



# FILESHARE Platform

It does not emit carbon through mining, so it is eco-friendly, can be mined anytime, anywhere, and is a system built by a blockchain based on an IPFS (Interplanetary File System) method.

## WHITE PAPER

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## 1. Introduction

With the development of IT technology, the world is now a craze for the Internet and smartphones. From the most basic of obtaining information through the Internet, technology and its scope of use are rapidly increasing so that they can be used closely in everyday life, facing the era of Untact. Its influence is getting wider, and as the Untact service is strengthened, online content services are also strengthened, and consumption demand such as movies, dramas, and children's contents through the Internet at home is increasing rapidly. However, in order to use these services, it is necessary to stabilize the server of the service that provides fast Internet speed and contents. This is because users will feel a great inconvenience if any of them is insufficient. FILESHARE has key technologies that can complement these essential requirements, which can provide fast service use to Content consumers and mine FILESHARE Coin.

The technology described in the FILESHARE white paper has already been developed and ecosystemed for 10 or 20 years, and aims to develop coins based on related technology companies and infrastructure and explore global markets.

Blockchain-based FILESHARE built an environment so that anyone can easily mine FILESHARE using technologies built for Over The Top (OTT) services. It will also introduce the NFT method, which has recently become an issue, and issue NFTs for file copyright protection on its own FILESHARE chain after the launch of the mainnet. NFTs of files protected by the blockchain are traded with FILESHARE coins between the holder and the buyer through a smart contract.

### **FILESHARE core technology**

- **P2P network technology that dispersion stores and shares files**
- **Technology that enhances File Download and streaming Internet bandwidth using Grid Peer network**
- **The unique information (DNA) of digital content (video, sound source, image, etc.) is extracted and built into a database, and based on this, comparative identification/ search/protection/blocking/charge method of filtering technology (NFT Token method) for copyright holder rights and interests.**
- **Copyright management and distribution service technology**

It is an integrated technology, and it is a technology coin with built-in economic incentives through file sharing between users with stable services and numerous contents.

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OTT : Over The Top. OTT service is a service that provides various media contents such as dramas and movies through the Internet by third-party operators along with existing telecommunications and broadcasters.

## 2. Background of Business

Existing mining methods such as Bitcoin consume a huge amount of electricity, and carbon emissions generated when producing this electricity are also the main culprit of environmental destruction that cannot be ignored. In this regard, China, which mines about 70% of Bitcoin, began to close its bitcoin mining companies after the end of May 2021 due to environmental destruction caused by carbon emissions, and it is estimated that Bitcoin mining was stopped more than 90% in June 2021. Therefore, the effect of bitcoin price decline is occurring.

In addition, regulations for safe transactions between coin exchanges and coins that occur worldwide have established policies for coin exchanges since 2020. The Coin Exchange, which did not provide accurate listing standards, continues to close its listing on coins that have no substance among the listed coins. For this reason, coins that need to be listed in the future will have a range of entities that can be invested normally and sustainable coins will be listed.

FILESHARE uses traffic generated by OTT services using P2P network technology that stores and shares files, so it does not consume electricity for mining and does not require expensive miners.

The NFT market is gradually expanding. NFT, short for Non-Fungible Token, is issued in the same way as coins on a particular blockchain and is an irreplaceable and independent object. As soon as the NFT is issued reflecting the characteristics of the existing irreversible blockchain, the holder's personal information is recorded and provided on the Internet, the holder can claim the right to this. The NFT market is growing actively in areas where disputes between counterfeiting and ownership are high, as shown in the figure, and is expanding to movies/drama/music/game/entertainment.

FILESHARE has established an infrastructure that allows holders to safely protect the copyright of files by combining the characteristics of copyright and NFT, which are most problematic for file

sharing on the file sharing platform.

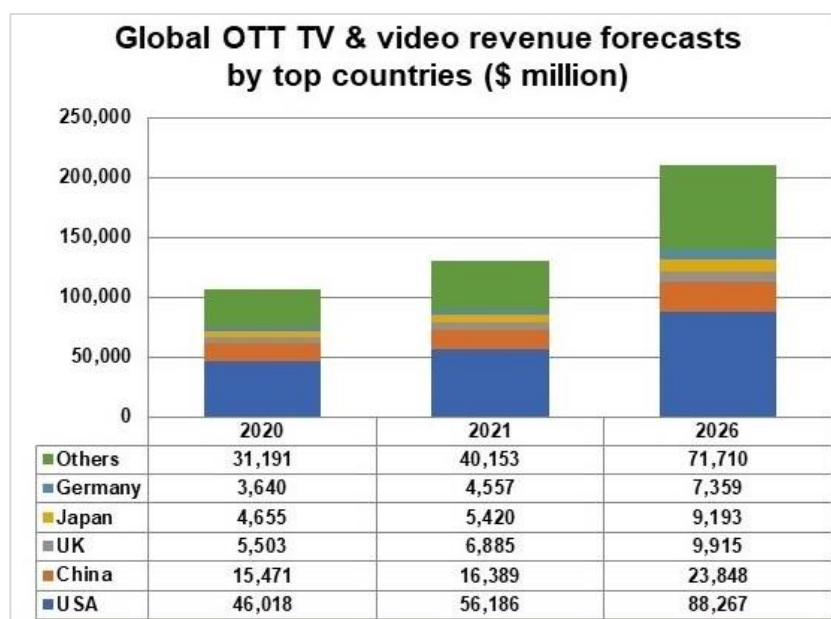
FILESHARE has had related technologies and application cases since about 20 years ago in the 1990s and early 2000s, and has secured platform services and users to which technology is applied.

Our goal is to make FILESHARE meet anytime, anywhere in a simple way. It is an eco-friendly and simple FILESHARE that does not require mining equipment, mining places, and cumbersome management of equipment. In addition, FILESHARE is also expected to grow together as the OTT global market is expected to grow further in the future.

### 3. Outlook and flow of OTT services

#### 1) Global OTT Market Growth Rate

Among the OTT services in 138 countries around the world, TV episodes and movies revenue reached about \$106 billion in 2020 and will reach \$210 billion by 2026, according to a study. The OTT market is growing rapidly.



2020-2026 Global OTT TV and movie revenue expectation top countries.

(Source: Digital TV Research)









China's OTT revenue is also expected to record the highest growth rate from \$15.4 billion in 2020 to \$24 billion in 2026.

In the case of Japan, it is expected to nearly double to \$9.2 billion in 2026, compared to 2020. India is expected to triple its growth from 2020 to \$6.7 billion in 2026.

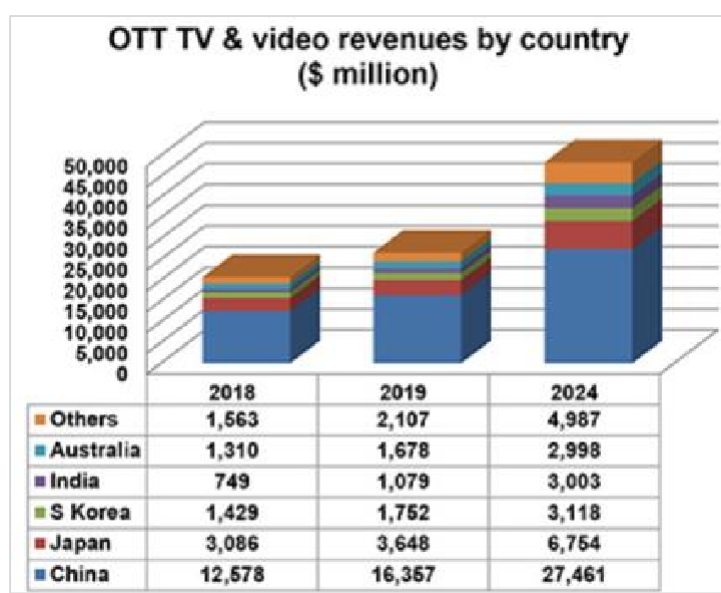
Korea is expected to grow 15% in 2021 from \$2.46 billion in sales in 2020, achieving \$2.57 billion in sales.

