

V 1.00

Iklay Platform

W H I T E P A P E R



Cloud

01

SUMMARY

WHITEPAPER

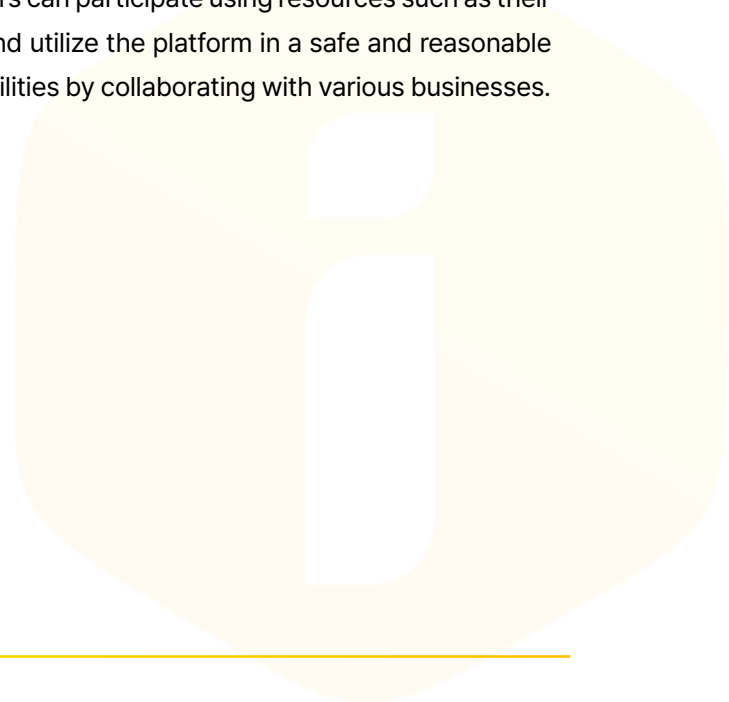
01 SUMMARY

Currently, large-scale data centers are generally concentrated in a few developed countries and provide cloud services around the world. However, as businesses and government agencies want services faster and closer together, there is a growing need to set up small but high-performance data centers and server rooms. Distributed cloud models have emerged to meet these needs. This model builds a cloud in a company or institution's data center or utilizes a dedicated region for a specific company, and adopts a hybrid form that fuses on-premise, private, and public cloud. This makes it possible to utilize public cloud services in various regions and on a small scale.

Distributed cloud computing is a model that interconnects data and applications into a centralized cloud platform. This enables data processing, storage, and networking in microclouds, and this approach can reduce risks such as latency, network congestion, and data loss.

However, this model suffers from problems such as performance degradation due to shared resources as multiple applications run simultaneously on one server, and performance degradation due to bandwidth limited by the cloud service provider. In addition, each cloud service provider has a different architecture, which poses technical difficulties, and the requirements required for organizations to deploy private clouds or design edge computing are also diverse, making design and implementation difficult.

Accordingly, Iklay provides a next-generation distributed cloud computing platform utilizing artificial intelligence and blockchain through independent research and development to solve these problems. Through this platform, companies and users can participate using resources such as their GPUs, and through blockchain, they can pay fees and utilize the platform in a safe and reasonable environment. Iklay also aims to grow its global capabilities by collaborating with various businesses.



02

**MARKET
TREND**

WHITEPAPER

02 Market Trend

According to the 'Global Distributed Cloud Market Forecast 2021-2031' report published by AMR (Allied Market Research), the size of the global distributed cloud market was valued at \$2.3 billion in 2021. This report predicts that it will grow at an average annual growth rate of 22.4% from 2022 to 2031, ultimately reaching \$17 billion in 2031.

DISTRIBUTED CLOUD MARKET

OPPORTUNITIES AND FORECAST,
2021 - 2031

Distributed cloud market is expected to reach **\$17 Billion** in 2031

Growing at a **CAGR of 22.4%** (2022-2031)



Image) Decentralized Cloud Market Analysis Report (Source: AMR)

According to the analysis, this growth will be driven primarily by increased use of mobile technology, rising data recovery requirements, increased digitalization, increased data throughput, and improved data recovery technologies. Additionally, adoption of cloud technology, new product launches, increased involvement of government agencies in implementing and promoting cloud technology, and advancements in AI technology are expected to drive market growth in the future.

