white paper

DMVChain

white paper

Made on: August 15, 2024

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1、Foreword or Preface

DMVChain is not only a decentralized platform for data trading and AI training; its core mission is to advance the treatment of oncological diseases by training large-scale medical models. The platform integrates high-quality medical data from around the world, ensuring data security through decentralized networks and privacy protection technologies. It supports efficient training and optimization of AI models in the medical field. By leveraging blockchain technology, DMVChain ensures the transparency and immutability of data transactions, providing a reliable ecosystem for medical AI developers. This accelerates innovation and application in cancer treatment technologies.

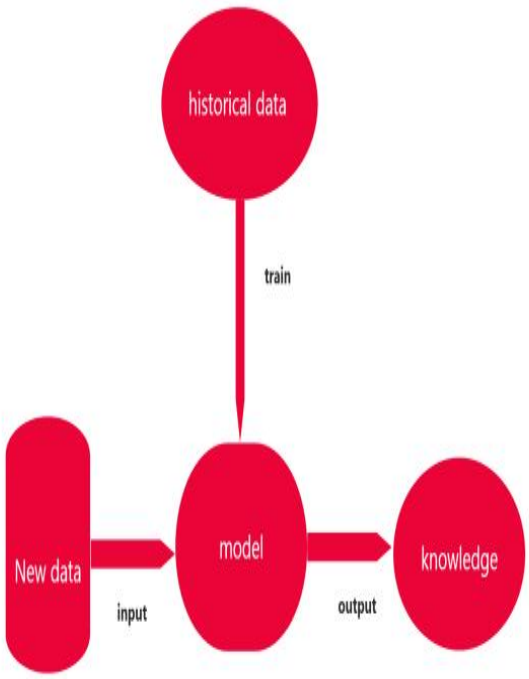
2、Project Background

In traditional data trading and AI training models, there are numerous challenges in data acquisition and usage. Data providers often struggle to ensure the privacy and security of their data, while data users find it difficult to assess the quality of the data. Additionally, AI model training requires substantial computational resources and high-quality data, further exacerbating the imbalances in the data market. DMVChain addresses these market pain points by utilizing blockchain technology to establish a trust mechanism between data providers, AI trainers, and data users, ensuring the transparency and security of data transactions.

·The second-generation digital technology represented by big data and artificial intelligence brings about a revolution in human cognition

·Data mining, machine learning, and AI have become new ways of knowledge production, distinct from the human intelligence system - machine intelligence (AI).

Through an iterative self training process, the machine discovers hypothetical patterns in the dataset and applies this learning to detect patterns in new datasets. Machine learning has changed the scale and capability of pattern recognition (the fundamental tool of human intelligence), which effectively recognizes, classifies, stores, and uses information, allowing for the discovery of patterns that humans cannot detect.

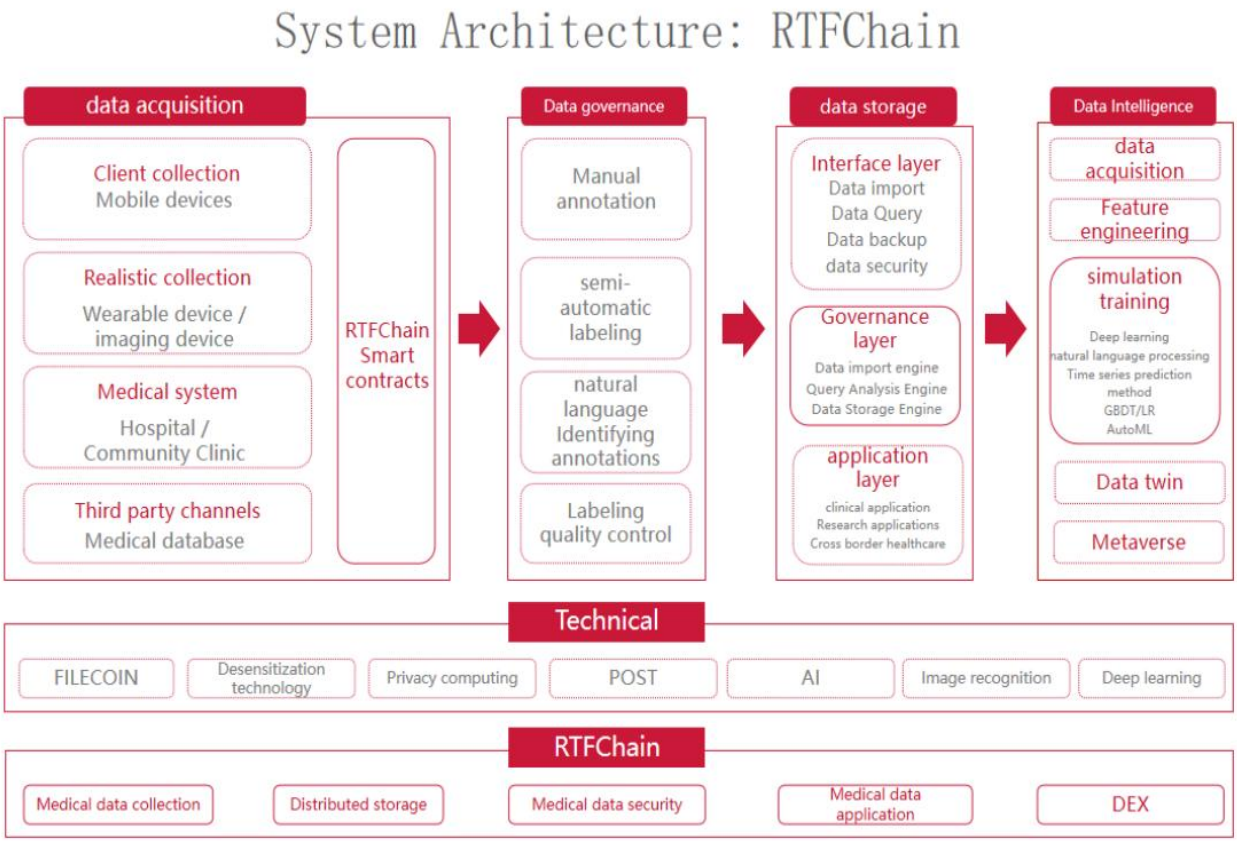


3、DMVchain Vision and Mission

DMVChain’s vision is to build a globally leading decentralized data and AI marketplace that promotes the efficient utilization of data resources and advances AI technology. Its mission is to provide a secure, trustworthy, and transparent platform for data trading and AI training to empower enterprises and developers and drive the growth of the digital economy. Through blockchain technology, DMVChain aims to establish a global data and AI ecosystem that ensures the fair distribution of data and AI resources, fostering the democratization of technology.

DMVChain’s vision is to become the core infrastructure in the global medical AI field, enhancing the efficiency and precision of cancer treatment through decentralized technology and AI model training. The platform’s mission is to provide a secure, trustworthy, and efficient collaboration platform for medical researchers, AI developers, and healthcare institutions, collectively advancing cancer treatment worldwide.

4、Technical Architecture



4.1 Consensus Mechanism

DMVChain employs an innovative hybrid consensus mechanism to ensure the security and scalability of the network. The Proof of Work (PoW) mechanism is used to defend against 51% attacks, protecting the integrity of the blockchain network, while the Proof of Stake (PoS) mechanism validates transactions through token staking, thereby enhancing network efficiency and reducing energy consumption. This hybrid consensus mechanism not only secures the blockchain but also balances transaction processing speed and energy consumption.

Hybrid Consensus Mechanism Design

1. Proof-of-Replication (PoRep) + GPU Optimization:

• **Function:** This mechanism allows nodes to verify the uniqueness and integrity of data through GPU computing power, ensuring that data is correctly stored. GPUs can accelerate the PoRep computation process, making it more efficient.

The core of the PoRep algorithm is to generate proof by encoding the original data and committing it to storage. It mainly involves two steps: replication proof and encoding.

1.1. Data Replication Commitment:

• Formula: Commitrep =H(Data | | Nonce)

• Where H is a cryptographic hash function, Data is the data to be stored, and Nonce is a random number.

1.2. Encoded Data Commitment:

• Formula: Commitenc =H(Encoded Data | | Nonce)

• Where Encoded Data\text{Encoded Data}Encoded Data is the data encoded by the PoRep algorithm.

2. Proof-of-Spacetime (PoSt) + PoW (RandomX):

• **Function:** PoSt is used to verify the temporal aspect of data storage, while PoW (using the Monero-based RandomX algorithm) ensures network decentralization and security. PoW through GPU mining resists ASICs, ensuring diversity among participants.

