DT (Devise Technology)
# White Paper

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01 Business Overview

1-1. Business Overview

1) NFT

The DT Project is a service that provides project-level guarantee management with low guarantee and preservability based on blockchain and NFT (Non-Fungible Token) technology. NFTs are issued for each product to emphasise the authenticity of the product or digital content, information storage of physical assets, and transparency of distribution channels. The DT project is an NFT warranty management project that aims to solve the challenges of NFTs, use the technology of NFTs pursued by blockchain, and link irreplaceable physical goods for warranty management. Through NFT information, consumers can reliably verify products' origin and the authenticity of any piece of content.

For the scalability of the DT project, we are planning to establish global partners in various countries including Korea and Southeast Asia, and each global partner will operate warranty management, distribution management, and marketing management. Also we are in the process of developing it into a global service, providing customers with innovative and secure content authenticity data through blockchain and NFT technology and operate the platform by combining various cultures and guaranteed content in the global market.
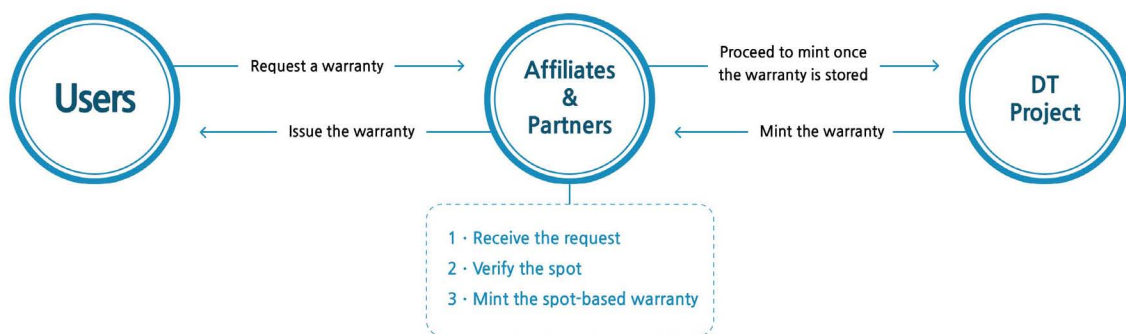
[The procedure of NFT Warranty Service]

2) De-Fi

DT Project is a service that rewards users through stable and effective liquidity control and value appreciation through De-Fi. De-Fi is short for Decentralised Finance. De-Fi often fails due to frequent inflation that is usually caused by excessive interest rates charged by algorithms witout a profitable business. This encourages ordinary investors to engage in extreme short-term trading, with rewards proportional to the interest rate, and simple speculation like moths to a flame on an ever-rising chart.

DT Project augments the real-world challenges of De-Fi with a stable De-Fi service. It pursues pure blockchain rewards, showcasing only blockchain technology that can be assigned future value, not guaranteed rewards by tangible assets. Users of DT Project's De-Fi Deposit Service are rewarded for the financial resources spent, not for excessive rewards. Instead of simply depositing into the De-Fi Deposit Service and receiving a fixed amount of rewards based on the number of deposits, they receive a logic-calculated amount based on the flow of the market.

1-2. Business Structure (Blockchain Business Structure / Technology Structure)

1) Utilisation of NFT Warrant

With NFT-based warranties, users can assess safe transactions with blockchain technology. NFT warranty holders can freely enjoy special benefits and services from affiliates and partners without having to verify their identity.
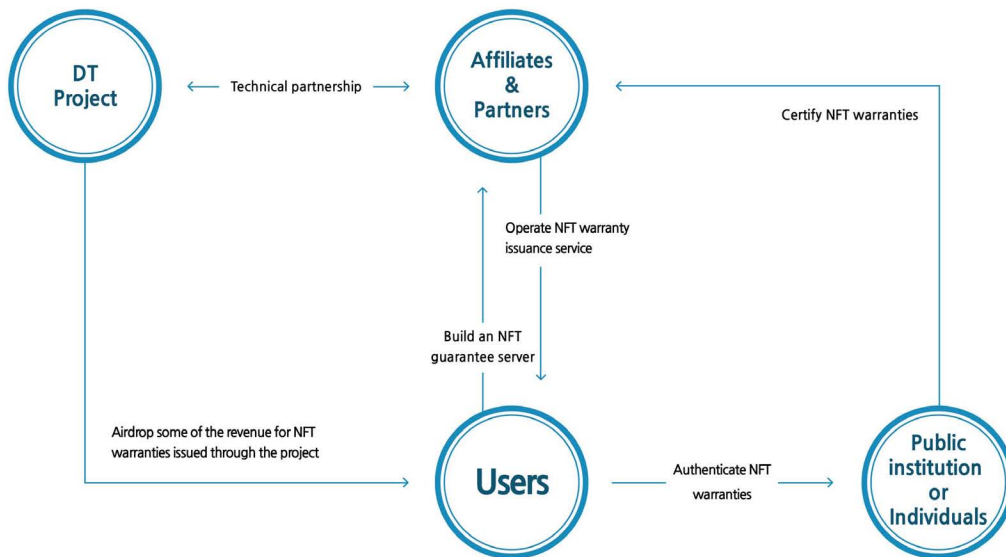
[NFT Warrant Usage Diagram]

### 2) Utilisation of De-Fi system

Customers who use De-Fi deposit service will receive De-Fi's deposit rewards.
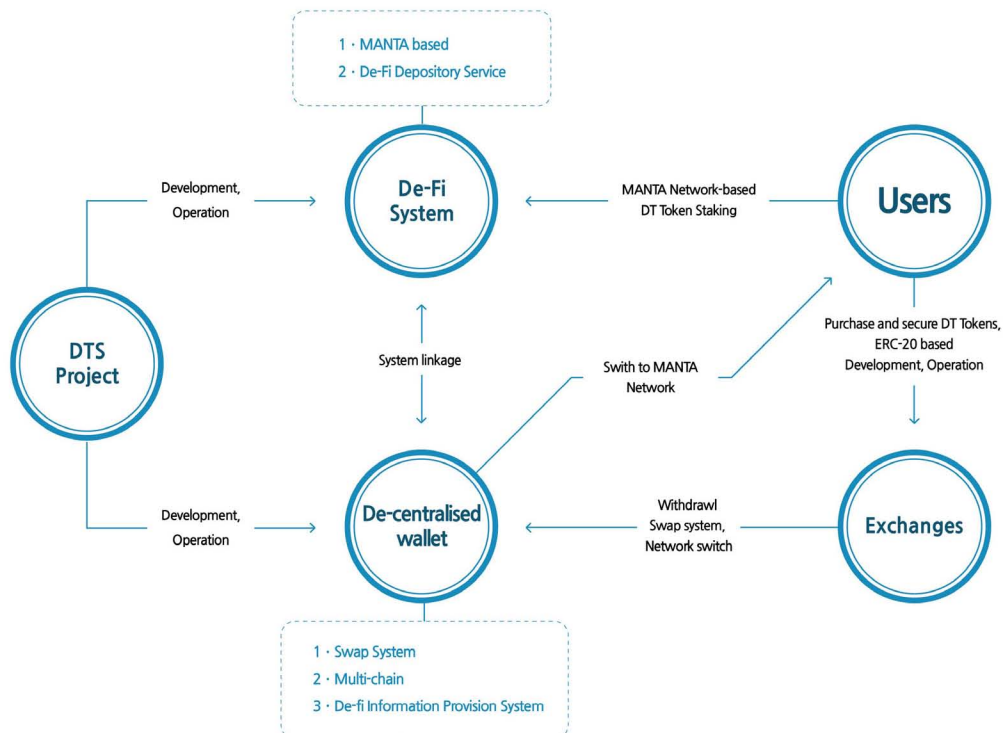
[De-Fi Depository Service Structure Diagram]

3) NFTs and De-Fi

Global partners and affiliates who use the NFT warranty service can trade them using DT tokens with multi-chains with some issuance fee. In addition, the revenue from the DT project's profitability model is equally distributed to De-Fi depository service users in proportion to the amount of deposits. Simply owning NFTs is equivalent to using the De-Fi Depository Service.

[Airdrop Diagram]
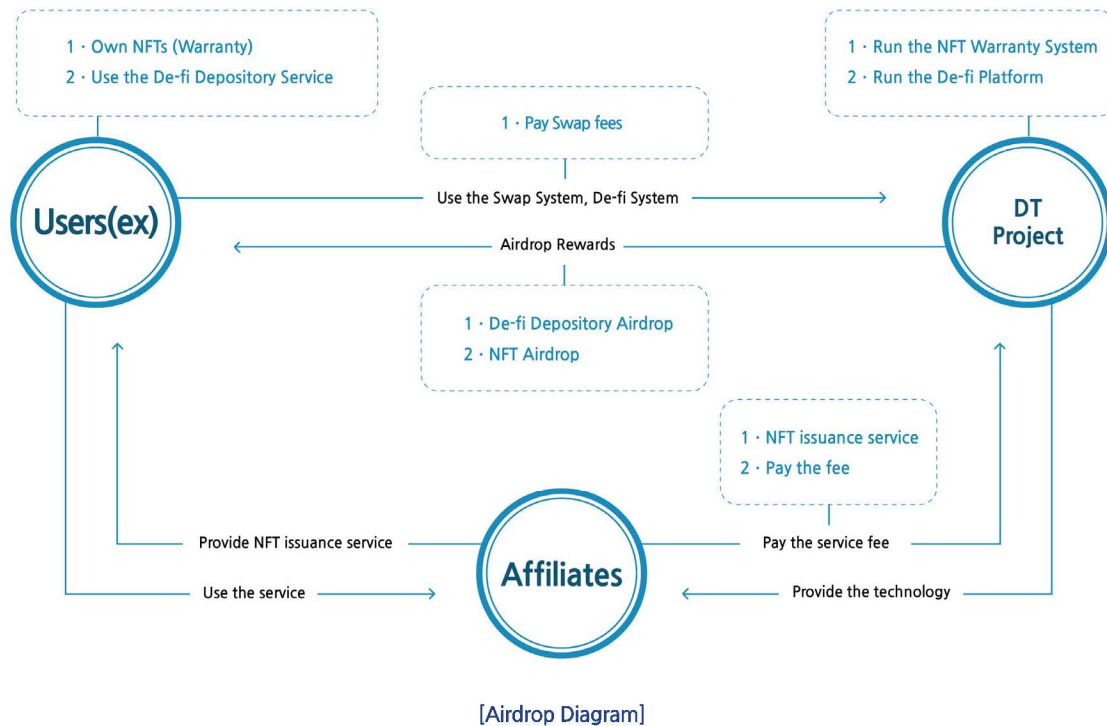
02 Business Market Status and Trends

