White Paper 1.0

1. Executive Summary

CTOC introduces a new healthcare paradigm that goes beyond traditional treatment-focused medicine, shifting toward daily health optimization and disease prevention. The project aims to transform the highly commercialized supplement market into a personalized precision nutrition ecosystem.

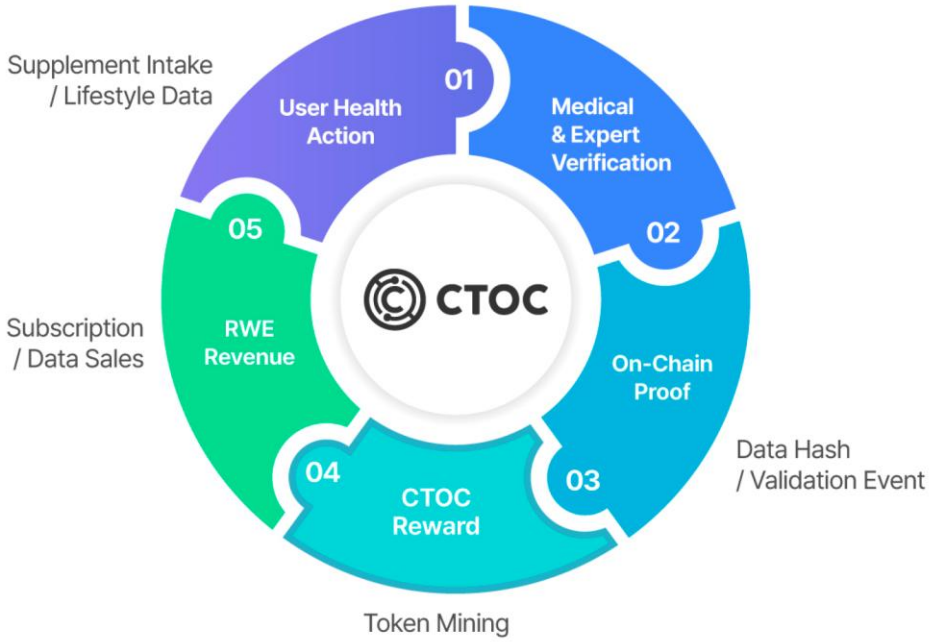
To achieve this, CTOC combines artificial intelligence with medical expertise to deliver a global “precision nutrition subscription service.” By analyzing individual health conditions and lifestyle patterns, the platform provides tailored nutritional solutions while continuously collecting and processing user intake and behavioral data.

This data is not treated as simple consumption records, but is refined into scientifically validated, high-quality health data through expert medical verification. CTOC further connects this data flow with hospital networks and CTOC Health Centers, creating an integrated online and offline healthcare ecosystem. Within this system, user activity, data generation, experience, and rewards are interconnected in a continuous cycle.

Through this process, CTOC evolves beyond a conventional healthcare service into an RWE (Real-World Evidence)-based health data mining network. It continuously generates real-world data, transforms it into valuable digital assets, and integrates it with a tokenized economic model. Ultimately, individual health activities become economically valuable data assets, which are utilized across industries, while the generated value is redistributed back to users and ecosystem participants.

In this way, CTOC redefines health data as a new asset class and establishes a next-generation digital healthcare infrastructure that integrates medical services, data, and token economics into a unified ecosystem.

2. Key Definitions



Precision Nutrition Therapy
A healthcare approach that delivers personalized nutritional solutions based on an individual's biological data, lifestyle patterns, and medical insights. CTOC defines this as a transition from standardized supplement consumption to data-driven, individualized health optimization.

Precision Nutrition Subscription Service
A continuous, subscription-based service model that provides tailored nutrition programs, tracks user behavior and intake, and generates structured health data over time. This model enables long-term engagement while creating consistent, high-quality datasets.

CTOC Health Center
An integrated offline healthcare facility connected to hospital networks, equipped with advanced medical technologies such as hyperbaric oxygen therapy. These centers function as key nodes for data collection, validation, and real-world user engagement within the CTOC ecosystem.

RWE-Based Health Data Mining Network
A system that continuously collects, verifies, and transforms real-world health data into valuable digital assets. CTOC operates as a network where user activities generate data, medical professionals validate it, and the resulting data is utilized across industries while being linked to a tokenized economic structure.

