



AGC

# Whitepaper

ver 1.3

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# 1. INTRODUCTION

The rapidly spreading ICT technology and the convergence of various industries allow break the paradigm of the existing industries and lead a prosperous life for modern individuals without realizing the changes. This affects the lives of individuals and becomes a driving force that raises the level and competitiveness of society and the nation. In the modern industrial society, complexity is increasing, the amount of knowledge required is increasing day by day, and ICT technology continues to evolve. As a result, new business models are being created, existing businesses without competitiveness are naturally eliminated, and an ecosystem for changes in existing industries or new industries is established. These recent changes lead to the creation of new business models. Digital transformation and ICT convergence are at the center of these changes.

Recently, digital transformation, which has been underway due to the COVID-19 pandemic, has been further spurred, and future technologies centered on the ICT industry such as AI technology and big data are becoming very important. At a time when economic and social paradigms are changing due to such ICT innovation, world trade, which was rapidly growing due to the expansion of the global value chain, is stagnating due to the spread of protectionism, resulting in changes in the supply chain and the competitive landscape in each market. In the era of the 4th industrial revolution, it is becoming a new trend to seek new businesses by converging ICT technology into the industry. In particular, start-ups and existing IT companies often base their products or services on IT technology, and launch products directly linked to them. As such, digital transformation and ICT convergence can increase the value of products and create completely new business areas through the incorporation of ICT technologies into existing traditional industries.

Among these ICT technologies, it is necessary to pay attention to blockchain. Blockchain is expected to bring trust and scalability in various fields, and blockchain-based smart contract business models are emerging centering on insurances and shared services. This is because blockchain technology is also linked with AI and big data as a medium, making it possible to implement the diversity of big data and AI as a business model. In recent years, Validity and Veracity have been added as a connection between the two technologies. Validity means that big data must provide the right data, and Veracity means that the data provided by big data must be reliable. As a technology that can supplement these two characteristics, blockchain may be an alternative.

Blockchain is a technology with a core concept of decentralization that aims for peer-to-peer (P2P) transactions in which all participants in the network record and manage transactions using the ledger data that records transaction information, not in a central server. While the existing system records and stores information on the central server, the blockchain based on the P2P method contains information in a block and shares it with all participants, so reliability can be guaranteed while preventing data from being manipulated.

While blockchain allows Validity and Veracity to data, it will be able to maximize synergy by combining it with AI. Blockchain shows the data source that is the basis of AI analysis and certifies that the data was trusted by consensus. Not only that, but more importantly, it is possible to implement AI analysis based on a decentralized distributed network. However, in principle, blockchain has all the data shared by participants, which allows AI to be used individually. In the existing centralized system, all data is stored in one computer or Cloud and analysis is performed in one place, whereas in a blockchain environment, analysis results can be shared and received, so the

scope of analysis can be determined by participants. As such, the convergence of blockchain and AI technology is making a paradigm shift in a wider direction.

AIDAPPS Group aims to develop various platforms and operate subsidiaries centering on SaaS-type software development business by combining decentralized distributed Cloud-based AI and blockchain. Based on existing verified platforms, it consolidates its growth base as a global AI blockchain company by converging with AI, distributed Cloud, and blockchain.





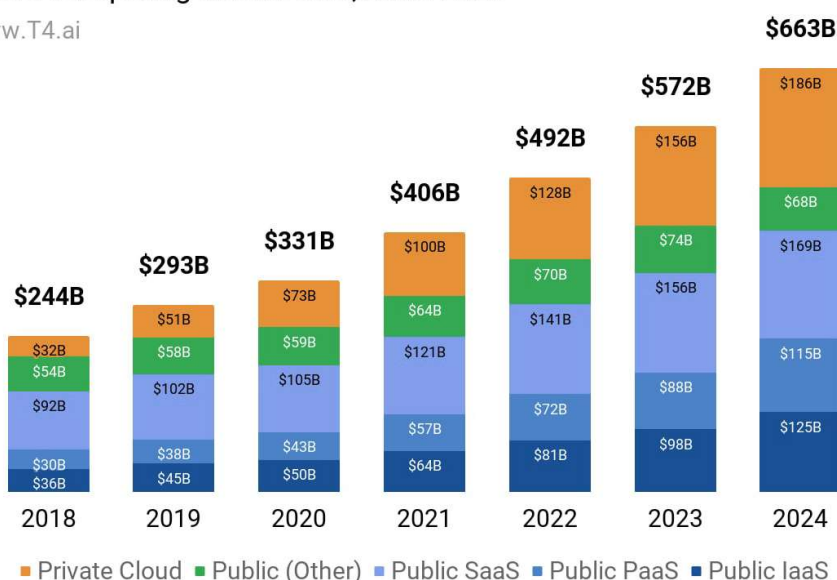
## 2. Cloud and AI Market Trend

### 2.1 Cloud Service Market Trend

Cloud Service is an IT service that can be accessed through the Internet, a computing service that pays as much as you use, and is generally classified as an infrastructure service (IaaS: Infrastructure-as-a-service), a platform service (PaaS: Platform-as-a-service), and a software service (SaaS: Software-as-a-service). Cloud Service provides users with the benefits of improved accessibility, certainty, and flexibility, a technology that is central to ICT convergence by enabling time reduction and cost-effectiveness by leveraging Cloud Services that can be used immediately when needed.

Cloud Computing Market Size, 2018-2024

www.T4.ai



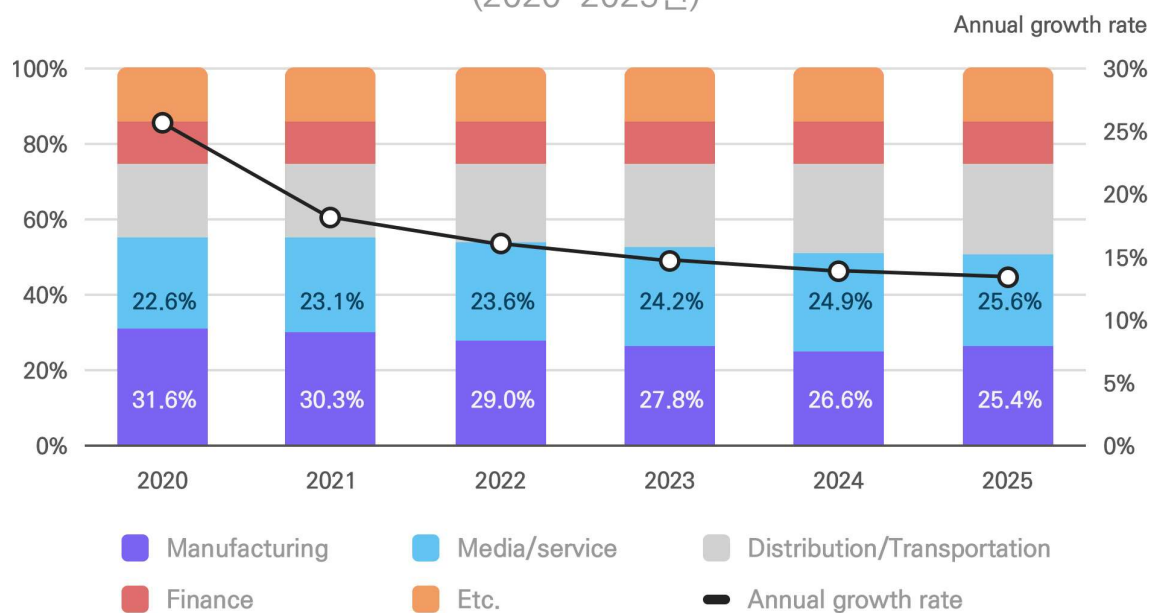
[Fig 1.] – international Cloud computing market size

As of 2022, pandemic influenced companies and institutions to accelerate their digital innovation efforts, resulting in increased investment in Cloud computing. As e-commerce increases due to the pandemic, using the Cloud as an essential business service has become a trend, and companies and institutions are entering a phase of company-wide Cloud transformation. As a result, the size and growth of the Global Cloud Market are rapidly increasing. The size of the Cloud Computing Industry in 2020 was \$331 billion and is expected to grow at an average of 18% annually through 2024.

In Korea, Cloud, the most important infrastructure technology in digital infrastructure, is drawing attention, and many companies in various industries continue to introduce Cloud. Companies are striving to secure strategic alliances and technologies to preoccupy competitive edges and incorporate correct digital services into their companies.

# IDC Korea Public IT Cloud service market outlook

(2020~2025년)



\* Source : Korea Cloud Opportunity Forecast by industry, 2021-2025

[Fig. 2] – Korea Public IT Cloud service market outlook

In the report, IDC Korea predicted that the manufacturing industry, which is expected to occupy the largest share of the Korean public IT cloud service market in 2022, will grow at a CAGR of 9.9% until 2025. The expansion of demand from companies that have not yet introduced Cloud is expected to serve as a long-term growth driving factor, especially Samsung, LG, and SK Group, contributing to Cloud market growth, focusing on factory process automation, data-based inventory management system, and AI/Machine Learning (ML) and Robotic Process Automation (RPA).

The media and service industry are expected to show the fastest growth through 2025, with a CAGR of 17.7%. The media and service industry include major terrestrial broadcasters, entertainment content providers such as Weverse and CJ ENM, and various service companies including large game companies in Korea. Industry's content-based service provides a vast amount of content based on PaaS, and as media companies expand their subscription-type service business, the demand for Cloud native-based efficient architecture, continuous integration and continuous delivery (CI/CD) technology, and 5G · Content Delivery Network (CDN) integrated services continues to grow. Korean media and service industry is leading the growth of the Cloud market by continuing remarkable growth every year, focusing on the industrial characteristics that can optimize the advantages of Public Cloud Services.

## 2.2 AI Market Trend

Competition for AI leadership intensifies between 2019 and 2020, and AI technology in vaccine development has drawn attention due to pandemic. Since 2019, AI technology has been applied to various industrial fields such as autonomous vehicles and smart homes, and has been converted to real payment. The demand for efforts has increased, and the development of AI and natural language processing technology in the field of vaccine development has attracted attention.

From 2021 to 2022, the importance of AI regulation proposals and introduction of AI in the defense sector has emerged. In 2021, EU began setting standards for AI technologies in institutions, including proposing AI regulations and the FDA announcing AI and machine learning action plans. With the outbreak of the war in Ukraine in 2022, the importance of introducing AI in the defense sector has emerged, and at the same time, the demand for responsible use of AI technology has increased.

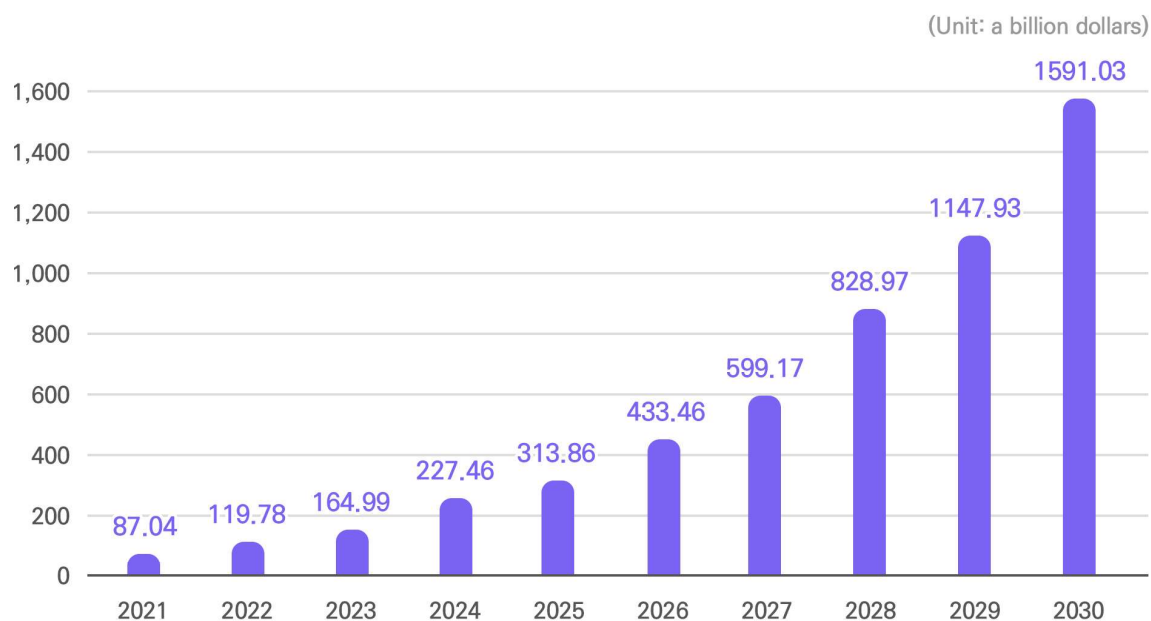
### Key issues in the artificial intelligence industry between 2019 ~ 2022

Category	Key issues
2019	AI pilot project 'real economy' (autonomous vehicles, smart homes, etc.)
	U.S. vs. China intensifies competition between the two countries to lead the AI market
	Establish procedures and institutions for ethically transparent AI development
2020	Innovative reduction in vaccine development time with AI
	The emergence of fully autonomous vehicles with AI
	Development of natural language processing technology 'emotion, intention, pattern, visual understanding'
2021	EU proposes AI regulation
	FDA Announces Action Plans Related to Artificial Intelligence/Machine Learning
	China threatens U.S. in AI study
2022	Increased demand for responsible AI
	Face recognition AI technology used in Ukraine war
	Expect to create a more powerful AI model with quantum computing

[Fig. 3] – Key issues in the artificial intelligence industry between 2019 ~ 2022

The AI market size is expected to reach \$1.591 trillion by 2030, growing at a CAGR of 38.1%. According to Precedence Research, a global ICT consulting agency, the global AI industry is estimated to be \$87 billion in 2021, and the AI industry market is expected to grow 38.1% annually between 2021 and 2030, reaching \$1.591 trillion.

## AI market size between 2021 and 2030



Category	2021	2022	2023	2030	CAGR(21~30)
AI	87.04	119.78	164.99	1591.03	38.1%

\* Source : Precedence Research (precedenceresearch.com)

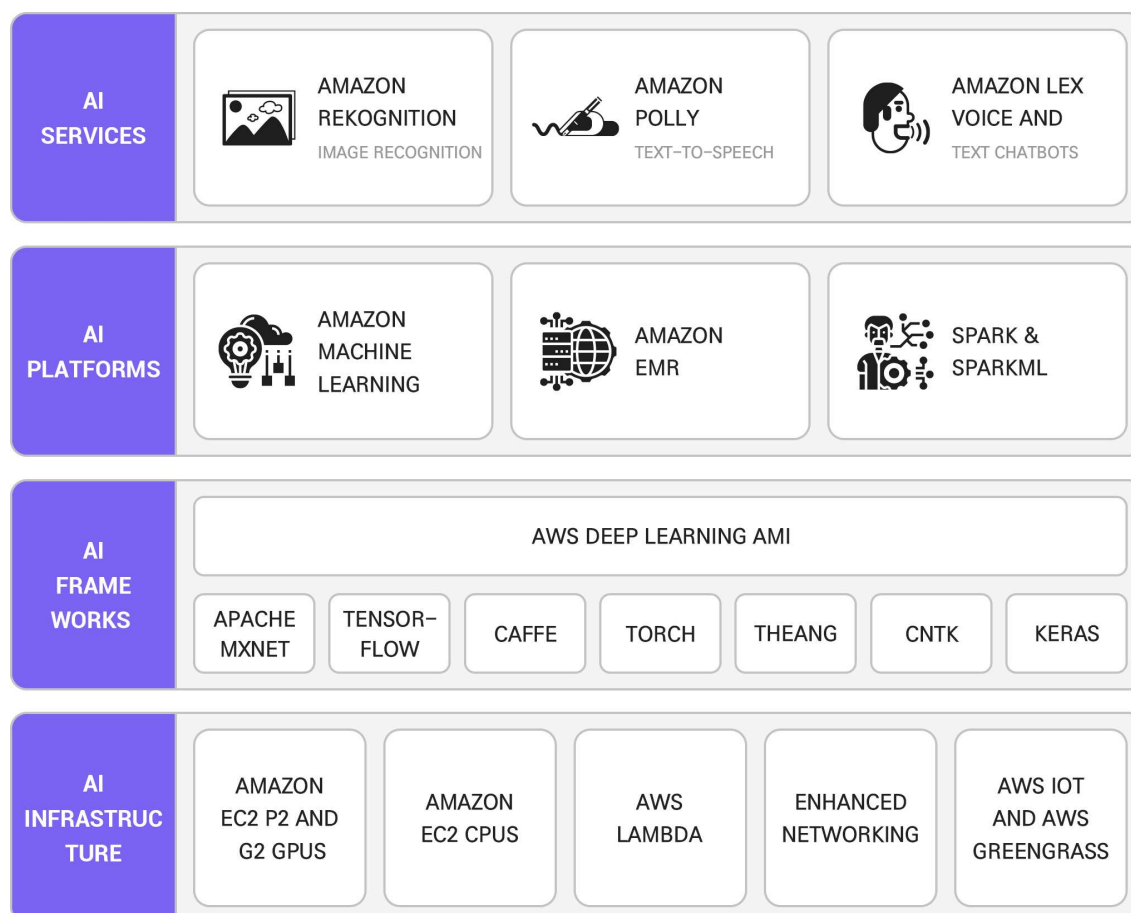
[Fig. 4] - AI market size between 2021 and 2030

## 2.3 Convergence and flow of Cloud and AI

### 1) Convergence of Cloud and AI

The purpose of companies introducing Cloud is changing from the existing IT management efficiency to big data analysis and AI technology development. Cloud is a basic infrastructure that provides vast computing resources necessary for the development and utilization of AI, and it is also natural that Amazon, Microsoft, Google, IBM, Alibaba, and Tencent, who are leading Cloud in the AI field, lead the global cloud market.

Cloud Service requires huge computing power and data bandwidth to learn and process data for machine learning to provide AI services, and Cloud data centers have made these resources available to anyone, anywhere. This has made AI accessible to users around the world and has a low-code interface, allowing use of AI technology without experts such as data scientists. While AI make decisions to manage data, provide insight, and optimize workflows, Cloud provides cost-effective access to these technologies while providing continuous data backup and recovery systems.