2-1. Global Market Trends

1) Market Size

Based on information up to 2023, the size of the blockchain and NFT (NFTs) market continues to grow and change. Blockchain projects based on decentralisation provide financial services without central management, highlighting one of blockchain's core values. A wide range of financial services, including loans, deposits, and transactions, are offered on blockchains. The latest trend in services is to incorporate blockchain-based piecemeal investments, which are increasingly used in various fields such as real estate, finance, and advertising. There is also a positive outlook for the cryptocurrency market in 2024. With the listing of Bitcoin spot exchange-traded funds (ETFs), it is predicted that the blockchain ecosystem will rise and the entire industry will be revitalised by including local institutions and expanding service blockchain infrastructure. NFTs guarantee ownership of individual digital assets and are gaining traction in the arts, gaming, and entertainment sectors. Various forms of NFTs will be in service in 2024 and linked to artworks, game items, virtual land, and other digital industries.

The year 2022 was marked by the problems with algorithmic De-Fi that led to the Luna debacle. However, the market for decentralised finance has continued to grow and change in 2023 and 2024, with the market continuing to be tested by inflation. The staking system, which was created to control liquidity in the market,

has presented many problems. Still, it has also attracted a lot of investment and is a significant investment source in the crypto market. The Luna project proved in 2022 that the extreme control of market liquidity and the algorithmic provision of that control is inefficient. More stable liquidity would be achieved if the right ratio of control and reward were in place rather than extreme control.

NFT market trends

1. Popularisation and diversity: The NFT market is becoming more accessible to the masses, covering creations from artists, creators, musicians, athletes, and more. Brand companies are also digitising their content and reaching a broader audience.

2. Convergence of gaming and entertainment industries: NFTs are also playing a significant role in the gaming industry. Virtual items, characters, land, and more are being traded as NFTs and made available for real-world ownership and trading within games.

3. Decentralised content ecosystems: NFTs are a reaction against centralised management systems, and there is a growing movement to build decentralised content ecosystems. NFTs also form their communities, creating an ecosystem for direct interaction and trading between creators and consumers.

De-Fi market trends

1. Popularisation and stability: Algorithmic DeFi's lack of stability has led to DeFi's emphasis on popularity and stability. The failure of various depository platforms, such as Klayswap and Lunar Project, which were responsible for the De-Fi market, has created a number of victims. Depository services that have overcome these failures and strengthened De-Fi logic and stability are being born.

2. Convergence of blockchain and financial industry: De-Fi also plays a big role in the Ce-Fi industry. Instead of a simple deposit form, there is one form that controls the market liquidity and guides the market value upwards. In recent years, various products other than Ce-Fi simple deposit products have been launched and operationally managed, inspired by De-Fi.

2) Service Status

NFT Service Status

1. Past NFTs: NFTs started as the "Etheria project" in October 2015 and were first unveiled at the Ethereum developer conference "Devcon" held in London, UK, in November. At Lava Labs, the market is being driven by the launch of "CryptoPunks", a platform that sells NFT characters developed by individuals using the Ethereum blockchain. The NFT market grew rapidly in Q3 2021, reaching approximately $10.7 billion in trading value, but since May 2022, trading volume and value have declined.

2. Current trends in NFTs: Since 2023, the NFT ecosystem has become active with the emergence of various NFT projects and companies, and several domestic subsidiaries, including Ripple, are entering the NFT business to secure a share of the domestic NFT market. In support of this, various examples of NFTs are used in industry, including certificates, games, mobile, sports, fashion and art.

3. Expectations of NFTs: As the NFT market using open source is rapidly growing globally, it is gradually expanding in Korea, but legal systems and regulations are weak. Even among other countries, few countries

have directly designated NFTs as virtual assets yet, and research and analysis are underway to define and regulate NFTs. The market is expected to fluctuate depending on whether NFTs are designated as virtual assets and how the definition of NFTs is defined. So, the market is expected to fluctuate depending on the definition of NFTs. Expectations are high given that the concept of NFTs has been introduced to the public for less than a year and can act as the most compelling proof of ownership in the borderless ecosystem of the 'metaverse'.

The state of De-Fi services

Decentralised finance (De-Fi) refers to the disintermediated trading of crypto assets instead of centralised financial systems. It is based on blockchain and smart contracts and is characterised by lower transaction costs and the ability for anyone to participate. Types include deposit/loan, asset management, derivatives, insurance, and exchanges, and regulatory directions include interpretation, amendment, and enactment of existing laws. Ethereum implemented smart contracts by introducing the concept of 'accounts', a form of programming code, and 'transactions', which can send and receive data and ultimately solved the problem of lack of trust in counterparties without the need for a centralised intermediary. Building on these technologies, De-Fi took off in earnest in 2017 and has seen a steep growth trend in recent years. For the foreseeable future, De-Fi will continue to provide new options for users in relatively simple areas where the role of a centralised intermediary is not critical.

Current services include "identity verification, wallet services, asset tokenisation, stablecoins, mortgages, staking services, decentralised exchanges, derivatives/prediction markets, insurance, and data analytics", and De-Fi coins such as Compound, Chainlink, Uniswap, Raptbitcoin, and Aave have been issued as utility tokens to build the De-Fi ecosystem.

3) NFT, De-Fi Market Trends

NFTs and De-Fi meet

First, De-Fi, like the rest of the crypto industry, is maturing as users become more engaged and experienced. As such, it has reached a point where fungibility is no longer sufficient, especially as users get a taste of what it's like to have their asset ownership personalised and significantly optimised.

In other words, using NFTs is the optimal next step. Meanwhile, the world of NFTs is also rapidly evolving into De-Fi. This is because it is driven by multiple protocols that gain financial utility through division and representation, as they increasingly need to be connected to DEX (Decentralised EXchanges) based liquidity. De-Fi and NFTs gravitate towards each other because they solve the challenges and highlight the advantages of their respective businesses. The convergence of the two is creating something new. On the negative side, the convergence of the two types of crypto assets is disrupting both sectors.

This gives rise to De-Fi/NFT hybrids, which attempt to bridge the two segments of crypto and engage both De-Fi and NFT users. Meanwhile, their potential and ability to combine attributes have caught the eye of both new and experienced crypto users alike. While it is currently impossible to assess the potential of this market if the converged De-Fi/NFT business reaches maturity, their convergence opens up a whole new world of possibilities in the crypto sector, giving users exposure to traditional assets, works of art, real estate, and more.

While the market is still uncertain, the community involved is optimistic rather than sceptical. With this mood dominating the industry, the development and combination of trends will continue, giving birth to a whole new line of assets and products that will change the entire industry mix as we know it today.

2-2. Target Analysis

1) NFT Users

1. Growth potential: The global non-fungible token (NFT) market size was $153.6 million in 2021 and is expected to reach $142.829 million by 2031 at a compound annual growth rate (CAGR) of 24.2% during the forecast period. NFTs stand for financial security. This security consists of digital data stored on a blockchain. It's a form of distributed ledger and can be considered an encrypted digital stock certificate that can't be copied, divided, or tampered with. NFTs are a trusted form of proof of authenticity and store and hold virtual assets, including music, images, game props, and more. Additionally, they are physical assets such as event tickets and physical collections.

The increasing influence of celebrities in NFT adoption, which is revolutionising the gaming industry, is fuelling market growth. The growing demand for digital artworks is expected to accelerate the adoption of the service. At the same time, the increasing use of NFTs in supply chain management across industries is estimated to drive market growth. Increasing demand for music, video, sports, and especially gaming services is speculated to propel the market growth over the forecast period. Growing investments by major market players propel the NFT market growth.

2. Latest Trends: The NFT (non-fungible token) market size has rapidly expanded. It will expand from $30.54 billion in 2023 to $43.32 billion in 2024, a CAGR of 41.5 per cent. The expansion seen in the historical period is attributed to the boom in digital art, endorsements from celebrities and brands, and active participation by crypto enthusiasts.

The evolution of new platforms for NFTs is shaping the NFT market. Major players in the space are focusing on building innovative platforms, with one model, Tapinator NFT500, offering a premium casting service and collection platform based on blue-chip NFTs. This trend reflects the industry's tacit agreement to provide customisable open source through unique programs. Similarly, companies are also focusing on introducing innovative marketplaces for NFTs, such as Binance NFT, a groundbreaking market and trading platform launched by Binance Holdings Ltd. The marketplace functions as a digital platform for users to create, buy, sell, and trade NFTs and contributes to the overall revenue growth of the NFT market.

North America was the largest region in the NFT market in 2023. Asia-Pacific is expected to be the fastest-growing region during the forecast period. The NFT market report covers Asia-Pacific, Western Europe, Eastern Europe, North America, South America, the Middle East, and Africa.