### [ Current status by global OTT service ]

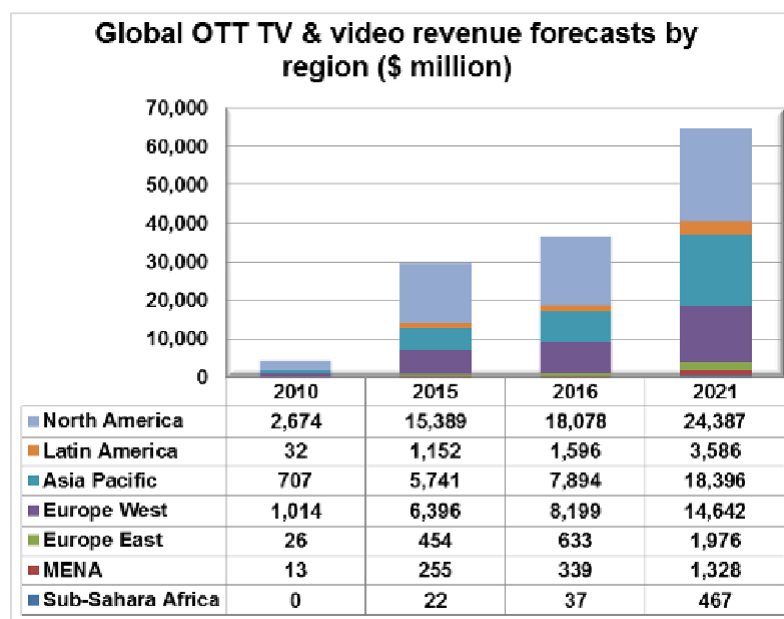
Service	Netflix	Disney+(Walt Disney)	Hulu (Walt Disney)	Amazon Prime Video	Apple TV+	HBO Max
						
Service Start Date	January 2007	November 2019	March 2008	September 2006	November 2019	May 2020
Launch Country	190 countries (Excluding China and four other countries.)	12 countries	1 country (USA)	242 countries	150 countries	1 country (USA)
Number of subscribers	180 million viewers	50 million viewers	28 million viewers	150 million viewers	10 million viewers	4 million viewers
Monthly fee (Basic)	\$8.99	\$6.99	\$5.99(use a commercial) \$11.99(remove the commercial)	\$8.99	\$4.99	\$14.99
Business model	SVOD	SVOD	SVOD + AVOD	SVOD	SVOD	SVOD
Mother company	Netflix	Disney	Disney	Amazon	Apple	AT&T

(As of May 2021)

- Asia Pacific OTT TV & Video sales as of 2018



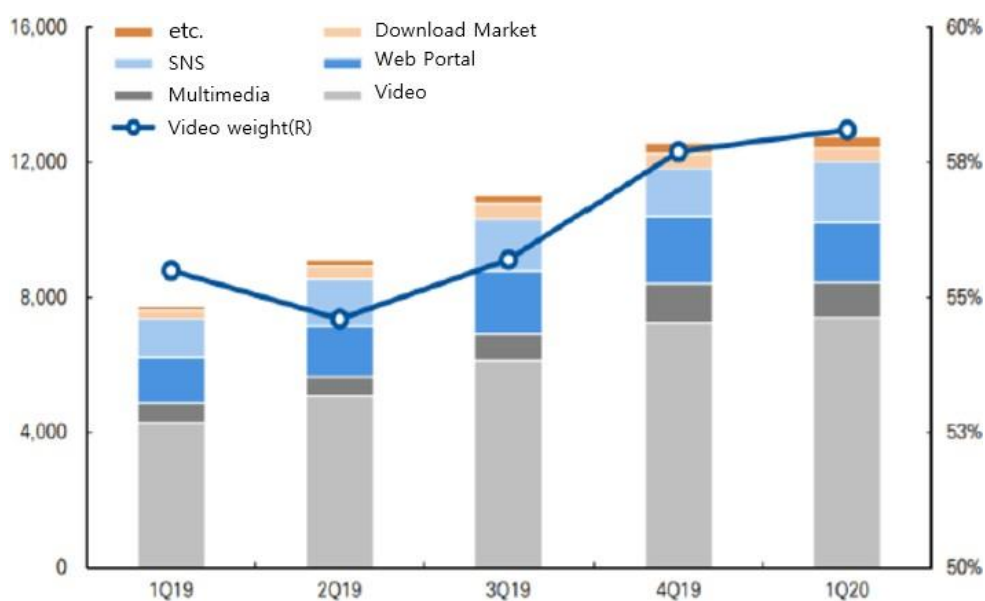
Source: Digital TV Research



Source: Digital TV Research

- **5G technology trends due to the growth of OTT services**

Smartphone sales have decreased since the outbreak of the COVID-19 pandemic, but the increase in 5G subscribers is clear. It is being built based on South Korean telecommunication companies LGU+, SKT, and KT, which are the birthplace of 5G networks.





## 2) OTT Status

Corporation	Key Points
YouTube	A paid-for strategy by launching YouTube Premium, which includes ad deletion, download function, music service, and original content in the existing advertising exposure method.
NETFLIX	In 2019, JTBC, CJ ENM, Studio Dragon signed a content partnership. A \$17.3 billion investment in content production in 2020.
Amazon	Service launched in 2016. It will offer a series of "Lord of the Rings" on TV that will have the highest investment ever in American dramas (1.5 billion dollars).
Disney	Launched in November 2019 Coming to Korea in 2021
Apple	Launched in November 2019 Undecided when to launch in Korea
Warner media	2020 HBO Max service starts
Discovery	2020 Discovery Plus service starts

•With the advent of the Untact era, the OTT craze is also blowing around the world. According to consulting firm PwC's Global Entertainment Media Industry Outlook 2020-2024, the global OTT market is expected to reach \$58.2 billion in 2020, up 26% from a year earlier.

•It is expected to form \$86.8 billion by 2024. It is nearly twice the size of 2019 (\$46.2 billion). In addition, global data usage is expected to more than double from 1.9 trillion MB (mega byte) in 2019 to 4.9 trillion MB in 2024..

•As of the third quarter of 2020, Netflix's global paid subscribers surpassed 195 million. Walt Disney, a latecomer, has already achieved its target of 140 million subscribers in 2024, while Netflix took 10 years to achieve 100 million subscribers in the past, while Walt Disney took less than a year. This is proof that consumers' OTT usage rate is increasing rapidly.

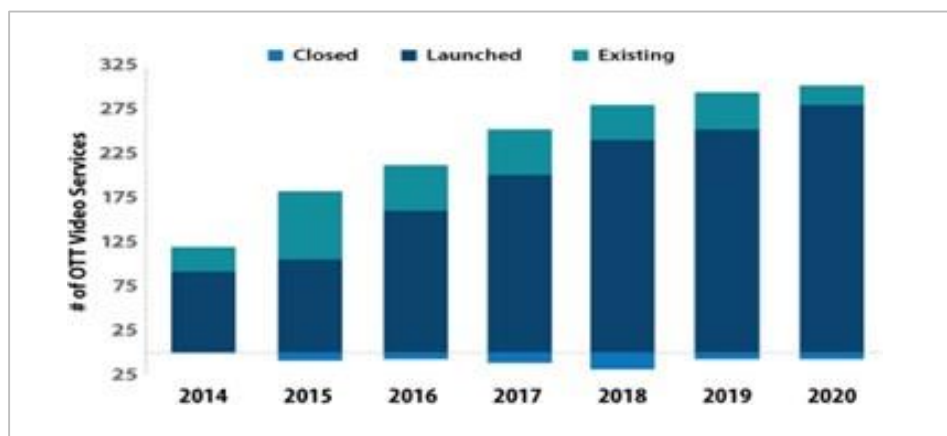
• Netflix offers three plans from \$8.99 to \$12.5 per month, and Wavve offers three tickets from \$6.9 to \$12 per month, while its cost-effectiveness (performance versus price) is overwhelming. However, in order to revive these advantages, it seems that sufficient competitiveness in content must be secured.

• Walt Disney's OTT service Disney Plus is available at \$6.99 a month, which is considerably

cheaper than Netflix. Walt Disney Company CFO plans to recruit up to 90 million Disney Plus users worldwide by 2024. As of the end of 2020, it has already reached 86.8 million, and it is expected to be able to recruit users much shorter than 2024.

- The Korean OTT market was in business around 2000, and the download OTT and P2P markets in Korea were the world leaders, but failed to enter the world due to illegal download sharing. However, it has its own know-how and large amounts of content while continuing its service for more than 20 years, and it is judged that many Peer and operating know-how technologies are sufficiently competitive in the global market.

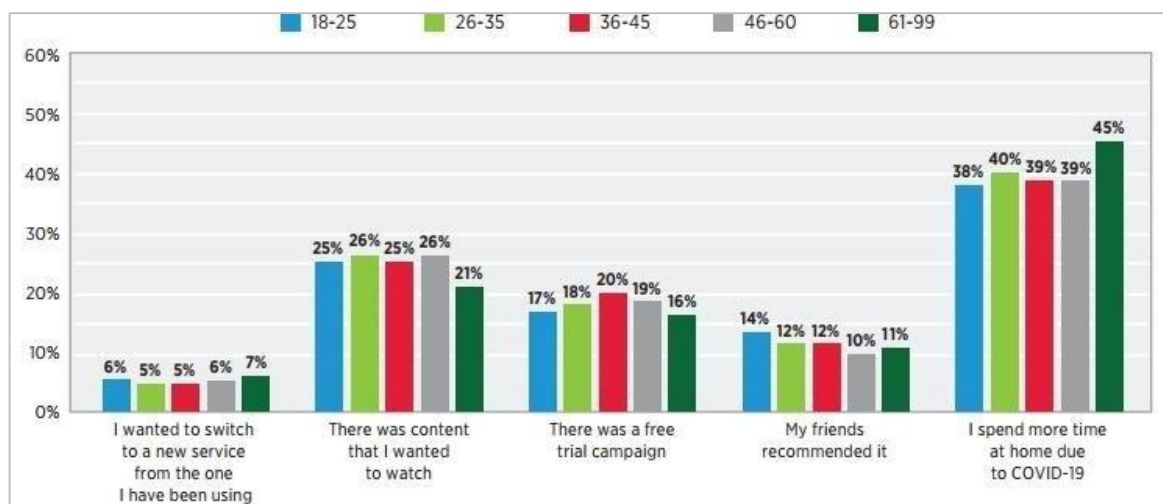
Compared to 2014, the number of OTT services in the United States more than doubled as of the third quarter of 2018, and exceeded 300 in 2021. Disney Plus and Apple TV Plus, which launched the service in November 2019, and HBO Max, which launched the service in May 2020, began to be in the top 10.