[Fig. 5] -AI service types provided by AWS in its Cloud platform

### 2) Changes in the Cloud Market

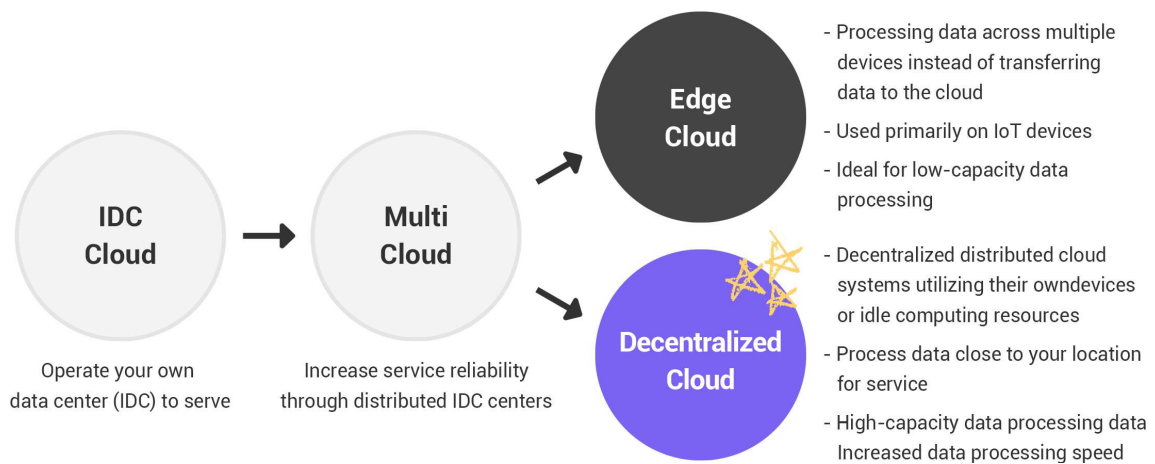
Over the past decade or so, the focus of public Cloud computing technology has been on deploying large-scale centralized internet data centers (IDCs) with thousands or tens of thousands of servers. In other words, after expanding the hardware servers, the service that needed to be expanded was installed on a new server to distribute the service request to several physical

servers. With the introduction of virtualization technology, it responded by expanding virtual servers rather than expanding physical servers. This was successful in economically expanding Cloud Service, but there were also disadvantages. For example, if tenants cannot replicate services between zones due to a failure in an Availability Zone, service interruption occurs, entailing problems in terms of privacy and compliance due to the use of remote data centers.

As a result, Gartner has selected distributed Cloud as one of the top nine strategic technology trends for 2021. Distributed Cloud is an extended form of cloud computing technology and a model that enables rapid provisioning of cloud services by rapidly provisioning services in the cloud close to the cloud service user through the cloud formed in the edge network close to the cloud service user.

Distributed Cloud may be hierarchically distributed to provide user-centered Cloud Service. Various types of distributed Cloud nodes are integrated into Cloud resources, and the connection between each node occurs autonomously, so services and resources are expanded on their own. In addition, as Cloud nodes are deployed in a wide area based on network nodes, it is possible to provide Cloud services geographically close to users, and it is possible to provide real-time services to users by reducing the bottleneck to the central Cloud.

As described above, in a situation where Cloud and AI technologies have become global trends, the ecosystem of the AIDAPPS group aims to enable all business models to run in this Distributed Cloud Environment as a way to overcome the limitations of centralized management of the Cloud. It can compensate for the disadvantages of high cost, slow data processing speed, and data forgery, falsification, and leakage caused by centralized processing.



[Fig. 6] - Evolution of Cloud Computing Models



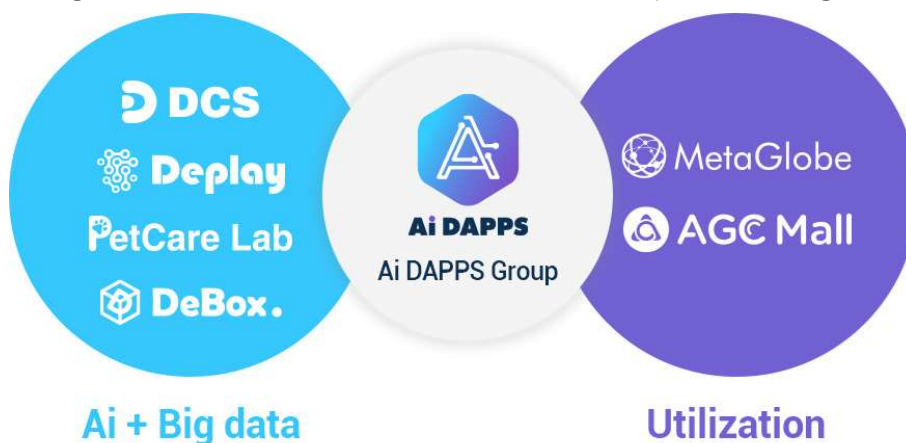
## CHAPTER 3 AIDAPPS GROUP CRYPTOCURRENCY (AGC) ECOSYSTEM

### 3.1 INTRODUCTION OF AIDAPPS GROUP

AIDAPPS aims at AI blockchain based on a distributed cloud network environment. To this end, we build an ecosystem that supplies hardware constituting a distributed network environment, rewards nodes that lent computing resources of the hardware, and builds various service platforms that operate on a distributed network basis. The first goal is to provide developers, individuals, and companies (institutions) with a distributed cloud environment combined with blockchain to store, manage, and process data in a decentralized environment to enhance security and reduce data processing costs. The first goal is to make AI technologies such as deep learning and machine learning through a user-friendly web environment easy for all developers, individuals, and companies (institutions) worldwide who need AI analytics and development by converging blockchain technology and AI technology.

In this way, AIDAPPS utilizes existing proven global AI frameworks so that many consumers can approach AI more familiarly and use it for work or business, so that individuals can strengthen their work capabilities, companies can increase productivity, and many platform developers can develop according to their platform concepts. By maximizing the synergy effect through the convergence of blockchain and AI technology, we are laying the groundwork for growth as a global AI blockchain company.

AIDAPPS Group operates various platforms and subsidiaries, focusing on software development businesses (SaaS) by combining decentralized distributed cloud-based artificial intelligence technology and blockchain technology. We have completed the development of DCS v1.0 product that converges big data and artificial intelligence technology on a distributed cloud basis and plan to launch Deploy, a data sharing platform that allows these AI technologies to be shared and developed with each other and operate various platforms and subsidiaries using the technology possessed by its parent company, AIDAPPS, such as Petcarlab, an AI-based pet care industry, and Metaglobe, a real estate diversification investment platform using NFT.



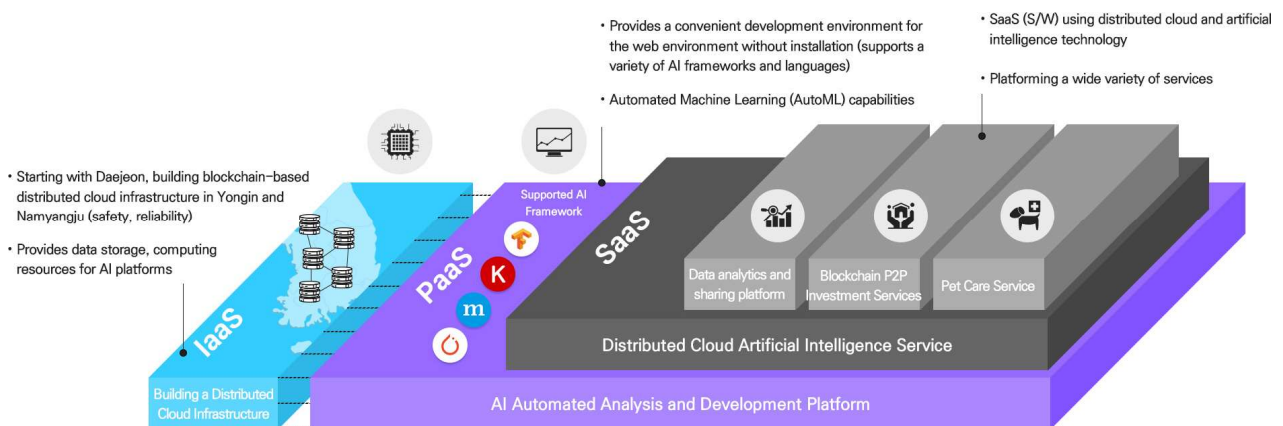
[Fig. 7] – AIDAPPS Group Structure



## 3.2 D-Cloud Artificial Intelligence Platform Service Model

### 1) AGC Platform Business Model

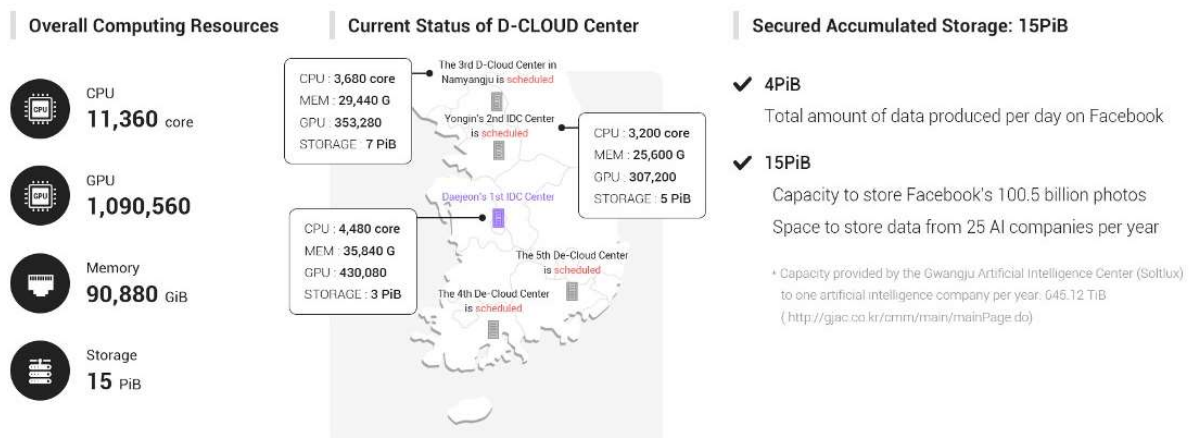
AIDAPPS Group is operating various platforms and subsidiaries focusing on software as a service (SaaS) type software development projects by combining decentralized distributed cloud-based artificial intelligence technology and blockchain technology. It is planning to develop DCS v1.0 products that combine big data and artificial intelligence technology in a distributed cloud, launch a data sharing platform Deploy that allows sharing and developing artificial intelligence technologies, and operate various subsidiaries such as Petcare and Metaglobe, a real estate distributed investment platform using NFT.



[Fig. 8] - Distributed cloud artificial intelligence platform service business promotion model

### 2) Distributed Cloud Infrastructure

We are developing a variety of SaaS-type services based on a distributed cloud and continue to expand our distributed network to further enhance the safety, security, reliability, and processing speed of these services. Currently, D-Cloud centers have been established all over the country to secure many computing resources.



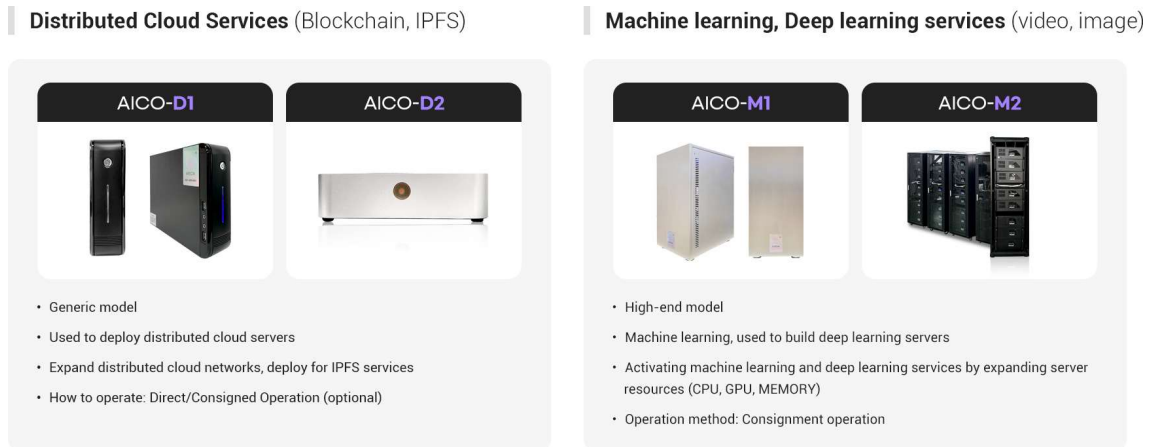
[Fig. 9] - Status of securing distributed cloud infrastructure



### 3) Detailed structure of distributed cloud systems

#### ① D-cloud Hardware

D-Cloud is the hardware that constitutes a distributed network environment within the AGC ecosystem. D-Cloud hardware began its first supply in September 2020, across the country, established, and is operating its own data centers. As of February 2020. These computing resources are used for ML/DL purposes. D-Cloud hardware supplied a total of 4 models, as shown in the figure below.

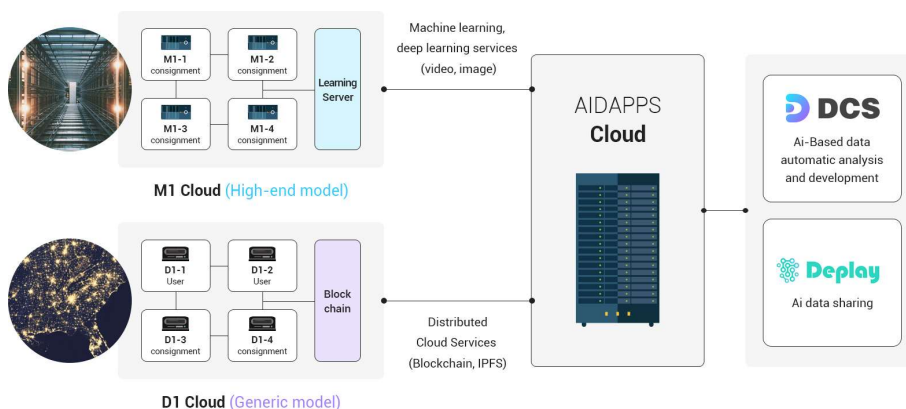


[Fig. 10] - D-Cloud Hardware Model

#### ② The entire structure of the D-Cloud

D-Cloud is not only maximizes performance through system clustering of D-Cloud in the distributed cloud but also compensates for the shortcomings of the existing centralized cloud system. And the more network participants (nodes) there are, the more data processing cost can be reduced.

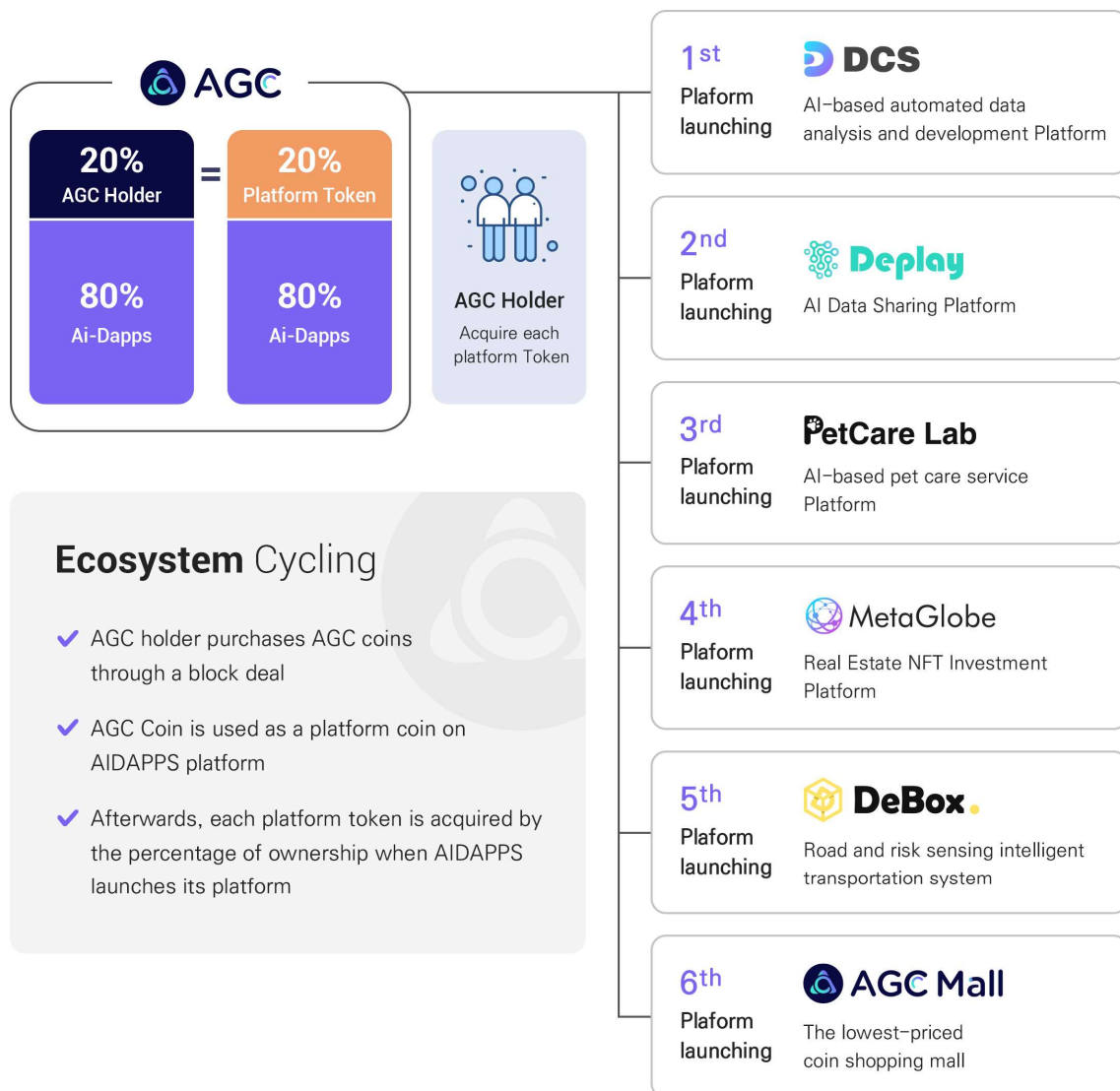
Because distributed cloud systems run on a blockchain basis and provide security through compartmentalization, they make the security of the network much more powerful than the current infrastructure provides. Even if an attacker such as a hacker accesses a block with data, it is difficult to operate: penetrate because it is only a part of the file. D-Cloud hardware implements the distributed cloud network environment by providing resources such as CPU, MEMORY, GPU, and STORAGE and consists of hardware (the distributed cloud hardware) and software (mining pool) utilizing idle computing resources of nodes. Data in D-Cloud can be expanded with IPFS-based large-capacity data processing. In addition to distributing file fragments to multiple computers or other hardware, it was implemented to analyze and process data using computing resources.



[Fig. 11] - Distributed Cloud System Architecture0

### 3.3 AGC Ecosystem Composition

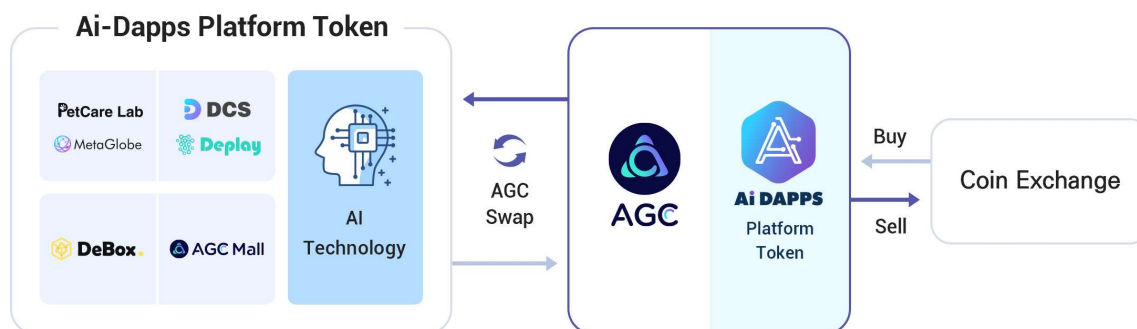
As shown in the figure below, the entire ecosystem of AIDAPPS (AIDAPPS Group Cryptocurrency) project is all connected with AGC Token and sub-AIDAPPS Platform. When AGC holders acquire AGC Tokens, they will receive an airdrop of tokens from the corresponding platform at the same rate according to the holding ratio of AGC Tokens, thereby providing benefits to the entire AIDAPPS group upon the launch of AIDAPPS Platform in the future. AGC token is a platform token and swappable utility token to be launched in the future, and it is used for real estate NFT investment, pet care service, and product purchase on various platforms, so the value of AGC tokens increases as each platform grows and the number of users increases.



