, D-H colors and IF-VS2 diamonds decreased, but rose again. As a result, the inventory level of the item has decreased.

India's loose stone exports rose even though the GIA Mumbai and Slat appraisers delayed their appraisals by a month, while U.S. and Chinese jewelry companies continued to charge stocks. With the Indian industry struggling to recover money amid the pandemic, cash buyers are increasing their cash liquidity. The industry is emerging from the 20-year crisis, with higher cash liquidity and less reliance on bank loans.

Meanwhile, the GIA (Gemological Institute of America) announced in July that the demand for diamonds with certificates continued to delay GIA's certificates, increasing the number of diamond certificates issued by GIA India from before the pandemic. In fact, the average number of weekly certificates issued by Mumbai and Slat Appraisal Offices in 2021 increased 37 percent from 19 years to 31 percent from 2021.

The surge in online sales also affected the demand for GIA certificates. In online transactions, people usually buy diamonds without looking at them, so they rely on reliable and authoritative certificates. According to GIA's diamond evaluation certificate, sales of diamond products with GIA certificates are increasing due to the recognition and reliability of the results of the evaluation in the global market. As a result, sales of diamond jewelry with certificates on the Internet have increased despite the decrease in demand offline.

In order to revitalize the diamond market in the era of "With-Corona", it is necessary to break away from offline-centered trading and increase the proportion of online businesses and operate in parallel with offline markets. At the same time, safety measures should be prepared to minimize the inconvenience of non-face-to-face transactions, such as establishing a stable and transparent trading system and ensuring a secure distribution network.

Chapter 3. Ecosystem

1. Treasureverse (TVS) Platform

Treasureverse (TVS), a blockchain-based platform where the project runs, will start as a marketplace-type platform for diamonds and eventually expand its service and business area to a "Life Finance Platform" that provides various financial products such as investment opportunities for rough and loose stone imports and loan services for diamonds.

The TVS platform, built on the basis of the Ethereum blockchain, reflects the life cycle of diamonds, and all transactions occurring at each stage of the life cycle are safely executed by smart contracts, all transactions are recorded, stored, and verified on the blockchain.

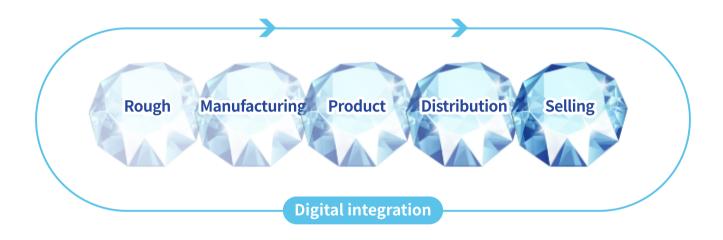


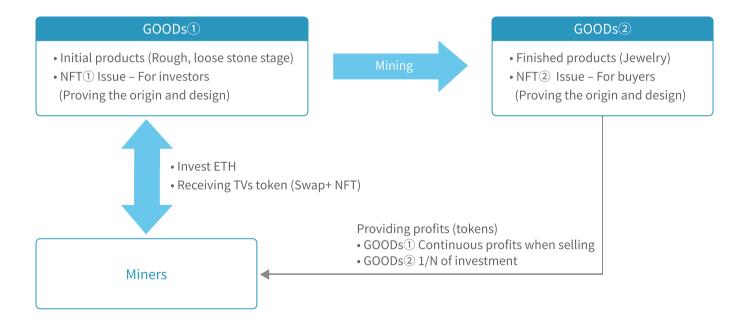
Figure 05. Diamond Life Cycle

The history of Rough Stone and Loose Stone, which are traded on TVS platform, is recorded and managed in blockchain. The TVS platform issues a certificate of origin of diamonds as NFT (Non-Fungible Token), stores genuine certificates (certificate of authenticity), and registers and manages information on details that can verify quality, such as color, cut, size, and transparency of diamonds on the blockchain.

In addition, the TVS platform will have an unrivaled competitiveness in the global market by discovering and mass-producing the best jewelry designers by forming a pool of experts named "K-Jewelry Designers" within the platform. Customers in the TVS platform can select the design of the K-Jewelry designer or related designer owned by the Treasureverse project team to work on the jewelry they want when making jewelry by selecting the loose stones. It also plans to ultimately lead to the revitalization of the new jewelry market by giving the value of scarcity to products and strengthening ownership by issuing designers' jewelry designs as NFTs.