2) e-Fi users

The De-Fi market continues to expand, especially in total deposits over the past year, and is used in areas such as lending, decentralised exchanges, asset management, and derivatives. According to De-Fi Pulse, as of March 2021, global De-Fi deposits (Total Value Locked) reached $41.8 billion, up nearly 75 times from $5.6 billion in March 2020. Unique Active Wallets have also increased from 20,000 in August 2020 to 40,000 as of March 2021.

De-Fi services are currently dominated by lending (47%), followed by decentralised exchange (DEX) (36%), and are gradually diversifying into asset management (Assets) and derivatives (Derivatives). As for lending, there are two representative platforms, MakerDAO and Compound, which provide lending services using crypto as collateral, and these platforms are responsible for issuing stablecoins such as DAI as collateral for loans. Decentralised exchanges are systems that use smart contracts to hold property and enforce trading rules

for all participating individuals to execute transactions, with services offered by SushiSwap and Uniswap, among others.

While overseas-based platforms dominate the current share of De-Fi services, domestic De-Fi companies have been established in earnest and providing services since 2019, mostly lending services. Delio, which started its service in July 2019, is the largest De-Fi company in Korea, holding KRW 1.9 trillion ($1.69 billion) in deposits as of March and partnering with crypto exchange Bithumb to provide lending and deposit services for crypto assets. In recent years, big tech firms such as Kakao and Naver have expanded into De-Fi through subsidiaries that work on blockchain projects.

03 Problems with existing NFT and De-Fi systems

3-1. Technical Factor Problem Analysis

1) Challenges of NFTs

1. Copyright infringement in the process of NFT transaction: When reviewing what copyright infringement may occur in the process of NFT transaction, it is as follows. Since NFTs do not contain copyrighted works as metadata, copyright infringement does not occur in NFTs' transactions. However, copyright infringement may occur in the process of minting NFTs. As we've seen, some marketplaces require that the work be uploaded, and if you're not the copyright holder and you upload someone else's work, you may be infringing on the right of transmission (or reproduction). On the other hand, if you're digitising an offline work to create an NFT, you may be infringing on the right of reproduction. If the work is sold under the name of someone other than the author, there may be an issue of moral rights infringement. If a work is used during NFT trading, unless you are the copyright holder of the digital work, you must obtain a copyright transfer or permission from the copyright holder to avoid copyright infringement.

2. Problems with NFT minting by unauthorised persons: The ideal NFT transaction is for the copyright holder of a digital work to set the terms of the transaction, mint it into NFTs, and sell it on the market. However, as we have seen, there are no particular restrictions on minting works into NFTs, so it is possible for non-copyright holders to mint other people's works. Someone who doesn't understand copyright could mint and sell a digital image, thinking they own it. The problem is that the purchaser may unintentionally become involved in a copyright dispute. In the recent case of the NFT issuance of the works of artists, Joongseop Lee, Hwanki Kim, and Sugeun Park, the issue was whether the seller had the right to mint the works. Of course, a buyer who believes the seller has the right may not be liable for copyright infringement because they did not intend to infringe, but this fact alone can confuse the market.

The problem of unauthorised minting of NFTs also extends to the sale of works in the public domain, such as works whose copyright protection period has expired, which may not constitute copyright infringement but may be socially and ethically inappropriate.

To prevent this from happening, the process of NFTising a work requires a minimum level of verification. However, the process should not be excessive, as it is difficult to prove the valid owner of a copyrighted work. In this regard, a link to the copyright registration system, which is currently presumptive under the law, could be one way forward. On the other hand, the challenges of claiming rights in the public domain must be limited, concerning Chilean copyright law.

3. Problems with the disconnection between NFTs and works: Since NFTs only store metadata, some people describe NFTs as a receipt for a work transaction. As such, NFTs only contain the location and description of the work, so the work is not directly transferred when an NFT transaction is made. The work is only accessible through a link in the NFT metadata. As such, there is a gap between the existence of the original work and the NFT transaction, which raises the question of whether an NFT transaction can be substituted for the validity of a work transaction.

To answer this question, we first need to examine the legal nature of NFTs and the validity of their transactions. NFTs are a type of virtual asset like Bitcoin, and their legal status is controversial. There have been cases in which the Supreme Court has ruled that Bitcoin is "intangible property with a property value that can be transferred, stored, and transacted electronically by digitally representing an economic value" and is, therefore, subject to confiscation. Still, there is some ambiguity as to what exactly constitutes property. On the other hand, the Act on the Reporting and Use of Specified Financial Transaction Information (the "Special Act"), which came into effect on 25 March 2021, regulates virtual assets, but the Act does not clearly stipulate the legal nature of virtual assets. However, regardless of its legal nature, it should be considered that NFT transactions are valid as virtual assets are being transacted in reality, and not only the Special Act but also the Inheritance Tax Act and the Income Tax Act indirectly recognise transactions such as the sale and purchase of virtual assets.

Even if an NFT transaction is a valid transaction, it is a different matter to equate it to a work transaction. It is unclear whether NFT transactions can be viewed as valid copyright assignments or licence agreements because only metadata is provided, and there is no physical transfer of the work but rather a link to the work, which is highly unstable. Since the link is impermanent, the work may disappear after purchase, or you may purchase an NFT with a missing link. To solve this problem, artists send the work to the edition buyer separately from the NFT, or use the InterPlanetary File System (IPFS) to store the files. However, there is no clear institutional protection for this, so it is legally unstable. Of course, even if such transfers were legally recognised, it is doubtful that they could be registered under Article 54 of the Copyright Act.

4. Other copyright issues: In addition to the issues mentioned above, in Europe, it is also an issue whether NFT transactions are subject to the exhaustion of rights under the right of distribution in Article 4 of the Directive on the harmonisation of copyright and related works in certain areas in the information society (the "Information Society Directive"). It is questionable whether the trading of NFTs can be considered as an act of distribution of a work, and it is unlikely that it will be exhausted under NFTs as it is CJEU precedent that such rights are not exhausted for digital reproductions.

In addition, NFTs can be set to pay a certain royalty to the original seller every time they are resold, which is similar to Droit de suites, and there is a problem that the activation of NFT transactions may result in the introduction of Droit de suites in practice. In particular, there is a concern that it will result in the introduction of droit de suite without any restrictions on works and scope of exercise, which may significantly impact the market.

2) Challenges of De-Fi

Continuous issuance of governance coins to pay interest will eventually cause inflation in token value. As long as the De-Fi service continues, governance coins will continue to be issued increasingly. Eventually, the token value and interest rate will plummet, resulting in many users leaving the De-Fi service.

3-2. Analysis of Service Problem Factors

1) Problem factors of NFT services

1. Security threats in the marketplace: 'Smart contracts' are an essential feature of all blockchains. Smart contracts support all NFT transactions and ownership transfers. Programming smart contracts with security in mind makes them very difficult for hackers to tamper with. However, if smart contract bugs are left unaddressed, hackers can exploit them. For example, Crypto Punks, a popular NFT project and the oldest NFT marketplace on Ethereum suffered from a smart contract bug 2017 that robbed participants of their Crypto Punks NFTs. While most NFT marketplaces use decentralised systems, some use a centralised model with security vulnerabilities, including the possibility of data tampering, censorship and creation, and the potential loss of collected NFTs. Blockchain platforms such as Open Sea and Nifty Gateway, which are centralised models, store the private keys of all assets on their own platforms, meaning that if the platform is compromised, multiple accounts can be hacked quickly.

Other scams include stealing NFT assets by exploiting security vulnerabilities, impersonating celebrities or corporate managers, extorting large sums of cryptocurrency, rug-pulling scams, defrauding participants of their investments, and stealing personal information by posing as legitimate mail.

2. Governance challenges: Organisations are constantly generating data. The sheer volume of data that modern enterprises deal with has driven the need for digital transformation initiatives to manipulate and deliver this data. However, while business managers reflexively recognise the value in getting data quickly, they do not recognise the value in getting data that is well understood and controlled adequately with guardrails. A key challenge in data governance is to show business managers that getting data a little faster will ultimately get them nowhere if it is of poor quality or unknown provenance.

It's especially difficult for organisations that have been slow to embrace digital transformation to understand the business value. The benefit of digital transformation is the ability to share relevant data with employees, customers, partners, and more. Data democratisation has the potential to grow your business, but it requires the guardrails of data governance.

One solution that has emerged is the Chief Data Officer (CDO). Initially, CDOs focused on data and worked under the CIO. Still, over time, they have risen to the same level as the CIO and have taken on the role of efficiently quenching the company's multiple thirsts for data. The CDO's role includes building the architecture and data platform to enforce data governance and keep it a top priority.

Analytics groups can also reinforce the business value of data governance. Analytics groups are often responsible for providing insights and are most affected by poor quality, misinterpreted, or misused data.

The widespread perception that IT owns the data and is therefore responsible for its governance is a barrier to digital transformation. In addition, data silos are common in many parts of the organisation, and low data quality and lack of trust in data make it a barrier to strategic decision-making rather than an enabler.

2) Problem factors of De-Fi services

1. Security incidents: De-Fi has various risks, but the most significant risk is the possibility of damage due to security incidents. Hacking damage by attacking vulnerabilities in the code that makes up De-Fi services or stealing administrators' accounts has been occurring steadily. The scale of these security incidents (hacks) has already reached a significant level, with six security incidents in 2021 costing more than $1 million in

damages, totalling approximately $1.35 billion. The damage from security incidents is more devastating because there is a lack of compensation and refund regulations and social infrastructure when damage occurs. The anonymity of the blockchain network makes it difficult to receive compensation for the amount of damage. Therefore, it is always necessary to be careful.