Proof-of-Spacetime (PoSt) Formula:

The core of PoSt is to verify data storage over a specific period by generating spacetime proof.

2.1. Time Window Generation:

• Formula： PoSt=H(Data | | Timestamp)

• Where Timestamp\text{Timestamp}Timestamp is the current timestamp, ensuring the proof is time-related.

2.2. Spacetime Proof Verification:

• Formula： VerifyPoSt =H(PoSt | | Challenge)

• Where Challenge\text{Challenge}Challenge is a random challenge provided by the verifier.

RandomX Formula:

RandomX is a memory-intensive PoW algorithm designed to be ASIC-resistant, prioritizing computation on general-purpose CPUs.

3.1. Hash Calculation:
• Formula： H=RandomX(I,k,M)

• Where III is the input data (such as block header), kkk is a random seed, and MMM is the program executed in memory.

3.2. Target Difficulty Comparison:

• Formula: H < T

• Where TTT is the current network difficulty target, and HHH is the hash generated by the RandomX algorithm.

RandomX Algorithm Characteristics

• **Memory Dependency**: Relies on large memory operations, designed to run efficiently on CPUs while performing slower on ASIC devices.

• **Random Program Generation**: The program executed in memory is randomly generated, making hardware optimization difficult.

Advantages

• **Data Security**: Combines PoRep and PoSt to ensure data security across both storage and temporal dimensions.

• **Computational Efficiency**: GPU-optimized PoRep and PoW make the computation process more efficient, suitable for large-scale data processing and model training.

Application Scenarios

• **AI Model Training**: Leverages the high computational power of GPUs to improve the speed and efficiency of AI model training.

• **Decentralized Storage**: Ensures the reliability and security of data storage, making it ideal for storing and processing sensitive information like medical data.

Through this hybrid consensus mechanism, DMVChain not only achieves secure data storage but also enhances AI model training efficiency, driving technological innovation on the platform.

4.2 Smart Contracts

DMVChain supports Turing-complete smart contracts, allowing users to create, deploy, and execute smart contracts on the platform. These smart contracts can automatically enforce predefined protocols, ensuring transparency and automation in data trading and AI training processes. The code of smart contracts is public and immutable, with all contract executions being jointly verified by the nodes in the blockchain network, ensuring fairness and trustworthiness in contract execution.

4.3 Data Storage and Transmission

DMVChain employs distributed storage technology, where data is fragmented and stored across multiple nodes to enhance security and availability. Encryption techniques are used to protect data during transmission, preventing it from being stolen or tampered with. Additionally, DMVChain supports off-chain data storage solutions to meet the demands of large-scale data storage, ensuring data integrity and security through coordination between on-chain and off-chain mechanisms.

4.4 Network Topology and Security

DMVChain's network utilizes a multi-layered network topology to optimize data transmission efficiency and network stability. Communication between nodes is conducted through encrypted protocols to prevent malicious attacks. Moreover, DMVChain incorporates mechanisms to defend against DDoS attacks and other network threats, ensuring the stable operation of the network and the security of user data.

5、Core Features and Innovations

5.1 Data and AI Marketplace: Strategic Planning and Market Planning

Strategic Planning

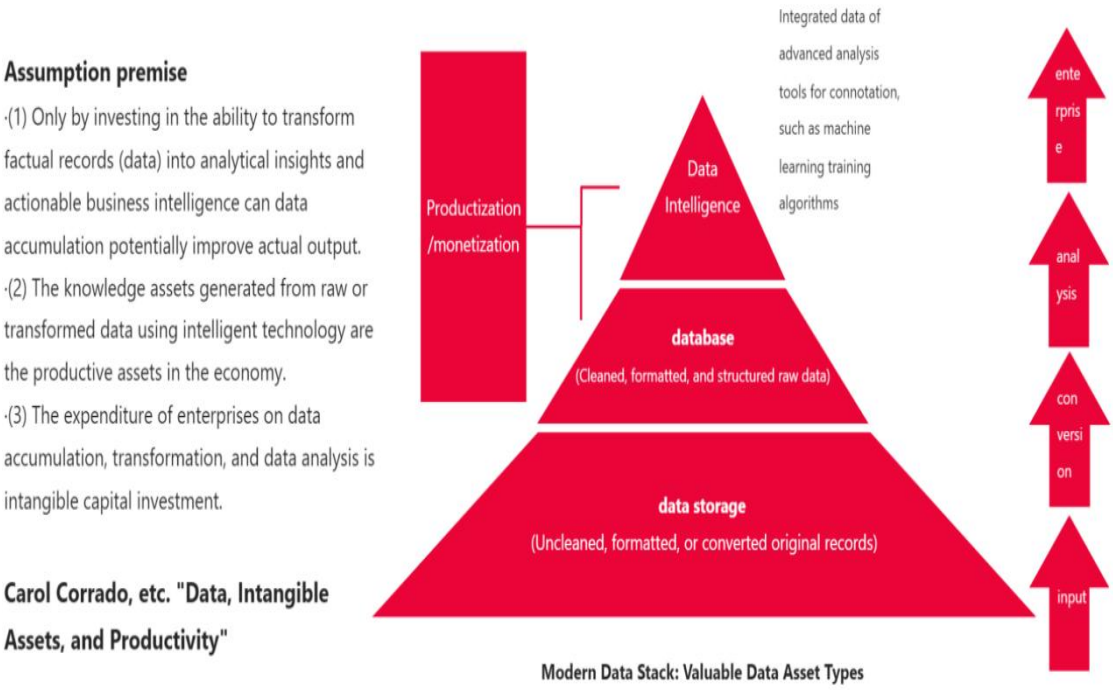
DMVChain’s Data and AI Marketplace aims to create a decentralized platform that enables the free publication and trading of datasets and AI models, ensuring transparency and immutability in transactions. The core of the strategic plan is to build a trustworthy ecosystem that attracts data providers, AI developers, and enterprise users. The strategic goals of the platform include:

1. Establishing a Trust Foundation for the Data and AI Marketplace: By leveraging blockchain technology to ensure transaction transparency and data immutability, the platform seeks to build user trust.

2. Developing a Robust Technical Infrastructure: The platform aims to build an efficient and secure data transmission and storage system to support large-scale data and AI model processing. Continuous optimization of the consensus mechanism, smart contracts, and network security will ensure the stable operation of the marketplace.

3. Driving Innovation in Data and AI Technology: The platform encourages users to publish innovative AI models and high-quality datasets, fostering more innovative applications through decentralization. A suite of tools and frameworks will be provided to support users in quickly developing and deploying AI applications.

Through cross-chain technology and global partnerships, DMVChain aims to break down geographical barriers to data, enabling global data circulation and sharing to meet the needs of different industries and regions.



Market Planning

DMVChain's core objectives in market planning are to expand the user base, increase market share, and drive the continuous growth of the platform ecosystem. The specific planning includes:

1. Target Market Identification:

• **Primary Market:** AI developers, data scientists, research institutions, and technology-driven enterprises, who have high demand for data and AI models, are the early adopters of DMVChain.

• **Secondary Market:** Medium and large enterprises, financial institutions, and industries such as healthcare that require high-quality data to support their operations and decision-making.

2. User Acquisition Strategy:

• **Community Building:** Create an active community through online and offline events, forums, developer conferences, and other activities to attract developers and data providers.

• **Partnerships:** Establish strategic partnerships with universities, research institutions, AI companies, and others to drive platform development and application deployment.

• **Marketing Activities:** Increase DMVChain's visibility and influence through social media, industry reports, and market promotions.

3. Value-Driven Strategy:

• **Token Incentive Mechanism:** Encourage users to publish and trade data and AI models through token rewards, enhancing user engagement.

• Data Quality Assurance: Ensure the legality and reliability of data on the platform through data provenance and verification features, increasing user trust in the platform.

4. Market Expansion and Internationalization:

• **Regional Expansion:** Gradually enter major global data and AI markets, such as North America, Europe, and Asia, by employing localization strategies to expand the user base.

• **Cross-Chain Collaboration:** Collaborate with other blockchain platforms to enable cross-chain interoperability of data and AI models, broadening the platform's application scenarios and user base.

Through these strategies and market planning, DMVChain aims to build a strong and globally influential data and AI marketplace, promoting sustainable development in the data economy and AI technology.

5.2 Data Cleaning and Verification

DMVChain features built-in data cleaning and verification tools to assist users in preprocessing uploaded data to improve quality. The platform also supports a community verification mechanism, where users can earn rewards by participating in data verification tasks, thereby enhancing the overall quality and credibility of data on the platform.