TVS individual solution Blockchain the GIA certificate that cannot be forged by issuing the certificate of origin into NFT • Ddia (D:decentral, dia-diamond) • DApp – launching Android version • User: Mining - Distribution - Process - Designer - GIA (Proof of authenticity certificate) Conceptual Diagram (NFT) **Process** 1. Ddia system: Registering information (Enter) • Material - Miner/Distributer Serial number • Design - Designer QR code • Proof - GIA authenticity certificate 2. Issuing NFT • Issuing agent - Foundation • Business Cooporation - GIA **Check Users** 3. TVS DApp (DApp. Ddia) • Confirming the Origin and GIA proof document

Figure 06. The process of issuing DM origin and design certificates issued by NFT on the TVS platform



Profit distribution formula

- Incentive (license) payment method = rough stone price + design cost + cost (delivery cost) + profit
- Distribution of profits = (profit * 50%)/ N (number of investors)
- Continuous profit generation through licenses (incentives)
- Issuing profits as NFT tokens ① and selling them to others (transfer)

Figure 07. Investment and profit distribution process through NFT issued by TVS

Starting with the issuance of NFT certificates of origin and original certificates of K-Jewelry design traded within the platform, the TVS platform plans to expand NFT issuance areas and build NFT marketplaces that can trade NFT contents more safely and transparently.

On the TVS platform, users can purchase rough or loose, or jewelry that has been set up. All transactions of the TVS platform are made through the TVP (Treasureverse Point), which serves as a key currency for the platform. TVP may be charged and used within the platform, or may be obtained as reward for activities within the platform.

Treasureverse Token (TVS) issued by the platform is based on ERC-20, a token standard for the Ethereum network. TVS Token is linked to TVP, which serves as a key currency for TVS platform. TVS Token is a means of maintaining and sustaining the platform ecosystem, revitalizing the token ecosystem, and becoming a medium for users, products, and digital assets to form a virtuous cycle structure.

• Treasureverse(TVS) Platform

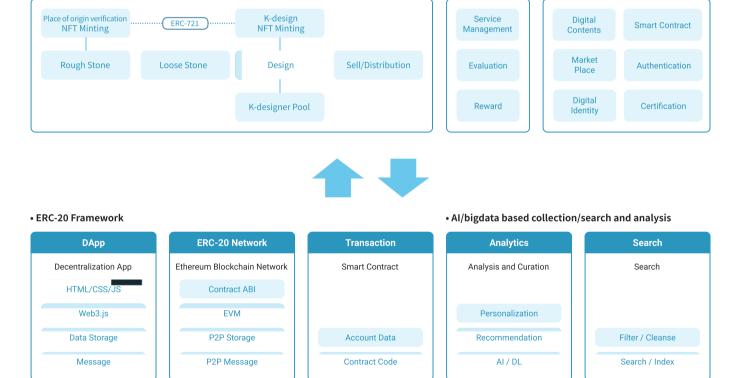


Figure 08. Ecosystem of TVS Platform

2. Token Economy

The TVS ecosystem forms a token economy through TVP (Treasureverse Point), which serves as a key currency for the platform, and TVS tokens issued by the platform. Treasureverse Tokens (TVS) and TVP are used as means of exchange and reward for value within the platform.

TVP is used as a basic means of product transactions within the platform, and is used as a means of paying compensation for user activities and commission income generated from transactions. Users in the platform will basically receive TVP according to the activity index, and TVP can be purchased (recharged) directly within the platform.

TVS tokens purchased through the exchange can be exchanged for TVP on the TVS platform, and services within the platform can be used using the exchanged TVP.

The TVS ecosystem plans to create an expanded token economy by supporting financial services such as De-Fi through the Ethereum blockchain network in the future.

TVP Point

- TVS platform basic payment method
- Exchangeable with TVS Token(1000:1)
- Platform reward giving method
- Obtain through recharge, purchase or rewards

TVS Token

- TVS platform token (ERC-20)
- Exchangeable with TVP Point (1:1000)
- Support staking function

TVS Finance

- De-Fi Service
- Staking Service

Figure 09. Token Economy of TVS Platform

2.1 TVP(Treasureverse Point)

TVP (Treasureverse Point) is a medium that connects the TVS platform ecosystem and is used as a means of exchanging values and rewarding within the platform. TVP is not only used as a basic payment method for asset transactions within the platform, but also as a means of paying reward for commission income and activity indices generated from transactions.

TVP, the basic payment method for all transactions occurring within the platform, can be purchased or charged using virtual assets, and can be obtained as rewards paid depending on the transaction details generated on the platform and the user's contribution to platform activation. TVP acquired as a reward can be exchanged for platform token TVS through the Ethereum network's wallet service and used as a means of trading virtual assets.

Users who obtained or puchased the TVP by completing KYC certification or other verifying system can exchange their TVP into TVS tokens. At this time, the minimum exchangeable point is 100 points, and the exchanged TVS token can be used as a means of purchasing goods and services within the platform.