Health Data Assetization
The process of converting individual health-related behaviors, consumption patterns, and medical interactions into structured, verifiable, and economically valuable data assets that can be utilized in healthcare, research, and industry applications.

Integrated Healthcare Ecosystem (On/Off-Chain)
A unified system that connects online platforms, offline medical infrastructure, data processing layers, and blockchain-based verification. This ecosystem ensures data integrity, scalability, and seamless value flow between users, providers, and the broader network.

3. Market Opportunity

The global healthcare data analytics market is experiencing rapid growth, driven by the increasing demand for personalized healthcare and the expansion of data-driven medical solutions. As the industry shifts away from standardized, product-centric approaches, there is a growing emphasis on precision nutrition therapy and personalized healthcare services tailored to individual needs.

This transition is being accelerated by advances in artificial intelligence, the proliferation of digital health technologies, and the integration of medical expertise into data-driven decision-making. AI-powered analysis, personalized supplement recommendations, and connected digital healthcare services are enabling a more precise and proactive approach to health management. At the same time, the involvement of medical professionals enhances the reliability and clinical relevance of these solutions, improving both personalization and overall healthcare outcomes.

Another key driver of this market expansion is the increasing importance of Real-World Evidence (RWE). As global populations age and chronic diseases become more prevalent, long-term health data collected from real-life environments is gaining significant industrial value. Pharmaceutical companies, insurance providers, and healthcare institutions are increasingly seeking high-quality health data to support research, risk modeling, and service optimization.

However, despite this strong growth, the current healthcare data ecosystem faces several structural challenges. Health data remains fragmented across hospitals, wearable devices, applications, and insurance systems, making integrated analysis difficult. In addition, the lack of standardized validation processes leads to concerns about data reliability, while the absence of clear incentive structures limits user participation and long-term data accumulation.

These challenges highlight the need for a new infrastructure that can integrate fragmented data, ensure trust through verification, and create sustainable incentives for continuous data generation. CTOC addresses this gap by combining real-world data collection, medical validation, and a tokenized reward system, positioning itself as a next-generation healthcare data platform.

3.1 Global Healthcare Data Market

The global healthcare industry is rapidly transitioning from a treatment-centered model to a data-driven paradigm focused on prevention, continuous management, and

personalized care. As digital technologies advance and data becomes a core asset, healthcare is evolving into an integrated ecosystem where medical data analytics and Real-World Evidence (RWE) play a central role.

The global healthcare analytics market is expected to grow significantly over the coming years, driven by increasing demand for data-based decision-making across pharmaceuticals, insurance, and clinical research. In this environment, platforms that can collect, standardize, and utilize large-scale health data are emerging as critical infrastructure for the next generation of healthcare.

Despite this growth, the industry still faces fundamental structural constraints. Healthcare systems remain fragmented across hospitals, insurance providers, and digital platforms, resulting in siloed and non-standardized data environments. This fragmentation limits the ability to generate meaningful insights and reduces the overall efficiency of healthcare delivery.

In addition, there is a lack of clear ownership and incentive structures for data producers. Individuals generate vast amounts of health-related data through daily activities, yet they receive little to no economic benefit or control over how their data is used. This imbalance restricts active participation and hinders the long-term accumulation of high-quality data.

Regulatory barriers also present a significant challenge. Strict data privacy and healthcare regulations vary across countries, making it difficult to integrate and utilize data on a global scale. As a result, many existing platforms remain closed ecosystems with limited scalability and interoperability.

To address these challenges, a new approach is required—one that combines real-world data collection with verifiable infrastructure and aligns incentives across all participants. CTOC introduces a solution that integrates blockchain-based proof mechanisms with real-world distribution and healthcare infrastructure, enabling secure, scalable, and economically sustainable healthcare data utilization.

3.2 Precision Nutrition & Personalized Healthcare

Precision nutrition represents a rapidly emerging sector within the global healthcare industry, focusing on delivering personalized nutritional solutions based on an individual’s genetic profile, lifestyle, biological data, and environmental factors. Unlike traditional approaches that rely on standardized products, precision nutrition aims to optimize health outcomes through highly tailored interventions.

This shift is supported by several key industry trends. The adoption of direct-to-consumer (DTC) genetic testing has expanded access to personal biological data, enabling more precise health recommendations. At the same time, the widespread use

of wearable devices has made it possible to continuously collect real-time biometric data, such as activity levels, sleep patterns, and physiological indicators. In addition, the growth of subscription-based healthcare services has created a structural foundation for long-term user engagement and continuous data accumulation.