The future distributed cloud computing market is expected to require an expansion of small data centers managed by various service providers and enterprises. Additionally, it is analyzed that the diverse regional adoption of distributed cloud architecture will be greatly influenced by future advances in artificial intelligence and next-generation infrastructure.



03

IKLAY

WHITEPAPER

Ver 1.00

03 Iklay

Iklay aims to present a new distributed cloud computing system paradigm and solve existing concerns by building a platform that combines blockchain with AI and distributed cloud computing technology. The platform operates in a scalable manner by providing data sets and computing resources securely and scalably through decentralized applications running on blockchain. Iklay provides the opportunity to participate in the ecosystem using its own token, Iklay.

The Iklay platform provides various benefits and better policies to users and companies by providing highly scalable services equipped with artificial intelligence and distributed cloud computing-related functions. In addition, we plan to expand our service area and diversify our business areas through various partnerships and collaborations in the future. Iklay plans to strive to provide various services and expand its business areas.

Iklay Platform

Iklay establishes a new decentralized governance through a secure, easy-to-manage, high-performance infrastructure sidechain, and explores the future of decentralized infrastructure based on blockchain by taking charge of leading capititation in major HPC, big data, and cloud industries. do. The project aims to ensure the highest level of transparency, resiliency and security for big data, HPC applications and high-value data and computing resources.

Iklay is a distributed cloud computing platform for AI and machine learning, offering the following key features:

- Cloud infrastructure provision: We manage and provide high-performance computing, storage, and networking that allows companies to store and process large amounts of data.
- Provides AI and machine learning platform: Provides a platform for model development, training, and deployment to support automated services such as data processing, modeling, and prediction.
- Scaling and resource allocation: Efficiently allocate resources for large-scale data processing and machine learning model training and adjust resources as needed.
- Security and data management: We safely manage customer data by providing security functions such as data protection, encryption, and access control.
- AI model and algorithm support: Utilizes the latest AI models and algorithms to help customers solve problems more efficiently.

Why need Iklay?

Blockchain technology provides limited computing power for running decentralized applications, but it also suffers from limited storage space, low virtual machine efficiency, and high protocol latency. This may limit applications that require additional capacity, and some analyzes say that existing clouds are insufficient to run Dapps that require fully decentralized infrastructure.

Meanwhile, the demand for computing power for large-scale data processing in artificial intelligence, industry, and science is increasing. However, cloud and high-performance computing (HPC) infrastructure used to process big data applications are complex and expensive. As a result, it is difficult for small organizations or users with innovative technologies to utilize HPC platforms, and the global cloud infrastructure is suffering losses due to excessive costs.

To solve these problems, Iklay provides a cost-effective, high-performance, decentralized cloud computing platform through blockchain computing. Through this, we utilize artificial intelligence-related blockchain-based distributed applications to build a decentralized cloud infrastructure and provide cost-effective, high-performance computing. Iklay provides low-cost, secure access to high-performance computing infrastructure through blockchain's decentralized cloud, and Dapp automatically manages computing resources based on Iklay to form an efficient structure between data producers and consumers.