2.2 Treasureverse Token, TVS

Treasureverse Token (hereinafter referred to as TVS), which creates a token economy for the TVS platform ecosystem, is issued based on Ethereum's token standard ERC-20. TVS Token is designed by applying an economic system in which users continue to stake tokens and reduce distribution based on the principle of value increase. TVS Token is a medium that connects all contents and assets; users and contents; and the TVS platform and users within the TVS platform. It is also an essential factor in expanding the business area and service size of TVS by lowering the barriers to inflow of overseas users.

2.3 TVS Finance

TVS Finance, a blockchain financial service plans to fund the import of rough and loose stones in the form of a combination of investment products and distribute the rate of return to investment. TVS Finance, which is planning to auction unique diamond works and liquid diamond collateral services, provides DeFi and Staking services.

• DeFi, Decentralized Finance Service

TVS platform users can use their loan services secured by their rough or loose stones and diamonds. This is a representative definition service provided by the Treasureverse project on the Lifestyle Finance Platform. DeFi means decentralized finance or decentralized financial affairs. It is mainly operated by using hypothetical assets as collateral to obtain loans or by providing other collateral for hypothetical assets. DeFi is a financial service based on a blockchain. They are primarily based on modular frameworks or open-source protocols for generating and publishing digital assets. These are designed to provide significant advantages in working on public blockchain, such as resistance to censorship and improved accessibility to financial services.

Through lifestyle finance services, TVS platform plans to provide users with opportunities to invest, such as rate of return to investment, auction of rare diamond works, and financing of diamond collateral.

Staking Service

TVS platform users can earn a certain level of revenue by holding platform token TVS through staking services. Staking refers to securing a certain amount of virtual assets as shares, and virtual asset holders deposit (holding shares) virtual assets regardless of price fluctuations and earn a certain level of profit during the deposit period. Since staking is possible in a blockchain network that adopts Proof of Stake (PoS) algorithms, not Proof of Work (PoW), it is expected that the Ethereum network adopted by TVS will be more stably serviced after the complete transition from the existing PoW method to PoS method.

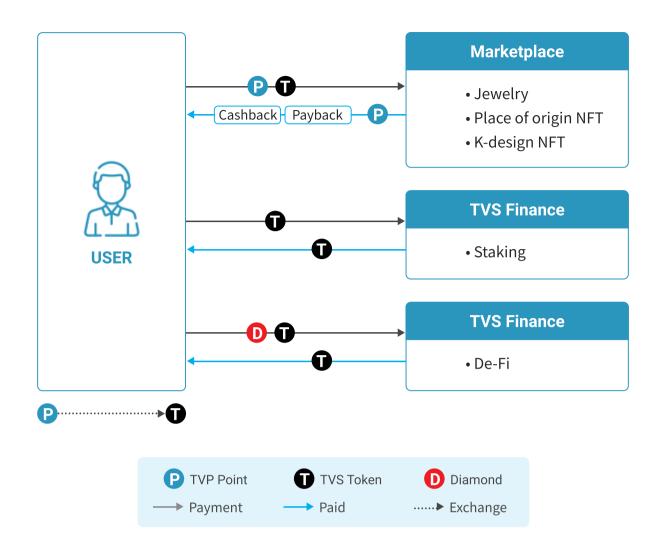


Figure 09. Token Economy of TVS Platform

3. Reward System

TVP (Treasureverse Point) is provided as reward to users who have performed activities that contribute to the activation of the TVS platform. The acquired points can be exchanged for TVS tokens and used as a means of trading virtual assets. The validity period of the TVP acquired as reward for activities within the platform is one year, and if there is no platform login record within the period, it automatically disappears.

The basic contents of the TVS platform's reward system are summarized as follows.

* 1TVP = 1\$, TVP = TVS exchange is based on token price ratio

Sort	Contents	Terms	Conditions
Membership	Platform registration	*** TVP point	Once for the first time
	Daily login	*** TVP point	Only once a day
Purchase	Initial purchase	1% payback of paid amount + *** TVP cashback	①Provided for initial purchase after registering ②TVP provided for payback and cashback
	Supporting shopping	1% payback of paid amount	①Provided for every purchase ②Payback with TVP
Payment	Exchange TVP with TVS	10% cashback of exchange amount	Cashback 10% of the exchanged TVP back to TVP
	TVP recharge	5% of payback of the recharged amount	①Provided for every time recharging ②Payback with TVP
	Using TVP as payment method	10% payback of paid amount + *** TVP cashback by per payment	①Paying with TVP when purchasing goods and services in TVS ②Payback and cashback are both paid through TVP
	Using TVS as payment method	1% payback of paid amount + *** TVP cashback by per payment	①Paying with TVS when purchasing goods and services in TVS ②Payback and cashback are both paid through TVP
Activity	Watching adverts within the platform	*** TVP point	Provided for each advertisement clips
	Goods and service evaluation (such as reviews, recommendations)	*** TVP point	※ Payment when the conditions according to the internal regulations of the platform are met

Payback (Getting part of the payment back)

[•] Cashback (Accumulated money for goods and service purchase)

^{*} The above reward system and contents may be added or changed according to the progress of the project.