[Fig. 12] – AGC(AIDAPPS Group Cryptocurrency) ecosys.

### 3.4 Benefits for AGC Token holders

#### 1) Reward system for AGC Token holders



[Fig. 13] – AGC Token Compensation System

The reward system of the AGC Token holders operates in a direction in which the value increases as the longer holding AGC Token. The AGC token guarantees an airdrop for the AIDAPPS platform token to be launched in the future and is used on each platform as a utility token.

#### ① AGC Token

AGC Token can be swapped with the tokens of the AIDAPPS Platform. AGC Token is circulated at the time of initial issuance, and after the block deal is completed and can be purchased from the exchange or acquired through swapping with platform tokens.

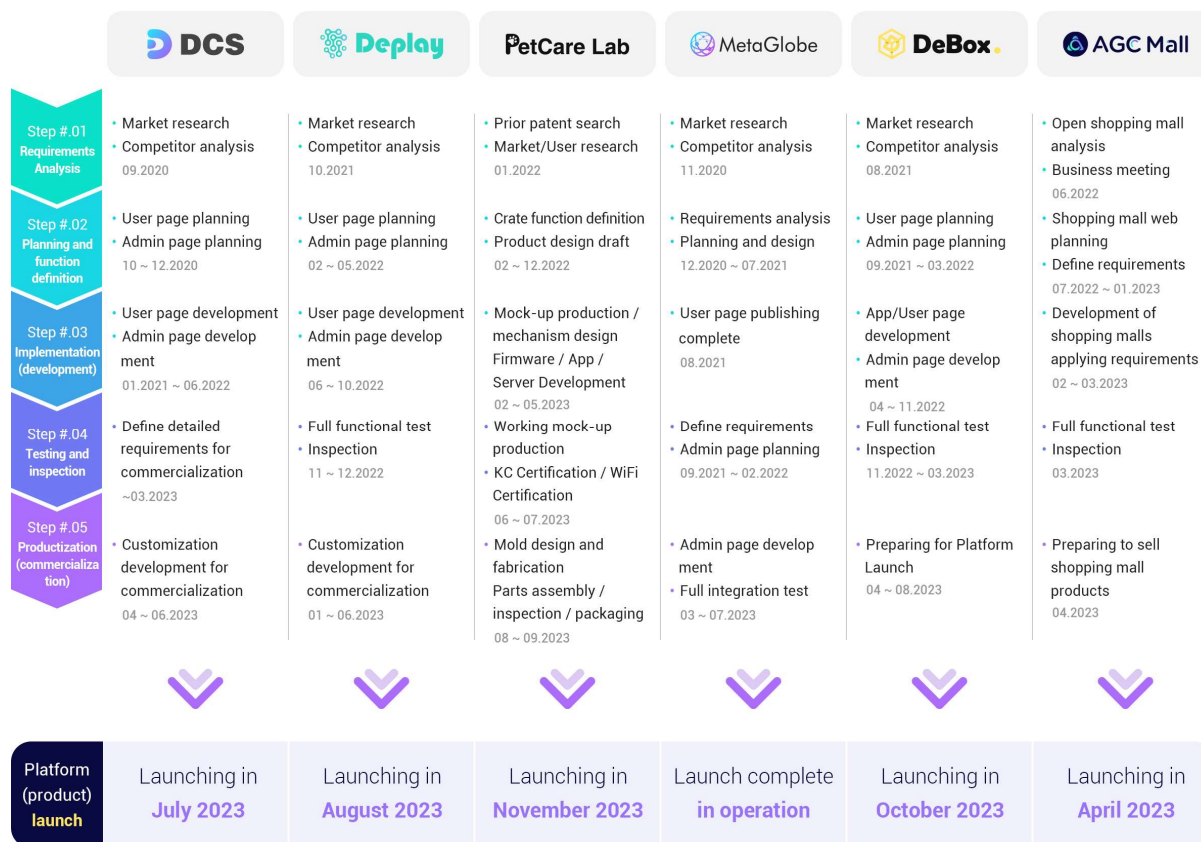
#### ② AIDAPPS Platform Token

AGC holders who have acquired AGC Tokens through block deals will receive an airdrop of tokens from the platform as much as their holding ratio whenever tokens of the AIDAPPS Platform are issued.

Since then, AGC Token will be used for real estate securitization investment, pet care service product purchase and shopping, fees of decentralized exchanges, coin shopping malls, etc., as the main coin in the entire AIDAPPS group platform. As the number of users of this AIDAPPS Group Platform increases, the value of AGC Token rises.

## 3.5 AGC Platform Roadmap

### 1) AIDAPPS Group Platform Roadmap



[Fig. 14] - AIDAPPS Group Platform Roadmap

AGC platform is planning to launch all platforms by the second half of 2023. The roadmap for each platform is as follows.

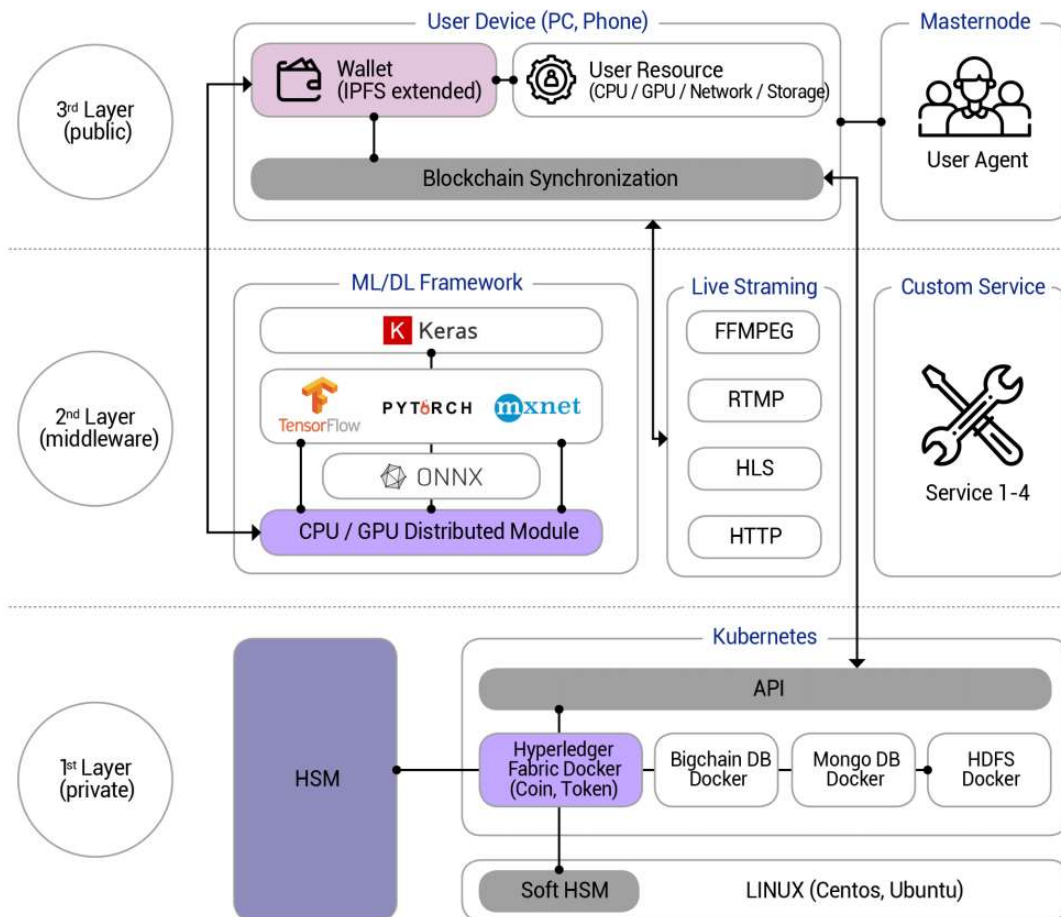
- DCS v1.0: Launched in July 2023, 420 contracts, accumulated storage 100 PiB, 3/4/5 IDC centers will be established in Namyangju, Gyeongnam, and Honam respectively by 2025.
- Deploy: Launched in August 2023 to secure 1,000,000 users in 2025
- Petcarelab: Launch November 2023 and launch iOS and Android applications, launch smart bowel movement Q2 2023 to target 1,000,000 users in 2024.
- Metaglobe: 40 target investment recruitment in 2025 due to platform launch and operation
- Debox: Launched in October 2023 and targets data supply contracts with 100 companies by 2025.
- AGC Mall: Launch platform in April 2023 to secure 1,000,000 users

### 3.6 AGC Mainnet

#### 1) AGC Mainnet

AGC is currently planning to launch AGC Mainnet after preparing for distributed cloud expansion and bringing scalability to the platform environment of Binance Smart Chain (BSC).

The AGC Mainnet consists of a total of three layers: a Kubernetes layer, a middleware layer, and a public layer, as shown in the figure below. The first layer was made to operate in Kubernetes and Docker environments based on the Linux operating system. The Kubernetes platform supports the automation of Container configuration and tasks, which does not require a manual process to deploy, expand, and update containerized applications, enabling uninterrupted service. As this is useful for managing multiple containers, as a result, efficient infrastructure management is possible. If the private area continues to expand, the Linux operating system combined with Kubernetes has a structure that continues to increase.



[Fig. 15] - AGC mainnet Architecture

It plays the role of an independent Container by configuring Docker in the form of an image within Kubernetes. Because there are various versions of Linux, it is difficult to install all the deep learning frames in the private chain area. By configuring Docker, you can reserve Container in a virtual machine cluster and immediately run the desired image. First, through the installed Hyperledger Fabric Docker (Hyperledger Fabric Docker), work related to coins and tokens is performed. Because the internalization process is not easy if the number of data stored in the DB increases depending on the system by sampling and linking coins generated from outside due to

security issues, you can use a big chain DB that chains the DB, and run the Hadoop Distributed File System (HDFS) to process large data such as big data in the private DB. HDFS can be used when you do not need a blockchain and want only to process large-capacity big data. In addition, by configuring TrustZone in the Linux operating system and loading a software security module (SSM), security can be strengthened to prevent external hacking.

### ① ML/DL Framework

Machine Learning/Deep Learning (ML/DL) is composed of Tensorflow, Pytorch, and Mxnet, the world's three major frameworks, and Keras is set at a high level to make library work a little easier for developers. When configuring the AI Framework, allowing developers to perform ML/DL tasks in an easier and more comfortable environment is the core, by configuring independent ML/DL model hubs, it supports various video models, voice models, and text models to allow developers to develop using the ML/DL model and select model even if they don't know the language.

### ② Masternode Method

In Horovod, it is important to configure an environment that can always maintain the network according to the amount of data. The AGC Project performs ML/DL in a private environment due to speed and security issues, and the supercomputing environment can be implemented in Horovod only when users participating in the private environment continuously provide a large amount of computing resources.

Users can participate as nodes in the AGC Project with the distributed cloud hardware and software (mining pool) within the AGC Ecosystem and may face a situation in which it becomes difficult to perform ML/DL tasks properly due to constant resource provision and lack of resources. To prevent this, the AGC Project used the master nodes method. If a small number of licensed masters participate as masters nodes in a private environment rather than performing the responsibilities of masters nodes in a traditional public environment, not only can the supercomputing environment be maintained stably, but at the same time, the amount of computing resources provided increases through systematic nodes management.

### ③ AGC Mainnet

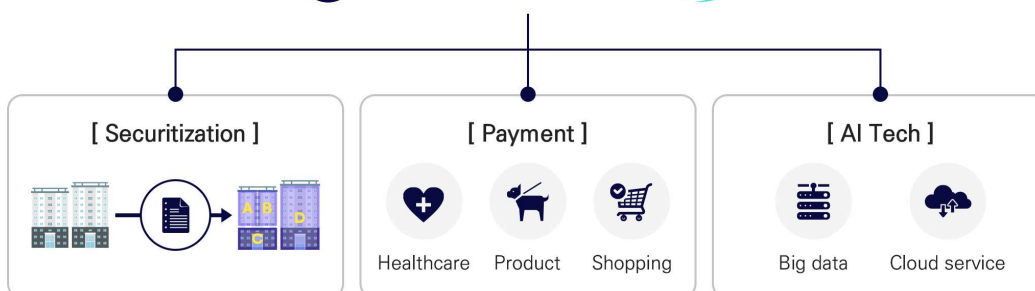
AGC Mainnet plans to provide distributed protocols for token trading on various platforms of AIDAPPS through a service network designed to reduce related transaction costs by utilizing AI, distributed Cloud, and blockchain on existing platforms.

- Provides a decentralized protocol for AGC Token transactions
- AGC Token can be exchanged with various platform tokens of AIDAPPS
- AIDAPPS platform services available through AGC Token swap, such as real estate securitization, pet care service payment, AI technology service payment, etc.
- As the number of platform users of AIDAPPS increases, the number of users of AGC Token increases through swaps, raising the value of AGC Token

## AGC Mainnet



## AGC Value Up



[Fig. 16] - AGC Token Mainnet

## 2) The Future of AGC

### 3) The Future of AGC

AGC Token connects the traditional financial sector and the blockchain through token swaps and combination with the existing platforms. AIDAPPS Platforms will expand the market as follows.

- Decentralized distributed Cloud-based AI provision and global AI data sharing platform
- AI-based pet care service to the growing global pet market
- Investing real estate worldwide regardless of nationality
- Transactions, swaps, purchase goods, and inter-coin transactions regardless of currency





[Fig. 17] - The future of AGC Token



## 3.7 Binance Mainnet Smart Chain (BSC)

AGC Token operates on the Binance Mainnet Smart Chain (BSC) until AGC Mainnet is developed. AGC Token and AIDAPPS Platform plan to expand the platform environment through Mainnet Smart Chain by partnering with Binance for the following reasons.

### 1) Introduction to Binance

The daily trading volume of the Binance Exchange is more than \$18 billion, with the largest number of users in the world, and the proportion of Koreans is the highest. Binance provides an IEO service that allows users to subscribe to virtual currency that is guaranteed to be listed and boasts the most stable and fast speed among smart phone apps on the virtual currency exchange. In addition, the most innovative services such as DeFi service, staking, and leveraged token [ETF] are provided to users first. As of 2022, Binance is evaluated as a pioneering platform that has all the functional elements related to cryptocurrency in addition to the basic services that exchanges should have.

#### Binance Launchpad

- \* Binance launched a new token, Fetch.AI (FET), on its own blockchain crowdfunding platform Binance Launchpad
- \* With Fetch.AI, it aims to rescue autonomous blockchain ecosystems, the so-called Token Economy, based on AI, and to develop fast and reliable machine learning and Internet of Things (IoT) solutions by choosing DAG algorithms different from the existing blockchain.

#### Binance DApp

- \* Representative decentralized distributed applications based on the Binance Smart Chain are Pancake Swap, Venus Protocol, Autofarm, Burger Swap, Spartan Protocol, and Cream.
- \* Binance Wallet is another option for certain apps from BSC, available as a browser extension for Chrome, Firefox and Brave, and has an easy-to-see and convenient UI.

### 2) Advantages of Binance Mainnet Smart Chain

#### ① Excellent performance

- Completeness that compensates for the shortcomings
  - \* New blockchain with all functions for developing high-performance decentralized applications
  - \* Built for cross-chain compatibility with Binance Chain with users benefit from both blockchains
- Scalability
  - \* As a high-performance decentralized blockchain, it works with the Ethereum Virtual Machine (EVM) in conjunction with BNB Staking to support Ethereum-based tools and DApps, and runs DApps on the Binance Smart Chain.
  - \* In case of gas fee, which is a problem with Ethereum, it offers 92% cheaper fee than Ethereum and 4 times faster data processing speed..

#### ② Low cost

- Only a small number of validated nodes are designed to create blocks, and fees are approximately 92% cheaper.
- Users who pay \$1 in commission at Ethereum just pay \$0.02 in the Binance Smartchain.
- Unlike other protocols, there is no block subsidy for newly created BNB because there is no inflation in BNB.

### ③ Quick development

- Cross-chain compatibility
  - \* A dual-chain structure that is independent of the existing Binance Chain and complementary allows users to freely transfer assets between each blockchain, which enables fast trading on the Binance Chain and enables powerful decentralized apps
  - \* BEP-2 and BEP-8 tokens of Binance Chain can be swapped with BEP-20 tokens, a new standard introduced by Binance Smart Chain, and BEP-20 tokens use the same functions as Ethereum.
  - \* It allows simple transfer from BEP-2 to BEP-20 or vice versa using the Binance Chain wallet.
- Flexibility
  - \* Applications such as Pancake Swap allow users to exchange assets without the certification process (quite similar to Uniswap), participate in staking, and vote on proposals.
  - \* Bridge projects to increase interoperability between different blockchains allow users to convert specific coins used on the Binance Chain and the Binance Smart Chain into wrapped tokens (or "pegged tokens")
  - \* Digital assets such as BTC, ETH, USDT, LTC, XRP, LINK, ATOM, DOT, XTZ, ONT are used in the Binance Chain ecosystem
  - \* Wallets that can interact with applications on the Binance Smart Chain include Binance Chain Wallet, Metamask, Trust Wallet, Math Wallet, Ledger, Token Pocket, Bitkeep, ONTO, Safepal, Arkane, etc.

### ④ Excellent user experience

- Usability of transactions
  - \* Regarding fees, an Ethereum-like gas system is used and calculated to reflect the computational resources required for transactions and smart contracts.
  - \* Binance Smart Chain Network uses Proof of Authority Consensus Mechanism, and users staking BNB to become a validator and receive a related transaction fee if the block validation is successful.

### ⑤ Strong Blockchain Platform

- Even before the launch of the Binance Smart Chain Mainnet, many major encryption projects have already worked with the Binance Chain community to build BSC as a powerful blockchain platform
- Partners consist of a variety of industries, including blockchain infrastructure and tool providers, distributed financial platforms, and cross-chain liquidity providers.



[Fig. 18] - Binance Smart Chain Project \* Source: COIN98

### ⑥ Transparency, Security and Decentralization

- Anyone can request, view, and view transactions on the blockchain
- Binance Smart Chain is a decentralized network, so one delinquent node cannot compromise its data integrity.