The data cleaning and verification functionality of DMVChain is one of the core modules for ensuring data quality and reliability. Below is a detailed description of this module from a technical perspective:

Data Cleaning

1. Automated Cleaning Tools:

• **Data Formatting:** The platform provides automated tools to standardize datasets from various sources, ensuring consistency in data formats. Using rule engines and template matching technologies, it performs standardization tasks such as date format normalization, unit conversion, etc.

• **Missing Value Handling:** The platform supports automatic detection of missing values in datasets and offers multiple handling methods, including deleting records with missing values, filling in with mean or median values, or predicting missing values using machine learning models.

• **Anomaly Detection and Correction:** Leveraging machine learning algorithms and statistical methods, the platform detects anomalies in datasets, such as outliers, duplicates, or inconsistent records, and automatically corrects or flags these data based on predefined rules.

2. Data Annotation and Classification:

• The platform supports semi-automated data annotation tools that utilize natural language processing (NLP) and machine learning algorithms for data classification and annotation. Users can engage in annotation through human-machine interaction to improve accuracy.

• The platform also supports multi-level annotation and classification, suitable for complex AI training tasks, ensuring diversity and accuracy in datasets.

Data Verification

1. Community Verification Mechanism:

• **Decentralized Verification:** DMVChain introduces a decentralized data verification mechanism where multiple independent nodes in the blockchain network cross-verify the data. Nodes can rate or vote on the authenticity, completeness, and quality of datasets, ensuring data reliability.

• **Incentive Mechanism:** Community members participating in data verification can engage in verification tasks by staking tokens and receive rewards based on verification results. This mechanism not only incentivizes community participation but also enhances the overall quality of platform data.

• **Multi-Level Verification:** The platform supports a multi-level data verification mechanism, using different verification methods for various data types and purposes, such as hash-based integrity verification and model-based quality verification.

2. Real-Time Monitoring and Auditing:

• **Data Flow Monitoring:** The platform includes real-time monitoring tools to track the flow and usage of datasets, recording this information on the blockchain to ensure transparency and traceability in data usage.

• **Auditing Tools:** The platform provides auditing features for data usage, allowing users and third parties to review the data usage history to ensure legality and compliance.

Technical Advantages of Data Cleaning and Verification

• **Modular Design:** DMVChain's data cleaning and verification tools are designed with modularity, allowing users to flexibly combine and configure different functional modules according to their needs, accommodating various data types and application scenarios.

• **Efficiency and Scalability:** The platform's cleaning and verification tools utilize parallel processing technologies and distributed computing resources to efficiently handle large-scale datasets and support future data growth.

• **Security and Privacy Protection:** Advanced encryption technologies are used during data cleaning and verification to ensure data security. Additionally, techniques such as zero-knowledge proofs are employed to protect data privacy.

5.3 AI Model Training and Optimization

DMVChain offers distributed computing resources for AI model training, allowing users to publish training tasks on-chain and utilize the platform's computing resources for model training. Through a decentralized computing framework, DMVChain supports large-scale data processing and AI model training, reducing computing costs and enhancing model performance.

The AI model training and optimization functionality on the DMVChain platform, through its distributed computing architecture, provides users with efficient model training services. Here's a detailed analysis of this functionality from a technical architecture perspective:

Distributed Computing Architecture

1. Distributed Computing Node Network:

• **Decentralized Node Network:** DMVChain employs a decentralized node network, where each node can provide computing resources for AI model training. By distributing computing tasks across multiple nodes, the platform achieves efficient resource utilization and parallel processing of tasks.

• **Node Types:** The platform supports various types of computing nodes, including high-performance nodes (for complex AI model training) and edge computing nodes (for real-time data processing and lightweight model training). Users can select the appropriate node type based on task requirements.

2. Task Distribution and Scheduling:

• **Intelligent Task Scheduling System:** DMVChain features an intelligent task scheduling system that automatically allocates AI model training tasks to the best computing nodes based on task complexity, resource availability, and node performance. This scheduling approach maximizes resource utilization and reduces training time.

• **Task Sharding and Parallel Processing:** For large-scale AI model training tasks, the platform automatically breaks down tasks into multiple sub-tasks and assigns them to different computing nodes for parallel processing. This method enhances computational efficiency and supports handling large datasets and complex models.

Data and Model Security Transmission and Storage

1. Data Encryption and Secure Transmission:

• **Advanced Encryption Technology:** The platform uses advanced encryption techniques to secure data and model parameters during transmission, preventing data leakage and tampering. All data transfers are conducted through secure communication protocols (such as TLS/SSL) to ensure the security of data between nodes.

• **On-Chain Data Provenance:** All task execution processes and results are recorded on the blockchain, creating immutable records. This not only enhances the security of data and models but also provides transparency and traceability of the training process.

2. Distributed Storage System:

• **Distributed Storage:** DMVChain employs a distributed storage system to store AI models and training data, ensuring high availability and security of the data. Data is sharded across multiple nodes and protected through redundancy mechanisms to maintain data integrity.

• **Data Privacy Protection:** The platform supports privacy protection using homomorphic encryption and secure multi-party computation (MPC) technologies, allowing data to be used for training without exposing the original content, thus ensuring the privacy and security of data providers.

AI Model Optimization and Continuous Learning

1. Model Optimization Algorithms:

• **Advanced Optimization Algorithms:** DMVChain supports a variety of advanced model optimization algorithms, including gradient descent, Adam optimizer, and learning rate adjustment. These algorithms effectively enhance the training speed and accuracy of AI models while reducing resource consumption during the training process.

• **Adaptive Optimization:** The platform can automatically adjust optimization parameters, such as learning rate and regularization parameters, based on the model's training performance. This improves the convergence speed and overall performance of the model.

2. Continuous Learning and Model Updates:

• **Continuous Learning Mechanism:** The platform supports continuous learning, allowing AI models to receive new data for online learning and optimization even after deployment. This mechanism enables models to adapt to dynamically changing data environments, enhancing their long-term performan

• **Decentralized Model Updates:** DMVChain implements decentralized model updates and synchronization through distributed update protocols, such as Federated Learning. Multiple nodes can collaborate and share training results without centralizing data, improving training efficiency while protecting data privacy.

Performance Optimization and Resource Management

1. Resource Optimization and Load Balancing:

• **Dynamic Resource Management and Load Balancing:** The platform uses dynamic resource management and load balancing techniques to optimize the allocation of computing resources, prevent node overload, and ensure efficient execution of training tasks.

• **Elastic Computing:** DMVChain supports elastic computing capabilities, allowing dynamic adjustment of resource allocation based on task requirements to meet the demands of large-scale computing during peak times.

2. Performance Monitoring and Adjustment:

• **Real-Time Performance Monitoring:** The platform provides real-time performance monitoring tools, enabling users to view the status of training tasks, resource usage, and training progress at any time. Based on this data, the system automatically adjusts computing resources and task scheduling to optimize overall performance.

Through these technical architectural designs, DMVChain provides a robust and flexible AI model training and optimization platform, which not only reduces training costs but also enhances model performance and security. The platform's decentralized computing architecture ensures efficient resource utilization and offers reliable technical support to users.

5.4 Decentralized Governance

DMVChain adopts a decentralized governance model where all significant decisions are made through community voting. Token holders can participate in platform governance by proposing or voting on the future direction of the platform. This governance model ensures fairness and transparency, empowering users with more authority and responsibility.

From an operational perspective, DMVChain's decentralized governance model is a key mechanism for promoting community involvement, enhancing platform transparency, and ensuring fairness. Here is a detailed analysis:

Community Participation and Governance Structure

1. Governance Tokens and Voting Mechanism:

• **Governance Tokens:** DMVChain's decentralized governance relies on governance tokens, which grant users voting rights. The voting weight of each token holder is proportional to the number of tokens they hold. This design encourages users to hold tokens long-term and actively participate in governance.

• **Proposal Process:** Community members can propose improvements or policy changes for the platform. Proposals must pass an initial screening (e.g., meet a minimum token holding requirement) before moving to the voting phase. Once approved, proposals are executed and recorded on the blockchain.

2. Layered Governance Model:

• **Layered Decision-Making:** DMVChain employs a layered governance model where different types of decisions require votes from different tiers of participants. For instance, technical upgrades and major strategic changes may require participation from higher-tier token holders, while day-to-day community management involves a broader user base. This layered approach balances efficiency with democracy.

Operational Transparency and Accountability

1. Transparent Decision-Making Process:

• **Blockchain Records:** All governance processes are recorded on the blockchain to ensure transparency. Users can access proposal details, voting results, and decision execution status at any time, reducing information asymmetry and building community trust.