Leading companies in this space are characterized by their ability to secure large-scale user data, implement recurring subscription models, and establish strategic partnerships with pharmaceutical and global healthcare organizations. These capabilities allow them to build scalable, data-driven platforms that continuously improve the accuracy and effectiveness of personalized healthcare solutions.

However, despite these advancements, there are still significant limitations in the current market. Many existing healthcare applications rely heavily on self-reported or device-generated data without sufficient medical validation, resulting in limited reliability and reduced industrial applicability. Furthermore, data ownership and economic incentives are typically concentrated within centralized platforms, leaving users without meaningful control or compensation for the data they generate. Regulatory differences across countries also make it difficult to scale these services globally, often confining platforms to isolated and fragmented ecosystems.

Within this context, CTOC aims to overcome these limitations by enhancing both the quality and scale of Real-World Evidence (RWE). The platform achieves this through standardized data collection, active participation of medical professionals in validation processes, long-term tracking of user health data, and blockchain-based proof mechanisms that ensure data integrity.

By combining these elements, CTOC establishes a high-quality, large-scale data pool that can be reliably utilized by pharmaceutical companies, research institutions, and healthcare organizations. This approach positions CTOC not only as a precision nutrition service provider, but also as a foundational infrastructure for next-generation data-driven healthcare.

3.3 Real-World Evidence (RWE) Market Dynamics

Real-World Evidence (RWE) refers to health-related data collected from real-life environments rather than controlled clinical trials. This includes data generated from patients' daily activities, treatment adherence, lifestyle patterns, and long-term health outcomes. As the healthcare industry shifts toward data-driven decision-making, RWE is becoming an increasingly critical resource across multiple sectors.

RWE is actively utilized in areas such as pharmaceutical research and development, where it supports drug efficacy analysis and clinical trial optimization. It also plays a key role in insurance risk modeling, enabling more accurate assessment of individual health risks and personalized policy design. In addition, RWE contributes to the advancement

of digital therapeutics (DTx) and AI-driven healthcare solutions by providing large-scale, real-world datasets for training and validation.

Despite its growing importance, the current methods of acquiring RWE remain limited. Most data is still collected primarily within hospital settings, which restricts both the diversity and scale of available datasets. Meanwhile, a significant portion of valuable health data generated in daily life remains unstructured, unverified, and ultimately underutilized.

Another major limitation is the lack of medical validation in many existing data sources. Health applications and wearable devices often rely on self-reported inputs or raw biometric data without sufficient expert verification, resulting in low trust and limited applicability in industrial use cases. Additionally, users typically do not have ownership or receive economic benefits from the data they generate, further discouraging active participation and long-term data accumulation.

To address these challenges, a new approach is required—one that can simultaneously improve both the quality and scale of RWE. CTOC introduces a framework that combines standardized data collection, active involvement of medical professionals in the validation process, long-term tracking of user health data, and blockchain-based proof mechanisms to ensure data integrity.

Through this approach, CTOC enables the creation of a large-scale, high-quality RWE data pool that can be reliably utilized by pharmaceutical companies, research institutions, and healthcare organizations. By bridging the gap between real-world data generation and industrial application, CTOC positions itself as a key infrastructure for the future of data-driven healthcare.

3.4 CTOC Strategic Positioning

Category	Legacy Market	CTOC Protocol
Validation	Limited Verification	Medical Verification + On-Chain Proof
Incentives	No Incentive / Rebate-Based	Token-Based Economic Incentives
Network	Limited / Fragmented Infrastructure	Real-World Infrastructure (Distribution, Logistics, Hospitals)
Global	Country-Specific Fragmentation	Scalable Global Protocol

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Long-Term Value Expansion

- Global Health Data Standard Protocol
- Data-Driven Pharma R&D Partner

- Insurance & Health Finance Infrastructure
- Digital Health Economy Platform

4. Platform Architecture

4.1 C-SYNC Protocol Overview

The C-SYNC Protocol is the core engine of the CTOC ecosystem, designed to connect user health behaviors, real-world product usage, medical validation, and blockchain-based rewards into a single synchronized system. It transforms everyday health activities into structured, verifiable data and ultimately into valuable RWE (Real-World Evidence) assets.

The protocol operates through three interconnected layers, where each stage clearly defines its inputs, processes, and outputs.