## CHAPTER 4 BUSINESS MODEL

### 4.1 DCS V1.0 - AI-BASED DATA AUTOMATIC ANALYSIS AND DEVELOPMENT PLATFORM

#### 1) Business analysis

##### ① Business analysis

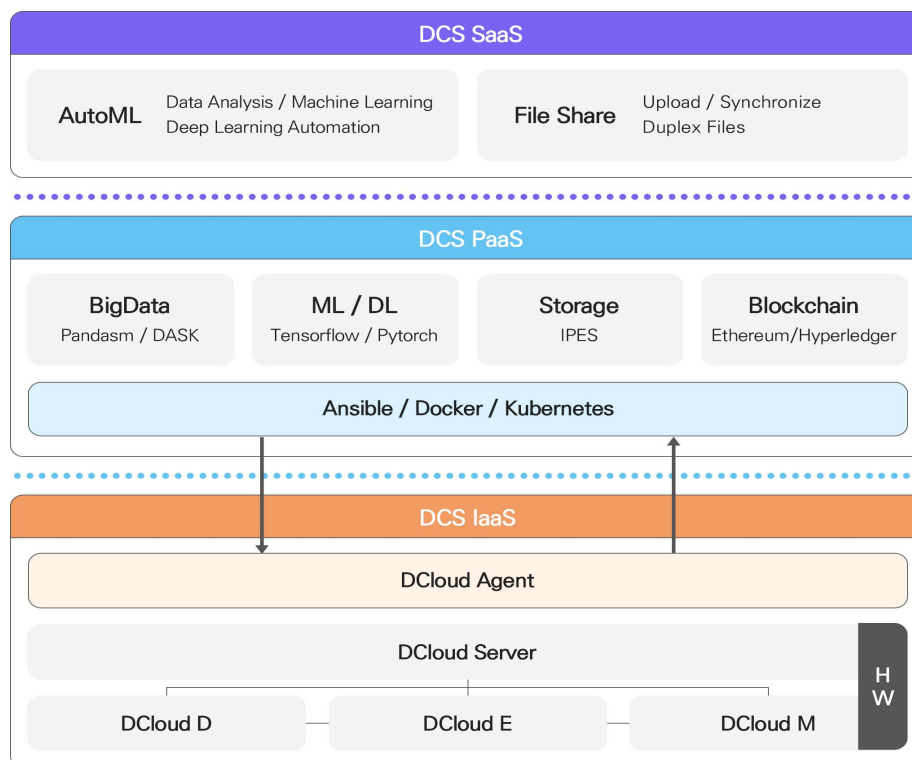
AI-based solutions are not systems that provide 100% correct answers but rather systems that can predict answers close to the correct answer. The application area can be infinitely expanded depending on the purpose of using the answer from the business point of view. Although the scope of AI services continues to expand regardless of the size of companies such as start-ups, SMEs, and conglomerates, many companies find it difficult to introduce AI solutions due to expensive costs and difficult usage.

DCS supports developers, individuals, companies, and institutions to obtain desired AI analysis results more easily by accessing data owned or available externally. DCS (D-Cloud Contents Service) is a service platform that supports data analysis and development using AI technology in a distributed cloud environment. DCS applies AI to data by using the computing resources (CPU, GPU, Memory, Storage) of the D-Cloud hardware that have been established in advance to derive results in fields requiring high accuracy and performing predictions based on existing data.

In addition, it supports efficient decision-making by comprehensively analyzing data and using the results as a basis for judgment. It has Tensorflow, Pytorch, and Mxnet, the world's top three AI frameworks, allowing the usage of data analysis services in the form of development and automated pipelines directly in the web environment without installing a complex AI framework. Therefore, even general users who are not AI experts can use the service very easily, and its biggest strength is that they can approach AI more familiarly.

##### ② Platform overview

- Description: A distributed cloud-based AI analytics and development platform
- Purpose: When analyzing the big data users want, it analyzes data based on AI, such as machine learning/deep learning. When analyzing data by a platform that supports detailed development in conjunction with the development editor (VSCode), it enables access to distributed nodes' computing resources (CPU, GPU, MEMORY, STORAGE, etc.), intending to build an infrastructure that enables anyone to leverage and train AI-based technologies from anywhere.



[Fig. 19] – DCS v1.0 Platform Service Overview

### ③ Main function

□ There are data analysis capabilities in the form of pipelines, data learning and output capabilities based on deep learning and machine learning, and user local data sharing capabilities and detailed functional descriptions are as follows:

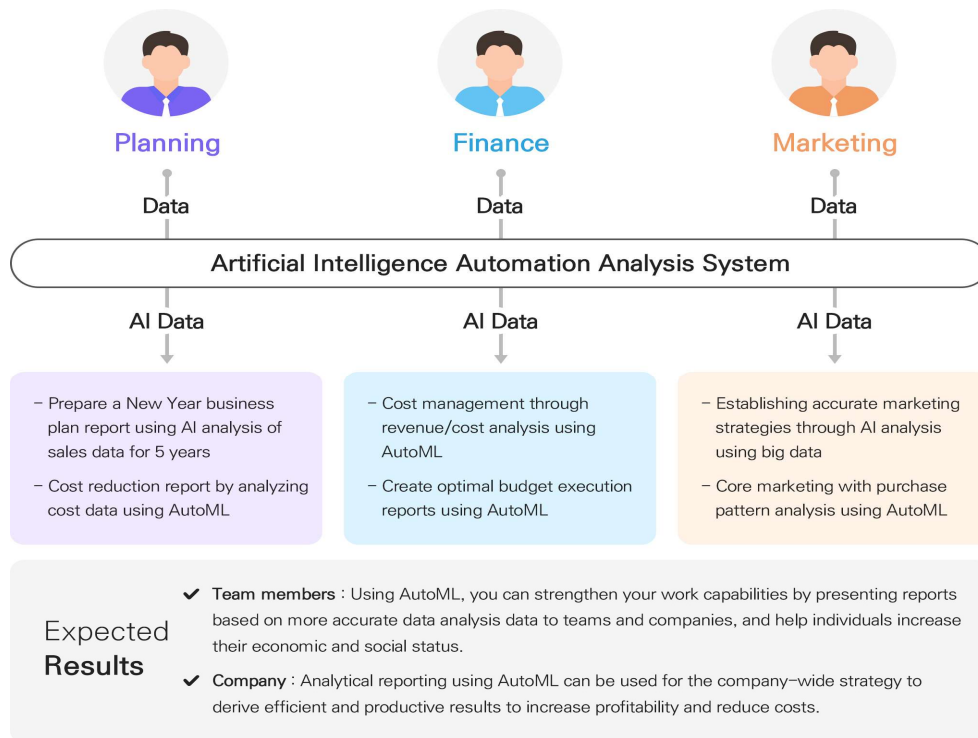
- Data refinement: Garbage data unnecessary for training can be deleted based on the data entered by the user.
- Data visualization: Supports data input and analysis in Excel format using web-based Grid Studio and Jupyter Notebook, and visualizes data through tables or graphs
- AI performance: Built-in AI framework for deep learning and machine learning analysis (learning) to make predictions based on user input data
- Development editor: Provides powerful and easy-to-use VS code editor for detailed programs of developers.
- File Sharing: Function to distribute and download users' local files to the IPFS network

□ DCS v1.0 product has three main features as follows.

- By providing an AI analysis and development environment in a web environment through a web browser, users do not need to install a separate complex AI framework (Tensorflow, Pytorch, MxNet, Keras, Scikit-learn, etc.). By providing users with different computing resources according to the service level, they can use the service very conveniently by simply logging in.
- As AI analysis service is provided in a decentralized distributed environment, security is further strengthened by distributing storage and management of data beyond the limitations of the existing centralized structure. By maximizing performance through clustering multiple computing units, it has the advantage of enabling rapid analysis and output of large data.
- Improved security and safety through blockchain and IPFS. In other words, the distributed system runs on a blockchain network and records the entire analysis process as a transaction, which improves security because it cannot be forged or altered, and even if nodes are hacked and down by applying IPFS, replicated neighbor nodes are activated, which increases safety

highly.

□ The platform uses an Excel-type CSV file format, which is very familiar to general users, as input data, and by displaying the figures for the data in graphs and tables, users can visually and directly check the data distribution consisting of only numbers. It also provides users with analyzed results such as analysis accuracy and running time for analysis for each AI analysis algorithm model provided. Additionally, in conjunction with Jupiter's laptop, it allows developers to program in detail themselves and users to easily upload files from their local drive to IPFS format in Drag&Drop format and share them with others with file synchronization.



[Fig. 20] – Example of DCS v1.0 utilization example

#### ④ Status of major facilities

□ DCS v1.0 continues to expand its distributed network to further improve the safety, security, reliability, and speed of the services it develops and established its first IDC center in Daehwa-dong, Daejeon and secured additional computing resources in cooperation with partners located in Mapo-dong, Yongin

Infrastructure facility (Daejeon)

Category	1st IDC Center (Daejeon)
Server	- 280 ea
Computing resource	- CPU : 13,440 core - MEM : 107,520 GB - GPU : 1,290,240 core - STORAGE : 10 PiB
Purpose	- Integrate large-capacity computing resources to perform AI-based analysis (learning) such as machine learning and deep learning - Leverage as nodes in distributed file systems (IPFS)

[Table 1] – Construction status of Daejeon 1st IDC Center

Infrastructure facility (Yongin)

Category	2nd IDC Center (Yongin)
Server	- CPU : 9,600 core - MEM : 76,800 GB - GPU : 921,600 core - STORAGE : 15 PiB
Computing resource	- Integrate large-capacity computing resources to perform AI-based analysis (learning) such as machine learning and deep learning - Leverage as nodes in distributed file systems (IPFS)

[Table 2] – Construction status of Yongin 2nd IDC Center

## 2) Competitive advantage

### ① Distributed cloud-based AI analysis and development platform

Provides a platform for AI analysis and development in a decentralized and distributed web environment

- Built-in the mostly used global AI frameworks (Tensorflow, Pytorch, MxNet, Keras, Scikit-learn, etc.) for AI analysis and development, so platform users can conveniently use the service in a web environment without a separate installation process
- By providing a distributed computing environment that can compensate for the high cost and slow analysis speed of the existing centralized computing environment, it enables rapid analysis of large data.
- Improved security and safety by allowing distributed systems to run on blockchain networks and record processing in transactions

The company is developing platforms by targeting markets that incorporate big data, blockchain, and AI technologies based on the cloud environment.

Government policy details (vision and goals) of the Ministry of Science and ICT

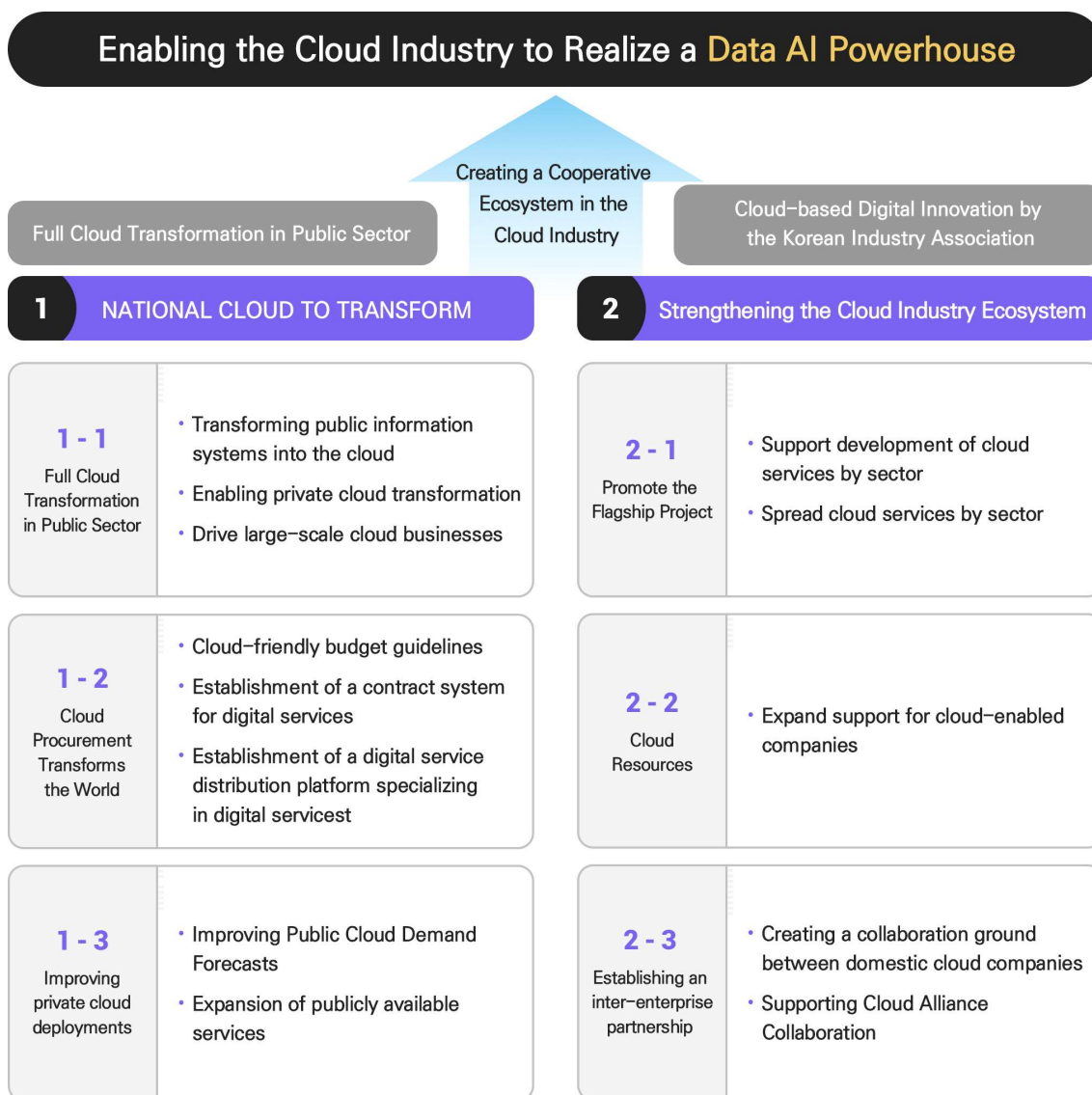
- 2020.06.04 (Wednesday), At the 16th 4th Industrial Revolution Committee meeting, the "Cloud Industry Development Strategy for Data Payment and AI Era" was deliberated and confirmed.
- Among the key tasks of the government's recent digital new deal, the collection, accumulation,



and utilization of data for "data and AI activation" are designed as clouds, drawing attention to the cloud as a key foundation for data utilization and economic revitalization after COVID-19

- Aiming to train 10,000 professionals in the \$30 billion market

□ The above development strategy is aimed at "transforming the national cloud" and "strengthening the cloud industry ecosystem" and decided to pursue the public sector's full transition to the cloud, the spread of cloud services by sector, and the expansion of support for small and cloud using SMEs.



[Fig. 21] – Government's Cloud Industry Vision and Objectives (major Policy tasks)

\*Source: Reorganization of the cloud industry development strategy (proposal), agenda item 1 of the 16th 4th Industrial Revolution Committee resolution

□ As above, the government-led policies are highly related to the main target market of the company's products, so it is expected to be easier to enter the market with the launch of the product, and it is also expected to be able to grow rapidly in the market

**② Favorable market environment**

□ Cloud market

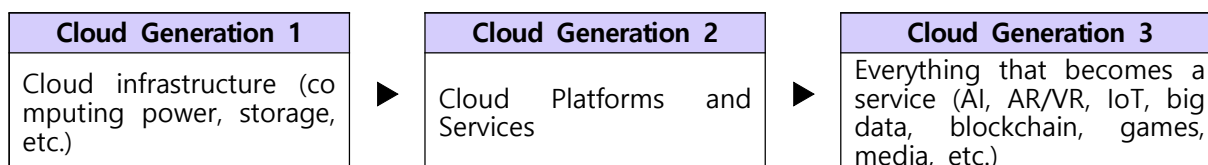
- Because Cloud has good flexibility such as accessibility, pricing, automatic update and maintenance management, distribution process, usage method, and usefulness of management,



many companies, and government organizations are preparing for a major system transition to introduce cloud services in the form of SaaS.

- Therefore, many companies and institutions are converting their software to cloud-based SaaS, the core infrastructure of AI, to leverage the advantages of cloud, such as efficiency, convenience, high performance, and large-capacity computing resources.

- In addition, beyond the effects of IT management efficiency and cost savings in the first generation of the cloud, it continues to evolve into the third generation of the cloud that creates new value combined with software such as AI, blockchain, big data, IoT, games, and media, the company's products are expected to enter the market easily.



[Table 3] – Evolution of Cloud Technology

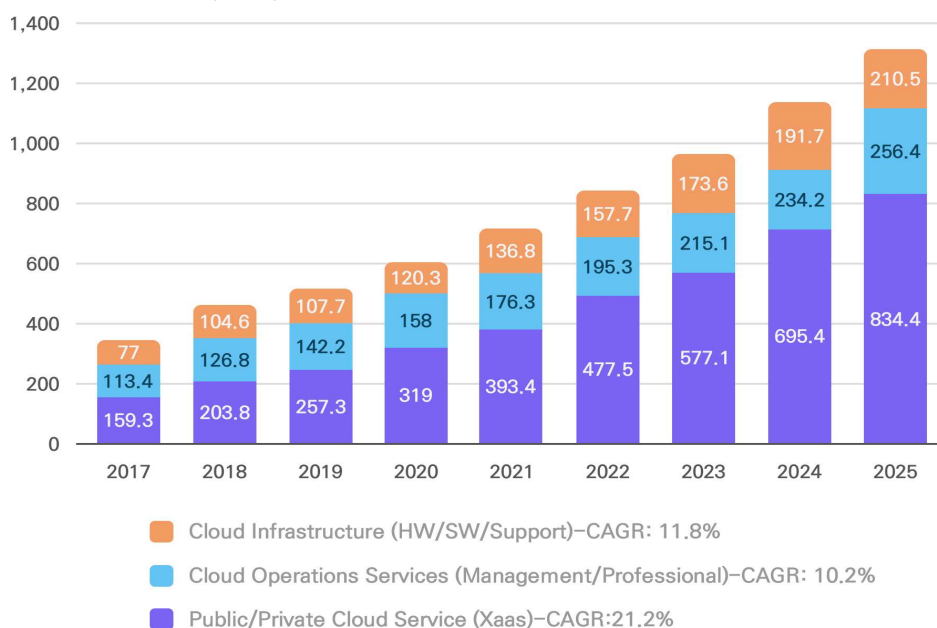
□ Overseas market

- The total global cloud market size is \$706.6 billion as of '21, and it is expected to grow to \$1.3 trillion in 2025 by maintaining a high growth rate (CAGR: 16.9%).

- The cloud service market occupies a high proportion (55.6% in 21 years) and is driving the growth of the entire cloud market by maintaining a high growth rate

- Global public cloud end-user spending is expected to rise 20.4% to \$494.7 billion from \$410.9 billion in 2021 and reach \$600 billion by 2023, and SaaS end-user spending is expected to reach \$176.6 billion by 2022.

- Infrastructure as a Service (IaaS) is expected to show the highest end-user spending growth of 30.6% in 2022, which is followed by growth of 26.6% for desktop as a service (DaaS) and 26.1% for platform as a service (PaaS).