The TVS platform's reward system operates as follows.

Evaluation

Based on the evaluation policy of TVS platform service utilization, all Users (jewelry designers and consumers) activities such as Jewelry design NFT issuance, purchasing jewelries or NFT, comments and likes are saved and evaluated.

Evaluation items

Users activity indexes such as product production, purchase, feedback (comments, likes/dislikes, reports) on TVS platform are evaluated and rewarded.

Activities within TVS platform

1) Product purchase

The act of contributing to traffic as the most frequent act, in other words, contribution act to profit generation reflecting traffic

2) Feedback: Comments, likes/dislikes, reports, etc

Although there is no direct contribution to profit generation, it can verify the quality of content and affect platform activation, so it stores the behavior as a log, evaluates it according to the evaluation model, and shares a certain portion of the revenue from the total distribution.

The reward system of the TVS platform is expressed in pictures as follows.

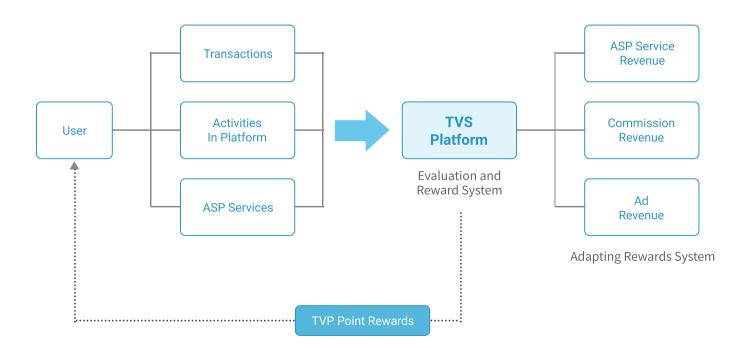


Figure 11. Reward System of TVS Platform

4. Blockchain Architecture

4.1 Ethereum Network

Blockchain is a distributed digital ledger technology that organizes encrypted transactions in block units and connects them to each other, and is a base technology that guarantees trust and safe transactions without a separate intermediary.

Shared Ledger

- Transaction information is avaiable to all the transaction participating parties within the shared ledger
- Prevents failure, manipulation and error by sharing the same contents

Privacy

- Transaction information are available for participants who have permission to use network
- Transaction stability improves by securing high security such as blocking malicious outsiders in privacy

Smart Contract

- Automation of contractual regulations agreement and process through computer network
- Simplification of contract process by automating the massive information involved process

Consensus

- Participants agreements about the terms and conditions needed prior to contract
- The contract automatically takes action if mutually agreed contract terms are premised

Figure 12. Main characteristics of blockchain technology

Ethereum's Smart Contract function has been added to further enhance the decentralization of the blockchain. Smart Contract is a system that automatically executes the contract after programming the contents of the agreement in advance, so that the contract can be signed between individuals (P2P) without a third guarantee agency.

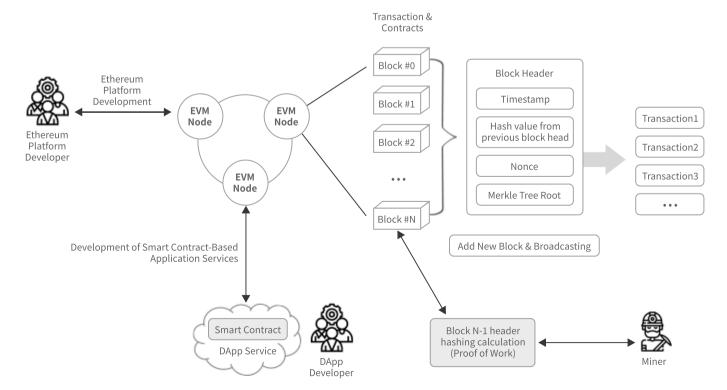


Figure 13. The process of operating the Ethereum Network

TVS platform ecosystem is based on Ethereum Network and Smart Contract, and operates as a reliable system that cannot be decentralized, forged, or altered. In addition, to achieve application portability between heterogeneous computers, Contract ABI (Application Binary Interface) is used to ensure binary compatibility.

• Digital assets

Digital assets are contents that are in a form of electronic data. Through blockchain technology, digital asset management can be decentralized and is free from traces of middlemen and unknown individuals, and secures a high standard of transparency. Users can register their assets in the TVS platform ecosystem as TVS platform supports various types of digital assets and the assets of users are protected legally according to the policy.

Digital identity

The users of the TVS platform will receive a digital identity that is encrypted and managed by blockchain where their identities are secured. TVS platform users may sign in and use all services using the digital identity system. Also, all history such as users' mobility provision, cost payments, transactions are stored on a blockchain to receive rewards based on their service activities.