2. Reliability of the service operating entity: De-Fi is essentially a decentralised financial service, but most De-Fi services currently in operation are not fully decentralised. Complete decentralisation means that there is no centrally managed entity, and transactions must be carried out between participants in the network. Still, to operate a stable and efficient De-Fi service, a limited, decentralised service is provided by setting an "Admin key" in advance and operating the service through it. While the admin function is utilised to maintain the rules of the service, upgrade features, and respond to events such as failures or hacks, there is a risk of abuse by those operating the service. For example, they may charge users for services that are incurred for their own benefit, or they may abuse their administrator privileges to change the rules of the service to their disadvantage. In addition, there is also a risk that the operator may abandon the operation of the De-Fi service due to financial difficulties.

3. Stability of De-Fi services: Traditional financial markets are relatively low in volatility, and regulations are in place to protect users to some extent through laws and systems. However, De-Fi is highly exposed to the risk of volatility due to the nature of the virtual asset market and is very vulnerable regarding user protection. In addition, there are concerns about whether the service can operate stably even in extreme situations due to large volatility. For example, deposit and lending services in De-Fi require a certain level of asset liquidity to be established and maintained in case of intensive deposit runs. However, doubts remain whether this liquidity can be secured and the ability to regulate supply and demand in real-time can be maintained in an abnormal situation known as a black swan event.

04 solutions

4-1. Why do we need blockchain?

Blockchain technology has transformed many industries due to its decentralisation and security. The technology can enhance the security and auditability of transactions in various fields, such as healthcare, finance, and supply chain management. US consulting firm Accenture estimates that blockchain technology could save around $10 billion a year by improving the efficiency of note exchange and settlement. The Australian Securities Exchange also uses blockchain technology to settle and clear stock trades.
Blockchain is also being used for identification and proof of identity, with the United Nations, Microsoft, Showcard, and others developing blockchain systems for identity verification. Blockchain technology is also used to manage food supply chains, with large food retailers looking to use blockchain to enhance traceability and ensure food safety.

Blockchain technology is expected to play an essential role in solving the security and authentication problems of digital data and transactions, and data security is expected to be gradually enhanced through investment and research by major companies.

As shown above, blockchain technology is being used in a wide range of technologies and industries. As such, it is an essential technology for financial, security, technical guarantee, branch preservation, and forgery prevention required in DT projects.

4-2. Technical solution (swap system concept description and swap system image)

The future value of the DT project lies in how it overcomes inflation. The biggest problem of the NFT and De-Fi platforms that DT Project is pursuing is the decline in project value due to inflation. However, DT Project's business model and objectives start with solving the challenges and problems of the industry. The problem with NFTs is that the value of guarantees and preservation is solved with a spot-based guarantee, and the revenue distribution structure of depository services through indiscriminate airdrops in De-Fi is that the lack of e-commerce on such platforms provides value despite the absence of a revenue model, promising investors an unreliable revenue distribution. The DT project guarantees profits through a precise revenue structure.
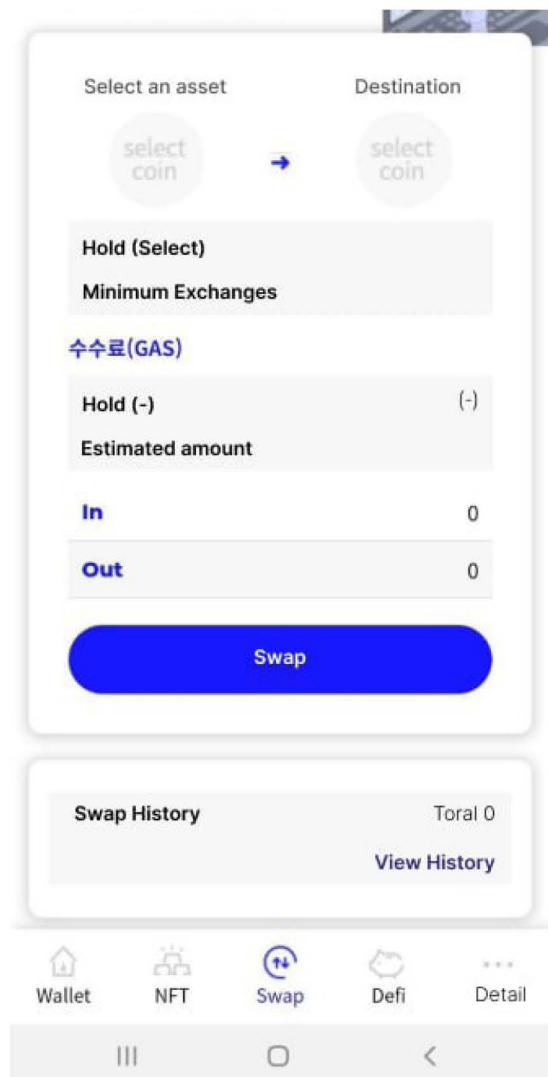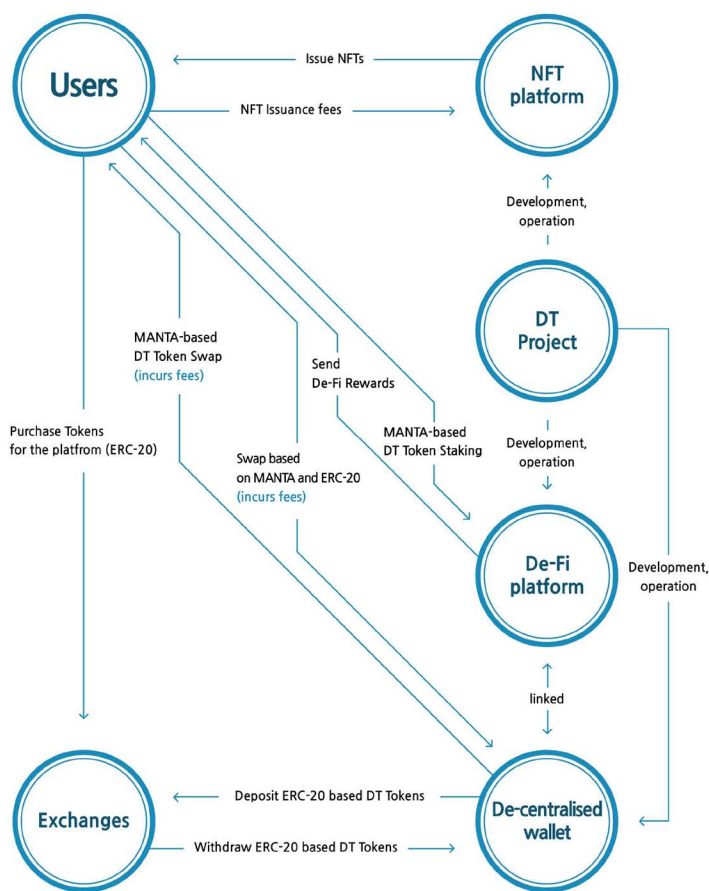
[Earnings structure based on the swap system]

4-3. Service Resolution

1) NFT Service (Concept Description)

An NFT service is an online platform or service that enables the creation, exchange, and trading of NFTs. These services are based on blockchain technology and allow users to buy or sell NFTs and verify and track their ownership. Artists, creators, game developers, and others can also use NFT services to publish and

monetise their work as digital assets.

NFT services make the ownership of digital assets more transparent to track and trade and offer new revenue models for creators to be compensated for their work. However, the NFT market is subject to price volatility and speculation, so caution should be exercised when investing or trading.

The biggest challenge with NFTs is preservation and assurance. Many NFTs are highly valuable and come from various creators, including paintings by famous artists. However, one of the most attractive features of NFTs is that once a transaction is made, all ownership is yours, but there are cases where this feature is abused. A typical example is that the creator can only fill the value of the preservation and guarantee. This has obvious challenges and downsides, as no one else is responsible for the preservation and backing, and only the person who transacts with it is responsible for its value.

DT Project overcomes these challenges of NFTs and operates a service that stores various in-kind guarantee certificates, such as physical-based guarantees and commitment contracts, and issues NFTs in various forms of certification and guarantee, such as authentication, issuance, and submission.

## 2) Resources about issuing, holding and storing NFTs
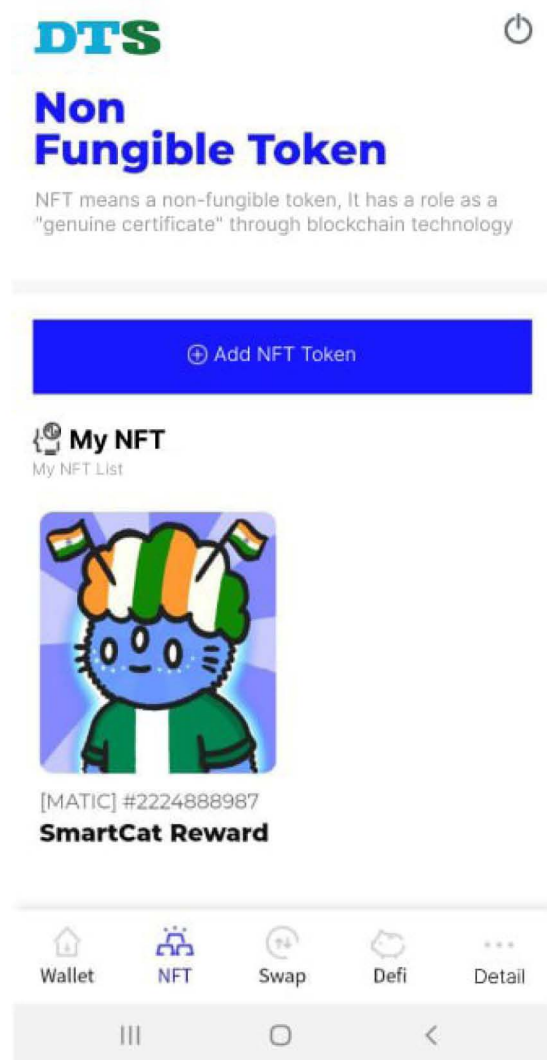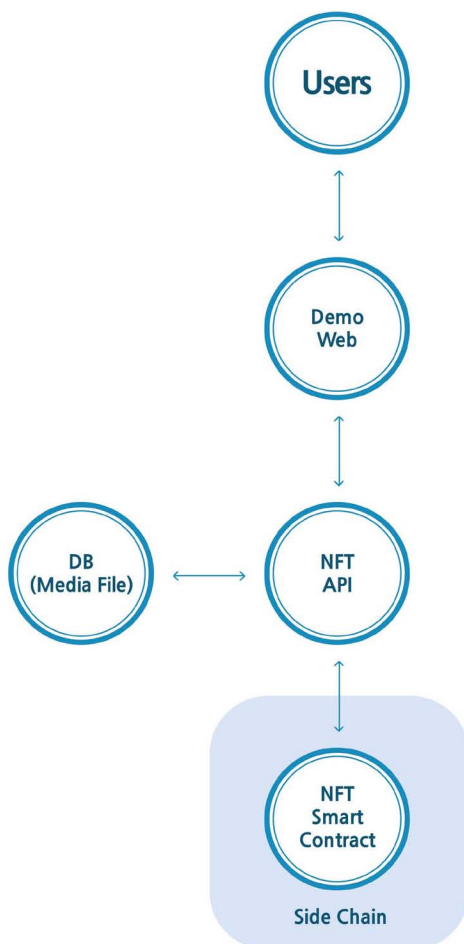
[NFT minting, NFT wallet examples]