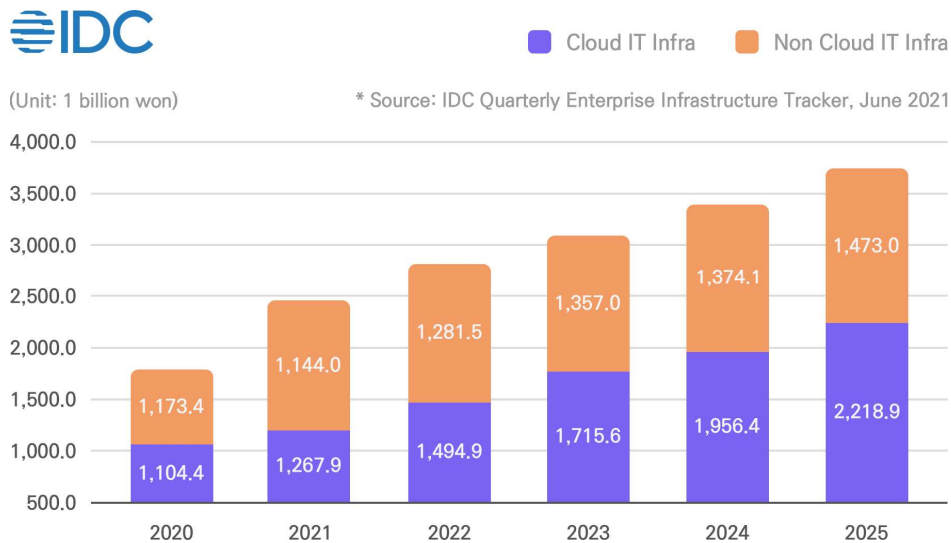
[Fig. 22] – Global Cloud Market Size

□ Korea market

- As of 2020, there are 1,225 cloud companies in Korea, with ₩3.3 trillion cloud market and

18.4% annual growth

- Cloud adoption in media/broadcasting and e-commerce is high, and healthcare, finance, and service sectors are expected to be introduced quickly
- Korean telecommunication companies such as KT are expanding their market share in the IaaS market, and SMEs such as Douzone (software for companies), are active in the SaaS market
- End-user spending in the Korean public cloud service market is expected to grow 22.9% YoY to reach \$4.79 billion in 2022, and software spending is expected to be the fastest-growing segment with 15.9% growth in 2022
- IDC said in its recently published "2021 Cloud IT Infrastructure Market Outlook Report" that the IT infrastructure market to be introduced into the Korean cloud environment is expected to grow at 15% annually over the next five years, reaching \$2.21 billion in sales by 2025.



[Fig. 23] – Korea Cloud Market Size

## 4.2 DEPLAY - AI DATA SHARING PLATFORM

### 1) Business Analysis

#### ① Business Analysis

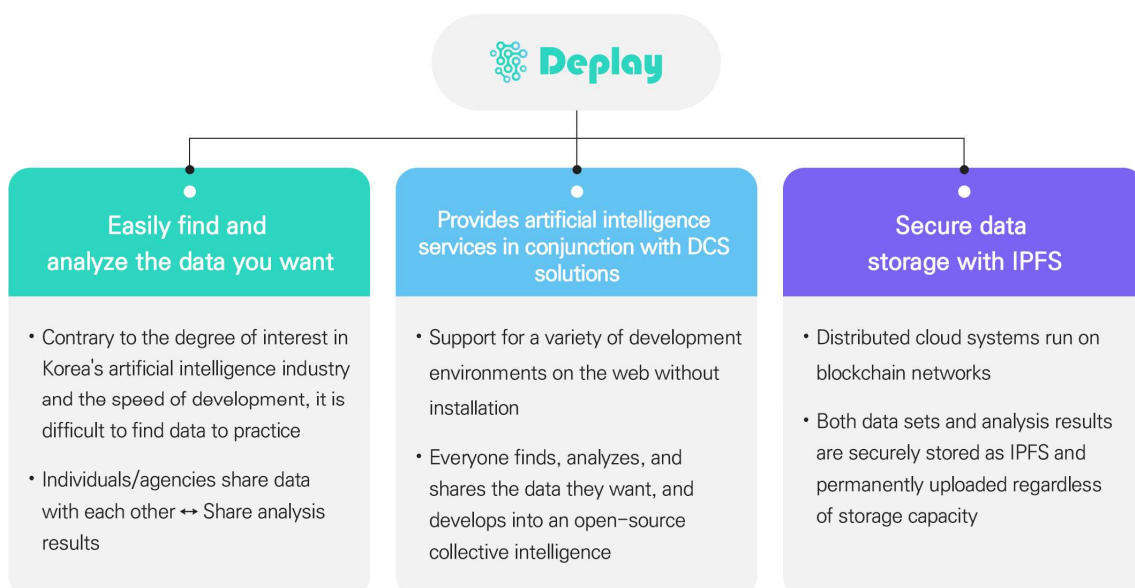
DePlay is a platform that uploads all data that requires AI analysis and shares it for free discussion. It aims to classify by category so that users can easily find the data they want, share the analyzed results, conduct data analysis in connection with the DCS platform, and increase data utilization.

One of the biggest restrictions in the AI field is the lack of data. It is known that many companies have great difficulties in securing usable data. It is no exaggeration to say that the key to AI competitiveness lies in data. Even if the learning algorithm is good, if the amount of data required for learning is insufficient, it will give poor results. Therefore, the issue of securing data from independents or companies is the most important thing that leads the project to success. DePlay is a platform for solving these problems.

#### ② Platform Overview

- Description: AI data analysis and sharing platform
- Purpose: As a platform for freely uploading and sharing data required for AI analysis, it performs data analysis in connection with the DCS platform and aims to increase the utilization of AI data by allowing users to share and discuss analysis results with each other.
- The figure below is the main screen of the DePlay platform.

The main function is the ability to freely search and share data through the first feed, upload or find the data you want to analyze, and freely share and discuss the analysis results with other users. It is also possible to recommend desired data because you can set the tag function and interest level. The second is a contest, where users or companies who want analysis results can upload their data and offer certain rewards. Therefore, general users can analyze the data and compete to receive rewards. Finally, in conjunction with DCS, data can be analyzed freely without installing a separate AI framework. It also includes a general community function that allows for free discussion.



[Fig. 24] – DePlay Platform Overview

### ③ Main function

□ DePlay largely includes data sharing and search, user data analysis, data requests through competition, and general community functions. Detailed function descriptions are as follows.

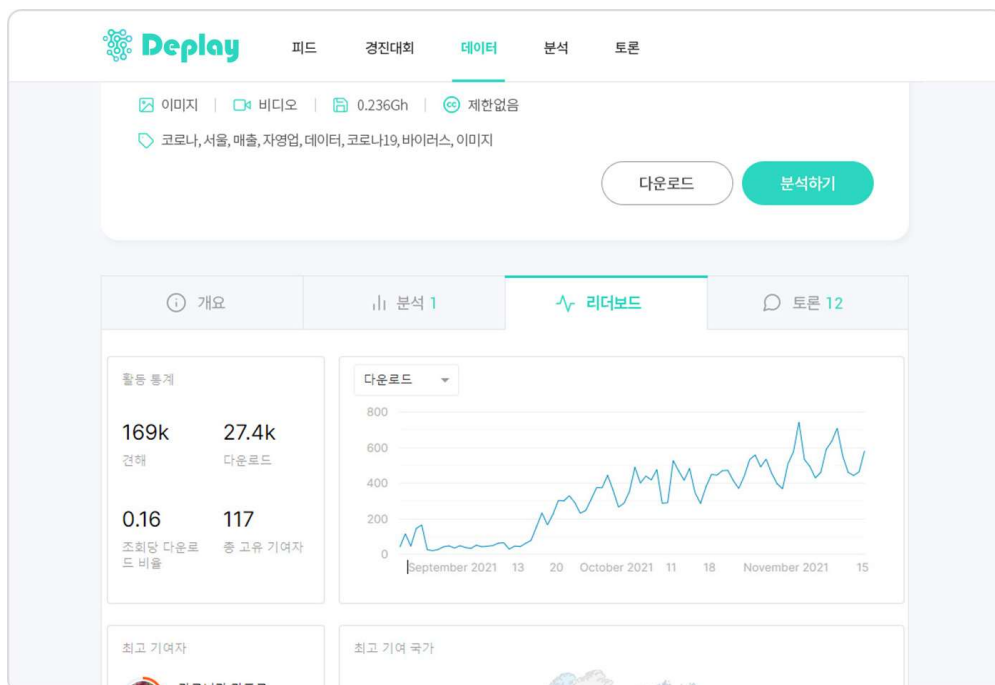
- AI data sharing and search: Users upload or search the data they want to analyze and freely share to discuss it with other users.

It is possible to set the tag function and the degree of interest in data so it recommends the desired data.

- Data analysis: In conjunction with DCS products, data can be analyzed using various languages such as C, Python, and Java, and models shared by other users can be easily called, modified, and added.

- Competition: users and companies who want data analysis results upload their data, present a certain reward, and competitors analyze the data and compete to receive rewards

- General function: Includes customer support functions such as announcements, inquiries, and manual viewing, as well as free discussions.



[Fig. 25] – DePlay Main screen

□ DePlay has three main strengths as follows.

- Anyone can easily find and analyze the data they want: A platform for individuals/institutions to share data and analysis results in a situation where it is difficult to find data to practice contrary to the level of interest and development speed in the Korean AI industry

- Provide AI service in connection with DCS solution: Without separate installation, various development environments are supported on the web so that anyone can find, analyze, and share the data to develop into an open-source form of collective intelligence

- Data storage through IPFS: A distributed cloud system run on blockchain networks, securely storing data sets and analysis results as IPFS, permanently uploading regardless of storage capacity

## 2) Competitive Advantage

### ① IPFS-based AI data-sharing platform

Currently, no site in Korea provides AI data for free, and there is a site (www.aihub.or.kr) that collects data owned by companies through a government-level project (development) in one place (www.aihub.or.kr). This is available only when data is purchased or licensed from the data holders. Its usage scope is limited depending on the license type. → DePlay aims to be used as if anyone can freely upload all data without a license, analyze it, and discuss it freely, so an increase in users is expected following the platform launch.

- Build and operate an AI data-sharing platform operated by private companies
  - (Currently) The AI data platform in Korea has a closed tendency except for public data portals built and operated by government-affiliated institutions. Most private data platforms are available for a fee, resulting in significant costs.
  - In addition, the government is conducting a data voucher support project that matches data supply companies with demand companies. Still, it is difficult to find appropriate data because the data is mainly composed of supplying companies rather than data needed by demanding companies.
  - Therefore, the company established and operated a platform that allows users to freely upload, share, discuss, and analyze data necessary for AI analysis.

### ② Favorable market environment

- AI is expected to grow rapidly as it is widely used not only in companies' management and business models but also in public services and individuals' lives.
  - World market: \$17.2 billion in 2017 -> \$53.2 billion in '23
  - Korean market: \$11.1 billion in 2020 -> 19.1 billion in '23

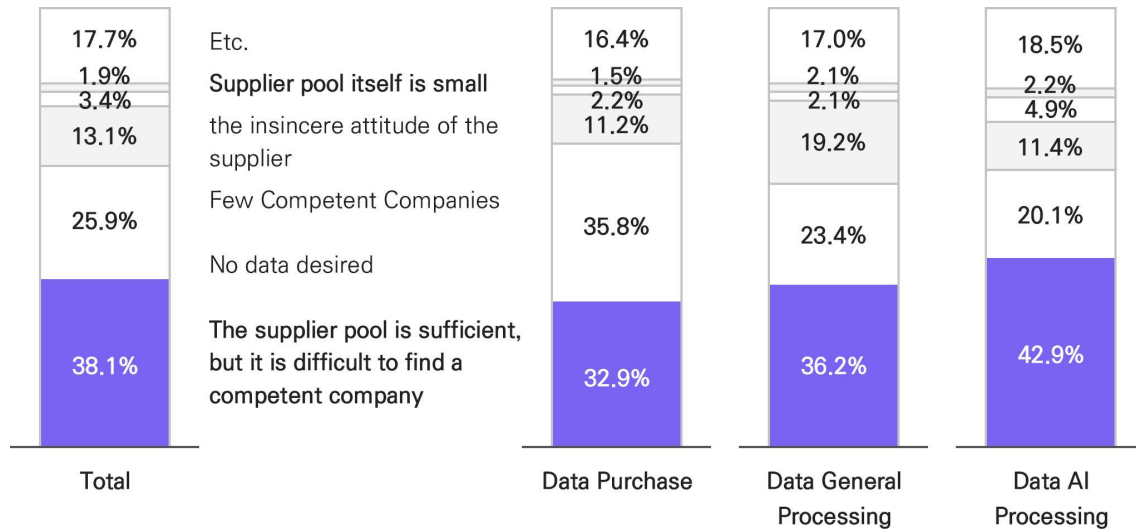
(Unit: \$1 million for the international market, \$1 billion for the Korea market)

Category	2017	2018	2019	2020	2021	2022	2013	CAGR
International market	4,819	7,345	11,283	17,267	25,995	37,987	53,231	49.2%
Korea market	6,400	7,500	9,100	11,100	13,320	15,984	19,180	20.1%

\* Source: ITP (2018.12), 'ICT R&D Technology Roadmap 2023, Statistics (International) / Ministry of Science and ICT (Korea) data reference

[Fig. 26] – Domestic and international artificial intelligence market outlook

- AI data shortage
  - It is showing high interest, such as carrying out a data voucher support project with an annual budget of \$123 million in 2021
  - However, looking at the final report on the operation and management of the data voucher support project, it is difficult to find appropriate data because the data is mainly composed of supply companies, and in the process of creating and providing data, data is composed mainly by supplying companies, which are purchasing and processing entities, rather than data reflecting opinions of demanding companies, making it difficult to find appropriate data.



[Fig. 27] - Data Voucher Support Project Operation Management Report (Demand Survey results of demanding companies)

Lack of data-sharing platform

- Korean data platform is closed except for public data portals operated by government-affiliated institutions
- In the case of private data platforms, some data are provided free of charge, but most are provided for a fee and require significant costs.

In terms of policy directions other than Korea, other countries differently concentrate as follows:

US: Open Data Policy

EU: Free access to data between Member States

Japan: Promotion of public/private integrated data portal establishment

Korea: Private data dams, revitalizing the private data industry, building data for Ai learning, and creating a digital education infrastructure for elementary, middle, and high schools.

No	Category	A charge	Free charge
1	ODPia	○	○
2	API STORE(KTH)	○	○
3	DBpia	○	○
4	SKT Bigdata hub	○	X
5	SK Open API	○	X
6	KT BigSight	○	X
7	NAVER Cloud Platform	○	X
8	KREPORT O	○	X
9	KisREPORT	○	X
10	API STORE(Dabeeo)	○	X

[Fig. 28] – Korea Data Sharing Platform

## 4.3 PETCARELAB - PETCARE SERVICE PLATFORM

### 1) Business analysis

#### ① Business analysis

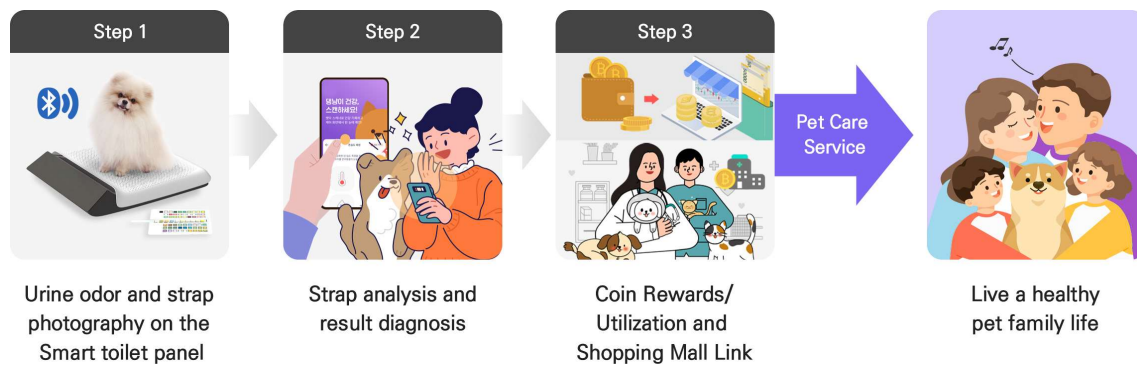
Petcarelab is a startup that specializes in developing and operating the pet platform. Its main business is to develop a healthcare platform for pet health management and disease prevention. Petcarelab platform is a product aimed at healthy pet families' lives through early detection and prevention of pet diseases using smart pee pads at home without visiting vets and is developing products using smart pee pads and AI-based analysis technology.

Recently, with the increase in single-person households, low birthrate, and aging population, the number of consumers who spend time and invest in pets instead of having children continues to increase. The global pet market is growing rapidly as the trend of "Pet Humanization," which considers pets as family members, and "Pet-Tech" to enhance the happiness and convenience of pet lovers and pets is spreading, resulting in sharp growth of the global pet market. In particular, with the advent of the big data era in the pet industry, 'Pet Tech' is attracting attention as a blue ocean market. Therefore, the potential for future growth is expected to be very high.

#### ② Platform Overview

□ Description: AI-based Petcare platform

□ Purpose: It is a platform that tests the pee of pets and informs them of their current health status and related knowledge information and aims to use AI analysis technology to detect and prevent pet diseases early and lead a healthy pet family's life by inserting and photographing strips with Bluetooth and camera at home without visiting vets.



[Fig. 29] – Petcarelab Platform Service Overview

#### ③ Main function

- Smart pee pads with built-in PCB that work with users' smartphones
  - A Bluetooth chip, MCU, weight sensor, camera, LED, LCD, and strip insertion module that can communicate with a smartphone are installed on the pee pads used by pets
  - A Bluetooth function for short-distance communication by pairing smart pee pads with users' smartphones
  - A function that detects the weight of pets when they are on pee pads, sends push alarms to users' smartphones and measures the pets' weight
  - A function that automatically inserts and removes the pee-stained strip into the cartridge of pee pads through a button



- A function that automatically films the strip inserted into the cartridge and turns on the LED automatically when filming
- A function that transmits images of strips with pets' pee and the pets' weight information to smartphones
- A function that automatically collects pets' pees in a specific space by flowing through pee pads with an inclination

#### Users App

- A function that retransmits the image received through Bluetooth to the linked analysis server and displays the result of the analyzed health checkups (pee test and health information)
- A health management function through a graph view of recent checkups and weight trend
- A health equipment recommendation service related to healthy food and pets, such as supplies and snacks function
- A function to register and view information such as the species, age, and gender of pets and the address, age, and gender of pet owners
- Provides customized services such as the definition of disease, cause, symptom, treatment, veterinarian's inquiry, etc., according to the disease and health information of the checkup result

#### Strip image processing and AI analysis within the analysis server

- Disease analysis function by measuring the concentration of 10 components (occult blood, bilirubin, urobilinogen, ketone body, protein, nitrite, glucose, acidity, specific gravity, white blood cell) contained in pets' pee and combining the measured concentrations
- An in-depth analysis function using prior data such as the species, age, and gender of pets and the address, age, and gender of pet owners

#### Blockchain-based Cryptocurrency ecosystem construction and shopping mall linkage

- A function that rewards users with issued cryptocurrency whenever they complete pee tests and allows affiliated vets to use it for pets' health checkups and surgery expenses
- A function to store and manage all the data analyzed through the smart contract in the blockchain server
- Linked with pets' health equipment shopping mall

### **④ Differentiation from other products**

Existing pet pee tests are a form in which pet lovers directly collect pees, apply it on a strip, and take photos with a smartphone to get health analysis results, and our products have the following big differences compared to existing products

- The biggest difference between the company's products is that smart pee pads with automated functions (strip insertion, shooting, smartphone linkage, weight detection, weight measurement, etc.) currently unavailable in the market, communicate with pet lovers' smartphones, and provide analysis results.
- In addition, the difference is that it not only predicts diseases through a combination of simple listing (suspicious or normal) of 10 component results, but also informs users of AI-based in-depth analysis results along with defecation frequency, weight information, and pre-data
- By establishing a blockchain cryptocurrency ecosystem, each time pee tests are completed, the issued cryptocurrency is re-rewarded, and the re-rewarded coins can be used as medical expenses (health checkups, surgery, medical expenses, etc.) in linked vets



- It is expected to preoccupy the pet cat market when completing prototypes because it targets not only dogs but also cat pee tests that do not currently exist in the market.