[ OTT video service in the U.S. appeared ]

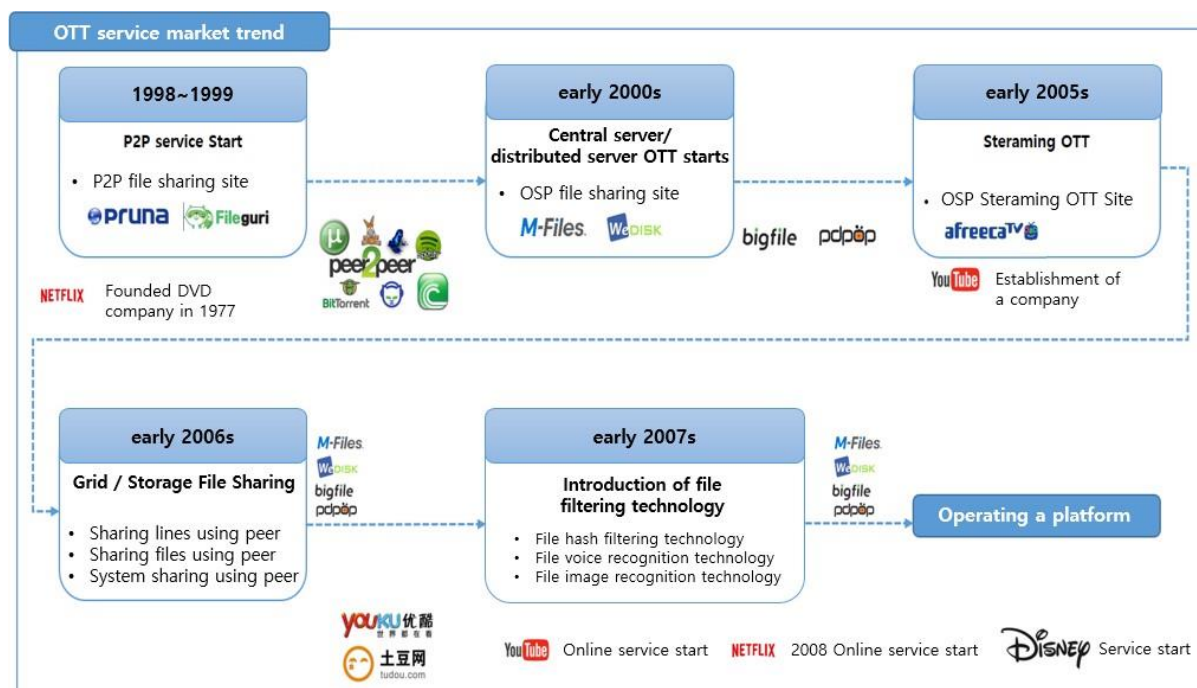


Video usage trend according to the previous year (2020) [Source: blog.adobe.com]



Lime Light Networks' "Online Video Usage Status 2020" report on the reason for subscribing to a new online streaming service.

### 3) OTT Market Flows



### YOUTUBE



Founded YOUTUBE company in 2005

Online business started in 2007

## NETFLIX

**NETFLIX**

Founded in 1997 and started  
the DVD business

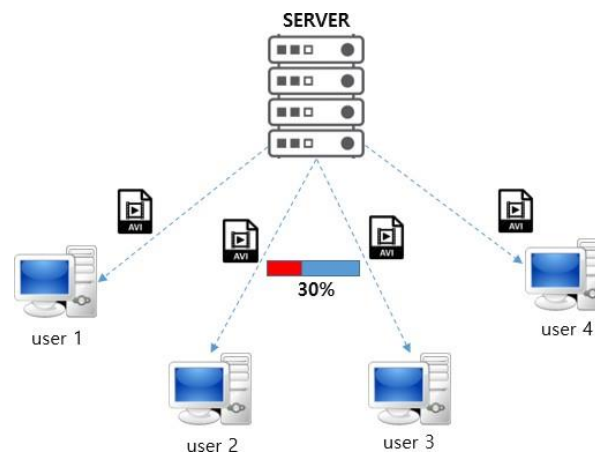


Online business started in 2007

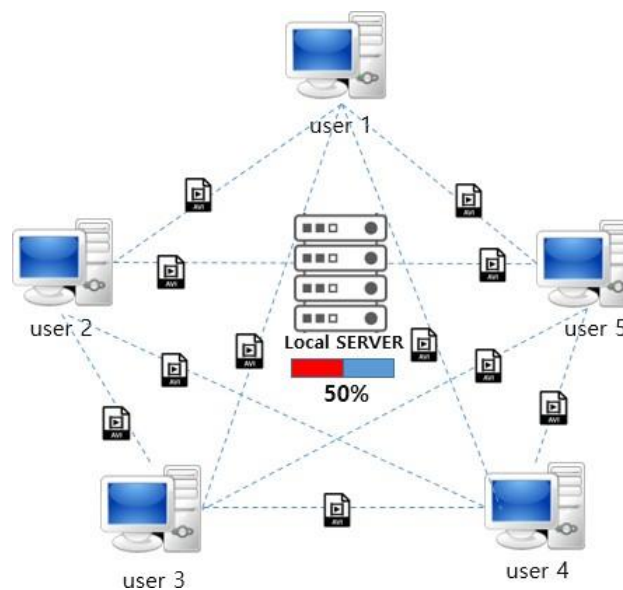
#### 4. FILESHARE Core Technology

##### 1) File Service Method

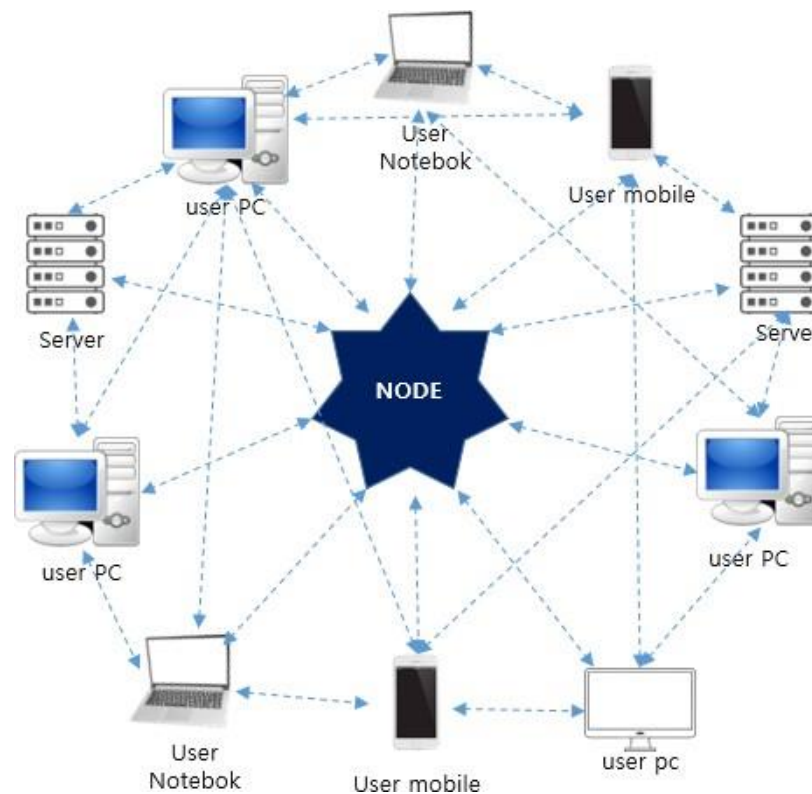
###### 1-1) client Server Method



###### 1-2) Peer to Peer Method



### 1-3) Computer Grid structure



## 2) GRID Service Technology

Peer to peer (P2P) allows information transmission between Peer (individual users) in the network in real time, and each Peer can function as both a client and a server. Peer can be defined as a network with characteristics such as providing the main information of the network, controlling the network is done by Peer itself, not by a central server, and even Peer that is not always connected (i.e., the network will be able to accommodate various connections).

The P2P service may be classified into Hybrid P2P and Pure P2P according to the existence of the central server.

The **Hybrid P2P method** is a method in which the central server provides access and location information about other users or a list of files to be exchanged. The advantage of having a central server, such as the Hybrid P2P method, is that users can quickly share files by providing access or file list information of other users, while operating the central server has the disadvantage of concentrating too much information and incurring a huge financial burden.

The Pure P2P method is a method in which personal computers are connected without going through a central server even at the time of initial access. While maintenance costs are low by removing central servers, there is no central server when searching for information, so specific search needs must be sequentially propagated through personal computers, resulting in slow speed, bottlenecks in the transmission process, and poor network stability.

### **Computer Grid Technology**

It is a technology that distributes data centralization and improves the speed of rapid search and file sharing by securing the advantages and disadvantages of the **Hybrid P2P method + Pure P2P method**.