• **Real-Time Feedback Mechanism:** The platform encourages users to provide feedback and suggestions during the governance process. A real-time feedback channel is established to allow the community to quickly respond to user needs and market changes.

2. Accountability and Responsibility:

• **Responsibility for Decisions:** Under decentralized governance, each decision-making participant is responsible for their voting actions. To ensure effective governance, the platform has established accountability mechanisms. Token holders who support decisions also bear some reputational risk in the future implementation results.

• **Incentives and Penalties:** The platform has designed incentive measures to reward active participants in governance. Additionally, there are penalties for malicious actions, such as submitting invalid proposals repeatedly or manipulating votes, to maintain community order.

Long-Term Operational Strategy

1. Ongoing Community Development and Education:

• **User Education:** The DMVChain operations team is committed to educating users about the importance of decentralized governance, providing training and resources to help new users integrate into the governance structure. Regular online and offline events are organized to enhance community cohesion.

• **Global Expansion and Multilingual Support:** To encourage global user participation, the platform plans to support multilingual interfaces and proposal voting, expanding the governance participation base.

2. Dynamic Adjustment and Iteration:

• **Governance Iteration:** The decentralized governance model needs to evolve with the platform's development and changes in the external environment. The operations team will continuously monitor the effectiveness of governance mechanisms, propose optimizations based on community feedback and data analysis, and implement changes through community voting.

• **Governance Incentives:** New governance incentives, such as long-term token holding rewards and proposal approval bonuses, will be introduced to encourage more users to participate in platform governance, creating a positive cycle that drives DMVChain's sustainable growth.

Through these operational measures, DMVChain's decentralized governance model not only ensures fairness and transparency but also empowers users with greater authority and responsibility, motivating community members to actively contribute to the platform's long-term development.

5.5 Cross-Chain Interaction

DMVChain supports cross-chain interaction, allowing users to exchange data and assets with other blockchain networks through the platform. Cross-chain protocols enable seamless integration with other blockchains, expanding the platform's use cases and user base.

Cross-chain interaction is a crucial technical feature of DMVChain, enabling data and asset transfer across different blockchain networks. Here is a detailed analysis of the cross-chain interaction functionality from a technical architecture perspective:

Fundamentals of Cross-Chain Interaction

1. Cross-Chain Protocols:

• **Cross-Chain Bridges:** DMVChain connects with other blockchain networks through cross-chain bridging technology. Cross-chain bridges facilitate the flow of assets and data between different chains, utilizing relayers or smart contracts to monitor and validate transactions between source and target chains.

• **Inter-Blockchain Communication (IBC):** DMVChain adopts standardized cross-chain communication protocols to ensure uniform data packet formats across different blockchains, supporting reliable communication between chains. The IBC protocol allows secure data and asset transfer, ensuring the security and effectiveness of cross-chain operations.

2. Smart Contracts and Multi-Signature Mechanisms:

• **Decentralized Multi-Signature:** In cross-chain transactions, DMVChain uses multi-signature smart contracts to validate the legitimacy of transactions. Assets or data are only transferred when multiple predefined nodes collectively sign the transaction, ensuring the security of cross-chain transactions.

• **Cross-Chain Smart Contracts:** DMVChain supports deploying smart contracts between chains that can automatically execute cross-chain operations, such as token transfers and data synchronization. The decentralized execution of these contracts makes cross-chain interactions more transparent and automated.

Technical Challenges and Solutions

1. Interoperability and Compatibility:

• **Cross-Chain Compatibility:** Different blockchain networks may have varying architectures, consensus mechanisms, and data formats. DMVChain addresses these compatibility issues through relayers and an adapter layer, enabling smooth interactions between different blockchain networks.

• **Standardized Interfaces:** DMVChain establishes and adopts standardized API interfaces to ensure seamless communication between chains. Using common data formats and protocol standards reduces the complexity of cross-chain operations.

2. Security and Consensus:

• **Cross-Chain Consensus Mechanism:** DMVChain introduces a cross-chain consensus mechanism to ensure all participating nodes in cross-chain interactions reach a consensus. This mechanism uses voting and validation methods to confirm the legitimacy of cross-chain transactions, preventing data tampering and double-spending attacks.

• **Preventing Cross-Chain Attacks:** To prevent potential attacks during cross-chain interactions, DMVChain employs Merkle trees and zero-knowledge proofs for validation, ensuring the security of data and assets during cross-chain operations.

Use Cases and Benefits of Cross-Chain Interaction

1. Multi-Chain Asset Management:

• **Asset Transfer and Management:** DMVChain allows users to freely transfer and manage assets across different blockchain networks, enabling flexible utilization of financial services on various chains, such as DeFi lending, staking, and trading, maximizing asset usage efficiency.

2. Cross-Chain Data Exchange and Collaboration:

• **Data Exchange Applications:** Cross-chain data exchange has extensive applications in decentralized finance (DeFi), supply chain management, and

cross-border payments. DMVChain supports multi-party collaboration in these scenarios, promoting connectivity within the blockchain ecosystem.

3. Expanding Platform Ecosystem:

• **Ecosystem Growth:** By supporting cross-chain interactions, DMVChain can integrate users and applications from other blockchain networks, expanding its ecosystem's scale and influence. Users can operate across multiple chains, enjoying a broader range of blockchain services.

Through these technical designs, DMVChain achieves efficient, secure, and scalable cross-chain operations, enabling seamless connectivity with other blockchains and broadening its application scenarios and user base. The platform’s cross-chain interaction functionality provides users with greater operational flexibility and a wider array of service options.

6、Token Economic Model

6.1 Token Distribution

DMVChain tokens will be used for all transactions and incentive mechanisms within the platform. The initial distribution of tokens will cover project development teams, early investors, community incentives, and ecosystem development funds. The specific allocation ratios and plans will be adjusted based on the project's actual situation and development stage to ensure the project's sustainable growth.

6.2 Reward Mechanism

DMVChain has established various reward mechanisms through smart contracts, including rewards for data contribution, model training, and node operation. Users can earn token rewards by participating in platform activities. This reward mechanism not only incentivizes user participation but also fosters the prosperity of the platform ecosystem.

6.3 Circulation and Application

DMVChain tokens can be used within the platform for payments and transactions, as well as for on-chain governance, staking, and other applications. As the platform continues to evolve, the use cases for the tokens will further expand, enhancing their liquidity and value.

6.4 Allocation Details

The total supply is set at 2 billion tokens.
Here is the token distribution plan, including allocations for data providers, data cleaning parties, AI training participants, platform operators, storage providers, training equipment suppliers, and other participants.

Role	Token Distribution Proportions
Data Providers	20% (400 million tokens)
Data Cleaners	15% (300 million tokens)
AI Trainers	15% (300 million tokens)
Platform Operators	20% (400 million tokens)
Storage Providers	10% (200 million tokens)
Training Equipment Suppliers	10% (200 million tokens)
Early Investors and Partners	5% (100 million tokens)
Community Incentives and Ecosystem Development	5% (100 million tokens)

1、Key Participants and Token Allocation

1.Data Providers (20% – 400 million tokens)

• **Purpose:** To incentivize data providers to upload high-quality data.

• **Allocation:** Based on data quality and usage frequency.

2.Data Cleaners (15% – 300 million tokens)

• **Purpose:** To incentivize data cleaners to efficiently and accurately clean and preprocess data.

• **Allocation:** Based on the quantity and quality of cleaned data.

3.AI Trainers (15% – 300 million tokens)

• **Purpose:** To incentivize AI trainers to provide efficient and accurate model training.

• **Allocation:** Based on the effectiveness and performance of model training.

4.Platform (20% – 400 million tokens)

• **Purpose:** For the development, operation, and maintenance of the platform.

• **Allocation:** Used to pay for platform developers, operations staff, and infrastructure costs.

5.Storage Providers (10% – 200 million tokens)

• **Purpose:** To incentivize those providing data storage services.

• **Allocation:** Based on the volume and duration of data storage.

6.Training Equipment Providers (10% – 200 million tokens)

• **Purpose:** To incentivize those providing training equipment and computing power.

• **Allocation:** Based on the duration of equipment use and the computing power contributed.

7.Early Investors and Partners (5% – 100 million tokens)

• **Purpose:** To attract early investment and key partners.

• **Allocation:** Based on investment amount and contribution to collaboration.

8.Community Incentives and Ecosystem Development (5% – 100 million tokens)

• **Purpose:** For community activities, developer incentives, and ecosystem development.

• **Allocation:** Based on community contributions and project progress.