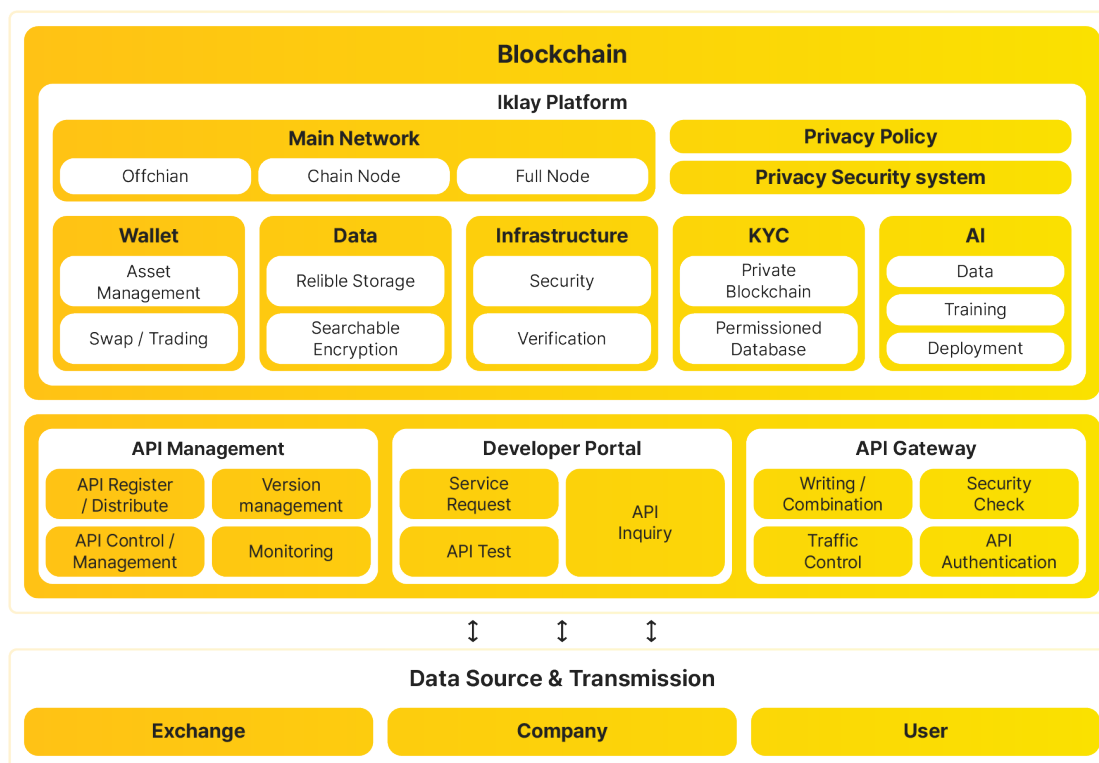
Technology

Iklay was developed based on MRC20, the standard token protocol of the POLYGON(MATIC) blockchain network. The platform is based on its own blockchain and is designed to run decentralized applications on blockchain. POLYGON is a service-oriented blockchain platform with a governance model that allows all network participants to make rapid decisions for the benefit of the platform.

Iklay seeks to verify and popularize blockchain technology and value, and utilizes service chains to improve processing speed per second. Additionally, data is stored in a separate space, and the service chain operates by freely calling Smart Contract functions and sharing token shares to secure resources.

MRC20 differs from ERC-20 by providing more options such as mint, burn, pause, etc., and all token transactions are tracked in event logs. As a fungible token, with uniformity and divisibility, MRC20 is compatible with all available tokens, with each token unit having the same value. This provides efficient transactions and a high-performance platform on the blockchain.

Architecture



Platform Structure

Iklay is a platform with enhanced stability and technology, and aims to expand the platform ecosystem through fluid processing between various technology layers to provide users with the information and results they need.

This platform consists of several layers. The Wallet layer safely manages personal accounts and provides key information to increase stability and strengthen data protection. The data layer is a reliable storage space on the blockchain that manages data through a decentralized distributed ledger, providing a safe and fair platform.

The Infrastructure layer expands the platform through linkage with other ecosystems, and the KYC layer strengthens identity verification and identity authentication to provide a safe and reliable platform.

The AI layer advances the capabilities of artificial intelligence by providing data assets and service exchange for decentralized AI, and the API Management layer creates an environment where users can safely and conveniently access the platform.