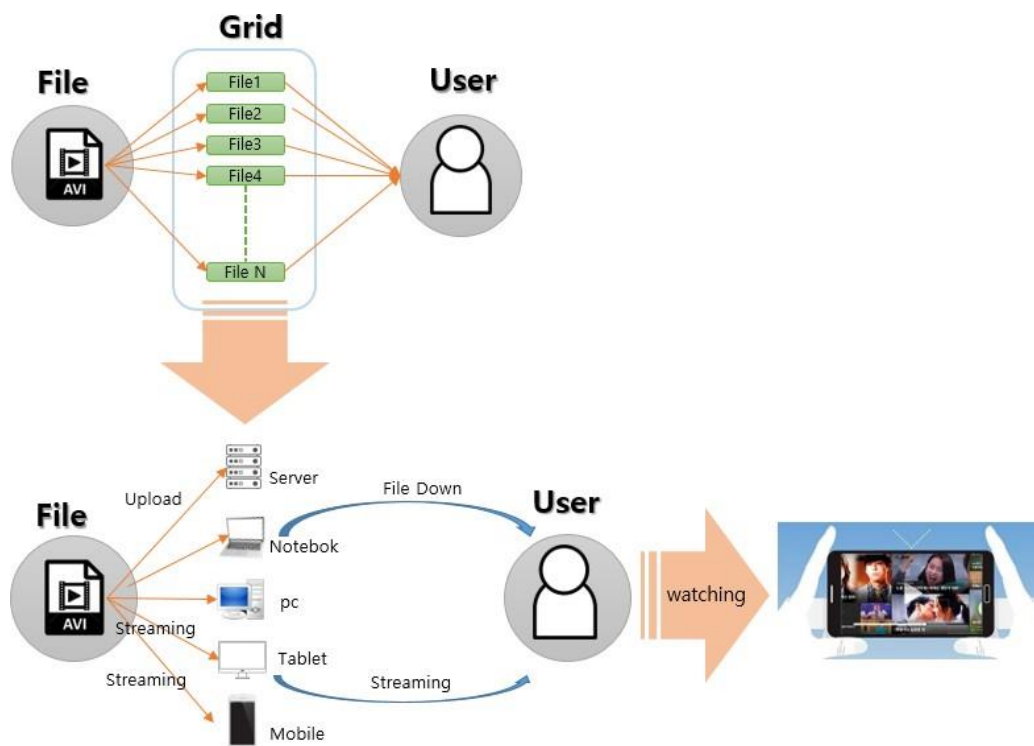
- **The Grid-based file sharing protocol divides a single file into several pieces and shares the file in pieces.**
- **The size of the fragment may be set when the grid is generated.**
- **Grid is key to the technology of checking the speed of files searched and selected by Users and sharing files from servers and Peer that can file down the fastest.**

### **Grid Technology**

- It is an infrastructure technology that can efficiently share online resources through the combination of advanced network technology and high-performance computing technology.
- A computing grid is a technology that shares locally distributed computer, server, and mobile power so that it can be used like a single high-performance computer.
- For example, the technology of the computing grid is to keep connecting PCs, mobile, and servers in unused time zones to the grid to use tens of thousands of PCs like one high-performance supercomputer.
- The place where this technology is most applicable to market conditions is a special type of online service platform (OSP) company that downloads files.

P2P services have been developed in pure file transfer networks, evolved into computing grid

technology, and are being serviced in the form of web hard OTT. Externally, it appears to be in the form of download OTT, but in reality, files are sent directly to each user's storage device, causing a load on the user system like a pure initial P2P network.



### 3) Computer Filtering Technology ( NFT Token Method )

#### Content Services Required Skills : Content Filtering

#### IP Contents Protection

Copyright content filtering technology was recognized for its technology only when it passed strict technical verification by the "Copyright Committee" of state agencies.

Content filtering technology is a program developed for more transparent content distribution and management in a neutral position between content providers (CPs) and online service providers (OSPs), and has filtering data bases for content worldwide in circulation.

Copyright content can be identified at 0.2 seconds at the earliest of 1 to 3 seconds, and it is



securing the world's best filtering data base, which has been copyrighted and distributed in Korea since 1920.

### [ Content filtering technology is? ]

It is a technology that extracts unique characteristic information of digital content, builds the information into a database, and compares and searches for content in circulation based on this. Currently, filtering technology is used to protect copyright content by blocking content that is illegally distributed online, and is used to distribute legitimate content through OSP companies that have introduced filtering technology.

### [ Preventing the distribution of illegal pornographic information. ]

•**Korea** : The Korea Communications Commission and the Korea Communications Standards Commission are using illegal pornographic information data to support the implementation of online service providers' technical measures on the distribution of illegal pornographic information.

Japan, US	Vietnam	China
It is possible to block and proceed with the service in the legally obscene content market.	No copyright-related laws.	Lack of awareness of copyright.

### [ Personal video copyright protection. ]

In the era of single-person media broadcasting, that is, copyright protection and distribution business using video recognition technology of individual-produced videos and digital works can be carried out together. It is possible to develop a personal video copyright protection distribution business through digitalization so that specific information can be extracted from personal video works and video content can be identified.

### [ NFT Token method ]

Content filtering technology is fused with the NFT Token method to achieve higher security. Information on the NFT will also be recorded in the database obtained through content filtering,

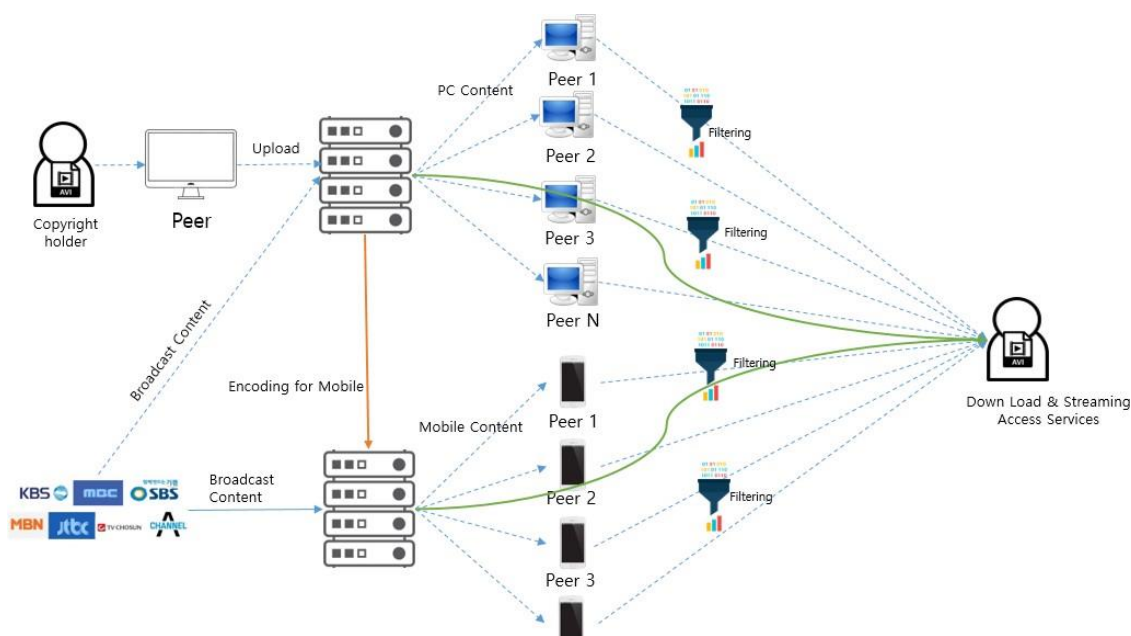
and the data that went through the initial filtering will automatically be placed on the block generated when the NFT was issued in the file. These two technologies complementarily increase the security of data.

#### 4) Copyright Management and Distribution Services Technology

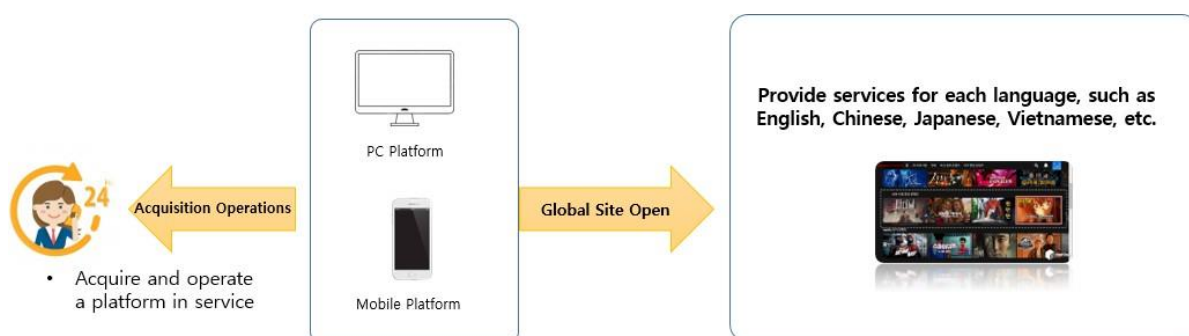
- **OSP (online Service platform) Platform**

It has more than 20 years of operational know-how and more than 10-20PB (about 15 million or more) of content.

The service is underway with the world's best technology of PC Download and Mobile Streaming Download.



- **The direction of entry into the SNS platform.**



- Service support for each language.
- Content Block chain FILESHARE Building a service model.
- Upload, Download, Streaming, Broadcasting Filtering Service expansion.
- New SNS Platform Expansion

## 5. FILESHARE Chain

The blockchain system is an area that receives many issues among icon technologies of the Fourth Industrial Revolution, and uses the storage of random computers composed of multiple independent nodes beyond the existing authentic file storage system, the central server system. The biggest advantage of the blockchain system is security, and transparency and unchanging disposition, which are the first-generation characteristics, are also emerging as advantages.

FILESHARE is a file sharing platform built on the basis of the Interplanetary File System (IPFS) method, and mined FILESHARE coins are traded on the blockchain system by smart contracts. In addition, when NFT is issued after the launch of the mainnet, content related to file copyright will be permanently recorded on the blockchain system.