2、Token Distribution Details

Data Providers

• **Incentive Mechanism:** Tokens are rewarded for each data upload and transaction.

• **Allocation Basis:** Based on the number of times data is used, the quality of the data, and the uniqueness of the data.

Data Cleaners

• **Incentive Mechanism:** Tokens are rewarded for each dataset that is cleaned.

• **Allocation Basis:** Based on the quantity, quality, and efficiency of the cleaned data.

AI Trainers

• **Incentive Mechanism:** Tokens are awarded based on the effectiveness and accuracy of the trained models.

• **Allocation Basis:** Based on the model's accuracy, training efficiency, and user evaluations.

Platform

• **Purpose:** For platform development, operations, and infrastructure.

• **Allocation Method:** Tokens are used to pay platform staff and developers as needed, and for the platform's long-term operation.

Storage Providers

• **Incentive Mechanism:** Tokens are awarded based on the amount and duration of data storage services provided.

• **Allocation Basis:** Based on the data storage capacity, storage duration, and frequency of data access.

Training Equipment Providers

• **Incentive Mechanism:** Tokens are awarded based on the provided training equipment and computing power.

• **Allocation Basis:** Based on the duration of equipment use and the computing power contributed.

Early Investors and Partners

• **Incentive Mechanism:** To attract early investment and key partners to drive project development.

• **Allocation Method:** One-time distribution based on investment amount and contribution to collaboration.

Community Incentives and Ecosystem Development

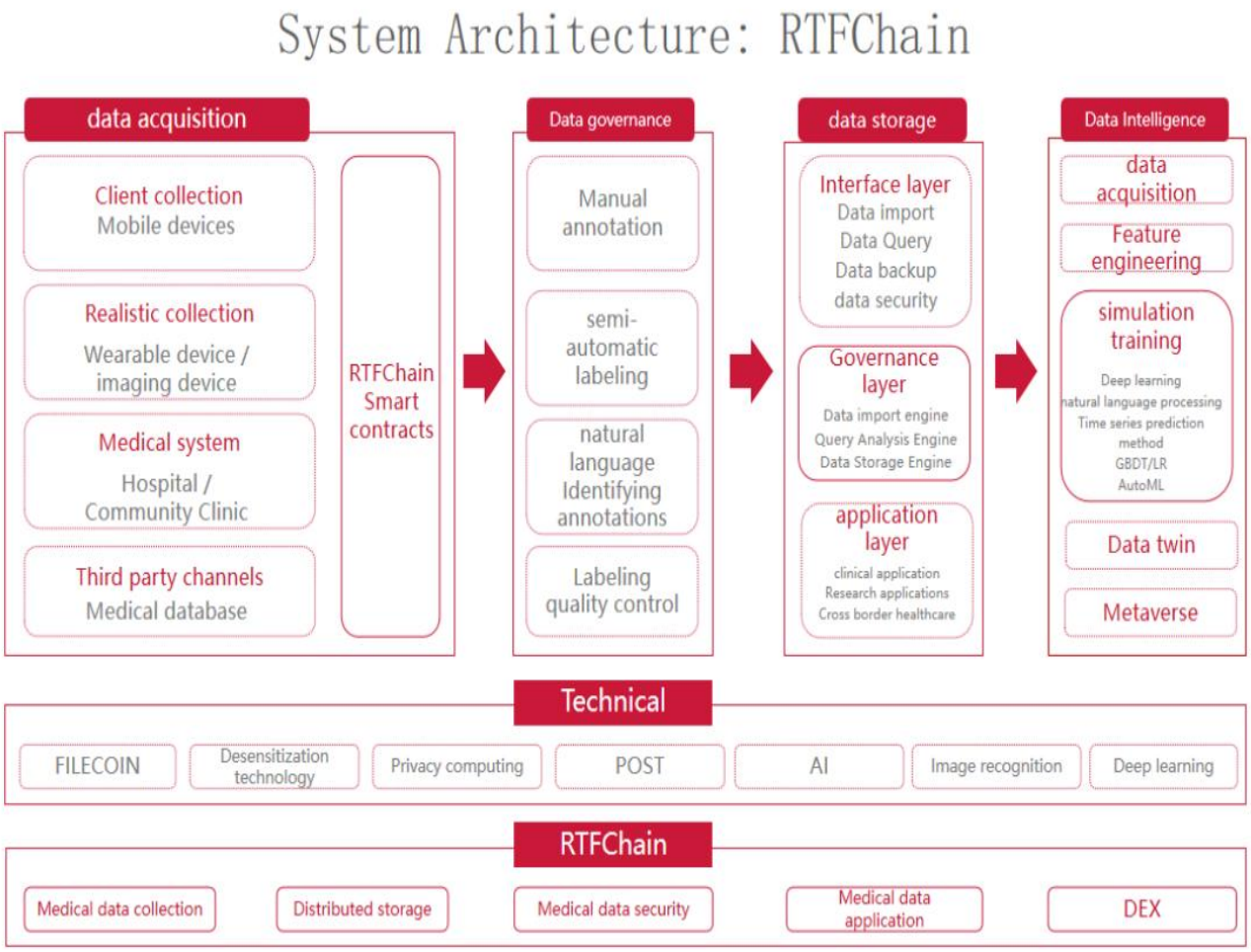
• **Incentive Mechanism:** To encourage community members to participate in project development and ecosystem building.

• **Allocation Method:** Based on participation in community activities and contributions.

7. Application Scenarios

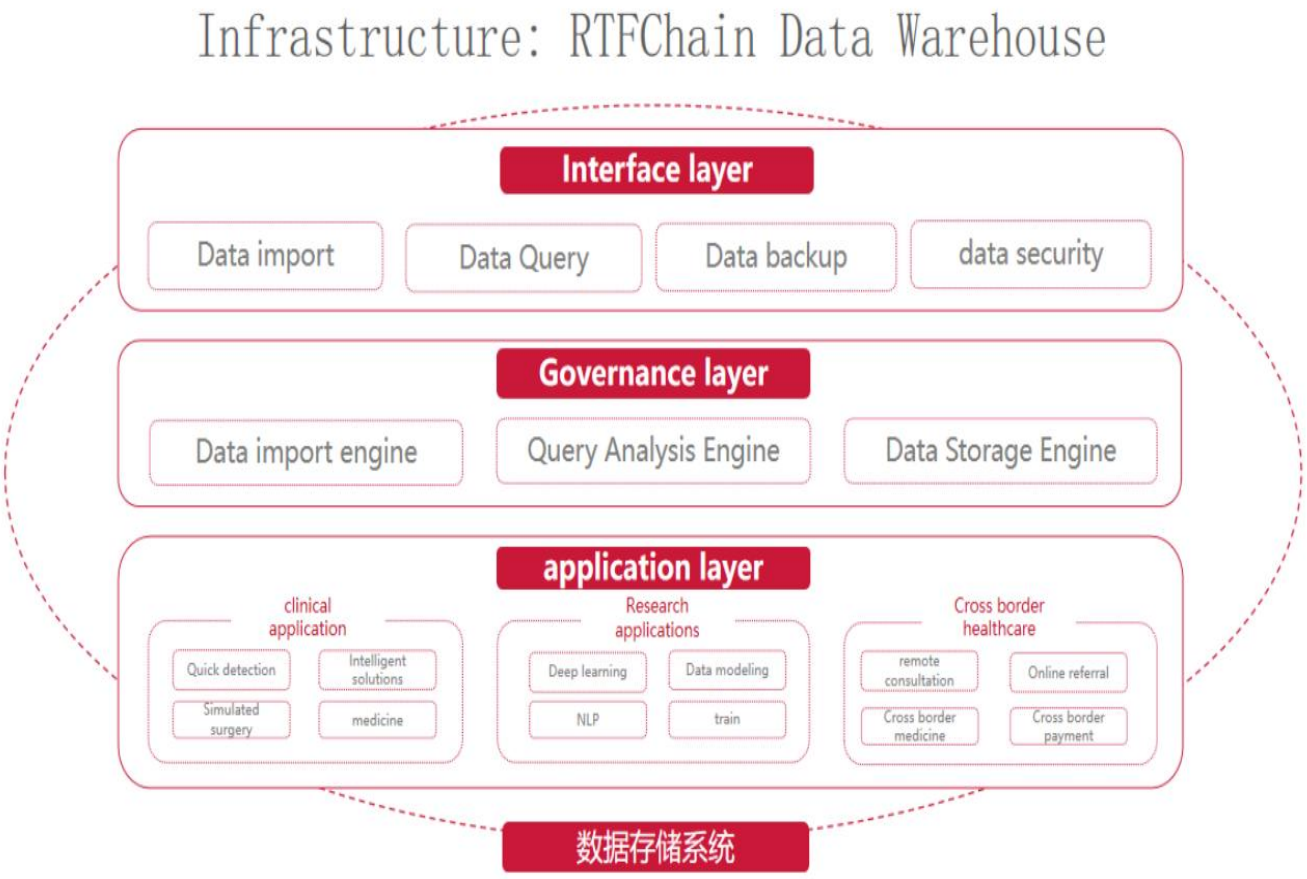
This product aims to provide an innovative data storage and mining service platform for the healthcare industry by integrating artificial intelligence, blockchain technology, and IPFS. The platform focuses on meeting the high standards for data management and health management, particularly for high-net-worth individuals within the healthcare sector.