Comparative analysis of major third-party products in Korea

- We compared and analyzed the products of major Korean competitors for the pet pee tests, and the company's products hold great differences, as shown below

Category	Petcarelab Inc.	oooPet Inc.
Product	Before release	ooo Basic
Inspection method	The urine collected in the smart toilet panel is applied to the strip and automatically photographed by the camera and sent to the app for analysis	After purchasing the inspection kit, users collect urine themselves and apply it to the strip to capture it with the app's camera for analysis
Product Configuration	Smart Toilet Panel + Apps + Strip	App + inspection kit (strip, colorimetric mark, absorbent paper, etc.)
How to collect urine	Automatically collect via Smart Toilet Panel	Collection by your companion in a cup
How to take strip photography	Automatically take photos with cameras built into Smart Toilet Panel	Put a strip between the colorimetric marks and shoot with your smartphone
a disease test	Prediction of disease by combination, rather than simply listing the results of the 10 components	Only "suspicious" and "normal" are determined by a simple list of 10 ingredient results
Weight measurement	Automatically measure with Smart Toilet Panel	None
Analysis and data storage	- Deep AI disease analysis based on pet weight/age, companion area/age, strip analysis - Save to Blockchain	- Simple disease analysis (AI analysis specialized in shopping mall pursuit service) - Store in a general database (DB)
Note	- Demo version development completed except strip insertion	- Achieved 1,200% of target amount through crowdfunding - Cumulative investment attraction of 28.3 billion won (the largest pet market))

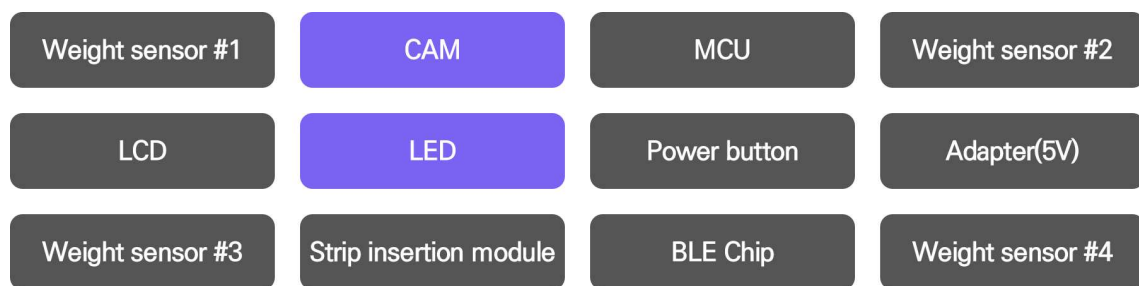
[Table 4] – Comparison of major Korea competitors

## 2) Competitive Advantage

### ① Promotion of product development through a strategy that is technologically differentiated from existing products

Target the market with a differentiated strategy through new pet pee tests service products that do not currently exist in the market

- (Currently) With most pet pee tests, users purchase pee test kits consisting of strips, color tables, and absorbent paper sold and directly collect pets' pee, apply them on the strip, and test using the app provided.
- Our products consist of a weight detection sensor to weigh pets when they step on pee pads, a camera and LEDs that film the strip with pee on it, and smart pee pads with built-in Bluetooth to transmit strip images and weight information to users' smartphones.
- In addition, the back end consists of a server that analyzes the strip images and a private blockchain that stores data.
- Provides AI-based in-depth analysis results by integrating pets' basic information (species/age/sex, etc.), strip image analysis results, and prior data (pet lovers' gender/address/age, etc.)
- [Fig. 23] below shows a block diagram of component on PCB to be embedded in the smart pee pads of the company.



[Fig. 30] – Block diagram of component on PCB

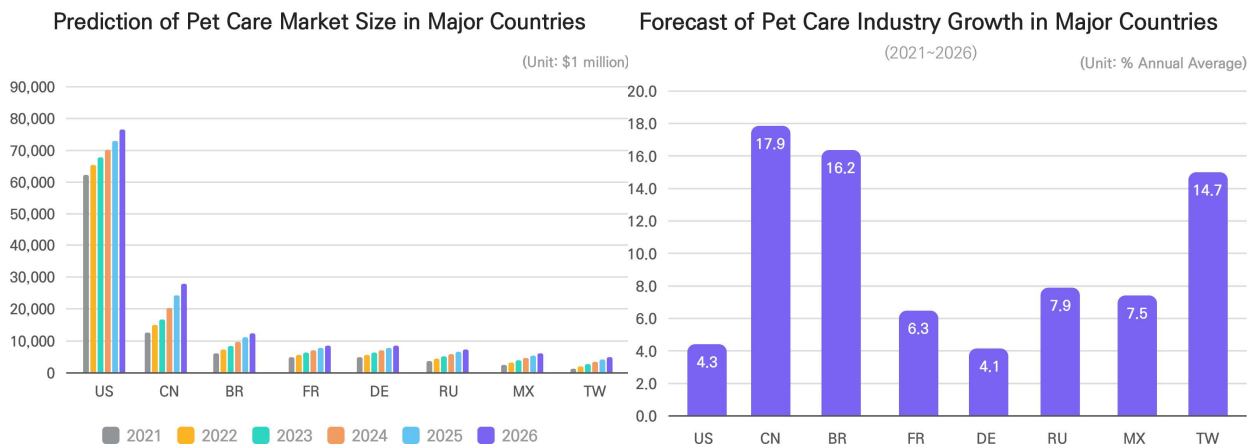
- Induce product purchases and flexible market entry through the establishment of a blockchain cryptocurrency ecosystem in the pet care market
  - Whenever pet pee tests are completed, a blockchain ecosystem is established to reward users (pet lovers) for self-issued cryptocurrency to induce users to purchase and use products
  - The cryptocurrency that users have received rewards can be used for pets' health checkups, surgery expenses, and medical expenses at linked health equipment shopping malls or affiliated vets
  - Secure and transparent management of pets' information and analyzed result data through smart contracts by storing them on a blockchain server
- Development of high-end smart pee pads and additional revenue generation and market development through connection with the pet health equipment shopping mall
  - Most of the pee pads on the market are mainly low-cost plastic products.
  - Development of high-end smart pee pads with harmonious and sophisticated design quality considering the interior atmosphere of users' homes.
  - Most competing products are promoted by linking shopping malls that sell pets' favorite snacks and healthy foods. The company plans to establish and operate a shopping mall specializing in health equipment specialized in improving pets' health.

## ② Favorable market environment

- According to the reports "The latest trend in the growing pet care industry" published by the International Trade Research Institute (202.01.20) and "Measures to strengthen the global competitiveness of Korean companies," the pet care industry is emerging as a new growth engine

in consumer markets other than in Korea. It is predicted that the quantitative and qualitative growth of the pet care industry will be further accelerated as the population raising pets increases due to changes in the global population structure, such as the increase in single-person households, low birth rate, and aging, and a culture that treats pets as family members is spreading.

□ Despite the recent economic contraction due to the COVID-19 pandemic, the global pet care market has continued to grow and recorded \$142.1 billion in 2020, an increase of 6.9% from the previous year, and is expected to grow to \$217.7 billion by 2026.

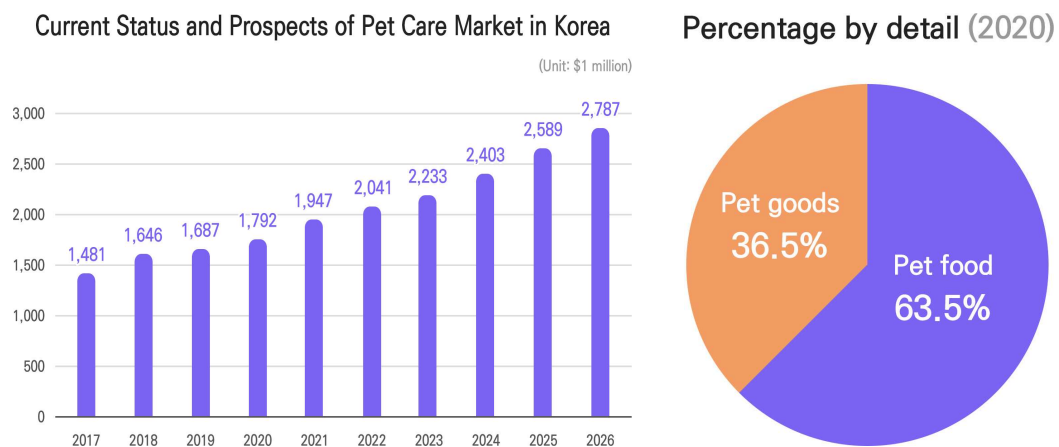


[Fig. 31] – Pet care market size and industry growth forecast in major countries

\*Source: Korea International Trade Association

□ In addition, the growth in advanced countries that have led the development of the pet care market is slowing down, and China and Brazil are emerging. Local companies and startups armed with innovative ideas and technologies are expanding their entry into the market, surpassing multinational companies' high market dominance.

□ The Korean pet care market is also rapidly expanding, with the proportion of households raising Korean pets reaching 27.7% in 2020. The pet care market has been growing at an average annual rate of 8.4% for five years from 2016 to 2020, forming a market of about \$ 2.23 billion.



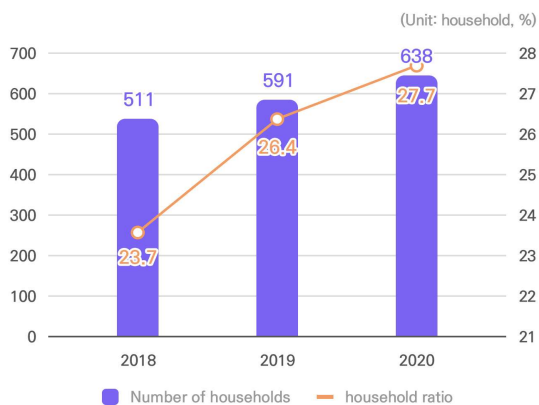
[Fig. 32] – Korean pet care market size and proportion by item

\*Source: Korea International Trade Association

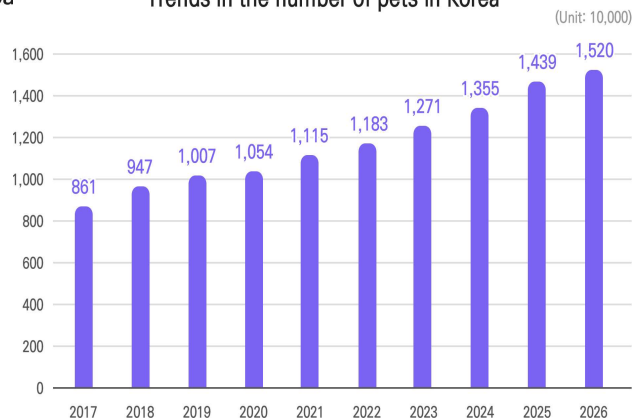
□ More time spent at home due to the prolonged COVID-19, increasing single-person households, low birth rate, and aging population, the rapid increase in the pet-raising population shows that the growth potential of the Korean market is very large.

\* (Reference) The number of pet-raising households: 6.38 million in 2020, 27.7% of the total households, up 7.9% from 2019

Trends in the number of pet-raising households in Korea



Trends in the number of pets in Korea



[Fig. 33] – Number of Korea households raising pets and population trend

\*Source: Korea International Trade Association

□ To strengthen competitiveness in the rapidly growing pet care market, differentiation strategies that reflect the latest trends, such as pet tech, which combines innovative technologies or products and services, are needed; it is expected that the company's products will easily enter the market.

## 4.4 Metaglobe - Real Estate NFT Investment Platform

### 1) Business Analysis

#### ① Business Analysis

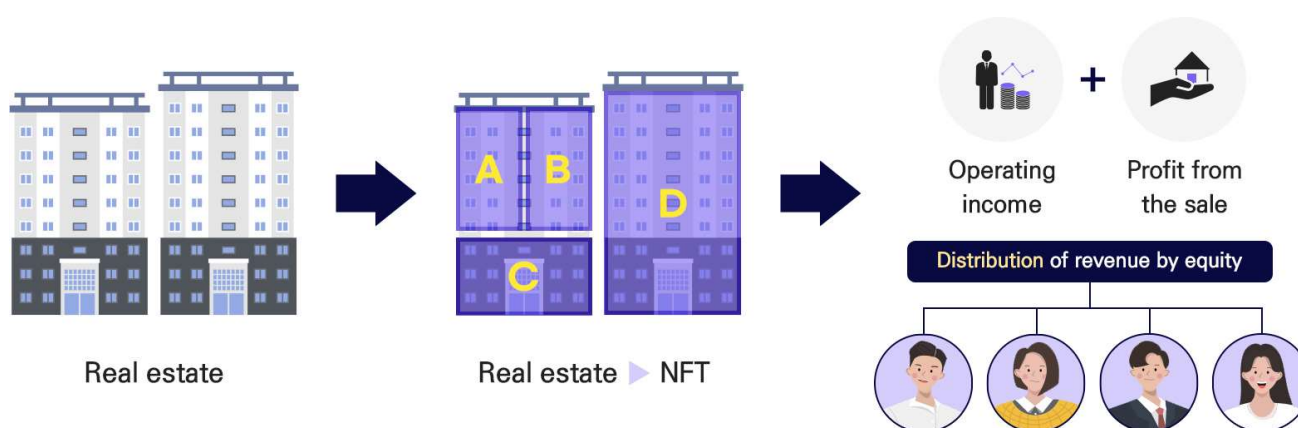
The Metaglobe platform aims to acquire real estate stock shares by NFTizing stocks of a real estate management corporation, allocation of operating income and trading profits as much as the invested shares, and free trading of the investment shares and NFTs.

Despite the government's recent efforts to increase the needs of general investors in real estate investment and expand real estate indirect investment, it is difficult to provide opportunities for indirect real estate investment for general investors, not institutions and companies. However, we operate a real estate indirect investment platform that meets the needs of the current market through the stock investment of real estate management corporations in combination with blockchain and NFT.

Metaglobe differs from other investment platforms through indirect investment through NFT of real estate (profitable real estate), customized small and medium-sized hotel remodeling (business initial model), fast refundability, and various profit vehicles.

#### ② Platform Overview

- (Description) Real Estate NFT Investment Platform
- (Purpose) As a real estate NFT investment platform that allows investors to make NFT-based investments in corporate stocks based on commercial real estate, receive an allocation of profits as much as the invested shares, and freely buy and sell the held shares, we aim to provide indirect investment opportunities for all real assets around the world.



[Fig. 34] – Overview of Metaglobe platform service

#### ③ Main characteristics

- Indirect investment through NFT of real assets (revenue-type real estate)
  - The management corporation purchases real assets and converts the shares of the corporate stock into NFTs to raise investment, and allocates profits for each corporate NFT share
  - Delivers ownership certificate and registration certificate of the Korea NFT Accreditation Certification for the NFT as well as the actual stock of the management corporation

- Investors can redeem NFT before maturity through matching between the transferors and the transferees, allowing capital liquidity

- Specialized in customized small and medium-sized hotel remodeling (initial model of business)
  - Purchases undervalued lodging establishments due to regional corona and operational problems

- Provides design to construction through steady analysis of demand levels by region/location, breakfast packages for business customers to businesses, the specialty of the tourist attraction in the commercial area of the tourist attraction, and family-style hotel rooms for family customers, etc.

- Secures brand awareness by cooperating with existing hotel brands such as Yanolja No.25

- Fast refundability

- Aims for a quick exit strategy to actively purchase NPL products held by installations such as banks, remodeling and operating purchased hotels to increase value and sell them at prices that fall short of the market average price

- Buys older small and medium-sized hotels that are not expensive and profitable, minimizing risk and providing financial flexibility

- Various revenue vehicles

- Since it is an investment in corporate shares, provides profits from profitable real estate management and capital gains from sales as profits from investments according to the ratio of investment shares

- Pays coins according to the amount of investment, which can be used as profit vehicles through Exchange, etc., or can be exchanged for hotel tickets on the platform

- Pays NFT as rewards to some investors (proportional to investment amount, investment return, etc.), and the NFT includes accommodation and breakfast tickets of Metaglobe platform products, and trading is possible at NFT marketplaces (Opensea), which functions as additional profits.

#### ④ Differentiation from other investment methods and platforms

- The existing real estate investment methods are largely divided into direct investment/indirect investment.

- Direct investment: A form in which all profits and losses belong to the investors by acquisition, development, operation, and disposal related to real estate.

- Indirect investment: A form of indirect investment in products developed by institutions specializing in real estate asset management to acquire and operate real estate and real estate-related assets

- Representative real estate funds and REITs (Real Estate Investment Trusts) of indirect real estate investment can be defined as follows.

- Real Estate Fund: An indirect investment product that purchases and manages real estate for a set period with investors' funds, allocate profits, and sells and liquidates at maturity

- REITs (Real Estate Investment Trusts): REITs is an indirect investment product that invests in real estate companies that hold real estate portfolios with the funds of multiple (equity) investors and allocate more than 90% of their profits.

□ Metaglobe greatly differs from existing investment methods and platforms because it invests indirectly through NFTs for profit-type real estate.

- Metaglobe is a form in which all gains and losses, which are characteristic of direct investment, belong to investors, and at the same time, indirect investment in products developed by asset management institutions

- Compared to the most representative real estate funds (public offering/private equity) and REITs in terms of indirect investment, the differences are as follows.

□ First, 'free trading of investment shares (funds: investments, REITs: equity investments)'

- By transferring the shares and allowing the transferee to trade freely, investors are given money and capital liquidity

\* In the case of public offering/private equity funds, the redemption period is generally 3-7 years, and in the case of REITs, stock fund is possible, but trust fund is not possible

□ Second, 'Diverse portfolio composition'

- In the case of REITs, investing in real estate management companies is not free because it has to follow the portfolio composition of the real estate management companies, whereas in the case of Metaglobe, one management corporation holds only one real estate, so it is possible to configure various portfolios according to the characteristics of investors

\* In the case of public offering/private equity funds, it is possible to form a free portfolio as it consists of one real estate/one fund, but from the point of view of general investors, the opportunity to choose is narrow in terms of the minimum investment amount and variety of products.

□ Third, free investment

- In the current real estate indirect investment market, investment opportunities for general investors are quite limited, and the public offering ratio of real estate funds is only 2.9% as of the end of 2020, and the minimum amount of general investors in private equity funds as of 2021 is \$300,000. It has been raised, making it difficult for general investors to find indirect real estate investment opportunities.

In Metaglobe, the minimum limit is set at \$10,000 for general investors, and the maximum is not specified, so investors can freely invest as much as they want.

□ Comparative analysis with major real estate indirect investment methods

- Comparative analysis was conducted according to the major real estate indirect investment methods and characteristics.