SYNC 1: User Action (Life × Crypto)
This stage begins with user participation and focuses on converting daily health behaviors into measurable and rewardable activities.

- **Input**
  - User health actions (e.g., supplement intake, physical activity, lifestyle habits)
- **Process**
  - Data is captured through app interactions, checklists, and initial verification steps
  - Engagement is tracked and quantified within the system
- **Output**
  - CTOC token rewards distributed based on verified participation
  - Increased user engagement and retention within the ecosystem

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SYNC 2: Data Collection (Analog × Digital)
In this stage, user-generated data is aggregated and refined into structured datasets through multi-layer validation.

- **Input**
  - User activity data from SYNC 1
  - Additional inputs from wearables, surveys, and verification checkpoints

- **Process**
  - Hybrid data processing combining manual validation (e.g., checklists, OCR) and automated inputs (e.g., wearable biometrics)
  - Cross-validation across multiple data sources to improve accuracy
- **Output**
  - Multi-layered, structured datasets with improved reliability
  - Increased data quality score and consistency

SYNC 3: Value Creation (Action × Outcome)
The final stage converts validated data into high-value RWE assets that can be utilized across industries.

- **Input**
  - High-quality, multi-source datasets from SYNC 2
  - Medical data inputs such as patient-reported outcomes (PRO) and clinical records
- **Process**
  - AI-driven analysis and anomaly filtering
  - Medical expert validation and compliance with healthcare standards
- **Output**
  - Verified RWE (Real-World Evidence) assets
  - Data ready for industrial use (pharma, insurance, research)

Feedback Loop

The C-SYNC Protocol is designed as a self-reinforcing cycle:

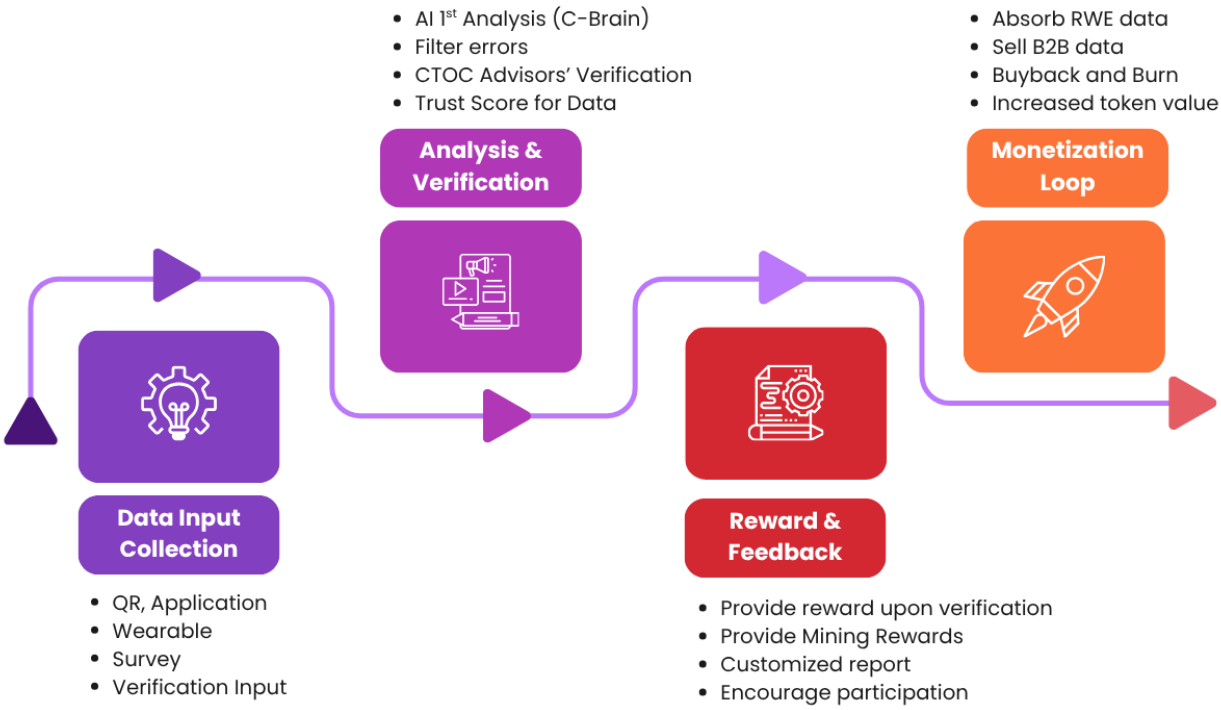
- Token value increases → user participation increases
- User participation increases → more data is generated
- More data improves quality → higher-value RWE assets
- Higher-value data drives demand → further strengthens token value

This feedback loop continuously enhances engagement, data quality, and overall ecosystem value, forming the foundation of CTOC's scalable health data economy.