By offering secure, efficient, and reliable data storage solutions, along with in-depth data mining and analysis services, this project is dedicated to advancing the digital transformation of the healthcare industry, enhancing the quality and efficiency of healthcare services.



7.1 Data Trading Market

DMVChain has established a transparent, decentralized data trading market where data providers can upload their data to the platform. After verification, other users can purchase and utilize this data for AI training or other purposes. The platform's smart contract mechanism ensures the security and transparency of data transactions.



Market Applications

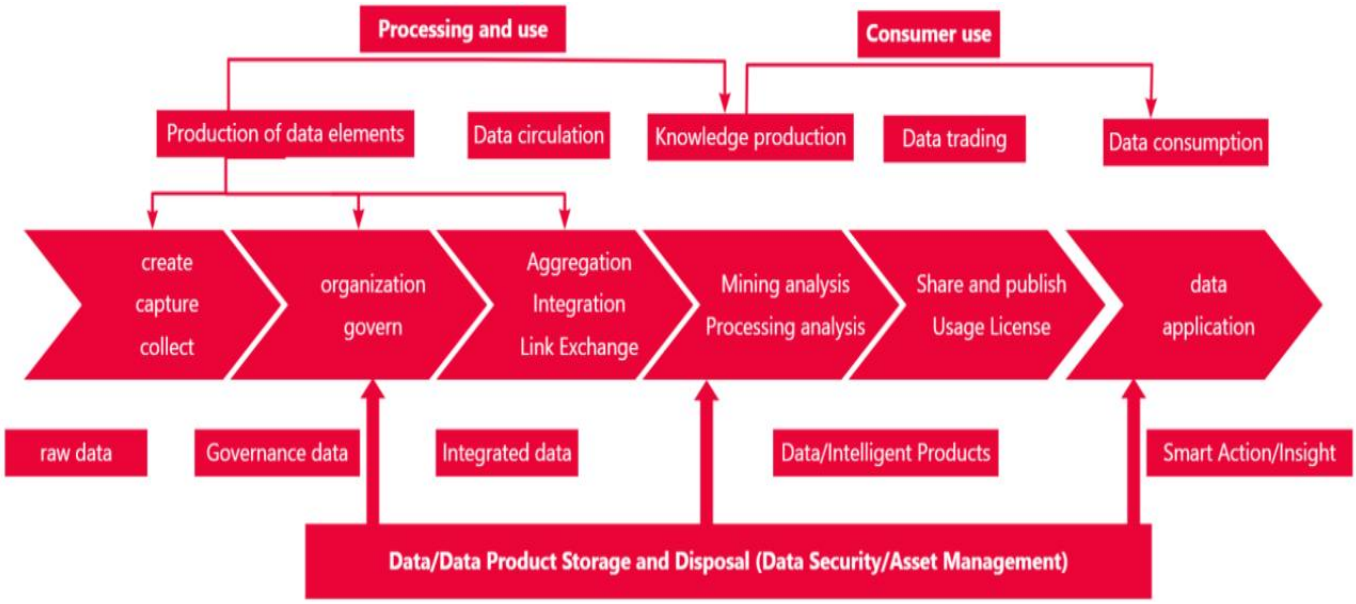
1. Bridge Between Data Providers and Users:
   • DMVChain's data trading market serves as a decentralized platform connecting data providers and data users. Data providers can upload high-quality datasets, such as medical data, financial data, market research data,

etc., which other users can purchase for AI training, data analysis, or business decision-making.

• **Vertical Markets and Customized Data:** The platform supports various vertical markets, including finance, healthcare, logistics, etc. Data providers can customize datasets based on industry needs to meet specific user application scenarios.

2. **Value Discovery and Monetization of Data:**
   • The data trading market offers data providers a channel for monetization. Data is no longer limited to internal use but can be shared with a broader user base through the platform, realizing its commercial value. Data providers earn economic returns by selling data while promoting the efficient utilization of data resources.

3. **Expansion of Application Scenarios:**
   • By integrating with AI, Internet of Things (IoT), and other fields, DMVChain's data trading market will drive the implementation of more innovative applications. The traceability and credibility of data make it widely applicable in scenarios such as smart cities, autonomous driving, and personalized recommendations.



Operational Model

1. **Decentralized Trust Mechanism:**
   • DMVChain's operational model leverages the decentralized nature of blockchain to automate data transactions through smart contracts, ensuring

transparency and fairness. The platform records all transaction information on the blockchain, allowing users to trace the source and usage of data, thereby enhancing the trust foundation of data trading.

2. Data Quality Control and Incentive Mechanism:
   • The platform incorporates data cleansing and validation mechanisms to ensure the quality of uploaded datasets. The operations team designs effective incentive mechanisms to encourage community members to participate in data validation and cleansing, improving overall data quality. Additionally, users providing high-quality data receive more exposure and economic rewards, creating a positive feedback loop.

3. Revenue Model:
   • DMVChain generates revenue through transaction fees, data validation service fees, and subscription services for advanced features. This diversified revenue model ensures the platform's sustainable operation.

   • Ecosystem Development Fund: A portion of the platform's revenue is allocated to support ecosystem development, such as attracting new users, supporting developer communities, and promoting the platform's brand.

4. Market Promotion and User Growth:
   • The platform will expand its user base through multi-channel marketing, including participating in industry exhibitions, establishing partnerships, and online marketing, to attract data providers and users to the platform.

   • Education and Community Building: Resources will be invested in market education through training, workshops, and developer competitions to enhance users' understanding and capabilities in decentralized data trading, promoting healthy market development.

Through these market applications and operational strategies, DMVChain's data trading market will become an efficient, secure, and transparent data trading platform, driving the efficient circulation and utilization of data resources to meet diverse market needs.

7.2 AI Training Market

DMVChain's AI training market allows users to post AI training tasks, where developers and data scientists within the platform can participate by contributing computing resources or optimizing AI models, earning corresponding token rewards. The platform provides a rich array of AI tools and algorithm libraries to support various AI application scenarios.

1. Distributed Computing Resources and Task Allocation:

• **Distributed Architecture:** The AI training market on DMVChain is based on a decentralized distributed computing architecture, allowing multiple nodes to handle AI training tasks simultaneously. The platform uses an intelligent scheduling system to automatically allocate training tasks to suitable computing nodes, ensuring optimal resource utilization.

• **Task Sharding and Parallel Processing:** The platform supports breaking down large AI training tasks into smaller sub-tasks, which are processed in parallel by different nodes. This not only enhances training efficiency but also allows complex models to be trained within a shorter time frame.

2. AI Tools and Algorithm Libraries:

• **Rich AI Tool Support:** DMVChain integrates various AI development tools and frameworks, such as TensorFlow, PyTorch, and Scikit-learn, for developers to choose and use. The platform also offers a range of pre-trained models and optimization algorithms to help developers quickly build and refine AI models.

• **Automated Model Optimization:** The platform supports Automated Machine Learning (AutoML) features, assisting users in automatically selecting the best model parameters and architecture, reducing manual intervention, and enhancing model performance.

3. Security and Data Privacy:

• **Encrypted Computing:** DMVChain employs privacy-preserving technologies, such as homomorphic encryption and secure multi-party computation, to ensure data privacy during the training process. Users can upload data for training with confidence, knowing their data security is protected.

• **Data Isolation and Access Control:** The platform enforces strict data isolation and access control for different tasks and users, ensuring that only authorized users can access and use the data, preventing data leaks and misuse.

Market Operations Perspective

1. Incentive Mechanisms and Community Building:
• Token Rewards: The platform offers token rewards to developers who contribute computing resources and participate in model optimization. This incentive mechanism not only encourages more users to engage but also enhances community activity and the prosperity of the platform's ecosystem.