### 1) Blockchain system

#### 1-1) Security

- Blockchain systems described as decentralized security systems are technologies that compensate for the vulnerabilities of existing centralized memory environments. Existing central server-style storage systems do not have a way to prevent security issues from occurring on a server or on a server stored in a region.

On the other hand, blockchain systems can protect data from hacking because tens of thousands of nodes, including master nodes, share and store data. Each node records new data in a virtual storage called a block and shares the same copy. The information continues to be given, and the given data is generated and recorded in accordance with the agreement of the nodes, but the name "blockchain" is derived from the fact that many blocks are linked together like chains.

- The method of reaching an agreement when information recorded in a block is utilized or when new information is recorded in a block is called the Consensus Algorithm, and information is used if more than 51% of nodes are agreed to be the right information. In theory, if more than 51% of nodes are hacked, an agreement can be reached with false information. However, from the hacker's point of view, it is recognized as the best security system with the current technology because it is not economical, unreasonable, and has many risks.

#### 1-2) transparent

- The advantages of the blockchain system lies not only in decentralization but also in transparency. Information recorded in the block may be freely viewed not only by nodes with authority to access the network, but also by non-nodes without authority. Based on the blockchain in which the current cryptocurrency transaction is recorded, anyone can freely view who sent how many coins to whom and who received them. However, since the identity of the owner of the wallet address is not recorded in the wallet, it is not known who the owner of the wallet is at present.

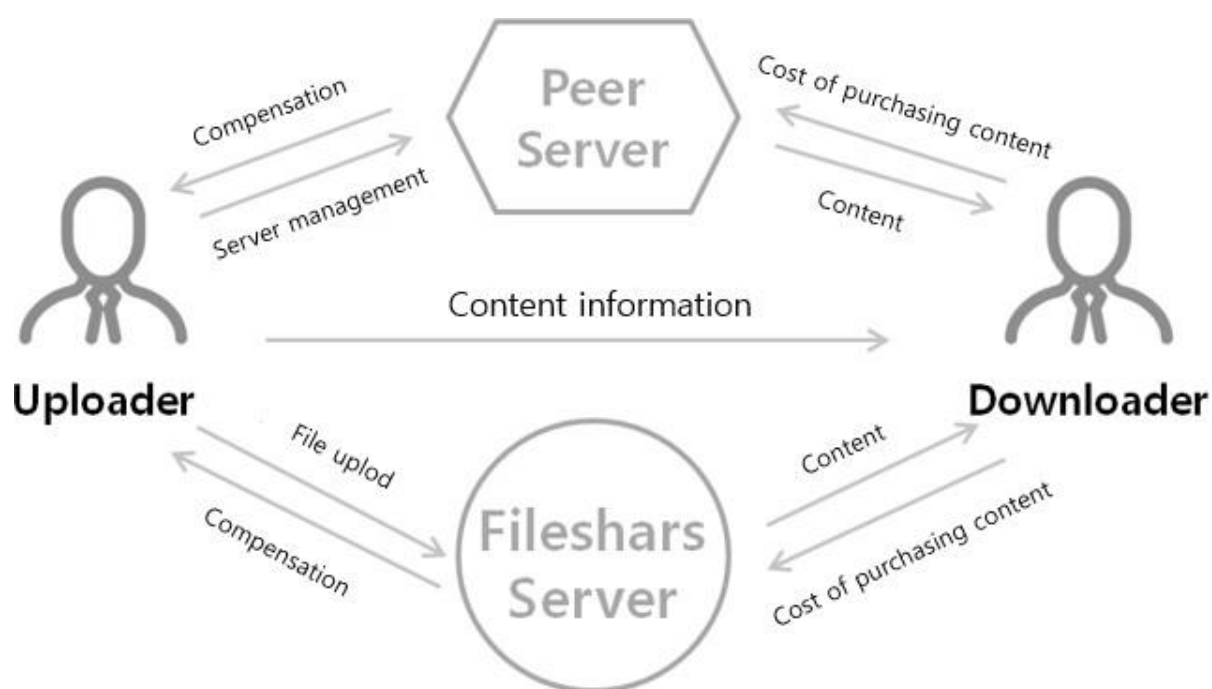
#### 1-3) Smart contract

- Smart contracts are a feature and advantage of Ethereum, which is widely used in existing centralized systems, and is a system that concludes contracts when conditions between contractors are established. Similar systems have escrow, but escrow has middle-man, and smart contracts have differences that are automatically made on the system without intermediates. In the initial development stage of FILESHARE, mining details and transactions of FILESHARE coins will be recorded on the blockchain based on the information above the IPFS construction system using the Ethereum chain's smart contract. In addition, since it requires interworking with IPFS systems, it will play the same role as escrow infrastructure when they trade. Smart contracts allow transactions between buyers and sellers to be made at cheap fees without intermediaries, and future NFT transactions will also use these systems.

## 2) Contents

### 2-1) IPFS interworking distributed server.

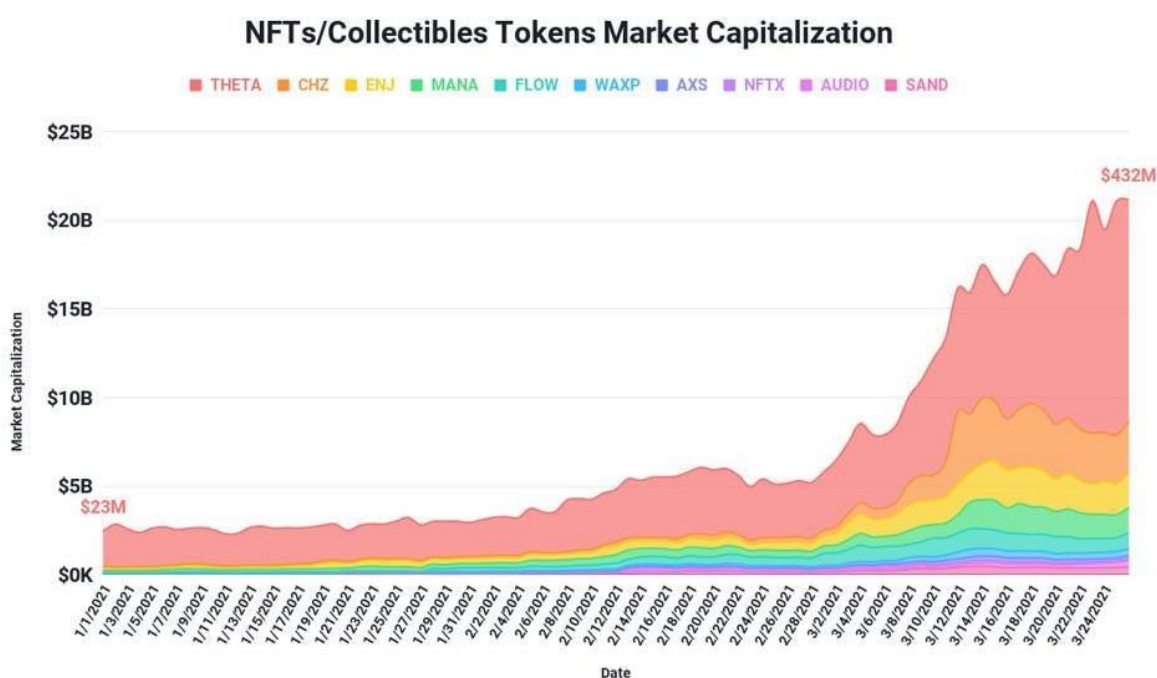
- The initial FILESHARE chain will be built in the form of Dapp above Ethereum. In conjunction with IPFS, users participate in the ecosystem through activities beyond simply uploading and downloading content. Users can contribute to the entire server by configuring their own nodes, and can directly manage data and generate profits by purchasing servers directly and creating node groups. From the details of uploading and downloading the content to the rights to manage the server are permanently recorded in the block above the FILESHARE chain, and copyright issues and server hacking issues are secure through this.



### 2-2) NFT Market

- Currently, the official blockchain NFT refers to a non-fungible token issued on the Ethereum chain. As certain information is recorded in a block, it does not correspond to a permanent record, but the information itself is produced on the chain in the form of a token, so that the identity of the token is recorded on the block. Before the launch of the Mainnet, FILESHARE will build an NFT market that can trade NFTs issued

by Ethereum as well as NFTs scheduled to be issued by major platform Coin through FILESHARE Coin. Users can upload NFTs, such as uploading content, which can permanently delegate authority over NFT ownership as NFT transactions are recorded on the block when NFT transactions are made on the FILESHARE platform by smart contracts. After the launch of FILESHARE chain's mainnet, FILESHARE' own NFT will be periodically issued, and the identity of the affiliated content and the exclusive content produced by the user will be traded between users in the form of NFT.



## 6. FILESHARE Mining Method

The HTTP method is vulnerable to data security, may have transmission speed problems, access and server down again, and may take time to solve the problem and recover.

FILESHARE can perform stable and secure mining (block creation) by replacing these shortcomings with the Interplanetary File System (IPFS) method.

You can get fom as a reward for mining.