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3) De-Fi services

 De-Fi stands for decentralised finance, which means providing financial services in a peer-to-peer manner without intermediaries, and utilising blockchain technology to ensure trust between users. To provide stable services, stablecoins that are linked to fiat currencies or issued as collateral for virtual assets are mainly used as a means of transaction. De-Fi can easily develop new financial services by reducing costs such as transaction fees and having excellent combinability. Still, there are also limitations, such as a high probability of accidents due to regulatory gaps and lack of product stability. To prevent investor losses due to the recent instability of DeFi, financial regulators in various countries are considering introducing regulations for stablecoins and De-Fi.

4) De-Fi Information Structure Chart
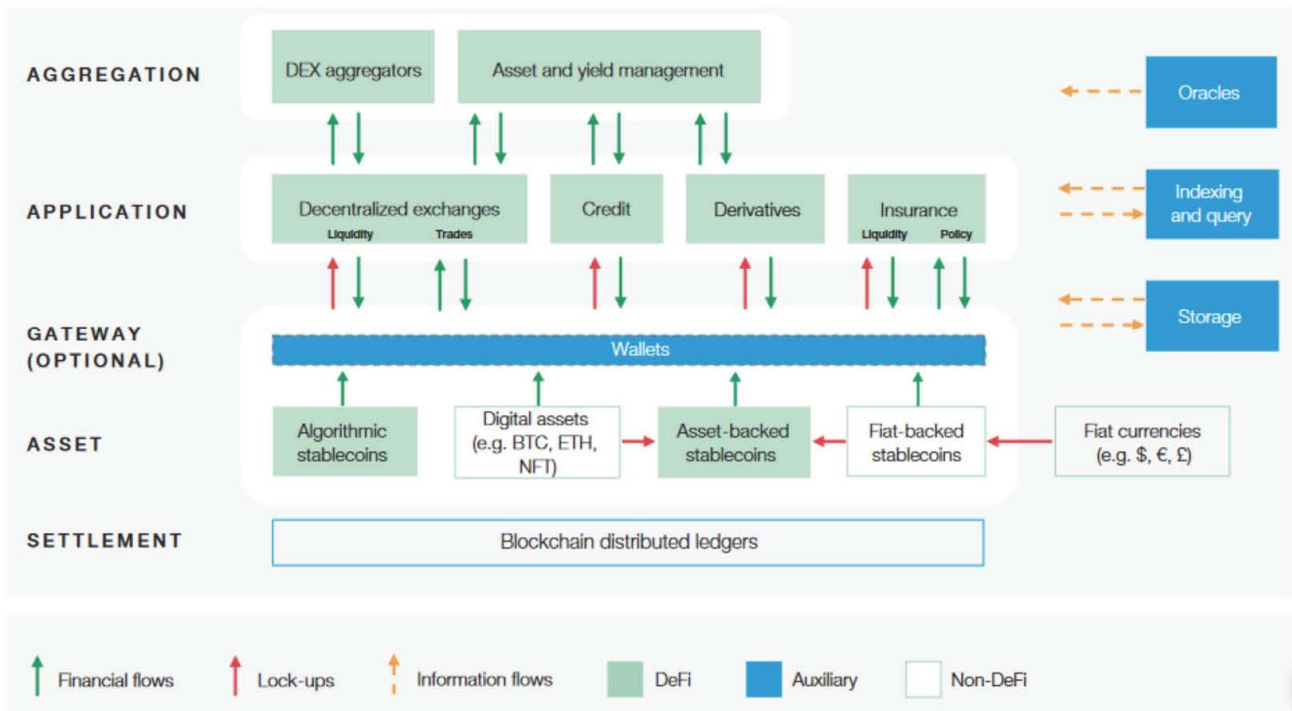
[De-Fi Information Structure Chart]
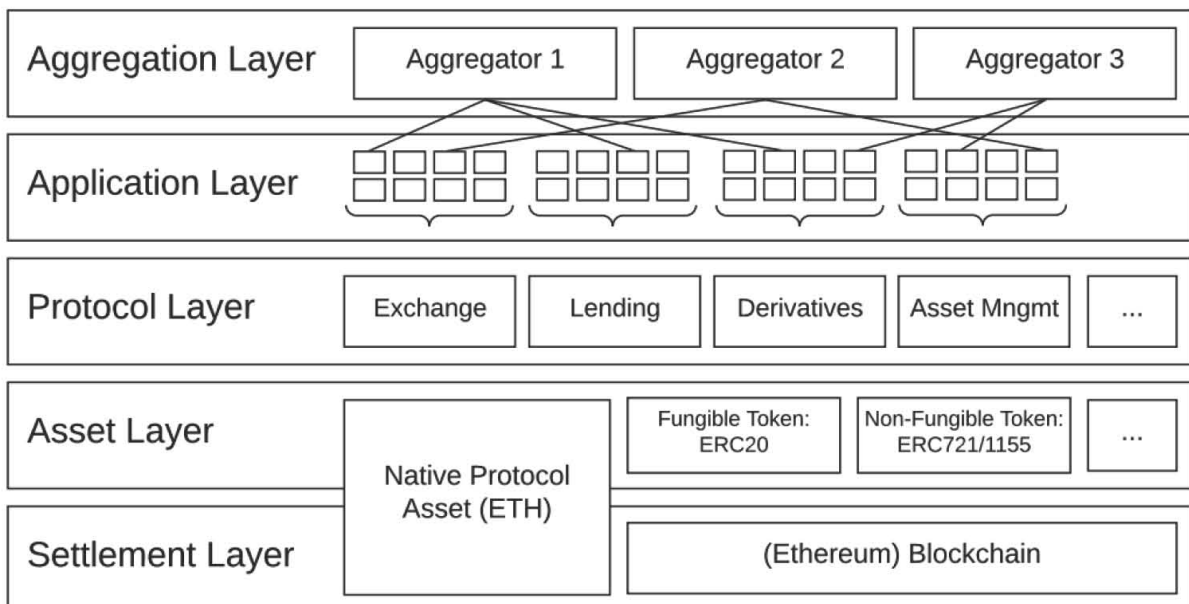
[De-Fi Information Structure Chart 2]

Platform Service
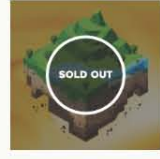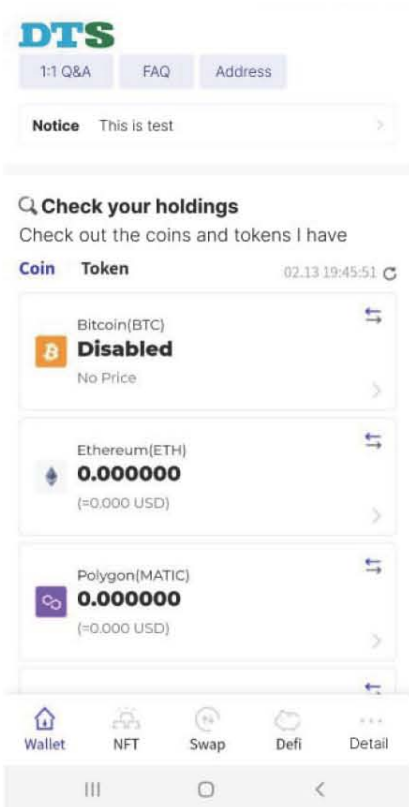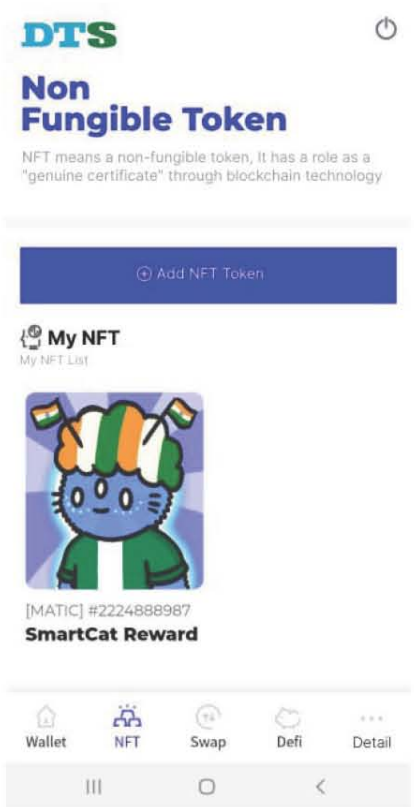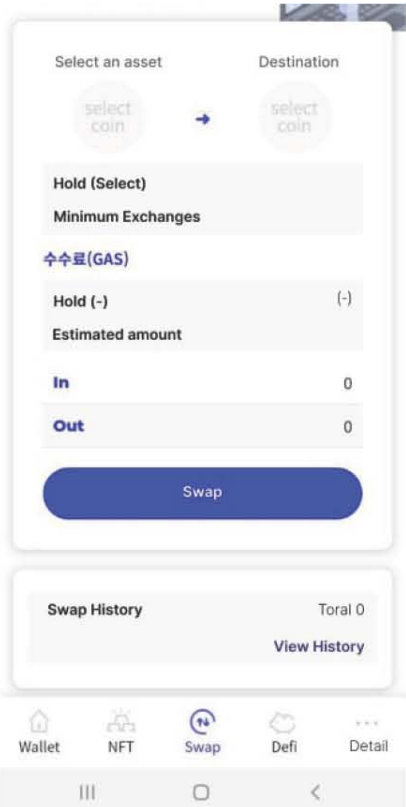
[NFT exchange examples]