• Competitions and Challenges: DMVChain regularly organizes AI competitions and challenges to encourage participation from developers and data scientists. These events help the platform discover and promote outstanding AI solutions while strengthening community interaction.

2. User Growth and Market Expansion:
• Target Market Positioning: DMVChain targets its AI training market at high-end user groups such as data scientists, AI researchers, and enterprise R&D teams. Through precise marketing strategies, including partnerships with universities and research institutions, the platform aims to attract a large number of professional users.

• Global Expansion: The platform plans to gradually enter international markets through localization strategies and partnerships with regional collaborators, expanding its global user base. Multi-language support and localized services will enhance user experience and drive market growth.

3. Operational Efficiency and User Support:
• Automation and User Support: DMVChain is committed to simplifying user operations through automated task posting, resource scheduling, and result delivery to improve user experience. The platform provides 24/7 technical support and customized services to ensure that user issues are resolved promptly.

• Continuous Optimization and Iteration: The platform's operations team will continually optimize the features and performance of the AI training market, regularly collecting user feedback to iterate and enhance functionalities, ensuring the platform meets the evolving market needs.

Through these technical and market operations measures, DMVChain's AI training market not only offers robust technical support but also ensures sustainable development and market impact through effective operational strategies. The platform aims to become a leading global AI training platform, driving the widespread application and advancement of AI technology.

7.3 Smart Contract Applications

The introduction of smart contracts automates processes such as data transactions and AI training, reducing transaction costs and improving efficiency. Users can customize smart contracts according to their specific needs, ensuring transparency and fairness in the transaction process. DMVChain also supports the upgrading and expansion of smart contracts to meet the evolving demands of the market.

7.4 Decentralized Finance (DeFi)

The DMVChain platform supports decentralized finance (DeFi) applications, allowing users to engage in decentralized lending, staking, and other financial operations on the platform. All financial transactions are automatically executed through smart contracts, ensuring transparency and security. DMVChain also plans to introduce a decentralized exchange (DEX) to further enrich the platform's financial ecosystem.

7.5 Privacy Computing and Data Protection

DMVChain has made innovations in privacy computing and data protection, utilizing advanced technologies such as zero-knowledge proofs and multi-party computation to ensure user data privacy and security during transactions and usage. The platform allows users to perform data computations without exposing the content of their data, enabling secure data sharing and utilization. In this way, DMVChain meets users' needs for data privacy while promoting the effective circulation and use of data. The following is a detailed technical analysis of this section:

Core Technologies

1. Zero-Knowledge Proofs (ZKP):

• **Technical Overview:** Zero-Knowledge Proofs are a cryptographic technique that allows one party (the prover) to prove to another party (the verifier) the truth of a certain piece of information without revealing the actual data. DMVChain utilizes ZKP to ensure that during data transactions or computations, users can maintain data privacy while still verifying the validity of the transaction.

• **Application Scenarios:** For instance, when a user provides a dataset for AI model training, ZKP can be used to prove the authenticity and integrity of the data without revealing its actual content, thereby protecting data privacy.

2. **Secure Multi-Party Computation （MPC）:**
• **Technical Overview:** MPC allows multiple parties to collaboratively compute a function without revealing their individual data. DMVChain leverages MPC to securely perform data computations across multiple users, ensuring that the privacy of each party's data is preserved.

• **Implementation:** MPC typically relies on secret sharing and encryption protocols, ensuring that during the computation, each party only receives partial intermediate results, preventing them from inferring the data of other participants.

3. **Homomorphic Encryption:**
• **Technical Overview:** Homomorphic encryption enables computations to be performed directly on encrypted data, producing encrypted results that, when decrypted, match the outcome as if the operations had been performed on the original data. DMVChain employs homomorphic encryption to keep data encrypted during transmission and computation, preventing data leakage.

• **Practical Application:** For example, during data analysis, data can be sent in encrypted form to the computing nodes for processing. The computation results remain encrypted, and only the data owner can decrypt and view the final results.

Privacy Protection and Data Sharing

1. **Distributed Data Protection:**

• **Data Fragmentation and Encryption:** DMVChain enhances data security by splitting data into fragments and storing them across different nodes, with each fragment being encrypted. Even if a node is compromised, the attacker cannot access the complete data.

• **Data Access Control:** The platform uses smart contracts and access control lists (ACL) to strictly manage data access rights, ensuring that only authorized users and applications can access specific datasets.

2. Secure Data Sharing and Circulation:

• **Controlled Data Sharing:** Users can selectively share portions of their data or share encrypted computation results without exposing the original data content. This approach fulfills data-sharing needs while protecting the privacy of data owners.

• **Data Traceability:** By recording data usage and transactions on the blockchain, DMVChain ensures that the data circulation process is transparent and traceable. This not only increases the credibility of data transactions but also provides additional security during privacy computing.

Technical Advantages and Future Development

1. Efficiency and Scalability:

• **High-Performance Processing:** Utilizing advanced encryption algorithms and distributed computing frameworks, DMVChain can efficiently handle large-scale data computation tasks while ensuring privacy and security. The platform's architecture is designed for dynamic resource allocation and flexible scalability to meet the growing demands of data computation in the future.

2. Continuous Innovation and Technological Iteration:

• **Ongoing Development:** DMVChain is committed to staying at the forefront of privacy computing technology by continuously iterating and optimizing its technical solutions. The platform plans to incorporate cutting-edge

privacy protection technologies, such as quantum-resistant encryption, to address future security challenges.

Through these technological measures, DMVChain not only provides robust privacy protection but also facilitates the secure circulation and efficient utilization of data under privacy-preserving conditions. This offers reliable technical support for users and enterprises in the field of data computation.

8、Roadmap

DMVChain's development plan spans multiple stages, from the initial concept to full implementation. Below is the detailed development roadmap of DMVChain:

8.1 Short-Term Goals and Strategies (2024-2025)

Establishing clear short-term goals and corresponding execution strategies at the outset of the project is crucial for guiding the project towards its intended direction. The following outlines the short-term goals and implementation strategies for 2024:

8.1.1 Short-Term Goals

1) **Completion of Technical Platform Development and Testing:** Ensure the development of an integrated platform that combines artificial intelligence, blockchain, and distributed storage technologies, and successfully pass the initial testing phase.

2) **Market Entry Preparation:** Complete market research, identify the target customer base, establish brand recognition, and prepare marketing materials and strategies.

3) **Establishment of Customer Base:** Successfully attract and serve the first batch of users, including at least three large healthcare institutions and ten small to medium-sized healthcare organizations.

4) **Establishment of Partnership Network:** Form partnerships with at least five key partners, including technology providers, medical data providers, and health insurance companies.

5) **Establishment of Legal and Compliance Framework:** Ensure that all operational activities comply with industry laws and regulatory requirements.

8.1.2 Strategy Implementation

Technical Platform Development Strategy:

- Adopt an agile development approach for rapid iteration of product prototypes.

- Establish an expert advisory team to ensure the forward-looking and practical selection of technologies.

- Conduct rigorous testing to ensure the platform's stability and security.

Market Entry Preparation Strategy:

- Enhance brand awareness and industry influence through industry reports, white papers, and online webinars.

- Develop a targeted marketing plan that combines digital and traditional marketing strategies.。

Customer Base Establishment Strategy:

- Offer trial periods and free consulting services to lower the barrier for potential customers.

- Build trust and expand the user base through case studies and customer referrals.

Partnership Network Establishment Strategy:

・Actively participate in industry events to broaden channels for finding partners.

・Attract partners through a win-win cooperation model to jointly explore the market.

Legal and Compliance Strategy:

・Hire industry legal advisors to conduct comprehensive legal reviews and compliance assessments.

・Establish an internal compliance review mechanism to ensure that operational activities meet the latest legal and regulatory requirements.

By implementing the above strategies, the project aims to achieve initial technological development and market entry in 2024, laying a solid foundation for long-term growth. During this period, closely monitoring project progress and market feedback, and adjusting strategies accordingly, will be key to achieving short-term goals.

8.2 Mid-to-Long-Term Development Plan (2025-2027)

The mid-to-long-term development plan for this project focuses on achieving sustained growth through technological innovation, market expansion, and ecosystem building, with the aim of establishing leadership in the healthcare services industry. Below are the mid-to-long-term development goals and implementation strategies for 2025 to 2027:

8.2.1 Mid-to-Long-Term Development Goals

1) **Technological Leadership:** Continuously monitor and adopt the latest advancements in AI, blockchain, and distributed storage technologies to maintain a leading edge in technology.

2）**Market Expansion:** Expand service offerings to new regional markets and increase the range of service industries, with a particular focus on international market expansion.