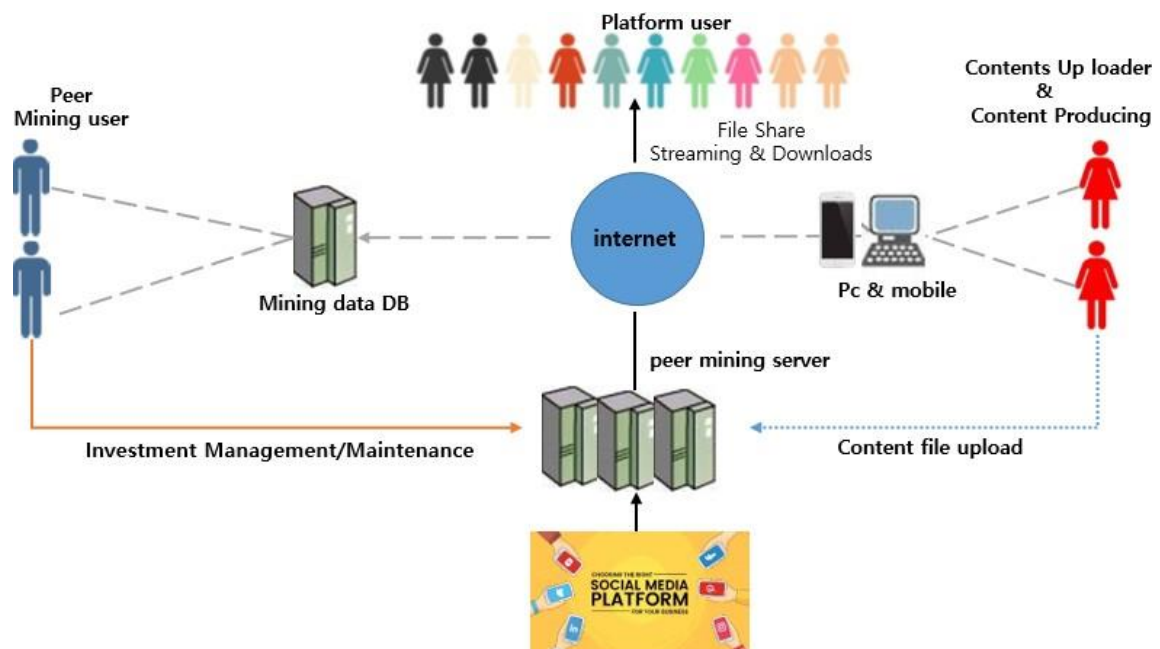
### 1) Platform Server Mining

Users can participate in mining on platform servers belonging to the FILESHARE Group, and platform companies are in charge of operating and maintaining servers for three years.

Mining is mined at the ratio of content traffic and nodes stored in the server, and users participating in the mining can check the server's resources and mining results and enable Coin transactions after a certain period of time.

Coin's transaction details are recorded on the FILESHARE chain, and users can make transactions safely.

Platform companies manage the storage and maintenance of content on servers.



#### 1-1) FSC Mining formula.

- FSC Mining reward (F)

$$F = (T * T \text{ factor} + N * N \text{ factor}) * (t/24) * R$$

- The final compensation (PSM) of platform server mining is as follows.



n = numbers of mining users

$$\text{PSM1} = \frac{\mathbf{F1}}{\mathbf{F1} + \mathbf{F2} + \mathbf{F3} + \dots + \mathbf{Fn}}$$

### 1-2) Detailed formula.

- Content traffic(T):

The amount of data exchanged between the server providing the content and the content users. It depends on the computing power and storage size of each node, and traffic is recorded in GB. The traffic factor has a value of 0.05 at 50-100GB, 0.03 at 100-500GB, 0.02 at 500GB-1TB, and 0.01 at 1TB or more.

- Number of nodes(N):

The number of nodes provided by a user of an account. Count the number of nodes by cpu or gpu. When there is one node factor, it has a value of 1, and when there is 2 to 5, it has a value of 2. If there are more than five, it has a value of 3.

- Mining time(t):

Time for the user to provide storage to the server. Users can control their participation on the platform SDK. It has a value of at least 1 hour to 24 hours. The unit is time.

- Group server ratio(R):

The percentage of platform server groups in all FILESHARE servers, including peer servers. It has a value from 0 to 1.

### 1-3) PSM Algorithm example

- T = 200GB, N = 1, t = 3h, R = 1  

$$F = [ (200 \times 0.03) + (1 \times 1) ] \times (3/24) \times 1 = 0.875$$
- T = 600GB, N = 1, t = 3h, R = 1  

$$F = [ (600 \times 0.02) + (1 \times 1) ] \times (3/24) \times 1 = 1.625$$
- T = 600GB, N = 2, t = 3h, R = 1

$$F = [ (600 \times 0.02) + (2 \times 2) ] \times (3/24) \times 1 = 2$$

$$- \quad T = 2\text{TB}, N = 6, t = 24\text{h}, R = 1$$

$$F = [ (2000 \times 0.01) + (6 \times 3) ] \times (24/24) \times 1 = 38$$

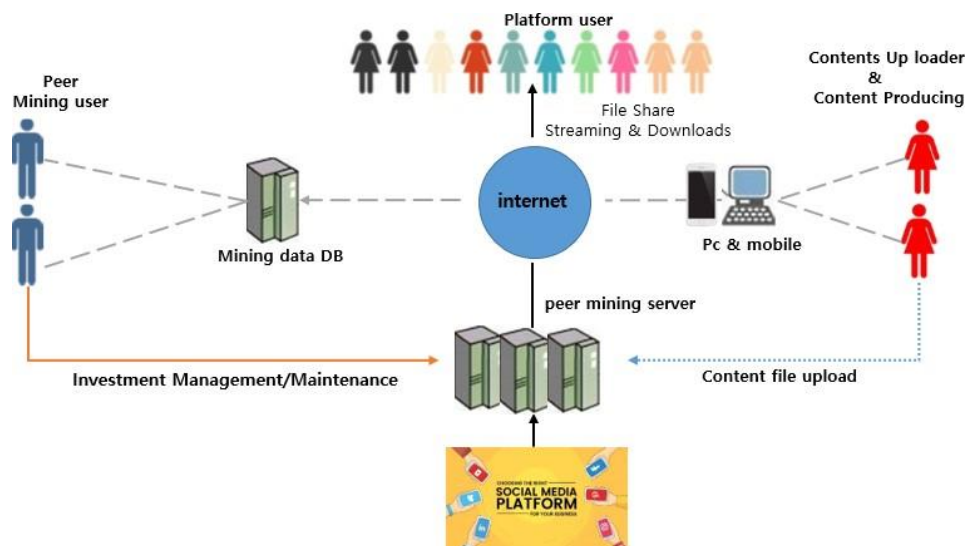
## 2) Peer Server Mining

Peer Server Mining purchases and manages servers, and mining proceeds when mining users participate as FILESHARE Platform Peer.

Peer Server investment maintenance can be done by mining users, and content data is uploaded by platform content and files are stored by content rights holders and providers.

Mining is carried out by stored file sharing traffic and node ratio, and mining is also carried out by peer server Internet line sharing. Peers who participated in the mining will be provided with site information to check the mining results.

FILESHARE Platform will secure users, develop services, and pioneer a global OTT market.



**2-1) FSC Mining formula.**

- FSC Mining reward (F)

$$F = (T * T \text{ factor} + N * N \text{ factor}) * (t/24) * R * 1000$$

- The final compensation PESM of peer server mining is as follows.

n = numbers of mining users

$$PESM1 = \frac{F1}{F1 + F2 + F3 + \dots + Fn}$$

**2-2) Detailed formula.**

- Content traffic(T):

The amount of data exchanged between the server providing the content and the content users. It depends on the computing power and storage size of each node, and traffic is recorded in GB. The traffic factor has a value of 0.05 at 50-100GB, 0.03 at 100-500GB, 0.02 at 500GB-1TB, and 0.01 at 1TB or more.

- Number of nodes(N):

The number of nodes provided by a user of an account. Count the number of nodes by cpu or gpu. When there is one node factor, it has a value of 1, and when there is 2 to 5, it has a value of 2. If there are more than five, it has a value of 3.

- Mining time(t):

Time for the user to provide storage to the server. Users can control their participation on the platform SDK. It has a value of at least 1 hour to 24 hours. The unit is time.