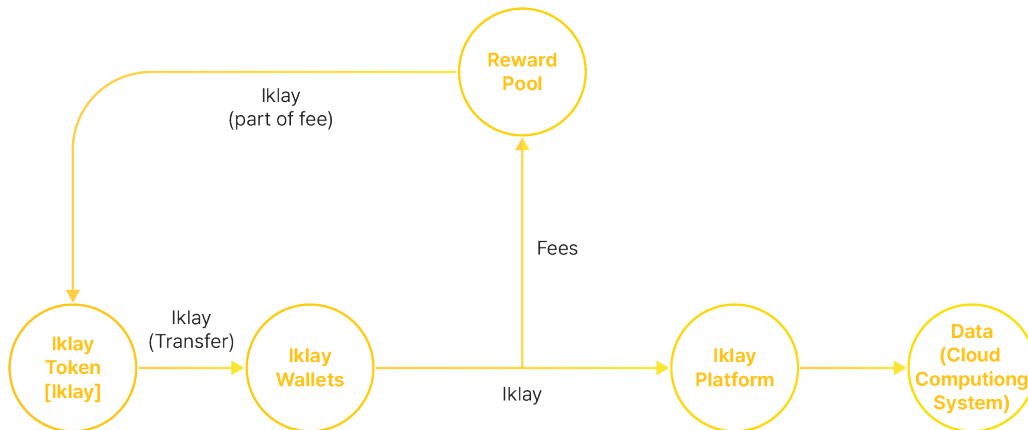
The developer portal layer improves the user experience by optimizing processes within the platform, and the API gateway layer processes API traffic and manages the system by optimizing integration with the platform. With these different layers, Iklay seeks to expand its ecosystem by providing an efficient and secure platform.

04

ECOSYSTEM

WHITEPAPER

04 Ecosystem



Ikla is the core token of the Iklay platform, which was created to provide ecosystem participants with all support related to blockchain technology and cryptocurrency.

Iklay Wallet

Iklay tokens are stored in a personal blockchain wallet through Iklay Wallet, through which users can check the amount of virtual currency and exchange it for Iklay by linking with the exchange API.

Reward Pool

The Reward Pool is a mechanism that provides rewards to platform participants, thereby contributing to supporting and expanding the ecosystem.

Token Utilization

Additionally, this token is used by ecosystem participants to provide GPU resources for cloud infrastructure or machine learning, and users who provide it are rewarded with Iklay, and users or companies holding the token utilize it to create an AI distributed cloud computing system. Available.

Utilizing cryptocurrency exchanges

Additionally, Iklay holders can utilize cryptocurrency exchanges to manage their investments and generate profits, which can then be reinvested into the Iklay ecosystem. This is a mechanism to generate additional revenue and drive ecosystem participation.

Marketplace

Iklay provides the following types of Marketplace for the convenience of users and businesses. Ecosystem participants can use the type of service they want through Iklay, the key currency they own.

Cloud Computing Marketplace

Traditionally, it has been difficult for developers to find the right resources or compare prices in a global marketplace where various sellers compete to purchase the computing resources they need. To solve this problem, Iklay makes available the resources of cloud-provided services by integrating them into the network in a decentralized form. Now, any device can participate as a worker receiving Iklay for application work, and the scheduler is responsible for distributing tasks from the worker pool.

This is a similar concept to mining pools, but in Iklay, public pools of workers compete to provide the best quality of service. Individual workers can move to different pools, maintain their reputation, and move to new pools. The Cloud Computing Marketplace provides access to private worker pools and offers a more sustainable approach to your data center. This gives every Dapp access to unlimited computing resources. Developers can easily utilize it by deploying their own applications and datasets and connecting them to an existing pool of workers.

Iklay Marketplace

Users participating in the ecosystem can easily view the different worker pools, available resources, and their respective prices. Within this diversity, users and developers can choose the pool that best suits their tasks, and the Marketplace utilizing Smart Contract provides an intuitive and easy-to-use interface. This allows users and developers to understand market and ecosystem dynamics in real time.

In existing cloud platforms, it was common to set prices using instances of specific properties. This approach had the disadvantage of inconsistent resource provision across providers. Iklay introduced a pay-per-job system to overcome these limitations. Developers can compare and benchmark their infrastructure against reference devices through a pool of workers to evaluate their projects. This gives developers tools to efficiently optimize and evolve their infrastructure.

Data Marketplace

In the current big data market, enormous amounts of data are gradually being converted into valuable assets. Iklay does not hold data in these markets, but has built a Data Marketplace to connect with users who need data so that applications can purchase and utilize data when needed. Through this platform, applications, companies, and individuals that accumulate data can sell a variety of data. Many different types of data are available, from financial data to stock markets, e-commerce websites, user behavior data, and even anonymized medical data. These applications rely on cloud marketplaces that provide decentralized computing resources to purchase and utilize algorithms for this new type of data.