Consensus algorithm

TVS platform ecosystem stores users' activity and establishes an evaluation system based on the stored information. To make such evaluation ratings and scores understandable and reliable, an Ethereum-based consensus algorithm, the PoW (Proof of Work) method is used to allow most active approvers to generate a block and receive rewards.

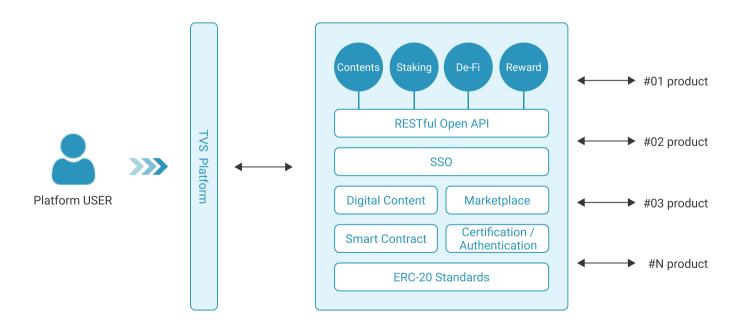


Figure 14. Technical Architecture of Blockchain Infrastructure

• ERC-20

ERC-20 is a standard token specification selected by the Ethereum blockchain network. It is a standard specification to secure the compatibility of distributable tokens on the Ethereum network. The reason that ERC-20 must be used is because of the compatibility of tokens. ERC-20 tokens must support the properties of a Smart Contract. The criteria of ERC-20 tokens depend upon the inclusion or absence of a smart contract function. It can be easily exchanged with the Ethereum when they are issued after designing DApps (Decentralized Application, DApp) that meet the requirement of ERC-20 and can be transferred to standard Ethereum wallets (such as My Ether Wallet, Meta Mask, and Mist). Therefore, tokens that use the Ethereum blockchain should follow the ERC-20 standard.

• ERC-721

ERC-721 is a standard of NFT which is known as a certificate. It is a free public standard that explains the method of writing unique or non-fungible tokens on the Ethereum blockchain. Most tokens are replaceable however, ERC-721 cannot be replaced. Movie tickets, for example, the form of the ticket may be the same but due to the different starting times and date and seat numbers, the ticket becomes different and unique. Because movies cannot be watched at the same time and seats. This is the property of 'non-fungibility' of the ERC-721. ERC-721 should become an effective collectible that may affect future NFT creation and for tokens that are shared in the dApp.

• Difference between ERC-20 and ERC-721 tokens

ERC-20 tokens are standard for most tokens that are generally traded on exchanges as ERC-20 tokens support fungible cryptocurrencies. The meaning of 'fungible' is simple when you think of money. For example, a \$1,000 note you have and another \$1,000 note that another person has the same value. The same property applies to other people. Tokens issued with ERC-20 have a characteristic of 'fungible'. On the other hand, ERC-721 tokens have a 'non-fungible' characteristic. In other words, ERC-721 issued tokens have a different value on each of them.

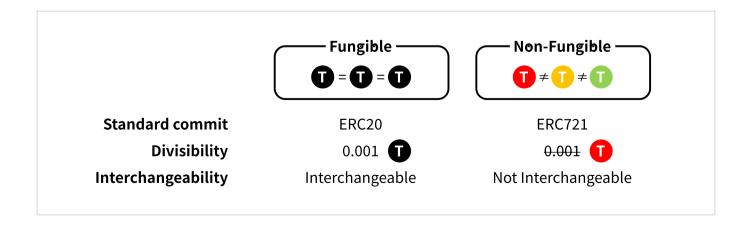


Figure 15. ERC-20 vs ERC-721

4.3 Applied technology

ERC-721 establishes a standard API about the NFT in the smart contact and this standard provides a basic function that tracks and sends NFT. ERC-721 considered the use case of NFT and consignment of the third parties' middleman, wallet and auctioneers. NFT is an ownership of digital or physical asset and each ownership can be tracked as NFT are distinguishable.

- Physical property houses, unique artwork
- Virtual collectables unique pictures of kittens, collectable cards
- "Negative value" assets loans, burdens and other responsibilities

The ERC-721 standard interface provides a contract where wallets/brokers/auction applications are working with all NFT of the Ethereum and a simple ERC-721 smart contract and a contract that may track NFT. Detailed information about the asset that shows NFT and a name of smart contract may be investigated through the meta extension and the enumeration extension opens all lists of NFT in the contract and allows the search function.

• SOLIDITY ISSUE #3412

The above interfaces include explicit mutability guarantees for each function. Mutability guarantees are, in order weak to strong: payable, implicit nonpayable, view, and pure. Your implementation MUST meet the mutability guarantee in this interface, and you MAY meet a stronger guarantee. For example, a payable function in this interface may be implemented as nonpayble (no state mutability specified) in your contract.