Category	Metaglobe	REITs	Real estate Fund (Private)
Size of investment	an early small and medium-sized hotel (mainly 5-10 billion won) Various profitable real estate products will be developed in the future	Mainly large (Average assets total 200 billion won)	Mainly large (Average assets total 50 billion won)
Investment period	an average of 8 months	Continuous operation without additional expiration	3 ~ 7 years
dividend cycle	a monthly dividend	a half-year or annual dividend	an annual dividend
intermediate redemption	Can be bought and sold like stocks (transferred, transaction with transferee)	Stock type: Possible, Trust type: Not possible (18 out of 323 stocks as of January 22)	N/A
Payment income type	Principal Interest + Operating Income + Profit from Sale	Principal Interest + Operating Income + Profit from Sale	Principal interest + operating income + profit from sale (conditional)

[Table 5] – Comparison of major real estate indirect investment methods

## 2) Competitive advantage

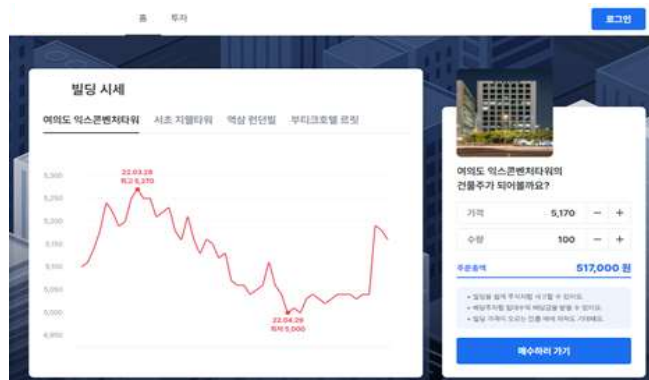
### ① A differentiated strategy from traditional platforms through different investment directions

Target the market with a differentiated strategy by providing new investment directions that do not exist in the market today

- (currently) In the case of existing real estate indirect investment platforms, users invest in real estate through digitally securitized DABS, and the profits from DABS capital gains are greater than holding until the end of the subscription, and the platform generates a lot of fees revenue by encouraging investors to do so

- Investors feel highly fatigued from holding because they have to actively act on the timing of buying and selling by judging the present value and future value of DABS, such as stocks and coins

\* Even if DABS worth \$20 million is issued, you can receive several times the value of fees depending on the trading volume.



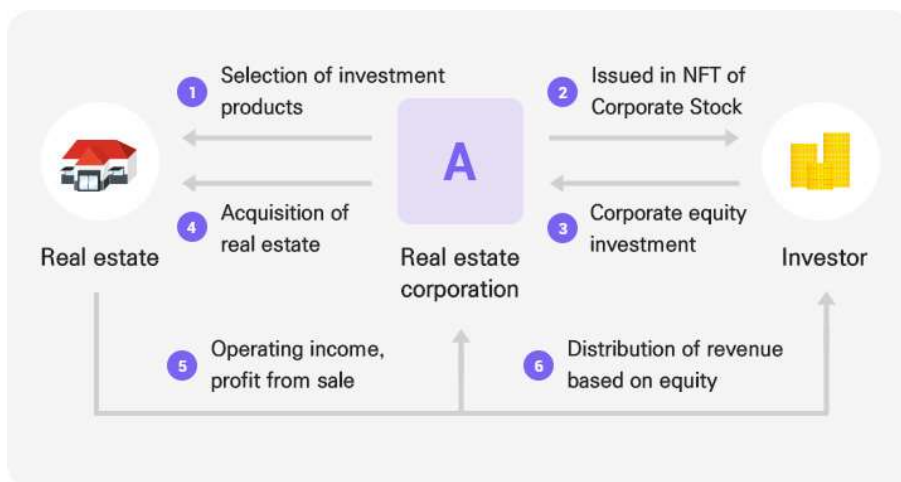
[Fig. 35] - K Platform DABS (Digital Securities) Market Price Page



□ (Metaglobe) Metaglobe provides liquidity and liquidity as a method of acquiring and investing stocks of real estate management companies but does not encourage capital gains through trading and guarantees profitability when holding shares in stocks

- If you buy or sell the holding stakes, you have liquidity, but the right to profit from the sale is transferred to the investors.

- The [Fig. 30] below is the data to be entered in the introduction section of the homepage of the company's platform and represents the investor's profit structure.



[Fig. 36] – Introducing the revenue structure of the Metaglobe platform

□ (Free from the Capital Market Act) In the case of current real estate indirect investment platforms, it distributes claims for profits, rather than dividing ownership of the underlying assets, and falls under 'securities' and has to perform the disclosure procedures under the 'Capital Market Act.'

\*Note: It is free from the Capital Markets Act because it is not a securities under the current Capital Markets Act, but it will be carried out without restriction by law due to the Financial Services Commission's move to legislate securities-type token guidelines

□ Increase the profit of the investors with lower fees through an improved security structure

- (currently) In the existing real estate indirect investment platform, trust companies are included in the middle, charging double fees - the pre-emptive fees and the sale fees

- (Metaglobe) In the case of Metaglobe, there are no trust companies in the middle, so investment can be managed with relatively low fees

Category	Pre-emptive fee	Operating fee	Operating income payment fee	Sales fee
Trustee (Hana Asset Trust Co., Ltd.)	0.7% of the public offering amount of the trust's basic remuneration (once upon initial issuance)	* 0.2% of the amount of public offering for trust management fees (annual)	-	7% of the profit from the sale of trust disposal fees (at the time of sale)
Lucent Block Co., Ltd	1.2% of the platform listing fee public offering amount (once upon initial issuance)	-	Operating payment fee (2.0% of operating profit payment upon payment of operating profit)	Sale commission (at the time of sale) 7% of the profit from the sale
<b>Total Fees</b>	<b>1.9% of the public offering amount (once issued for the first time)</b>	<b>0.2% of the public offering amount (annual)</b>	<b>2.0% of operating income payment (payment of operating income)</b>	<b>14% of the sale loan (at the time of sale)</b>

[Fig. 37] – Fee structure of basic real estate beneficiary securities platform (BBRIC, same as Kasa)

□ In the early stages of the platform, targets the market with fast cash flow through small and medium-sized hotel remodeling products that could not be seen on existing platforms

- (Currently) Most of the existing indirect real estate investment platforms are centered on small and medium-sized offices

\*Looking at the trend so far, the shortest subscription is nine months (Kasa, 'Yeoksam Korea Technology Center' 1 case), and the longest is 18 months (Kasa, 'Yeoksam Londonville' 1 case). There is no case of closing the platform subscription such as BBRIC.

- (Metaglobe) To quickly enter the market, Metaglobe provides relatively short investment periods and high exchange rates through active purchases of undervalued small and medium-sized hotels worth \$5 to 10 million and NPL products by remodeling small and medium-sized hotels and will provide small and medium-sized hotel investment products in a way that gives high value again by remodeling through analysis of business districts/demand groups.

□ Provides investment incentives through the establishment of blockchain and cryptocurrency ecosystems and flexible market entry strategies

- By establishing a blockchain ecosystem that rewards self-issued cryptocurrency to investors according to the amount of investment, new investment factors are provided to investors

- The cryptocurrency that users have received rewards can be used instead of fees when investing or can be used as accommodation tickets and breakfast vouchers for products (hotels) in service on the Metaglobe platform

- Pays NFT as rewards to some investors (proportional to investment amount, investment return, etc.), and the NFT includes accommodation and breakfast tickets of Metaglobe platform products, and trading is possible at NFT marketplaces (Opensea), which functions as additional profits.

## ② Favorable market environment

□ The flow of securitization in the real estate market

- (Real Estate Market) REITs was first introduced after the 1997 Asian financial crisis by enacting the 'Real Estate Investment Company Act' (2002.05.05) to promote company restructuring by securitization of holding real estate. They are promoting measures to revitalize real estate funds and REITs for securitization.

- The government expects to improve the financial structure of companies through the expansion of the real estate indirect investment market, recovery of the housing economy, normalization of the housing rental market, and securitization of real estate owned by unnecessary companies.

- General investors show high interest because it has high stability and tax benefits compared to direct investment.

- The government announced a plan to nurture a public offering-type investment market worth \$60 billion to foster the real estate indirect investment market. In the case of Lotte REITs/NH Prime REITs, the competition rate was 63:1/1/1317:1 and attracted the attention of many investors in Korea.

Market environment	Corresponding direction	Detailed Improvement Plan	expectation effectiveness
Low interest rates and asset price uncertainty ↓ Increase market interest and participation in REITs	① Rigid Regulatory Rationalization  ② Revitalizing listed REITs and improving investment environment of investment	①-1 Simplified consultation procedures for related agencies upon approval ①-2 Improvement of REITs Registration System ①-3 Rationalization of Holding Company Regulations ②-1 Diversification of the People's REITs Investment Methods ②-2 Diversification of investment types such as New Deal infrastructure assets ②-3 Support for investment in listed REITs by policy funds, etc ②-4 Improvement of the public offering system and expansion of information provision	Continuous quantitative and qualitative growth of the REITs market
public investment Increase ↓ Increasing the Need for Investor protection	③ Strengthening the soundness of the market	③-1 Blocking planned real estate using REITs name abuse of REITs ③-2 Strengthen management of expertise and soundness such as AMC - Introduction of remuneration training for asset management professionals - Supplementation of disclosure obligations and soundness management regulations	Promoting safe and convenient REITs investment by the people

[Table 6] - 2022 REITs system improvement direction

\*Source: Ministry of Land, Infrastructure and Transport / Financial Services Commission / Fair Trade Commission

- Barriers to entry for general investors in the real estate alternative investment market
  - However, despite the government's efforts and investors' interest, the proportion of ordinary investors in the real estate alternative investment market is decreasing, and the proportion of company and institutional investors is increasing
  - The proportion of public offering funds in the Korean alternative investment market fell from 3.25% at the end of 2019 to 2.86% at the end of 2020
  - In '21, due to the revision of the Capital Market Act due to the inability to repay the Optimus Private Equity Fund and the Lime Fund, etc., the minimum investment amount of private equity funds for general investors has been revised from \$100,000 to \$300,000, which further reduced opportunities for general investors in the alternative investment market.

Trends in size by fund type (Unit: 1 trillion won, %)										
Category	'19				'20				Increase and decrease	Rate of increase and decrease
	Public offering	Private offering	Total (A)	Percent age	Public offering	Private offering	Total (B)	Percent age		
Securities	134.2	129.4	263.6	40.6	121.3	141.2	262.6	37.9	△1.0	△0%
Stock	77.2	20.0	97.2	15.0	65.6	20.6	86.2	12.5	△11.0	△11%
a bond	44.7	88.5	133.2	20.5	42.8	89.1	131.9	19.1	△1.3	△1%
Re-indirect	12.3	20.9	33.2	5.1	12.9	31.5	44.4	6.4	+11.2	+34%
MMF	73.5	31.3	104.8	16.1	101.9	24.0	125.9	18.2	+21.1	+20%
Derivatives	20.4	30.4	50.8	7.8	24.5	23.7	48.3	7.0	△2.5	△5%
Alternative investment	6.4	185.1	191.5	29.5	6.3	212.5	218.8	31.6	+27.3	+14%
Real estate	3.2	95.1	98.3	15.1	3.2	108.4	111.6	16.1	+13.3	+14%
Special assets	3.2	90.0	93.2	14.3	3.1	104.2	107.2	15.5	+14.0	+15%
Mixed assets	2.6	36.2	38.8	6.0	2.3	34.1	36.4	5.3	△2.4	6%
Total	237.2	412.4	649.6	100.0	256.2	435.7	691.9	100.0	+42.3	+7%

[Fig. 38] – Size Trend by Fund Type

\*source: Financial Supervisory Service

- (High interest in real estate indirect investment platform) As the need for indirect real estate investment increases, real estate indirect investment platforms are in the spotlight.
- Every time Kasa and BBRIC publicly offer, they have achieved all the target subscriptions, showing high interest from general investors.
  - In addition, SK Securities, Hana Financial Investment, Korea Investment Securities, etc. show high interest in starting cooperation with these indirect real estate investment platforms.

## 4.5 Debox – Road and Risk Sensing Intelligent Transportation System Platform

### 1) Business analysis

#### ① Business analysis

The road and risk detection intelligent traffic system platform Debox aims to prevent traffic accidents by providing real-time road dangerous situations to drivers by acquiring road environmental information in real-time and performing artificial intelligence analysis.

It collects and analyzes users' vehicle black box images and provides road conditions, and rewards users who provide black box images in cryptocurrency so that they can collect a lot of data.

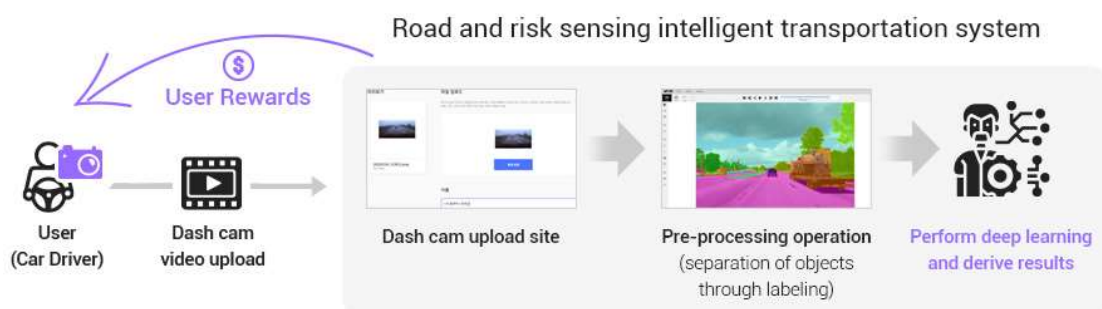
#### ② Platform Overview

- Description: Road and Risk Sensing Intelligent Transportation System Platform
- Purpose: To prevent traffic accidents by collecting traffic and dangerous situations and providing real-time traffic conditions to drivers.

#### ③ Utilization of collected images

- Through the Debox platform, all road environment information by time and location is analyzed using artificial intelligence (AI) technology through a real-time purification and normalization process. In order to analyze and learn such a large amount of road image data without deteriorating image quality, a large amount of computing resources are required, and time and cost are reduced by utilizing a self-built distributed cloud environment.

#### ✓ Collect traffic and hazardous situations and provide real-time traffic conditions to drivers



[Fig. 39] - Structural diagram of Debox image analysis platform

- Image collection: Driver image collection and compensation in real time
- Refining and pretreatment: Preprocessing artificial intelligence analysis by recognizing objects such as vehicles, traffic lights, people, obstacles, and various objects.
- Deep learning performance and results derived: Using artificial intelligence technology, deep learning performance and delivering results to customers

### ④ Debox Intelligent Traffic System - Differentiation from Existing Central Traffic Control System

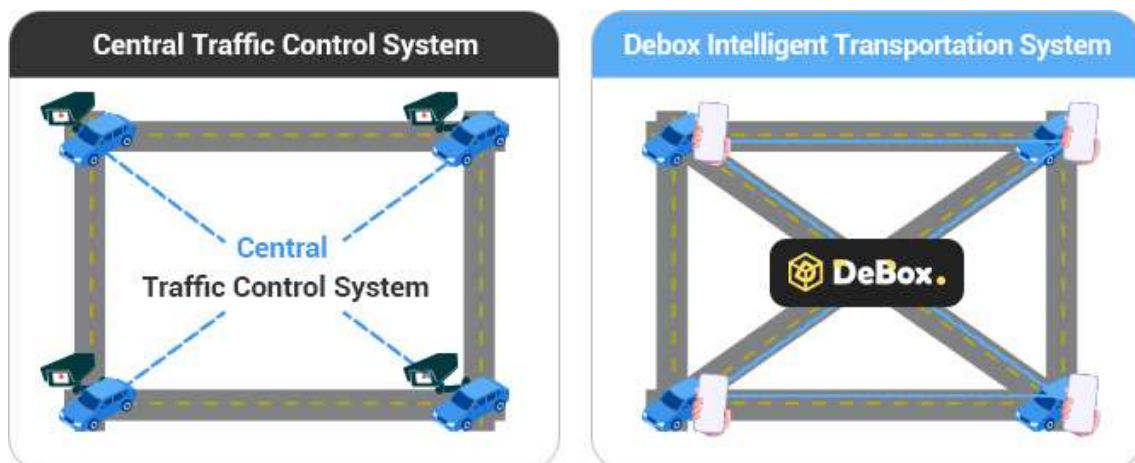
□ The Debox intelligent transportation system platform has the following differences from the existing central traffic control system.

□ two-way transmission and reception

- The existing central traffic control system was a form of collecting data through road peripherals (vms, vds, cctv, etc.) and sending it to the traffic information center to provide one-way information at the traffic information center. This had limitations in responding quickly to unexpected situations and early detection as the manager directly monitored numerous corresponding images at the traffic information center and provided information in one direction. Intelligent transportation systems communicate directly through road peripherals as well as single-machine in each vehicle, so traffic control centers do not provide one-way information, but can bring two-way transmission and reception, and can solve difficulties only with the eyes of managers.

□ Intelligent traffic control

- Although AI technology was used only for data information collection and location-based information provision, real-time information provision was limited. However, two-way transmission and reception were possible, real-time risk factors were automatically detected.



[Fig. 40] - Comparison of the existing Central Traffic Control System and the Debox Intelligent Traffic System

## 4.6 AGC Mall - Lowest-priced coin shopping mall

### 1) Business analysis

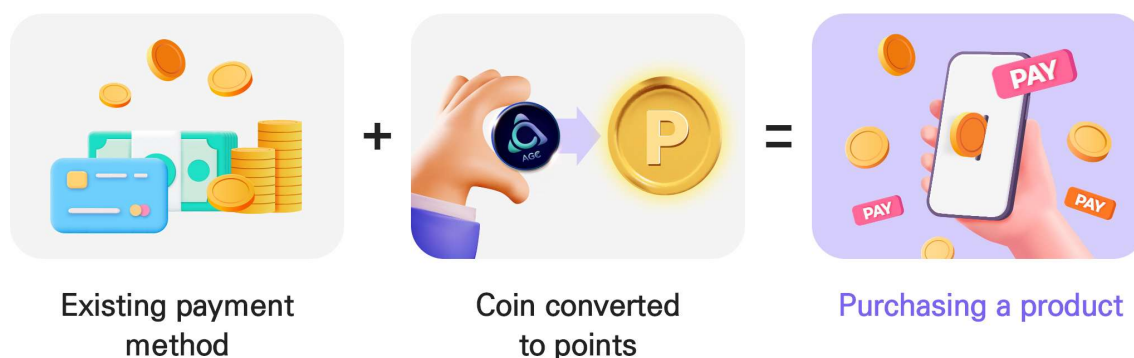
#### ① Business analysis

Exchanges users will sell at the amount they want and have to wait for the buyers, but in the case of actual minor coins, the difference between selling and buying is large, so a loss occurs even if the sale proceeds. The lowest-priced coin shopping mall provides a shopping mall where members can purchase products using coins that are not actively traded among the coins they are holding and registered products at a lower price than other companies. Payment can be made with existing payment vehicles such as cash and cards, and coins converted into points.

#### ② Platform Overview

(Description) Lowest price coin shopping mall

(Purpose) Aims to give real value to users by providing an online shopping mall where they can purchase products necessary for real life at the lowest price with coins without current use value.



[Fig. 41] – Lowest price coin shopping mall service overview

#### ③ Main characteristics

Utilization of coins with significantly less trading volume

- Trading volume is particularly concentrated on major coins listed on exchanges.
- It is expected to meet customers' needs as a place to use minor coins, which are not easily traded.

Recognize the maximum value of coins

- Unlike the existing shopping malls that pay points when purchasing products or meeting payment conditions, the Lowest price coin shopping mall allows users to use their holding coins like cash.