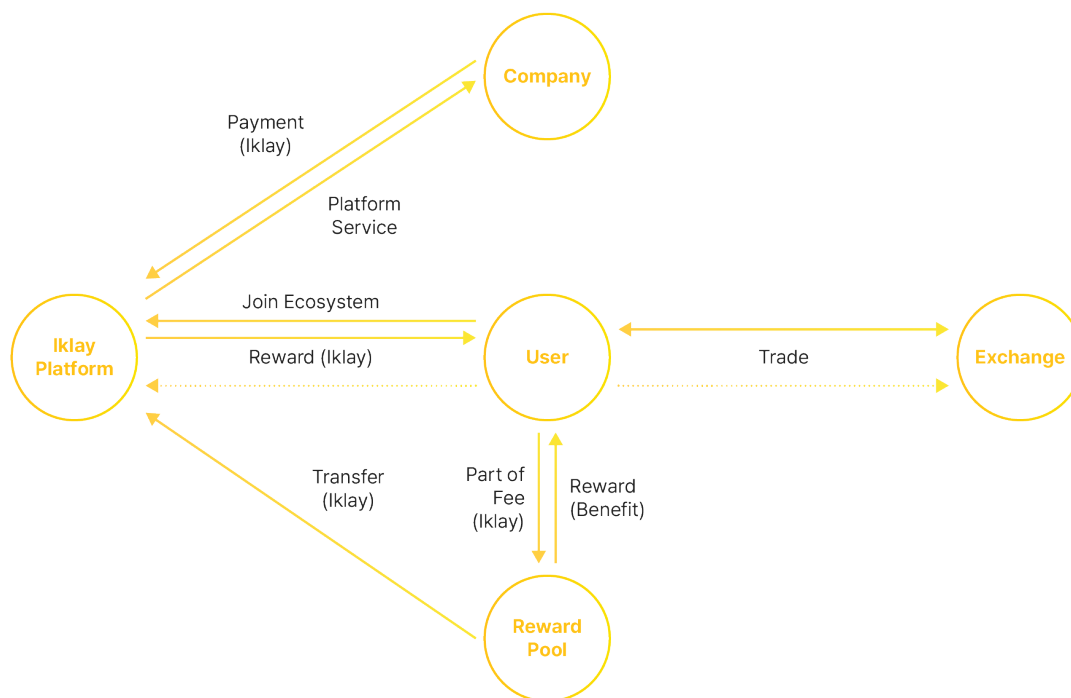
Dapp Marketplace

Iklay focuses on strengthening computing capabilities for AI, big data, IoT, and financial technology-based applications that require intensive computing power. To this end, all applications developed based on Iklay are listed on the Iklay Dapp Marketplace. Here, users can browse and leverage existing Dapps, and developers can register and monetize their apps.

Iklay Dapp Marketplace comprehensively offers applications for all use cases, which are systematically categorized into different types. Applications are ranked based on user reputation, and ecosystem participants receive rewards by leaving reviews, discussions, and comments on each Dapp page. Iklay Dapp Marketplace is also linked to the Cloud Computing Marketplace and Data Marketplace, focusing on supporting a new generation of powerful Dapps. It also plays an important role in providing a platform that meets trends through combination with the decentralized economy, including the open marketplace model.



Token Economy



Iklay, which is used as the key token for Iklay, is a utility token that supports the ecosystem and is designed to support everything related to blockchain technology and cryptocurrency to individuals, companies, developers, and ecosystem participants.

Token Purchase

To use the services provided by the Iklay platform, users can purchase coins directly from the Iklay platform itself or through exchanges where Iklay is listed.

Ecosystem Participation

Users who participate in the Iklay ecosystem can participate in the ecosystem by utilizing services provided by the Iklay platform and participating in events, and through this, rewards are paid according to their contribution to the ecosystem.

Utilizing cryptocurrency exchanges

Ecosystem participants holding Iklay can use listed exchanges to manage additional investment operations. Through this, you can expect to generate additional profits, and you can participate again in the Iklay ecosystem through the profits secured here.