[Decentralisation, NFT wallet, swap system examples]
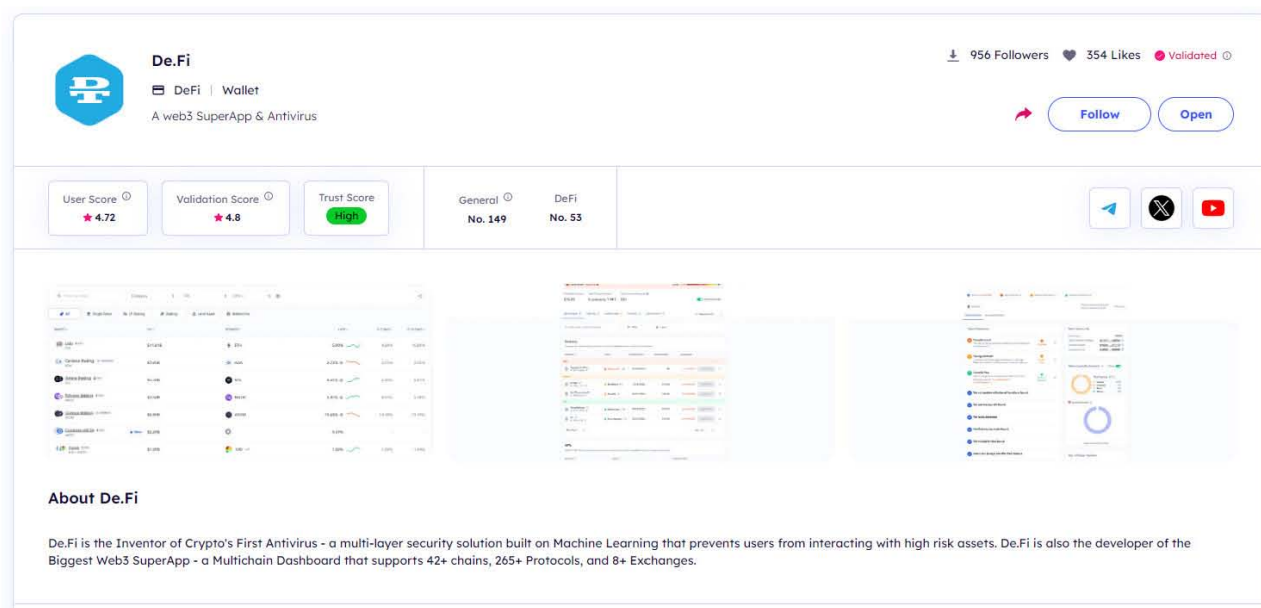
06 TECH

About Blockchain and its structure

A blockchain is made up of a series of 'blocks'. The term 'block' refers to a data storage unit within the blockchain code. Each block contains a unique number from the previous block, which forms a 'chain' of blocks.

How blockchains work

The first block created is called the genesis block – think of it as the first line of a database. It's just a small collection of data, but it contains a unique numerical symbol, such as 0001. When a second block is added, it's identified as block 0002 and includes the information that it follows block 0001. This is how the chain is formed.

Blockchain protocols

Refers to the different types of blockchain platforms used to develop individual applications. Each blockchain protocol adapts the basic blockchain principles to a specific industry or application.

Blockchain decentralisation

Unlike regular databases, which are stored on a single server, blockchains are decentralised and distributed across a peer-to-peer network. Each node on the network (usually a device or server) has a copy of the blockchain. Before a new block is added, it must be verified and validated by most of the node operators in the network. This helps limit the threat of an unspecified number of people tampering with the chain's integrity or leaving out important information (for example, adding a block that doesn't connect correctly to the previous block). For example, the blockchain of Bitcoin, the most famous cryptocurrency, already reportedly has more than 13,000 nodes – so-called decentralisation.

Because of this blockchain economy and the way blocks are coded, once information is added, removing it from the chain is very difficult.

Pros of Blockchain

1. Integrity of data

Due to the decentralised network system, there is no specific person with the power to manipulate data. This makes it difficult for anyone to tamper with data stored on the blockchain. Once information is included in the chain, you can be confident of its integrity and accuracy, even if you review it years after it was added.

2. Higher transparency

Most blockchains are highly transparent, allowing outside observers to see the data stored on the chain. This is especially important for cryptocurrencies. Tracking the flow of funds through a blockchain wallet is much easier than tracking them through a personal bank account. This transparency makes it easier to identify and track down fraudsters.

3. Decentralised control

Blockchain technology is based on decentralisation: it doesn't rely on large organisations like banks or credit card companies to handle your data and money. The peer-to-peer ledger system prevents any person or organisation from having too much control over the blockchain.

Cons of Blockchain

1. Lack of regulation

Because blockchain technology lacks regulation, recovering your losses is much harder if the data you store on a blockchain is stolen. If you have cryptocurrency in a blockchain wallet and someone gains access to your wallet, there is no bank or central authority to help you get your money back. This is a significant factor in why many members of the public don't trust cryptocurrencies and their technology.

2. Too much transparency

Transparency has its downsides. Most data on a blockchain is accessible to most people, which makes it a poor place to store sensitive information. Hashing techniques hide the owner of the data, but the data itself is still public, which is why you should be sceptical of proposals to use blockchain for government record-keeping or medical data.

Despite these problems with blockchain, this revolutionary technology is already being used in many places.

Block 2

| Magic number 4 |
| Block size 4 |
| Block header 80 |
| Transaction counter 1-9 |
| Transaction list up to 1MB |

Block 2 Block Header

| Version 4 |
| Previous block hash 32 |
| Merkle root 32 |
| Timestamp 4 |
| Bits - Difficulty target 4 |
| Nonce 4 |

Merkle root

H(01)   H(23)

H(Tx 0)   H(Tx 1)   H(Tx 2)   H(Tx 3)

Tx 0   Tx 1   Tx 2   Tx 3

previous block link

Block 1

| Magic number 4 |
| Block size 4 |
| Block header 80 |
| Transaction counter 1-9 |
| Transaction list up to 1MB |

To previous block - Block 0

Transaction 0

| Version 4 |
| Locktime 4 |
| List of inputs Variable |
| List of outputs Variable |
| Input counter 1-9 |
| Output counter 1-9 |

Input

| Previous transaction ID 32 |
| Previous transaction index 4 |
| Sequence Number 4 |
| Script length 1-9 |
| ScriptSig(unlocking script) Variable |

Output

| Amount 8 |
| Script length 1-9 |
| ScriptPubKey(locking script) Variable |

ScriptSig

| <signature> |
| <pubkey> |

ScriptPubKey

| OP_DUP |
| OP_HASH160 |
| <pubkeyhash> |
| OP_EQUALVERIFY |
| OP_CHECKSIG |

[Blockchain structure]

07 Token Policy

7-1. DT Project Revenue and Reward Structure Diagram

The merchant operating units that wish to invest shall be divided and distributed, and the profits shall be distributed to the investing users.

The purpose of the merchant profit share is to provide a profit distribution system and method for blockchain-based virtual assets that can be utilised as a sharing economy business model by making blockchain-based virtual assets available to various businesses, checking the transparent progress of the DT Project, and making the investment targets and the corresponding virtual assets available to the systems of the linked businesses, which can be expected to benefit from the DT Project. Another purpose is to increase the utility of virtual assets by making them available for various additional businesses, increasing the expectation of profitability from investing in virtual assets and enabling reconversion to virtual assets at any time.

The purpose of the merchant revenue share is to increase the investment value and utilisation of virtual assets by utilising them for various additional businesses, including payment service businesses using blockchain-based virtual assets, and transparently distributing the virtual asset transaction fees and usage fees for payment according to these businesses. Another purpose is to solve the problem of indiscriminate issuance and value retention of tokens in the virtual asset business by issuing and burning tokens and swapping tokens and virtual assets and to solve the problem of maintaining the reliability and value of the token ecosystem. The revenue distribution system of blockchain-based virtual assets includes a virtual asset blockchain system in which virtual asset investor nodes operating as public blockchain nodes and virtual asset operator nodes operating as private blockchain nodes mutually agree to select block constructors. The business system also

includes a virtual asset payment service system, which provides merchants with payment agency services using blockchain−based virtual assets. It collects virtual asset usage fees and provides them to the virtual asset blockchain system. The virtual asset blockchain system may further distribute the virtual asset usage fees to the beneficial interest investors.