- User Server Ratio(R):

The percentage of servers provided by users to all FILESHARE servers, including peer servers. It has a value from 0 to 1

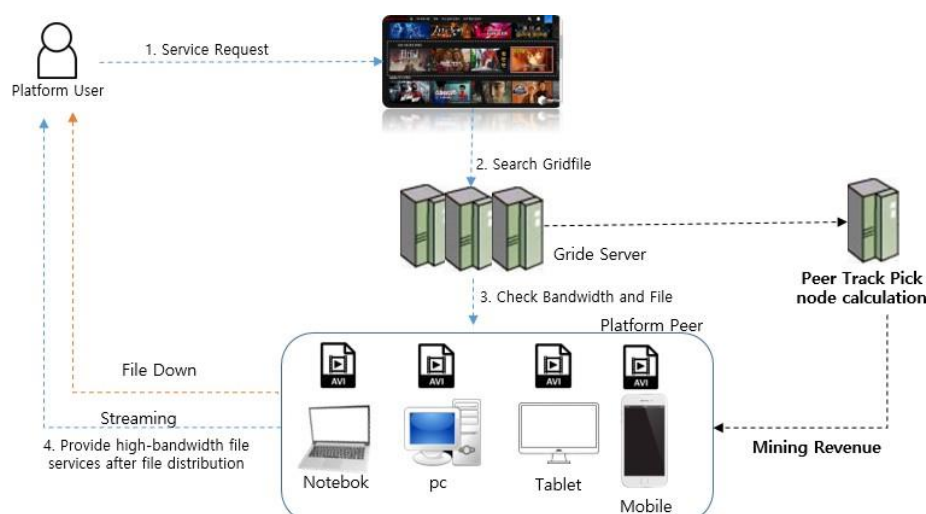
### 2-3) FSM Algorithm example

- $T = 200\text{GB}, N = 1, t = 3\text{h}, R = 0.01$   
 $F = [ (200 \times 0.03) + (1 \times 1) ] \times (3/24) \times 0.01 \times 1000 = 8.75$
- $T = 600\text{GB}, N = 1, t = 3\text{h}, R = 0.01$   
 $F = [ (600 \times 0.02) + (1 \times 1) ] \times (3/24) \times 0.01 \times 1000 = 16.25$
- $T = 600\text{GB}, N = 2, t = 3\text{h}, R = 0.01$   
 $F = [ (600 \times 0.02) + (2 \times 2) ] \times (3/24) \times 0.01 \times 1000 = 20$
- $T = 2\text{TB}, N = 6, t = 24\text{h}, R = 0.01$   
 $F = [ (2000 \times 0.01) + (6 \times 3) ] \times (24/24) \times 0.01 \times 1000 = 380$

### 3) PC / Mobile Mining

PC/Mobile Mining provides video transmission network streaming bandwidth sharing and opportunities for file sharing users to generate and participate in financial revenue.

Mining participants are utilized as FILESHARE Grid Peers that can reduce transmission and network costs, share the remaining Internet bandwidth on users' PCs and mobile, improve content streaming data speed and file download speed, and users who participate in mining can earn profits from FILESHARE that match the percentage of participants.



### 3-1) FSC Mining formula.

- FSC Mining reward (F)

$$F = (H \text{ factor} + B * B \text{ factor} + S * S \text{ factor}) * (t/24)$$

- The final compensation (PMM) of PC/Mobile mining is as follows.

n = numbers of mining users

$$PMM1 = \frac{F1}{F1 + F2 + F3 + \dots + Fn}$$

### 3-2) Detailed formula.

- Hardware factor(H):

Values according to the type of hardware. The hardware factor has a value of 2 on the PC and 1 on the mobile.

- Bandwidth(B):

Bandwidth of upload measured by trusted node. In order to induce the participation of the distributed node, the bandwidth factor has a value of 10 at 1-8M, a value of 5 at 9-20M, and a value of 1 at 21M or more. We use a step-by-step algorithm. (Refer to the example below)

- Storage(S):

Storage available for mining measurements by trusted nodes. To encourage users to share more storage resources, the storage value is set to 0 below 200G, 1 above 200-1000G, 2 above 1000G, and the storage factor is set to 5.

- Online time(t):

Daily online time is measured by a trusted node and refers to the time a user uses the platform. At least 1 to 24 hours.

### 3-3) FSM Algorithm example

- H = mobile, B = 1M, S = 100G, t = 1h  

$$F = [1 + (1*10) + (0*5)] * (1/24) = 0.5$$
- H = mobile, B = 8M, S = 300G, t = 2h  

$$F = [1 + (8*10) + (1*5)] * (2/24) = 7.167$$
- H = PC, B = 9M, S = 300G, t = 10h  

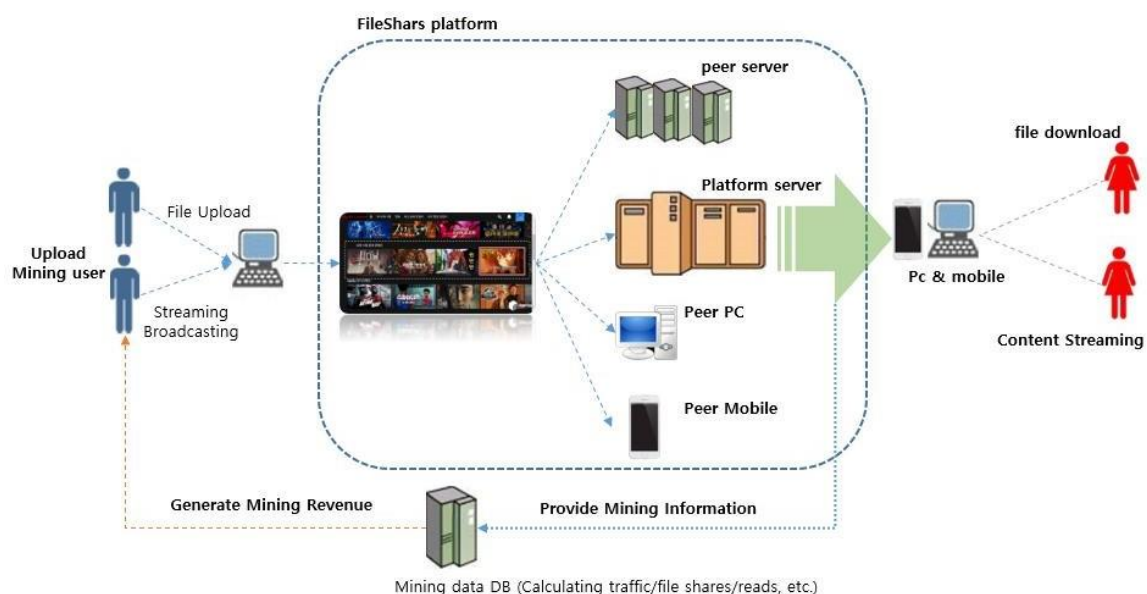
$$F = \{2 + [8*10 + (9-8)*5] + (1*5)\} * (10/24) = 38.333$$
- H = PC, B = 20M, S = 500G, t = h  

$$F = \{2 + [8*10 + (20-8)*5] + (1*5)\} * (24/24) = 147$$

## 4) File Upload Mining

It provides opportunities to generate revenue and participate in the platform to users who provide media and files that can be shared with users, such as computer files and video files of social media users.

Upload Mining can generate revenue considering video and file traffic posted by users, the number of downloads, and the number of views, and the revenue will be paid to FILESHARE coin. The degree of mining is measured for each file, and the sum is calculated by the formulas below.



#### 4-1) FSC Mining formula.

- FSC Mining reward (F)

$$\mathbf{F} = \mathbf{D} * \mathbf{D} \text{ factor} + \mathbf{U} * \mathbf{U} \text{ factor} + \mathbf{O} * \mathbf{O} \text{ factor}$$

Individual rewards for files : FS

- Mining compensation combined with individual file compensation is as follows.

m = numbers of uploaded files

$$\mathbf{F1} = (\mathbf{FS1} + \mathbf{FS2} + \mathbf{FS3} + \dots + \mathbf{FSm}) = \sum_{i=1}^m \mathbf{FSi}$$

- The final reward (FUM) of File Upload Mining is as follows.

n = numbers of mining users

$$\mathbf{FUM1} = \frac{\mathbf{F1}}{\mathbf{F1} + \mathbf{F2} + \mathbf{F3} + \dots + \mathbf{Fn}}$$

#### 4-2) Detailed formula.

- The number of downloads(D):

The number of times a user downloads a file uploaded by another user. The download factor has a value of 1 from 1-10 times to 5, 11-49 times to 3, 50-99 times to 2, 100 times or more.

- Upload capacity(U):
- The capacity of the uploaded file. In order to induce users to share more storage resources, the upload value is set to 0 below 10G, 1 when it is 11 to 50G, 2 higher than 50G, and the upload factor is set to 3.
- Reward for views(O):

The daily cumulative number of views will be counted from midnight the previous day



to 24:00 on the same day. With at least 1 point, maximum 10 points, and basic 1 point, the higher the number of views, the higher the reward, and the inquiry factor is 5.

#### 4-3) FSM Algorithm example

$$- D = 5, U = 5G, O = 3$$

$$F = (5 \times 5 + 0 \times 3 + 3 \times 5) = 40$$

$$- D = 15, U = 5G, O = 5$$

$$F = (15 \times 3 + 0 \times 3 + 5 \times 5) = 70$$

$$- D = 15, U = 20G, O = 5$$

$$F = (15 \times 3 + 1 \times 3 + 5 \times 5) = 73$$

$$- D = 50, U = 20G, O = 10$$

$$F = (50 \times 2 + 1 \times 3 + 10 \times 5) = 153$$

## 5) Content Producing Mining

As a way to expand the channels of content production and distribution companies and provide good services to many people by securing killer content, the platform participates in content production and distribution.

In addition, it opens a channel for single-person show media and provides platform revenue to participating users for the purpose of providing various contents through FileShare.

Content Producing Mining provides FileShare in proportion to the number of downloads, upload values, likes, and views for content produced by the user himself.

#### 5-1) FSC Mining formula.

$$- \text{FSC Mining reward (F)}$$

$$F = (S * S \text{ factor} + D * D \text{ factor}) * 0.8 \\ + (U * U \text{ factor} + O * O \text{ factor}) \\ * 0.2$$

Individual rewards for files : FS

- Mining compensation combined with individual file compensation is as follows.

m = numbers of produced files

$$F1 = (FS1 + FS2 + FS3 + \dots + FS_m) = \sum_{i=1}^m FSi$$

- The final compensation (CPM) of Content Producing Mining is as follows.

n = numbers of mining users

$$CPM1 = \frac{F1}{F1 + F2 + F3 + \dots + Fn}$$

## 5-2) Detailed formula.

- Number of recommendations (S):

Number of recommendations for user-generated content. Recommendations can only be made once in one account, and recommendations are not reflected in the value. The recommended factor is 5.