05
TOKEN
INFORMATION

WHITEPAPER

05 Token Information

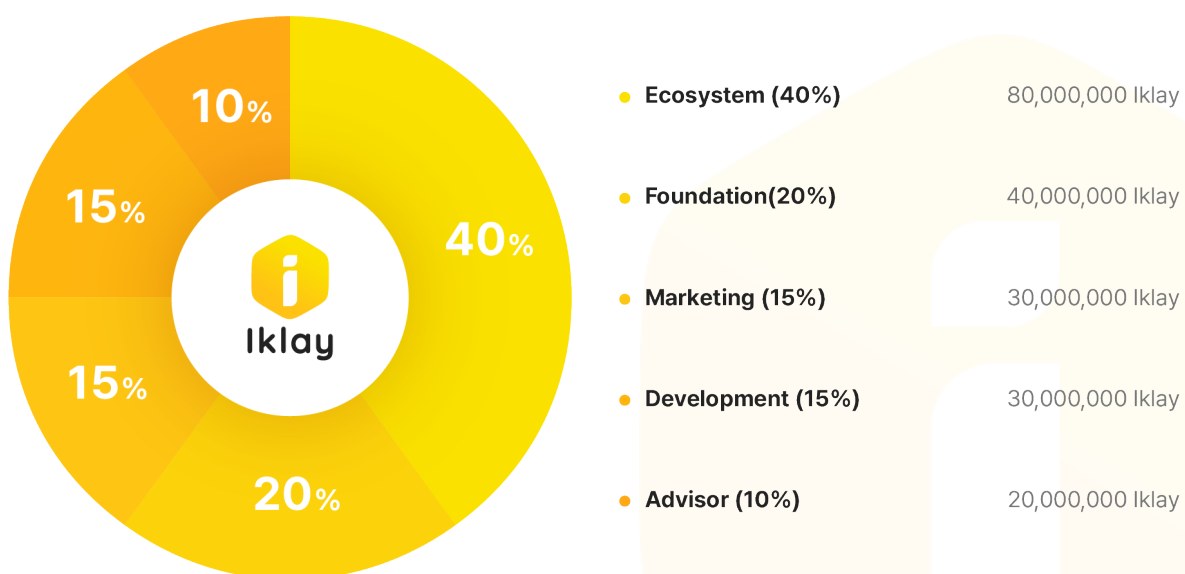
Iklay token distribution plan

[1] About Iklay

Iklay, used as the key currency within the Iklay platform, is issued in the KIP-7 standard within the POLYGON blockchain network. Iklay is issued for the purpose of development, trading, and participation in the ecosystem for investment and information utilization in applications that can be used in the Iklay ecosystem, and is carried out to create an ecosystem for transparent recording and management of information. It will also be used for marketing to expand the Iklay ecosystem, including partnerships and cooperation with other businesses, listing, development of an independent blockchain network, maintenance, platform construction, and preparation for changes in market conditions.

Token Name	Token Type	Total issuance	Decimal point
Iklay (Iklay)	MRC20	200,000,000 Iklay	18