The beneficial interest investors can use the crypto assets they hold as tokens through the payment service system to act as fiat currency, and the randomly selected crypto asset investor nodes can participate in consensus and transaction validation using quantum random numbers. The virtual asset blockchain system may include a plurality of virtual asset operator nodes that participate in the consensus process as full nodes operating at all times and may have a redundant configuration with at least one master node with random user node selection, node management, and fee distribution functions. The master node may monitor the status of the cryptocurrency operator nodes. Profit Staking is used as Proof of Stake in PoS.

The business system includes a virtual asset wallet system, which distributes virtual asset transaction fees based on token holdings through token issuance and can convert virtual assets and tokens to each other through token service linkage.
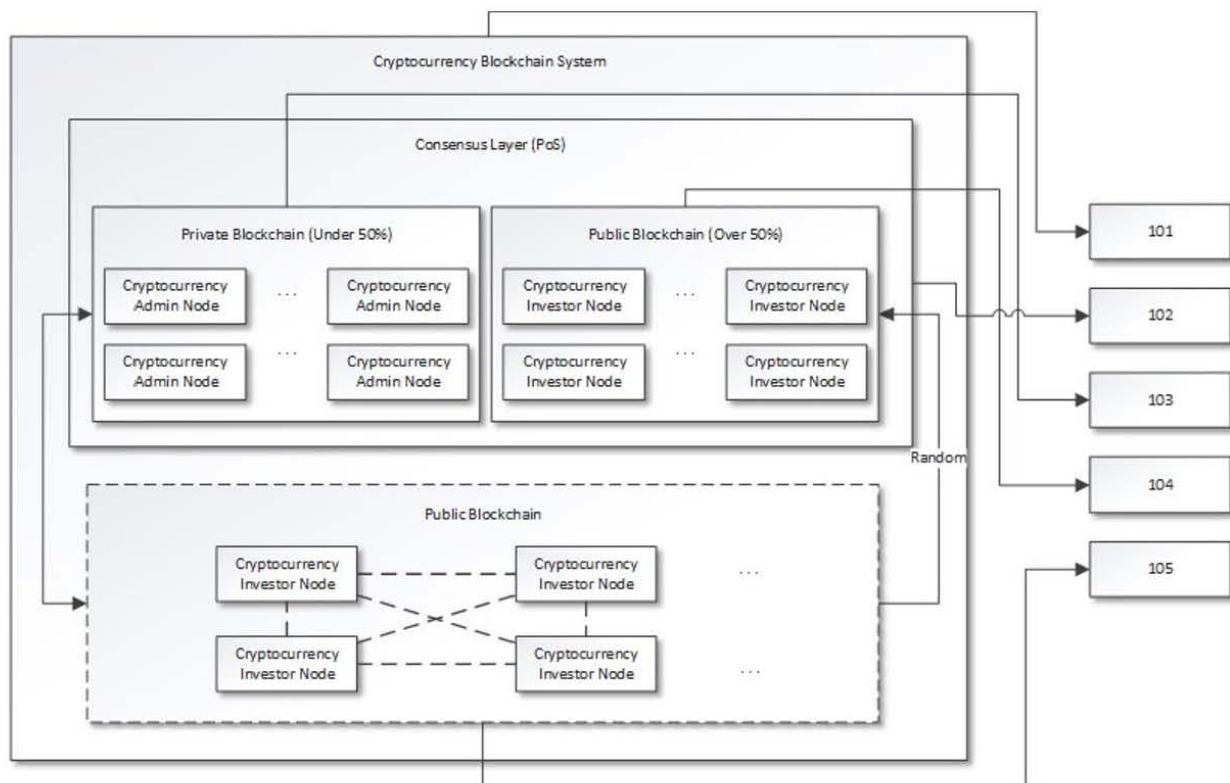
[DT project revenue and compensation structure chart]

As illustrated in the figure above, the merchant revenue share system 101 internally includes a consensus part 102, which is substantially a combination of the virtual asset operator nodes of the private blockchain comprising the corresponding virtual asset blockchain system 101 and the virtual asset investor nodes (general user nodes) of the public blockchain.

The illustrated conceptual consensus part 102 comprises a private blockchain 103 and a curated public blockchain 104 randomly selected from the public blockchain 105, wherein the cryptocurrency operator nodes comprising the private blockchain 103 are substantially full nodes that are operated at all times for

the operation of the corresponding cryptocurrency blockchain system, comprise a predetermined number of nodes (e.g., 10), and are equipped with functions for block generation. The curated public blockchain 104 comprises cryptocurrency investor nodes that are unpredictably and randomly selected via a quantum random number algorithm from the public blockchain 105, the number of which is always greater than the number of cryptocurrency operator nodes (e.g., 20).

Among the nodes participating in the consultation, the proportion of virtual asset investor nodes corresponding to users is higher than that of virtual asset operator nodes, so it is possible to monitor the normal operation of the virtual asset operator nodes that are always in operation. The randomly selected cryptocurrency investor and cryptocurrency operator nodes participate in transaction validation to select a block producer to create blocks from among the cryptocurrency operator nodes. This can be done using a round table in which the order of block generation is randomly determined using quantum random numbers, and the transaction validation can apply an algorithm that can ensure consensus reliability (PBFT / Practical Byzantine Fault Tolerance algorithm or an improved algorithm thereof).

On the other hand, to monitor the above-mentioned virtual asset operator nodes, perform the function of randomly selecting virtual asset investor nodes, i.e., user nodes, and distributing various fees according to the ratio of virtual asset holdings, one of the virtual asset operator nodes is preferably operated as a master node. For such a master node, it is necessary to have various security and stability for stable operation, and it is required to be configured to respond to abnormal situations through at least a redundant configuration.

On the other hand, in the case of a cryptocurrency investor node, as a user node, anyone can participate in the cryptocurrency blockchain system by installing the corresponding function on their device and can partake in the transaction verification process and consensus by random selection.
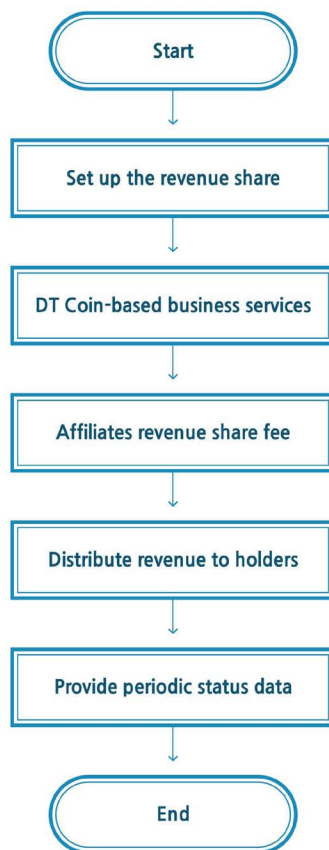

[Affiliates revenue share flowchart]

Through the merchant revenue share system consisting of master nodes, virtual asset operator nodes, and virtual asset investor nodes, a blockchain for the DT Project is periodically created and maintained, and various business service systems based on these virtual assets and blockchains are established. For example, various additional businesses such as virtual asset payment service system, purchase system between DT project and merchant profit share, exchange and staking between different virtual assets, CeFi, De-Fi service system, etc., can be linked with the merchant profit share system to disclose the details of business performance transparently.

Once these virtual asset blockchain systems and various businesses are configured, the merchant revenue share system collects transaction fee information for NFT transactions in these businesses. It distributes the fees to investors holding NFTs based on their holdings. For example, the periodic revenue distribution (R(n)) for user n may equal the following mathematical formula 1.

$$R(n) = \sum_{i=1}^{m} Pi \times \frac{B(Un)}{C\ supply}$$

Where Un is the wallet of user n, Pi is the profit of the i-th block, C supply is the total amount of all crypto assets, B(Un) is the wallet balance of user n, and m is the number of blocks in the distribution cycle.

Transparent information about these distributions is published on the dashboard as a cycle-by-cycle status. These revenues are fees for all revenue share transactions, including person-to-person transactions between users, as well as fees for DT Project transactions generated by affiliated businesses. Furthermore, you can also collect usage fees for all kinds of transactions using the DT Project, which can be distributed according to the merchant's revenue shareholdings.
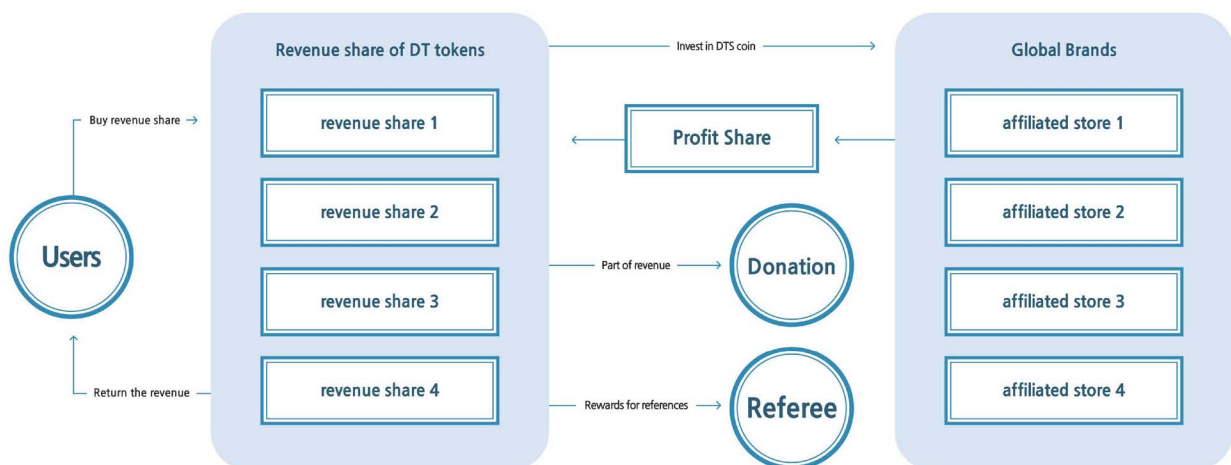
[Schematic of revenue share operations with affiliates]