• SOLIDITY ISSUE #3419

A contract that implements ERC721Metadata or ERC721Enumerable SHALL also implement ERC721. ERC-721 implements the requirements of interface ERC-165.

SOLIDITY ISSUE #2330

If a function is shown in this specification as external then a contract will be compliant if it uses public visibility.

Rationale

There are many proposed uses of Ethereum smart contracts that depend on tracking distinguishable assets. Examples of existing or planned NFTs are LAND in Decentraland, the eponymous punks in CryptoPunks, and in-game items using systems like DMarket or EnjinCoin.

NFT Identifiers

Every NFT is identified by a unique uint256 ID inside the ERC-721 smart contract. This identifying number SHALL NOT change for the life of the contract. The pair (contract address, uint256 tokenId) will then be a globally unique and fully qualified identifier for a specific asset on an Ethereum chain. While some ERC-721 smart contracts may find it convenient to start with ID 0 and simply increment by one for each new NFT, callers SHALL NOT assume that ID numbers have any specific pattern to them, and MUST treat the ID as a "black box". Also note that a NFTs MAY become invalid (be destroyed).

Transfer Mechanism

ERC-721 standardizes a safe transfer function and an unsafe function.

Transfers may be initiated as follows:

- The owner of an NFT
- The approved address of an NFT
- An authorized operator of the current owner of an NFT

Additionally, an authorized operator may set the approved address for an NFT. This provides a powerful set of tools for wallet, broker and auction applications to quickly use a large number of NFTs.

The transfer and accept functions' documentation only specify conditions when the transaction MUST throw. Your implementation MAY also throw in other situations. This allows implementations to achieve interesting results.

When the operator sends the token, it is the operator acting on their own accord, NOT the operator acting on behalf of the token holder. This is why the operator and the previous token owner are both significant to the token recipient.

Gas and Complexity (regarding the enumeration extension)

If your application is able to grow, then avoid using for/while loops in your code. These indicate your contract may be unable to scale and gas costs will rise over time without bound. Remove the asset enumeration function if it requires a for-loop, return a Solidity array type from enumeration functions.

Privacy

Wallets/brokers/auctioneers identified in the motivation section have a strong need to identify which NFTs an owner owns. It may be interesting to consider a use case where NFTs are not enumerable, such as a private registry of property ownership, or a partially-private registry. However, privacy cannot be attained because an attacker can simply call ownerOf for every possible tokenId.

Metadata Choices (metadata extension)

We have required name and symbol functions in the metadata extension. Every token EIP and draft we reviewed (ERC-20, ERC-223, ERC-677, ERC-777, ERC-827) included these functions.

Chapter 4. Token Plan

1. Token issuance plan

Considering the safety and expandability of transactions, TVS token uses the standard token specification known as ERC-20 specification selected by the Ethereum blockchain network. The following is the basic information of the NFT and TVS token issuance plan.

Token Name	Treasureverse Token
Token Symbol	TVS
Standard	ERC-20(Ethereum)
Total Supply	20,000,000,000 TVS

Table 1-1. TVS Token Matrix

NFT Minting Authority	TVS & CO
Standard	ERC-721(Ethereum)