[2] Token Allocation

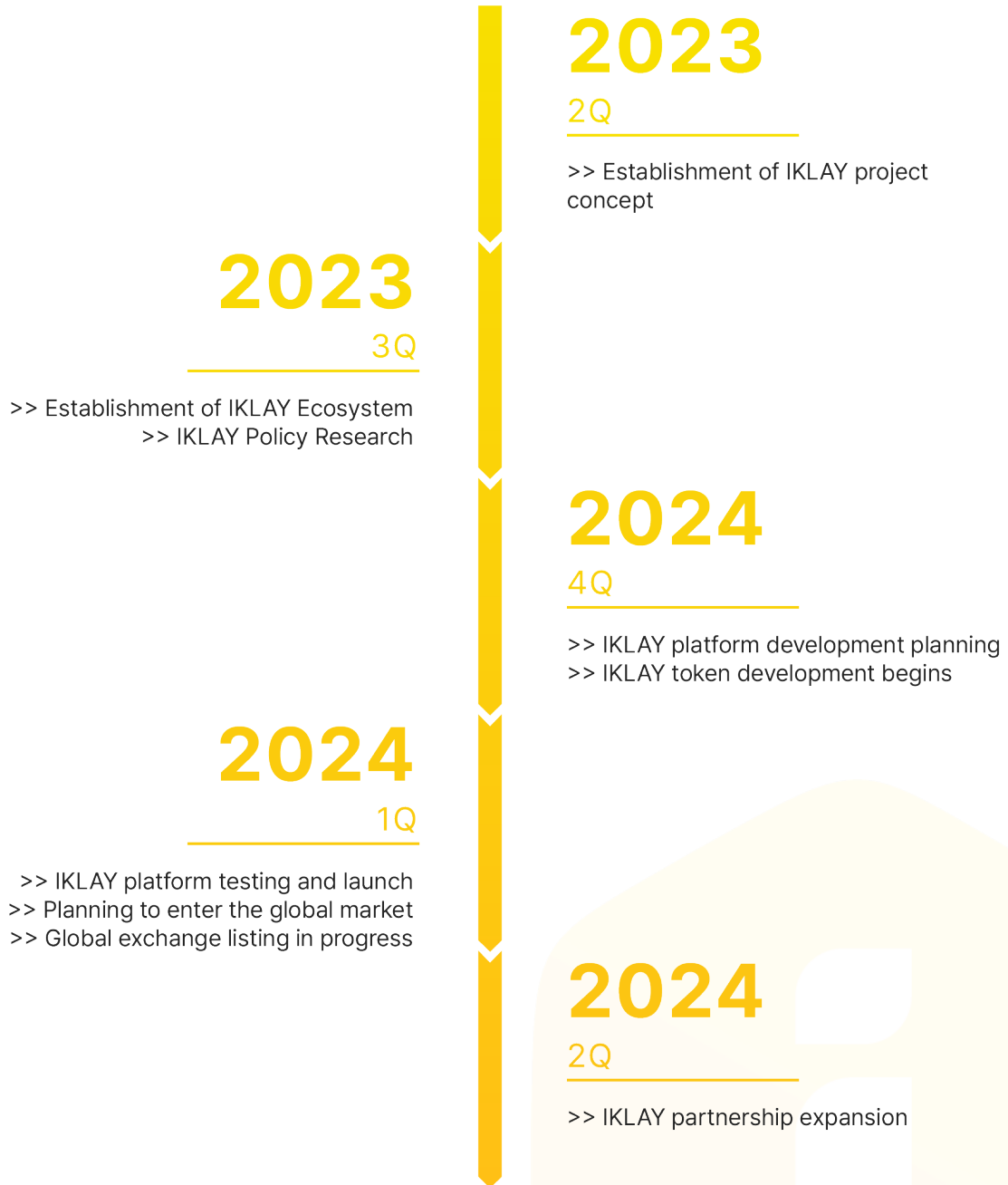


06

ROAD MAP

WHITEPAPER

06 Road Map



-The roadmap may change depending on the business direction and variables that may arise during development-

Way to Iklay

Iklay plans to proceed with its future business direction as follows.

STEP 1

The Iklay platform enables Dapps to access off-chain computing resources to initiate computations and perform results. When a transaction is detected, it delegates calculations to trusted computing resources and stores the results in the infrastructure to prevent security risks.

STEP 2

It builds a marketplace network for application and server providers, structuring them to generate revenue through pay-per-job plans. Computing resources can be traded in a variety of ways, including API, GUI, and CLI, and target a variety of infrastructure providers from large users to individuals.

STEP 3

It supports hybrid sharing and private blockchain-based resource access, and builds an integration mechanism for data providers to share data to resources with minimal computation and consideration of importance and supports private access. It also provides a new revenue model for high-performance Dapps, allowing selected resource providers to take advantage of specialized environments and performance SLAs.

STEP 4

Through blockchain-based high-performance computing, miners can join the market and GPU applications can also join the network. Iklay expands the GPU-based application market so that it can be used in various fields such as deep learning and 3D rendering.

STEP 5

Build a fully decentralized platform to enable Dapps to provide resources, data, and applications directly on the blockchain. We also aim to develop server-less service areas through our platform, addressing the complexities of blockchain and providing a convenient deployment and development platform.