3）**Customer Base and Market Share Growth:** Double the customer base, especially among large medical institutions and pharmaceutical companies, and significantly increase market share.

4）**Ecosystem Construction:** Build a healthcare service ecosystem centered around this project, including a network of partners, third-party developers, and innovation institutes.

5）**Brand Building and Social Influence:** Establish a recognized brand position within the industry, becoming a symbol of medical technology innovation, and exert a positive impact on the development of the healthcare services industry.

8.2.2 Implementation Strategies

Technology Research and Innovation Strategy:

- Establish R&D centers focused on research and application development of cutting-edge technologies.

- Collaborate with research institutions and universities to jointly conduct technology research and talent development.

Market Expansion Strategy:

- Analyze international market demand and compliance requirements to develop targeted market entry strategies.

- Establish branches or representative offices in key regions to enhance local market service capabilities and brand influence.

Customer Growth and Service Optimization Strategy:

・Strengthen cooperation with large medical institutions and pharmaceutical companies, offering customized solutions.

・Build a customer success team to improve service quality, enhance customer satisfaction, and foster loyalty.

Ecosystem Construction Strategy:

・Attract third-party developers to participate in ecosystem building through open APIs and developer tools.

・Host innovation competitions and seminars to stimulate technological innovation and knowledge sharing within the ecosystem.

Brand Building and Influence Enhancement Strategy:

・Strengthen public relations and brand marketing activities to increase brand awareness and reputation.

・Participate in social responsibility projects, such as medical aid and public health education, to enhance social impact.

By implementing the above strategies, the project expects to achieve the goals of technological leadership, market expansion, customer growth, ecosystem construction, and brand influence enhancement in the mid-to-long term, bringing profound changes and value to the healthcare services industry.

Additionally, the project will closely monitor industry trends and policy changes, flexibly adjusting strategic plans to ensure sustained growth and competitiveness in an ever-changing market environment.

8.3 Continuous Innovation and Upgrade Path

Continuous innovation is the core driver of the long-term development of this project in the healthcare services industry. Below is a detailed plan for technological innovation and upgrade paths:

8.3.1 Technological Innovation Strategy

1) **Frontier Technology Tracking:** Establish a dedicated technology observation group to track the latest developments in AI, blockchain, distributed storage, and other fields, ensuring that the project can timely adopt and apply the latest technologies.

2) **Open Innovation Platform:** Create an open innovation platform that encourages internal employees, external developers, partners, and academia to participate in the exploration and application development of new technologies. Innovation competitions, seminars, and other events will be held to foster innovative thinking and promote technology exchange.

3) **Collaboration and Alliances:** Establish strategic partnerships with research institutions, universities, and other leading technology companies to jointly conduct technological research, talent cultivation, and new product development.

8.3.2 Technology Upgrade Path

1) **Artificial Intelligence:**
- **Algorithm Optimization:** Continuously optimize and update machine learning and deep learning algorithms to improve the accuracy and efficiency of data processing and analysis.

- **Application Expansion:** Expand the application of AI in medical diagnostics, disease prediction, personalized treatment, and other fields to enhance the quality and effectiveness of healthcare services.

2) **Blockchain Technology:**
- **Privacy Protection:** Strengthen the privacy protection of medical data by leveraging the anonymity and encryption capabilities of blockchain technology.

・**Cross-Institution Data Sharing:** Develop secure cross-institution data-sharing solutions to promote the interconnection of medical information and improve the efficiency of healthcare resource utilization.

3) **Distributed Storage Technology:**
・**Performance Enhancement:** Improve data access speed and system stability by optimizing storage algorithms and network protocols.

・**Data Security:** Develop more advanced data encryption and access control mechanisms to protect data from unauthorized access and tampering.

8.3.3 Mechanisms for Continuous Upgrades

1) **Feedback-Driven:** Establish a systematic user feedback mechanism to collect user opinions and suggestions during use, serving as important references for technology upgrades and product optimization.

2) **Results Conversion:** Strengthen communication with the commercial operations team to ensure that technological innovations can be quickly converted into marketable products and services, enhancing market competitiveness.

3) **Continuous Investment:** Allocate sufficient R&D investments in the financial budget to support technological innovation and product upgrades, maintaining the project's technological advancement and market leadership.。

By implementing the above innovation strategies and upgrade paths, this project will achieve continuous innovation and progress in technology, not only improving service quality and efficiency but also continuously expanding service scope and application scenarios to meet the evolving needs of the healthcare industry and drive the advancement of healthcare services.

9、Team Introduction

DMVChain was founded by a team of experts specializing in AI-driven cancer treatment and blockchain technology. The team members have significant achievements in their respective fields and have held important positions in leading research institutions and technology companies globally. Below are some key members of the team and their backgrounds:

1. Max Yan – Founder & CEO

• Max Yan holds a degree in Computer Science and an MBA, and has been a visiting scholar at Stanford. He is an experienced entrepreneur and AI healthcare expert with over 15 years in the fields of healthcare, AI, and blockchain. He has successfully founded two tech companies and led teams in developing several renowned blockchain projects. Max is focused on driving innovation and global strategies for DMVChain in the healthcare and AI sectors.

2. David Smith – Chief Technology Officer (CTO)

• David Smith has over 10 years of experience in blockchain and distributed systems development and has served as a technical lead at a globally renowned blockchain company. He has deep expertise in blockchain consensus algorithms and smart contract security, and is the primary architect of DMVChain's technology, dedicated to applying blockchain technology for the secure storage and processing of medical data.

3. William Lee – Chief AI Scientist

• William Lee graduated from MIT with a PhD in AI and Machine Learning. He previously worked as a senior researcher at Google AI, overseeing several medical AI projects, particularly in cancer treatment applications. His expertise lies in integrating deep learning with medical image processing, providing cutting-edge AI technology support for DMVChain.

4. Emily Wong – Chief Data Scientist

• Emily Wong holds a master's degree in Data Science from Stanford University and has led data science teams at top fintech and medical data analytics companies. She focuses on large-scale medical data analysis and

application, helping DMVChain design and implement efficient data trading and sharing mechanisms to ensure the platform's data flow and security.

5. Advisory Team

- **Dr. John Doe – Blockchain Advisor:** An early contributor to the Ethereum Foundation and a prominent figure in the blockchain and cryptocurrency fields, providing technical guidance and strategic advice for DMVChain.
- **Prof. Jane Smith – AI Advisor:** A globally recognized AI scholar with teaching experience at several top universities, specializing in AI applications in healthcare. She provides valuable advice on DMVChain's AI technology development direction.
- **Michael Johnson – Business Advisor:** Former executive at JPMorgan with extensive experience in finance and business strategy, assisting DMVChain in developing commercialization strategies and market promotion plans.

DMVChain's vision is to leverage blockchain and AI technologies to drive transformation in cancer treatment, and ensure the project's success and long-term development through their extensive experience and global perspective.

10、Legal and Compliance

DMVChain strictly adheres to global laws and regulations to ensure the platform operates legally. The platform has established comprehensive KYC/AML (Anti-Money Laundering and Know Your Customer) policies to protect user privacy and data security. DMVChain will continue to monitor regulatory policy changes worldwide and adjust its operational strategies as necessary to maintain compliance.

11、Risk Assessment

Despite DMVChain's innovative advantages in technology and market, the project faces several risks:

• **Market Risk:** The blockchain and AI sectors are highly competitive, and DMVChain must continuously innovate to maintain market competitiveness.

• **Technical Risk:** Rapid advancements in blockchain and AI technologies may pressure the project to keep up with technological iterations.

• **Legal Risk:** With increasing regulatory scrutiny on blockchain and cryptocurrency, DMVChain must closely monitor policy changes to address potential legal risks.

The DMVChain team will employ ongoing market analysis and risk management practices to address these potential risks and ensure the project's long-term sustainability.

12、Conclusion

DMVChain is committed to creating a global leading data and AI ecosystem by providing a secure, transparent, and efficient platform for data trading and AI training through blockchain technology. We believe that with the collective efforts of the community, DMVChain will become a fundamental infrastructure of the future digital economy, advancing the development and application of data and AI technologies. DMVChain looks

forward to growing with global users, enterprises, and developers to build a better future together.

13、Appendix

- **Glossary:** Explanations of specialized terms appearing in the white paper to help readers better understand the technical content.
- **Technical Details:** Detailed descriptions of DMVChain’s technical implementations, including consensus mechanisms, smart contract architecture, and data storage solutions.
- **References:** A list of references and resources used during the writing of the white paper to ensure the content's authority and credibility.