Table 1-2. NFT Matrix

2. TVS token allocation

1) Token swap for initial business, development costs and seeds: 30%

2) Constructing and maintaining the ecosystem and platform: 25%

3) Platform development, implementation and system advancement: 20%

4) Marketing: 5%

5) Initial members: 10%

6) Advisors and partners: 10%

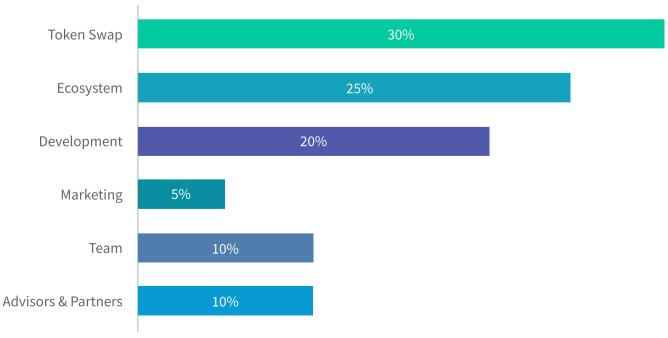


Figure 16. Token Allocation

3. TVS fund management plan

1) Development costs: 30%

2) Marketing fees: 30%

3) Service establishing and operating costs: 20%

4) Legal and accounting advisory costs: 10%

5) Company hold and risk preventing costs: 10%

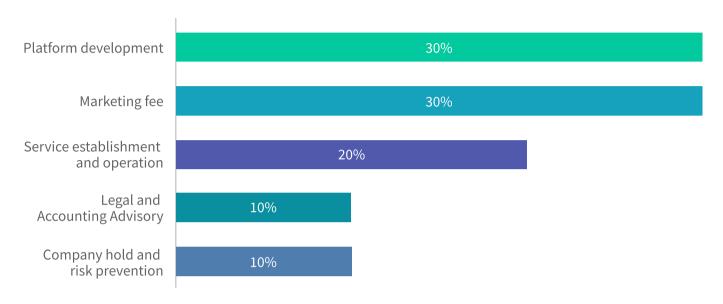


Figure 17. Funds Management Plan

Chapter 5. Roadmap

2021

Platform design

- Project design
- Blockchain data design
- Securing consortium members
- Platform and token design
- Publishing a white paper

2022

Opening platform

- E-wallet, platform launch
- Expanding the ecosystem
- Online/offline partnership

2023

Contents diversification

- Key content promotion
- Expanding partnership for platform contents
- Expanding the ecosystem by upgrading the platform
- Expanding global marketing
- Global virtual asset exchange expansion

2024

Service advancement

- Advanced platforms based on AI and big data
- Expanding the ecosystem and introducing additional business models

^{*} This roadmap may vary depending on the market situation, the company's development progress, and other circumstances.

Chapter 6. Business Partners

1. Relationship between TVS & CO Foundation and KDE

KDE(Korea Diamond Exchange) is an exclusive Korean exchange of the World Federation of Diamond Bourses(WFDB) that conducts diamond trades through accurate appraisal and trade notice that provides only GIA-certified diamonds. At the 36th WFDB General Assembly, KDE was officially joined as a member representing Korea, and as individual consumption taxes in 2019 and tariffs in 2020 are abolished, it emerged as a reliable operator based on WFDB's authorized network. TVS & CO utilizes KDE's global network to purchase all forms of natural diamonds in order to establish a new virtuous cycle for distribution, including exports.

2. Treasureverse Platform Vision

TVS & CO does its best to increase the value and profit of Treasureverse tokens and to satisfy token owners. TVS & CO will use all investments from partners and investors participating in the Treasureverse platform ecosystem for the Treasureverse project. The investment assets and profits held by the TVS & CO will be used to revitalize the platform ecosystem and will also be used for efficient reinvestment purposes such as M&A and equity investment to expand Treasureverse projects. Ultimately, TVS & CO will successfully operate the Treasureverse project, and through this, it will return a significant portion of its business value and profits to investors and partners.

Chapter 7. Legal Disclaimer

This white paper briefly summarizes the core concept of TVS. This white paper was written for the purpose of providing necessary information to those who want to participate in the project, and is not a document that recommends investment, etc.

1. General Notice

The project-related coins in this white paper do not correspond to financial investment products such as securities, and their issuance does not correspond to subscription for financial investment products or solicitation of subscription. TVS is not intended for speculation and have no rights in any form of real estate, intellectual property rights, other property, or cash.

TVS is not stocks because they do not give ownership to the distributor, and ownership of TVS does not give the right to participate in the decision-making process in assets and/or business plans. In addition to the benefits that can be obtained from the use of the platform, there is no commitment to the value or rights for the separate TVS profit.

The information contained in this white paper was prepared on the date indicated on the cover. Including information on the business operation and financial condition of the distributor in the future, information written in this white paper may be changed from time to time.

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Neither the full text nor partial excerpts of this white paper may be regarded as advice on legal, financial, tax, or other professional provisions. You should get separate professional advice in your decision to purchase TVS. Please note that you are solely responsible for all evaluations and decisions that may arise when deciding whether to purchase TVS. You may request additional information regarding TVS to your distributor.

Distributors have discretion, but not legal force, and provide the requested additional information in consideration of all relevant circumstances, including whether the request for information is reasonably necessary such as ① whether there are any prohibitions or restrictions from a legal point of view, ② whether the requested information is a matter of helping the reader to further clarify what is specified in this white paper, and to seek expert's advice, whether it is something that could influence his/her/its decision as to whether the reader buys coins.

Please note that this white paper was prepared for the purpose of information delivery and has not described the future prospects. It is stated that distributors are responsible for all losses and damages (direct/indirect, predictable, or others) arising from acting or relying on any information related to the distributor or the contents of the TVS ecosystem contained in this white paper or additional information inquired by another reader even if there was the distributor's negligence, default, or insufficient guidance.

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In purchasing TVS, you are deemed to have thoroughly reviewed the white paper, and also deemed to have agreed to the terms and conditions of the provision of TVS. Please note that the information specified in this white paper does not guarantee any legal liability. You expressly acknowledge and agree that TVS are not securities and do not generate any form of return on investment.