07

DISCLAIMER

WHITEPAPER

07 Disclaimer

This white paper was written to provide information on the new business model, status, and team of the AI-related distributed cloud computing platform that the Iklay project seeks to promote. By accessing this document and the information set forth herein, you unconditionally and irrevocably represent and warrant to Iklay that you agree to the following:

1. Documents are not accessible in regulated countries

It may not be legal for individuals in certain jurisdictions or within certain circles to view such documents. Individuals viewing this white paper must first determine whether they are subject to any laws or regulations that prohibit or restrict their viewing of this document. In particular, unless permitted by applicable laws and regulations, participation in the sale of coins or tokens mentioned in this document should not be provided in countries where participation in the sale is prohibited, and documents should not be transmitted directly or indirectly. Iklay is not responsible for individuals accessing this white paper in regions where there are laws or regulations prohibiting access to this document and in regions where parts of the document may be illegal. You must take this risk at your own risk.

2. Information purpose

Neither Iklay nor its employees, officers or advisors make any warranties of any kind with respect to any information and disclaim all warranties and conditions, express and implied. Iklay assumes no responsibility or liability to you or any third party for such information and for any errors or omissions in the information and for any consequences resulting therefrom.

The information contained in this white paper regarding Iklay may include statements that are considered 'forward-looking statements', but these are not statements based on historical facts. Among these forward-looking statements, Iklay uses 'aims', 'aims', 'expects', 'believes', 'may', 'estimates', 'expects', 'if', " Words such as 'intend', 'may', 'plan', 'possible', 'likely', 'expect', 'should', 'looks likely to', 'will', or similar terms. You can utilize the same future outlook words. There may be more such terms. Forward-looking statements involve risks and uncertainties relating to future events or circumstances. Accordingly, the information in this document regarding opinions and forward-looking statements, including estimates and forecasts regarding the expected roadmap, development, expected conditions and performance of the relevant entities, is selective and may be updated, expanded, revised, independently verified and corrected. there is.

Iklay does not make any representations, warranties, or promises regarding the truth, accuracy, or completeness of the information specified in this white paper. Additionally, Iklay expressly disclaims any obligation or undertaking to update or revise any forward-looking statements except to the extent required by law, and does not guarantee, represent or warrant that any of the events referred to in the forward-looking statements of Iklay or its affiliates will actually occur.

Iklay will strive to achieve all goals specified in this white paper, but the goals may change due to unexpected variables or circumstances, and the goals may not be achieved without separate notice.

3. No suggestions

This white paper has been prepared for informational purposes only and does not propose or form a purchase, sale, subscription, or acquisition of any form of investment, security, or other financial product. Additionally, nothing in this document is in any way intended to suggest that any contract or investment decision be made in relation thereto, and may not be used or relied upon as the basis for such decision.

4. No notice

Nothing contained in this white paper constitutes legal, financial, tax or other notices. You must conduct your own due diligence and comply with all local laws regarding digital assets, taxes, securities, and other regulations in your jurisdiction. Please consult individually with the relevant expert.

5. Regulatory risks

In many jurisdictions, the regulatory situation for digital tokens, including digital currencies, digital assets, and blockchain applications, is unclear or unstable. The publication and distribution of this document does not imply compliance with relevant laws, regulations, or rules. No regulatory agency has reviewed or approved this document. If any relevant government agency makes changes to existing laws, regulations or rules, or if a financial institution makes certain commercial decisions, any of which may have a material adverse effect on or impair the ability of any relevant matter referred to in this White Paper to function or operate as intended. You can do it. Additionally, this white paper should not be used as the basis for any contract or investment decision.

6. Other disclaimer notices

This document contains information about Iklay, but does not represent the entire content of Iklay. The contents of this white paper may change depending on management's judgment as well as changes in relevant laws and regulations, business situations, and industry outlook. Changes in political, social, economic, stock, and digital asset market conditions may occur, and there may be little or no acceptance and adoption of related blockchain systems and tokens, which may result in related blockchain systems and tokens no longer being commercially available. It can get dark. Where references are made to third party websites or information sources, we may not have required further verification of the accuracy, completeness or timeliness of the information referenced by such sources, and we make no warranties in relation thereto.