4.2 End-to-End Ecosystem Flow

The CTOC ecosystem operates as a structured, end-to-end process in which data flows sequentially from collection to monetization. Each stage builds on the previous one,

ensuring that user-generated data is continuously refined, validated, and transformed into economic value.



Step 1: Data Input Collection
The process begins with the collection of user health data from multiple sources.

- **Input**
  - Supplement intake verification (QR scan, app input)
  - Wearable device data (activity, sleep, biometrics)
  - User surveys and feedback
  - Validator inputs (summarized medical indicators)
- **Output**
  - Raw, multi-source health data
  - Initial dataset capturing user behavior and conditions

Step 2: Analysis & Verification (C-BRAIN AI + Medical Layer)
Collected data is analyzed and validated through both AI systems and medical experts.

- **Input**

    - Raw data from Step 1
- **Process**
    - AI-based filtering (duplicate removal, anomaly detection)
    - Preliminary analysis by C-BRAIN AI engine
    - Review and validation by CTOC medical advisory group
- **Output**
    - Verified and refined health data
    - Reliability score assigned to each dataset

Step 3: Reward & Feedback Mining
Once data is verified, users are rewarded, reinforcing continuous participation.

- **Input**
    - Verified data from Step 2
- **Process**
    - Reward calculation based on data quality and engagement
    - Distribution of CTOC tokens
    - Feedback provided to users for improved health management
- **Output**
    - Token rewards
    - Increased user engagement and retention

Step 4: Monetization Loop (Value Creation)
Validated data is aggregated and converted into economic value within the ecosystem.

- **Input**
    - High-quality, verified datasets
- **Process**
    - Data anonymization and aggregation
    - Sale of RWE data to B2B clients (pharma, insurance, research)
    - Revenue generation from subscriptions and data services
    - Buyback and burn mechanism using platform revenue
- **Output**
    - Monetized RWE data
    - Increased token demand and reduced circulating supply

Sequential Value Flow

This process follows a clear and repeatable sequence:

Data Collection → Analysis & Verification → Reward Distribution → Monetization → Value Feedback

Each cycle strengthens the ecosystem by increasing data volume, improving data quality, and reinforcing user participation, ultimately driving sustainable growth in both platform value and token economy.

4.3 Core Technology Stack

The CTOC ecosystem is powered by a modular technology stack that integrates AI-driven analysis, real-world data infrastructure, and device-based data collection. Each component plays a distinct role in ensuring that data is accurately collected, validated, and transformed into high-value RWE assets.

C-BRAIN AI Engine
The C-BRAIN AI Engine serves as the intelligence layer of the ecosystem, responsible for analyzing user data, supporting medical validation, and generating personalized health insights.

- Personalized health analysis based on user data
- Recommendation of customized nutrition and supplement plans
- Detection of abnormal patterns, duplicates, and data inconsistencies
- Risk identification for excessive intake or harmful combinations
- Data reliability scoring and quality assessment
- AI-assisted support for medical expert validation processes

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Data Farm Infrastructure
The Data Farm Infrastructure acts as the large-scale data acquisition and aggregation layer, enabling efficient collection of high-volume, real-world data across institutions and user groups.

- Large-scale data collection through enterprises, schools, and organizations
- Integration with hospital networks and offline CTOC Health Centers
- Structured data acquisition through B2B contracts
- Reduction of customer acquisition cost (CAC) through group onboarding
- Continuous accumulation of long-term user datasets
- Centralized management of high-volume data pipelines

C-LINK Devices & IoT Layer
The C-LINK layer is responsible for automated and real-time data collection through wearable devices and IoT integration, minimizing manual input and improving data accuracy.

- Automatic collection of biometric data (e.g., activity, sleep, vital signals)
- Integration with wearable devices and health tracking systems
- Future implementation of supplement intake detection via IoT
- Enhancement of data integrity through automated input mechanisms
- Prevention of data manipulation and manual input errors
- Continuous real-time monitoring of user health conditions

4.4 On/Off-Chain Architecture

CTOC adopts a hybrid architecture that separates sensitive health data from blockchain-based proof layers, ensuring both security and scalability. The system is designed so that critical verification processes are recorded on-chain, while sensitive and high-volume data is managed off-chain.