7-2. Token Information & Allocation

1) Token Information

Role of Token	Utillity	
Name	Devise Technology	
Total Issuance	600,000,000	
Blockchain Network	ERC-20	MANTA
Symbol/Ticker	DT (ERC-20)	DT (MANTA)
Token supply	300,000,000	300,000,000
Decimal	18	18

2) Token Allocation

Blockchain(TOTAL)	Category	Volume
ERC-20(50%, 300,000,000)	Swap Systems & Transaction	300,000,000(100%)
MANTA(50%, 300,000,000)	Platform Reward	150,000,000(50%)
	Team & Foundation	30,000,000(10%)
	Reserve	45,000,000(15%)
	Business development	15,000,000(5%)
	Partnership	30,000,000(10%)
	Investment deposit	30,000,000(10%)

TOTAL	Category	Volume
DT (100%)	Swap Systems & Transaction	300,000,000(100%)
	Platform Reward	150,000,000(50%)
	Team & Foundation	30,000,000(10%)
	Reserve	45,000,000(15%)
	Business development	15,000,000(5%)
	Partnership	30,000,000(10%)
	Investment deposit	30,000,000(10%)

Investment Deposit, 5%

Partnership, 5%

Business Development, 2.5%

Reserve, 7.5%

Team & Foundation, 5%

Swap Systems & Transaction, 50%

DT
(100%)
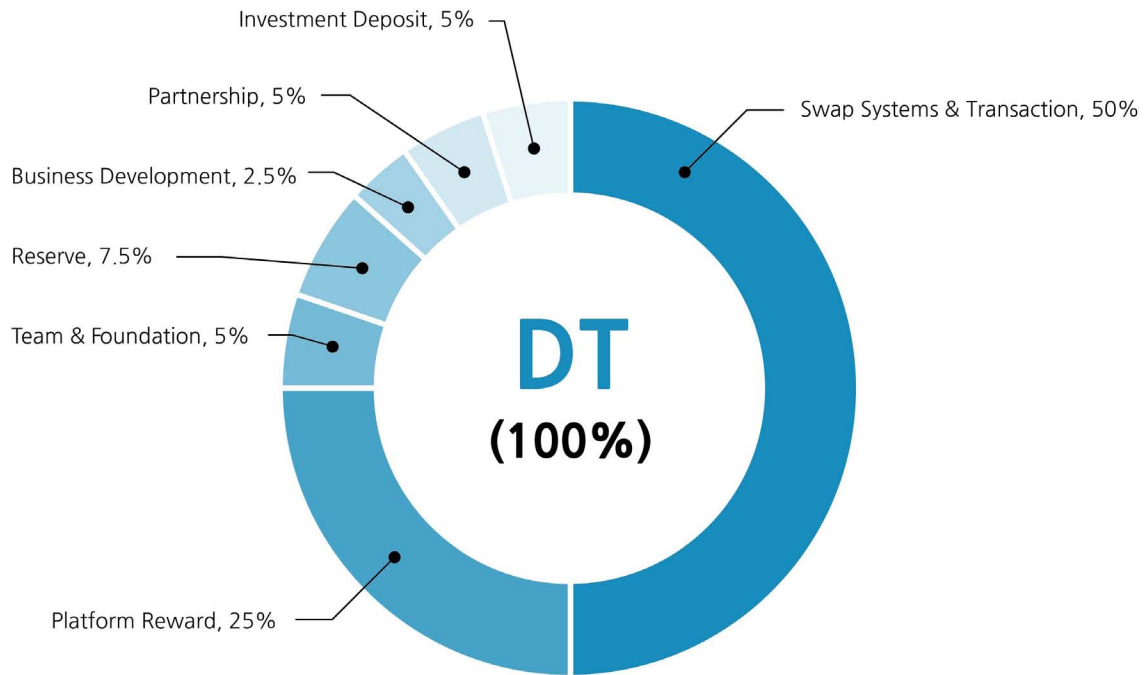
Platform Reward, 25%

Category	Blockchain	Volume
Swap Systems & Transaction	ERC-20, MANTA	600,000,000(100%)
Platform Reward & Swap (50%, 300,000,000)	MANTA	150,000,000(25%)
	ERC-20	150,000,000(25%)
Team & Foundation & Swap (10%, 60,000,000)	MANTA	30,000,000(5%)
	ERC-20	30,000,000(5%)
Reserve & Swap (15%, 90,000,000)	MANTA	45,000,000(7.5%)
	ERC-20	45,000,000(7.5%)
Business development & Swap (5%, 30,000,000)	MANTA	15,000,000(2.5%)
	ERC-20	15,000,000(2.5%)
Partnership & Swap (10%, 60,000,000)	MANTA	30,000,000(5%)
	ERC-20	30,000,000(5%)
Investment deposit & Swap (10%, 60,000,000)	MANTA	30,000,000(5%)
	ERC-20	30,000,000(5%)

7-3. Airdrop Logic (Airdrop Logic Explanation / Calculation Formula)

Airdrop Criteria (Policy)

1. 80% of DT Foundation's revenue generated will be used for airdrop

2. 80% of 100% of the revenue generated will be used for reward payment / 20% will be used for the Foundation's operating expenses.

3. 90% of the 80% allocated for reward will be airdropped to De-Fi Deposit Service users and 10% to NFT holders.

De-Fi Depository Service Airdrop Criteria

1. Scoring of De-Fi Deposit Service usage by number and duration (detailed logic of scoring will be disclosed later)

2. Aggregation of total scores of service users

3. Aggregated total scores/DT Foundation return rate (90%) = number of points per 1 point

4. check the individual scores of service users and airdrop 1/n to the total number of service users

NFT Deposit Service Airdrop Criteria

1. score the NFTs of users who issued NFT warrants using the NFT issuance service (detailed scoring logic will be disclosed later)

2. aggregate the total score of service users' scores

3. aggregated total score/DT Foundation yield (10%) = number of units per 1 point

4. check the individual scores of service users and airdrop 1/n to the aggregated number of service users

08 DT Project Vision

The vision of the DT Project is to provide users with a new reward system and experience of overcoming inflation through NFT, De-Fi platform and DT token services and to provide an environment that enables blockchain e-commerce through partners. Based on the blockchain system, the service focuses on combining centralised modern technology with decentralised future technology to realise more secure and efficient services used in real life.

DT Foundation utilises blockchain technology to provide a secure transaction environment and protect users' personal information.

Transaction history is recorded on distributed nodes, making it difficult for data to be tampered with and ensuring reliable transactions.

DT Foundation provides real-time transaction processing with fast transfer speeds through the DT Project platform, allowing users to use the service quickly and easily anytime, anywhere.

Low transfer fees and an intuitive, user-friendly interface enhance the user experience and make it accessible to all levels of digital inexperience.

Build a blockchain-based DT project ecosystem to collaborate with various operators and expand the service ecosystem. Improve the problems of reckless abuse of NFT technology and inflation in De-Fi, and provide convenience and speed.
Provide cost-effectiveness for users through stable and fast transfer speeds while maintaining low fees.

DT Foundation's technology and vision will lead and innovate the future of finance and help users utilise crypto assets more safely and effectively.

CHIEF MATE

STARBUCKS WPS

Team A Company

DTShop&Shop

DT - MonkeySwap

PET PHONE

ESG-smartphone

WOWMAX Exchange

10 Roadmap

2023. 4Q
- Issue DT Tokens
- Affiliate with global partners
- List on a global exchange

2024. 1Q
- Develop decentralised wallet service
- Introduce multi-chain system and issue
- multi-chain tokens
- Develop and introduce NFT system

2024. 2Q
- Establish global payment system for DT project
- Launch NFT minting service and NFT exchange system
- Develop and introduce NFT system

2024. 3Q
- Launch NFT warranty storage technology
- Develop decentralised swap system
- Launch NFT exchange beta service

2024. 4Q
- Develop De-Fi system
- Launch decentralised swap system
- Launch NFT exchange service

2025. 1Q
- Launch De-Fi system beta service
- Develop NFT reward system

2025. 2Q
- Launch De-Fi service

11 DT Project Operation Policy

 The policy of the DT Project is determined by the DT Foundation. It may be changed considering customer convenience and efficiency in the operation process, such as one month, three months, etc. When changes occur, members will be notified of the policy changes through the official website of the DT Foundation.

Examples of possible changes to the operating policy are as follows.

 1. User level: The service users' level may be divided.

 2. Affiliation policy: Continuous additions are planned according to business alliances and business additions.

 3. Reward policy: Referral rewards and airdrops may be changed according to membership level.

 4. Cost policy: Depending on the membership level, payment costs and fees may change.

DT Project's policy changes are implemented, with the highest priority being the efficiency of the DT Project system and the increase in the value of cryptocurrency. These policy changes are included in the policy change agreement when using the service.

12 Disclaimer

1. This white paper is for general information purposes only.

2. DT Foundation makes no representation or warranty of any kind, express or implied, regarding the integrity, accuracy, reliability, suitability or availability of the content of this whitepaper.

3. This white paper does not constitute legal or financial advice.

4. Investors should seek independent professional advice before taking action, as per the information in this whitepaper.

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6. There is considerable risk and uncertainty inherent in such statements.

7. Actual results or performance may differ materially from what is implied in that statement.

8. DT Foundation is not responsible for the accuracy or completeness of such statements.

9. None of the statements in this paper are constructed to predict the future performance of the DT Foundation.

10. Investing involves risk, including loss of principal.

11. Investors must be able to bear the risks involved.

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