#### ④ Differences from existing shopping mall payment methods

Typical existing shopping mall payment methods are as follows.

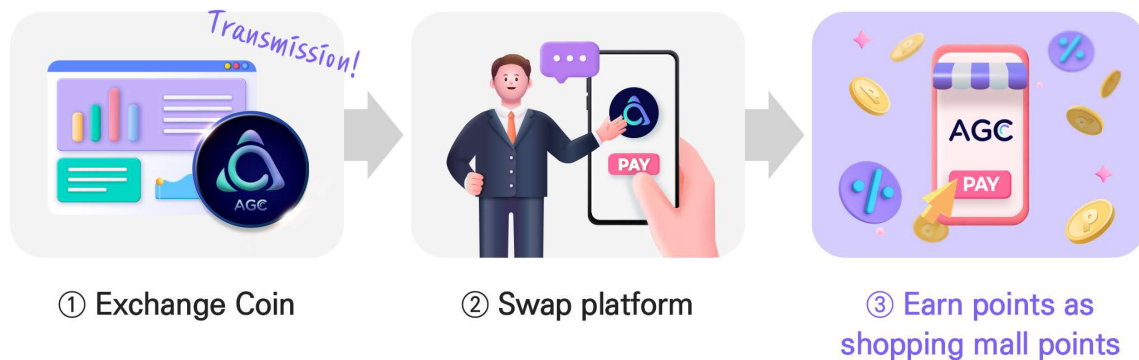
- Card payment: Payment by credit or debit card.
- Real-time account transfer: Internet banking users immediately withdraw money from their account number and pay.
- Virtual account payment: The company assigns a deposit confirmation number to each customer for payment
- Mobile payment: Payment from mobile devices such as mobile phones, smartphones, and tablet PCs.



- Deposit without bankbook: A method of depositing money into an account using an ATM or visiting banks even if the sender does not have a bank account.

□ Differentiated payment method of Lowest price coin shopping mall

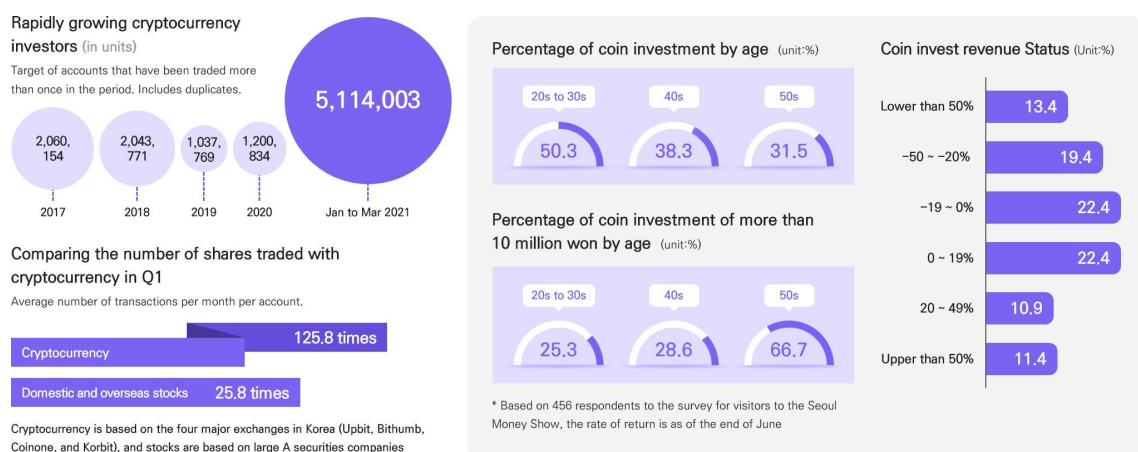
- A coin payment method is provided for the popularly used existing shopping mall payment method.
- Holding coins on various exchanges can be converted into points using a separate platform provided by us.
- Coins accumulated as points can be freely used like cash at the corresponding shopping mall.



[Fig. 42] – Point accumulation simulation

□ Lowest price coin shopping mall's future

- According to data obtained from the four major Korean exchanges (Upbit, Bithumb, Coins One, Cobit), 2,335,977 people in their 20s and 30s who experienced virtual currency trading more than once in the Q1 2021 said they were "in loss" according to a survey conducted by Maeil Economy.



[Fig. 43] – 03/2021 The number of virtual currency investors is increasing rapidly

\*Source: Kwon Eun-hee, a lawmaker of the People's Party

- AIDAPPS Lowest price coin shopping mall has a big difference because it provides clues for customers to use 'losing' coins.





## CHAPTER 5 TOKEN ISSUANCE AND ALLOCATION

One billion AGC tokens will be issued, of which 20 percent, or 200 million, are for token sale and 80 percent, or 800 million, are for the company's holding. Of the 80% of the company's holding, 40% is used for the company and teams, 20% for marketing, and 20% for R&D.









## CHAPTER 6 Company Overview and Introduction

### 6.1 Company Introduction

#### 1) Overview

AIDAPPS offers a variety of SaaS-type software that combines artificial intelligence (AI) and blockchain technologies in a distributed cloud-based environment

<b>Name of a Company</b>	AIDPPAS Co., Ltd.
<b>Foundation Date</b>	February 21st, 2020
<b>Homepage</b>	<a href="http://www.ai-dapps.com">http://www.ai-dapps.com</a>
<b>Operation Site</b>	<a href="https://www.youtube.com/channel/UCtvwcVfe0GDUAXfMa_wbWxQ">  <a href="https://www.youtube.com/channel/UCtvwcVfe0GDUAXfMa_wbWxQ">https://www.youtube.com/channel/UCtvwcVfe0GDUAXfMa_wbWxQ</a> </a>
	<a href="https://blog.naver.com/aidapps">  <a href="https://blog.naver.com/aidapps">https://blog.naver.com/aidapps</a> </a>
	<a href="https://twitter.com/AICON_project">  <a href="https://twitter.com/AICON_project">https://twitter.com/AICON_project</a> </a>
	<a href="https://t.me/aiconproject">  <a href="https://t.me/aiconproject">https://t.me/aiconproject</a> </a>
<b>Major Line</b>	Distributed Cloud / Data Analysis / AI / Blockchain / IPFS / PetCare
<b>Business Areas</b>	<ol style="list-style-type: none"> <li>1. Expansion of Distributed Cloud based on Blockchain</li> <li>2. Developing SaaS-type Service Platform based on Distributed Cloud</li> <li>3. PetCare Service</li> </ol>

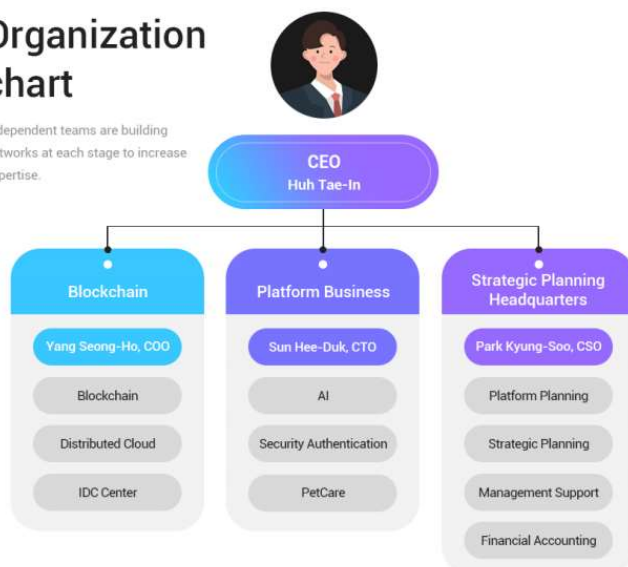
[Fig. 44] - Company Outline

## 2) Organization Chart

Approximately 40% of all employees are technical personnel, and 50% of them have more than 15 years of experience. We operate our organization to flexibly respond to the development of SaaS-type services based on distributed cloud and cloud device supply businesses, which are key business areas..

### Organization chart

Independent teams are building networks at each stage to increase expertise.



### Current Status of Staffing



[Fig. 45] - AIDAPPS Organization chart

## 3) Vision

Based on its software technology that runs in Korea's first distributed cloud environment, AIDAPPS Co., Ltd. Meets the expectation of the National agenda, while pursuing corporate value of satisfying customers' requirement.

### Secured a distributed cloud network

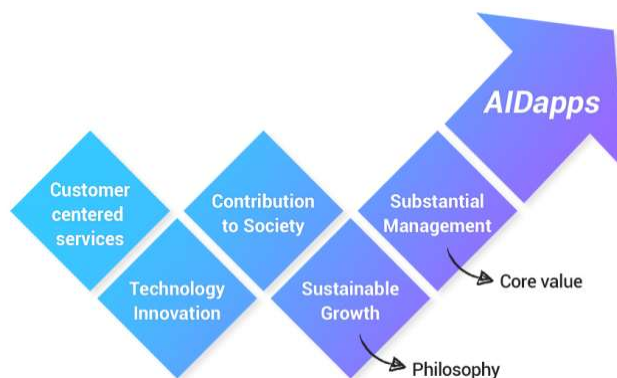
- Secure distributed cloud infrastructure by establishing and expanding distributed cloud centers, or D-Cloud
- Free up idle computing resources such as CPUs, GPUs, MEMs, and STORAGE

### AI Data Analysis Platform

- A platform that provides data and AI/ML analysis in a public environment and contributes to the development of the ecosystem based on open source.

### Continued Research and Development for Future Technology

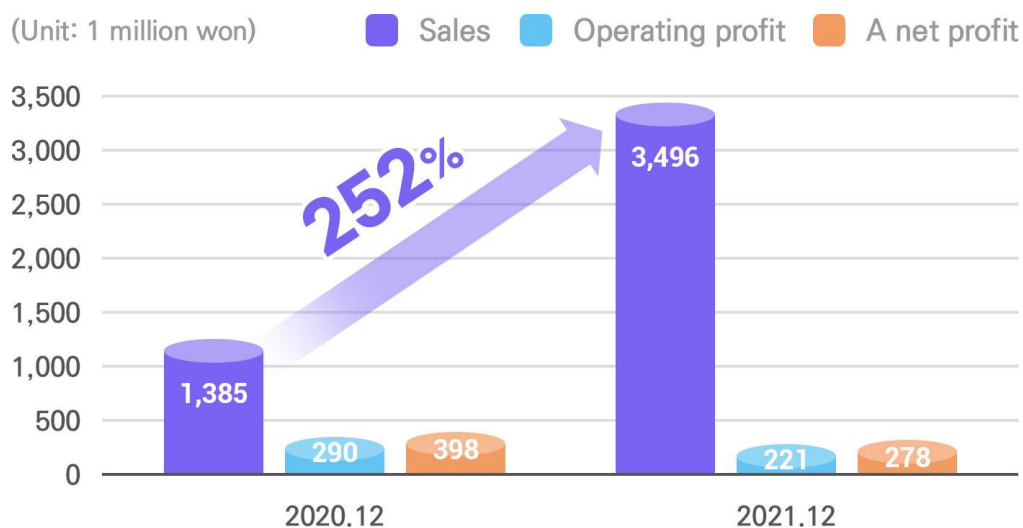
- Development of AI Technology Convergence Platform in Distributed Cloud Environment
- Development of a platform that integrates blockchain technology by utilizing the acquired distributed cloud-based resources and artificial intelligence data.
- Various SaaS lineups such as blockchain P2P investment services and pet care services.



[Fig. 46] - AIDAPPS Vision

## 6.2 FINANCIAL STATUS

AIDAPPS' sales surpassed \$1.3 million in the establishment year (2020), and recorded about \$3.5 million the following year, resulting in a sales growth of 252 percent in a year. AIDAPPS continues to develop into a company with a stable financial structure.



[Fig. 47] – AIDAPPS sales growth rate

In addition, the company registered ten patents to enhance competitiveness in the market and acquired an innovative growth type venture company certificate in recognition of its technological innovation and business growth and a 'T-4' grade excellent company certificate from the Tech Credit Bureau (TCB).

Donghyun Accounting Corp. evaluated the company's stock value through due diligence (03/31/2021) by applying a cash flow discount method generally recognized as a fair and reasonable model - a method of calculating future profit value. The value of the company's equity capital is about \$23.5 million, and the value per share is estimated at \$587

Category	Amount (KRW)
A. Operating value during the estimated period	10,060,498,134
B. Operating value after the estimated period	12,984,305,528
C. Operating value (A+B)	23,044,803,662
D. Value of non-business assets	321,209,675
E. Corporate value (C+D)	23,366,013,337
F. Value of interest-bearing liabilities	(151,372,401)
G. Value of equity capital (E-F)	<b>23,517,385,738</b>
H. Ordinary shares	40,000
I. Value per share	<b>587,935</b>

[Table 7] – Stocks Value Evaluation Results \*Source: Donghyun Accounting Corp.

## 6.2 PATENT REGISTRATION AND MAJOR CERTIFICATES

Title of the Invention	Patent Number
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE BASED BLOCKCHAIN	10-2296907
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE INCLUDING IAAS BASED BLOCKCHAIN	10-2361215
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE INCLUDING PAAS BASED BLOCKCHAIN	10-2361212
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE INCLUDING SAAS BASED BLOCKCHAIN	10-2361207
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE USING VERIFIED NODE AND UNVERIFIED NODE BASED BLOCKCHAIN	10-2361224
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE BASED BLOCKCHAIN USING MASTER NODE	10-2361222
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE INCLUDING MACHINE LEARNING SERVICE BASED BLOCKCHAIN	10-2361217
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE PROVIDING REWARD ACCORDING TO MACHINE LEARNING BASED BLOCKCHAIN	10-2361221
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE BASED BLOCKCHAIN USING DISTRIBUTED CLOUD STORAGE BASED ON IPFS	10-2392739
THE METHOD AND SYSTEM FOR PROVIDING CLOUD SERVICE USING PUBLIC BLOCKCHAIN AND PRIVATE BLOCKCHAIN	10-2391469

[Table 8] – AIDAPPS patent registration status

Type of Certification	Certification number	Issuing Institution
Certificate of Software Quality "GS Level 1"	21-0279	Telecommunications Technology Association(TTA)
The certification of Excellent Technology Evaluation Company "Grade:excellent(T-4)"	NICE-2022-77-000229	NICE INFORMATION SERVICE CO LTD,
Certificate of Venture Enterprise (Innovative Growth Company)	20210707030178	Venture Enterprise Certificaton
Corporate of Authorization R&D Center	202111352	Korea Industrial Technology Association(Koita)
Certificate of copyright registration	DCS v1.0	Korea Copyright Commission
Certificate of Small and Medium Enterprise	0010-2020-463517	Ministry of SMEs and Startups

[Table 9] – AIDAPPS key certificate acquisition status

also, AIDAPPS received a T-4 rating in the technical rating evaluation conducted by NICE Ratings Information Co., Ltd. for its outstanding expertise in systems management and security software development in the technical field

□ Expected Effects of Technology Credit Ratings

1) Satisfied Technical Listing Special Requirements of KOSDAQ/Conex Market

- Qualification for listing preliminary examination is granted according to the evaluation results of two professional evaluation institutions (TCB), including NICE.

- In addition, in the case of the special listing system, some external requirements are exempted or waived (history, capital, profit, etc.)

2) Satisfying Bank's Technical Credit Requirements

- Technology Credit Loan: Low-interest loans are provided to companies which scored a certain level (T-6) at or higher at technology evaluation.

- Applies to Korea Finance Corporation's on-lending, bank's proprietary technology financing, etc.

3) Role as an Objective Technology Evaluator for Partner Companies

- Consistent and reliable technical evaluation by experts in the field for cooperation and partnership

4) Compliance with qualification requirements for product registration by Public Procurement Service

- Satisfying qualification criteria for product registration examination by Public Procurement Service through reports on technology business competency and technology competitiveness evaluation

5) Possibility of attracting VC's Investment and Public Fund.

- Essential elements of attracting technology-related public funds, such as growth-ladder-funds and technology innovation funds

- Fund support such as technology commercialization funds is expanding



[Fig. 48] - Certification of Excellent Technology Company





## CHAPTER 7 LEGAL CONSIDERATIONS

1. The issuer and ownership of the AGC token are in AD GLOBAL HOLDING LTD. AI Daps Co., Ltd. is AD GLOBAL HOLDING LTD. to use AGC token as a utility coin on the AI Daps platform. It is transferred from and used to expand the platform business.

2. Herein whitepaper is intended to provide potential buyers with information about the AGC project so that users can make their decisions about whether to purchase AGC tokens or not and does not constitute the sale, purchase, offer or solicitation of any stocks, securities, or assets of the company or of the company in connection therewith.

3. Herein whitepaper is intended to provide information on the business purpose of AGC and the AGC project, as well as information on the company's approach to providing solutions based on blockchain technology, and all information contained in this whitepaper may be modified, added, and supplemented at any time.

4. The following information may not be comprehensive and does not include any elements of the contractual relationship.

5. The operating entity of AGC shall not be liable for any loss to the extent permitted by relevant laws, regulations, and regulations, and in all cases relating to herein whitepaper, and the losses include financial or non-financial losses. This means a comprehensive loss, including sales, income, profits, rights, reputation, or loss of data, and the company shall not be liable for any losses.

6. AGC tokens and AIDAPPS platform are not considered as collateral within any scope, and herein whitepaper shall be provided as an investment document or document in any form, nor it shall be used for the purpose of investing in marketable securities, securities, and soliciting investors.

7. Before purchasing, AGC tokens buyers should carefully consider and evaluate all information in herein whitepaper related to AGC tokens and AGC and all risks and uncertainties related to legally binding contracts. All statements regarding the foundation's financial position, business strategy, plans and potential are forward-looking, and the foundation or any person related to the company or any person do not guarantee or take responsibilities for the actual future results, performance and achievement of the company.

8. In countries and regions that ban the contents of herein whitepaper, the contents of all or part of the contents shall not be reproduced, modified, or distributed. If people from countries and regions that ban the contents of herein whitepaper recognize the contents of herein whitepaper and invest, such investment is at their own risk, and the foundation does not take any legal responsibility for it.

9. Herein whitepaper does not guarantee the integrity of the project promoted by the AGC project. In addition, the company or its executives or employees shall not be held responsible for errors,

delays in schedules, and related matters that may occur in the service provision and development process.

10. Herein whitepaper contains information on future plans and was prepared based on the realization plan. However, this does not guarantee, and the contents of herein whitepaper do not guarantee the integrity of the service to be developed in the future.

11. The contents of herein whitepaper cannot be interpreted as legal, financial, accounting, tax advice, etc. in any case. In the process of purchasing and using AGC token, measures with separate laws, financial, accounting, and tax may occur in accordance with policies and laws of each country. Buyers and users may need separate advice on this, but the foundation is not responsible for these matters.

12. Ecological construction may be delayed or other tangible and intangible losses may occur due to reasons not intended by the AGC project, such as system attacks from third parties, natural disasters, and force majeure reasons. The foundation shall not be held responsible for the buyer's risk due to loss or leakage of the buyers' individual keys.

13. The company is not free from all risks, including depreciation of the AGC tokens, changes in the market environment, uncertainty, political risks, and competition with competitors, which may disrupt the development of the AGC project or change service direction and future plans.

14. The foundation does not delegate or transfer all decisions, including the operation policy of the ecosystem and the suspension of operation, to others, and all decisions are made at the discretion of the foundation.