TVS and related services have been designed to be used for the purposes specified in the white paper and are provided by the distributors as they are and under this use if possible. Distributors do not make any guarantees or representations (both explicit and implicit) of the accessibility, quality, suitability, accuracy, adequacy or completeness of TVS and related services, and expressly deny this.

Thus, the distributors also expressly deny any liability arising from errors, delays or omissions in any action taken by you by relying on TVS and related services. No warranty is made in any respect, including the guarantee that there will be no infringement of the rights of third parties with respect to the TVS and related services provided by the distributor, name, merchantability, satisfactory quality, or fitness for a particular purpose.

We cannot guarantee the future performance and value of TVS. This includes the intrinsic value of TVS, and also includes a guarantee that it will have any value in the future. Unless you fully understand and accept the distributor's overall business plan and the potential risks of TVS, you should not participate in the sale of TVS. TVS was developed for the future function of the TVS ecosystem. The distributor expressly denies full responsibility for any losses you may suffer in connection with the purchase of TVS.

You are not obligated to make any contract or binding legal commitments in connection with the sale or purchase of TVS. A separate document describing the terms of the contract (hereinafter "terms of the contract") is applied to the contract between you as the distributor and the purchaser and to the sale and purchase of TVS In the event of inconsistency between the terms of the contract and the contents of this white paper, the former takes precedence.

2. Risk factors

Purchase of tokens

TVS should be purchased only by a financial expert who fully recognizes and evaluates the advantages and risks of the purchase, or a person who can get advice from a token trading-related professional advisor, or a person who can withstand the losses that may be incurred by purchasing, including the possibility of losing the total amount spent on the purchase of TVS.

No prior market

No guarantee is made as to whether the TVS-enabled market or liquid funds trading market will be developed, and it must be sustainable as TVS are traded on the cryptocurrency exchange after the development is completed.

Platforms that have not been completely developed

The value and demand for TVS is highly dependent on the performance and commercial success of the TVS platform/service. Distributors give no warranty as to whether the TVS platform/services will be commercially successful. In addition, the TVS platform/service has not been fully developed, finalized, and integrated, and additional changes, modifications, updates, and adjustments may exist before release (and after release). These changes can cause unpredictable consequences to users, which in turn may affect success.

• Risks related to uncertain losses

TVS is not protected unless personal insurance is separately acquired as a means of protection for TVS. Therefore, there will be no separate public or private insurance as action taken by the distributor for the buyer in case of loss of the token itself or the utility value of the token.

Tax-related risks

The tax characteristics of TVS are unclear. Therefore, the tax system that will target the token is also uncertain. Anyone who wants to buy TVS should find a personal accountant who can deal with related issues before deciding whether to purchase TVS. Distributors do not make any statements as to whether taxes may be incurred by purchasing or holding TVS.

• Risks from Ethereum Protocol

Due to the nature of TVS and TVS platform/service based on Ethereum Protocol, malfunction, breakdown, suspension, or disposal of Ethereum Protocol may have a significant negative impact on TVS and TVS platform/services. Advances in crypto technology or advancement of related technologies, such as the development of quantum computing, may be a potential risk for TVS and TVS platforms/services. This includes the use of tokens to acquire services, rendering inefficiency of the password matching mechanism that supports the Ethereum Protocol, and other risk factors.

• Risk from third parties

TVS is an asset based on the blockchain technology. The security, mobility, storage, and connectivity of these blockchain assets are based on factors such as the security, stability and suitability of the basic blockchain protocol and process (In this case, Ethereum is out of the distributor's control.)

Unexpected events may occur, such as mining attacks, hacking, and unauthorized access to the private key of the wallet where TVS are stored. Distributors cannot guarantee that they will prevent these external factors from adversely affecting TVS directly or indirectly.

Furthermore, the risks posed by third parties also include illegal acts, fraud, and failure to receive TVS at the time of token payment because the third party's wallet is not compatible with TVS. Any resulting losses are irreversible. Distributors are not responsible for any risks arising from the intervention of third parties and cannot take action to recover lost TVS in this way.

3. Anti-Money Laundering / Combating the Financing of Terrorism

As part of the token distributor's responsibility in relation to the policy for Anti-Money Laundering / Combating the Financing of Terrorism ("AML-CFT"), detailed identification of anyone wishing to own or use TVS as a means of payment is required. Depending on the circumstances of each application, token distributors may request additional information and/or documents to the applicant from time to time.

Pursuant to all applicable laws, distributors are committed to complying with all relevant guidelines applicable to their business with respect to AML-CFT obligations. Distributors reserve all rights to exclude anyone who refuses to provide appropriate information and/or documents that may be requested by the distributor from the purchase process in the process of initial coin purchase and/or further purchase of TVS.

In addition, distributors reserve the right to prohibit the handling or provision of financial services to designated individuals and legal entities for any suspicious transaction. In this case, distributors have all rights to refuse any service/ TVS transactions.