- The number of downloads(D):

The number of times a user downloads a file uploaded by another user. The download factor has a value of 1 from 1-10 times to 5, 11-49 times to 3, 50-99 times to 2, 100 times or more.

- Upload capacity(U):
- Capacity of uploaded file. To encourage users to share more storage resources, set the upload value to 0 below 10G, and when there is 11 to 50G it has a value of 1, and 2 higher than 50G, and 3 upload factor.
- Reward for views(O):

The daily cumulative number of views will be counted from midnight the previous day to 24:00 on the same day. With at least 1 point, maximum 10 points, and basic 1 point, the higher the number of views, the higher the reward, and the inquiry factor is 5.

### 5-3) FSM Algorithm example

- $S = 10, D = 5, U = 5G, O = 3$   

$$F = (10 \times 5 + 5 \times 5) \times 0.8 + (0 \times 3 + 3 \times 5) \times 0.2 = 63$$
- $S = 10, D = 15, U = 5G, O = 5$   

$$F = (10 \times 5 + 15 \times 3) \times 0.8 + (0 \times 3 + 5 \times 5) \times 0.2 = 81$$
- $S = 25, D = 15, U = 20G, O = 5$   

$$F = (25 \times 5 + 15 \times 3) \times 0.8 + (1 \times 3 + 5 \times 5) \times 0.2 = 141.6$$
- $S = 50, D = 50, U = 20G, O = 10$   

$$F = (50 \times 5 + 50 \times 2) \times 0.8 + (1 \times 3 + 10 \times 5) \times 0.2 = 290.6$$

## 7. FSC Token

### 1) FSC Token Characteristics

- Proven profit model: movie, drama, video content payment
- Technology know-how and ecosystem construction: NFT content identification technology, peer acquisition through Grid technology, and OTT platform service operation know-how for many years.
- Value Creation Mining Program: Any Platform user participates in the mining program and maximizes the use of the mining coin platform.
- Listing on various exchanges: Maximizing user participation through listing on the

Global Exchange.

- Anyone in the world can use: pay for a large amount of movies, dramas, video content, shopping mall products



## 2) Token Economy

- Limited mining and supply: FSC tokens are mined only within services affiliated with OTT Platform and limited amount of coin is mined through program algorithms.
- Content investment and copyright acquisition and distribution: Maximize platform value and enter the global market by investing in content production such as movies and dramas and securing copyrights.
- Providing various token users: Increasing demand for Token users through media content payment, shopping malls, and games.
- Decrease in coin distribution due to incineration: Part of the coins recovered from content payment, product sales, and mining fees are incinerated every certain period of time to reduce coin distribution.
- Price Increase: Coin prices naturally rise due to the increase in platform users.

## 8. Use Case

### 1) Shopping

- You can buy household items and luxury goods.
- Services through product development by country (to be promoted)
- Global delivery (to be carried out)

### 2) Contents

- Various content services such as global movies, dramas, videos, and animations are underway.
- Various game content services such as web, mobile, RPG, casino games, etc. are underway.
- K-Webtoon contents service in progress.
- Adult K-Live Bj Streaming content service is underway.

### 3) Wellet

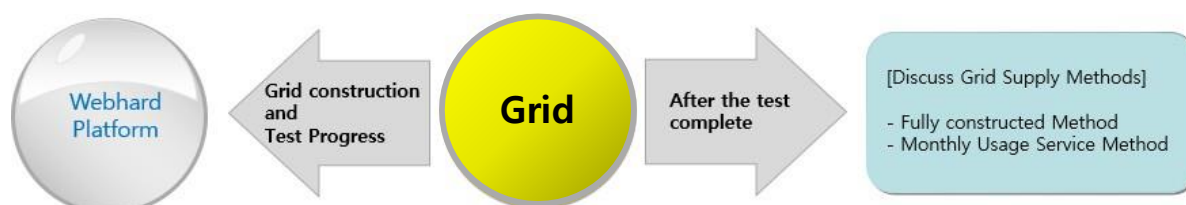
- BTC, ETH , USDT, FSC(FILESHARE) coin wallet
- Use the platform after switching BTC, ETH, USDT, FSC Fom Token.
- You can withdraw money from the exchange after switching to Fom Token FSC.

## 9. Advisors of Core Technology

### 1) Grid Advisor : Grid

Grid technology is at the center of the core technology that enables interplanetary file system (IPFS) services. Grid technology is a distributed file system that solves server capacity shortages, reduces excessive traffic costs, and enables users to download and stream content quickly.

#### • Grid basic structure.



### 2) Filtering Advisor

Content filtering technology is a technology that extracts unique characteristic information of digital content, builds the information into a database, and compares and searches for content in circulation based on this. Currently, filtering technology is used to protect copyright content by blocking content illegally distributed online, and is used not only to distribute legitimate content but also to protect teenagers from harmful content through OSP companies that have introduced filtering technology.

Related technologies have been recognized for their technology through strict technical verification by state agencies. The performance evaluation of feature-based filtering technology for video, audio, and comic books was passed, and the evaluation confirmation was obtained by passing the mobile web hard feature-based filtering technology evaluation for video and audio. The evaluation of state agencies verifies filtering technology through re-evaluation every year, maintains and develops technology. The filtering time can be identified at 0.2 seconds at the earliest of 1 to 3 seconds, and since 1920, it has secured the world's best filtering database, which has been confirmed and distributed copyrights such as videos and sound sources produced.

## 10. Distribution

### 1) Issuance

The initial FSC TOKEN is based on ERC-20 with a total issuance of 3,000,000,000 FSC.

- Base : ERC-20
- Issued volume : Total 3,000,000,000 FSC

### 2) Distribution ratio and lock period by item.

- Company (foundation) : 5% / 150,000,000 / 5 years
- Mining steak : 15% / 450,000,000 / 3 years
- Mining : 55% / 1,650,000,000 / 6 months
  - Immediate payment : 412,500,000
  - Divide into 6 months : 1,237,500,000
- Token sale : 10% / 300,000,000
  - Institution : 75,000,000 / 2 years
  - General : 210,000,000 / 1 years
- Team member: 5% / 150,000,000 / 5 years
- Development : 10% / 300,000,000

## 11. Made the FILESHARE Platform

FILESHARE Platform is based on blockchain and has built an environment for anyone to mine easily using technologies built for OTT (Over The Top) services.





### 1) Leader Group

#### - COIN NETWORK

##### CEO. Batbayasgalan Batbayar



- Graduated from Hansung University, South Korea, majoring in Business Management
- Received the grand prize in the SHOW WINDOW DISPLAY exhibition held by the American FIDM Costume Design College
- Joined Mongolian CF production 'J&B Production' in 2016
- 2018 'NEW TYPE consulting' CEO
- 2019 'PARIS cosmetics MONGOLIA' concurrently as CEO
- 2021 'COIN NETWORK' Company establishment

#### - COIN NETWORK

##### CTO. Bataleu Bateukisigeu



- Graduated from People's Friendship University of Russia
- Teaching Economics at LKH Zasang International University

## - COIN NETWORK

### TEAM. JANG (YOOKEUN JANG)



- Graduated from the Department of Industrial Art at Suwon University
- FIDM University of Costume Design in the U.S. won the grand prize in the SHOW WINDOW DISPLAY exhibition
- Joined 'Myeong' production in 1996 in CF production
- Established 'NewType Production' in 1997
- CEO of "YAK Entertainment" in 2000
- 2008 Sangbang Media Vietnam Business Department under Sangbang Group
- Director of the 2015 Mongolian feature film "Single Lady 2"
- The director of the 2015 Mongolian feature film "Marriage Is difficult."
- Director of the 2016 Mongolian feature film 'Rich Father and Poor Father'
- Director of production of the 2017 Mongolian feature film "Black Rain."
- A number of CF director, including fashion brands

## 2) Advisor

### - Things9 Co., Ltd.

#### CEO. LIM JONGBUM



- Korea University Global MBA
- Blockchain and Cryptocurrency Technology Specialist
- Developing various cryptocurrencies, developing interworking with the blockchain of Pay/Pos services, and promoting successful launch
- Promote technology alliances with leading Korean companies on blockchain application
- Promote a leading role in the convergence of technology and management in various blockchain fields
- FSC Blockchain Wallet and Cryptocurrency Development Subcontractor

## - SELVAS AI

### Vice chairman Hyunseo Jung



- Hankuk University of Foreign Studies Business School
- An army academy / Captain's discharge
- White Castle Partners / Korea Partner
- GV Residence / CEO
- J Corporations. LTD / CEO
- Current management consulting advice/investment attraction
- SELVAS Ai / Vice Chairman
- Korea Digital Payments / Vice Chairman
- NIA Corporations / Vice Chairman
- Publish, Advisor
- Soft PV, Advisor
- Conducting past management consulting/advice
- Yozuma Group Korea Co., Ltd / Venture partner
- Korea Economic Daily Real Estate Advisory Co., Ltd
- (주)집꾸미기 / Advisor
- Parking Cloud Co., Ltd / Advisory partner
- Spoqa Co., Ltd / Advisory partner
- Sandoll Co., Ltd / Advisor

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