- **On-Chain (Ethereum – Proof Layer)**
  The blockchain is used to guarantee transparency, integrity, and traceability of key events within the ecosystem.
  - Data commitment hashes
  - Validator registry
  - User consent records
  - Reward settlement records
  - Buyback and burn proofs
- **Off-Chain (Secure Data Vault)**
  Sensitive and high-volume data is securely stored off-chain to comply with privacy regulations and enable scalable processing.
  - Raw medical and health data
  - Personally identifiable information (PII)
  - AI input features and processed datasets

This architecture ensures that no sensitive personal data is stored on-chain, while maintaining verifiable integrity through cryptographic proof mechanisms.

4.5 Security & Trust Design

CTOC is designed with a multi-layered security framework to ensure data protection, system reliability, and operational transparency. Given the sensitive nature of healthcare data, security and trust are treated as foundational elements of the platform.

- Multi-signature wallet system for secure fund management
- Smart contract audits to ensure code reliability and safety
- Access control mechanisms separating data permissions by role
- On-chain policy commitment for transparent governance changes
- Data access based strictly on user consent
- Anonymization and de-identification to prevent re-identification risks
- Full audit logs for all data access and usage activities

This design ensures that both users and institutional partners can trust the integrity, security, and governance of the CTOC ecosystem.

4.6 Scalability & Interoperability

CTOC is built to support large-scale data processing and global expansion by ensuring both system scalability and interoperability with external platforms and regulatory environments.

- Off-chain computation for handling high-volume data efficiently
- API-based integration with external healthcare systems and partners
- Flexible architecture adaptable to country-specific regulations
- Modular system design enabling expansion across regions and use cases
- Support for integration with wearable devices, hospital systems, and enterprise platforms

By combining scalability with interoperability, CTOC enables seamless expansion into global markets while maintaining compliance with diverse regulatory frameworks and ensuring efficient system performance.

5. Business Model

5.1 Product Architecture

The CTOC product architecture is structured into four distinct categories, each designed to serve a specific role within the ecosystem—from mass user acquisition to high-value data monetization. These categories work together to create a scalable pipeline that increases both data volume and data quality.

Category A. C-CYCLE (Life-Cycle Oriented)
This category focuses on users across different life stages and is designed as the primary entry point into the ecosystem. It offers low-barrier services that enable large-scale user acquisition and data accumulation.

- C-Kids: Growth data tracking
- C-Mom: Pregnancy stage management
- C-Silver: Elderly care management
- Low price point for easy onboarding
- High user inflow and retention
- Large-scale data generation

Category B. C-GOAL (Goal-Driven)
This category targets users with specific health goals and generates more structured and higher-quality data through continuous tracking and engagement.

- C-Diet: Body fat and metabolism management
- C-Energy: Sleep and vitality tracking
- C-Beauty: Beauty and wellness optimization
- Integration with wearable devices
- Higher-quality behavioral data
- Mid-level ARPU (revenue per user)

Category C. C-DATA (Clinical Data Intensive)
This category focuses on generating premium-grade, clinically relevant data that can be directly monetized through B2B channels.

- C-Gene: DTC genetic data
- C-Blood: Periodic blood biomarkers
- High-reliability medical-grade data
- Premium data layer
- Direct linkage to B2B revenue (pharma, research, insurance)

Category D. C-TOGETHER (Group-Based)
This category is designed for group participation, enabling scalable expansion and cost-efficient user acquisition through bundled offerings.

- Family Pack: Family-based health programs
- Biz Wellness: Corporate and institutional wellness solutions
- Long-term contracts
- Reduced customer acquisition cost (CAC)
- Stable and recurring user base

Through this structured architecture, CTOC enables a natural progression from mass adoption to high-value data generation, ensuring both scalability and sustainable monetization within the ecosystem.

5.2 Revenue Streams

B2C Subscription Revenue
Recurring revenue based on monthly subscriptions, with an upselling structure (Basic → Standard → Premium)

B2B Data Monetization
RWE data sales and licensing model targeting pharmaceutical companies, IT firms, insurers, and research institutions

Box Media & Advertising
Monetization of delivery packages as advertising media, generating additional revenue through targeted advertising

5.3 Unit Economics

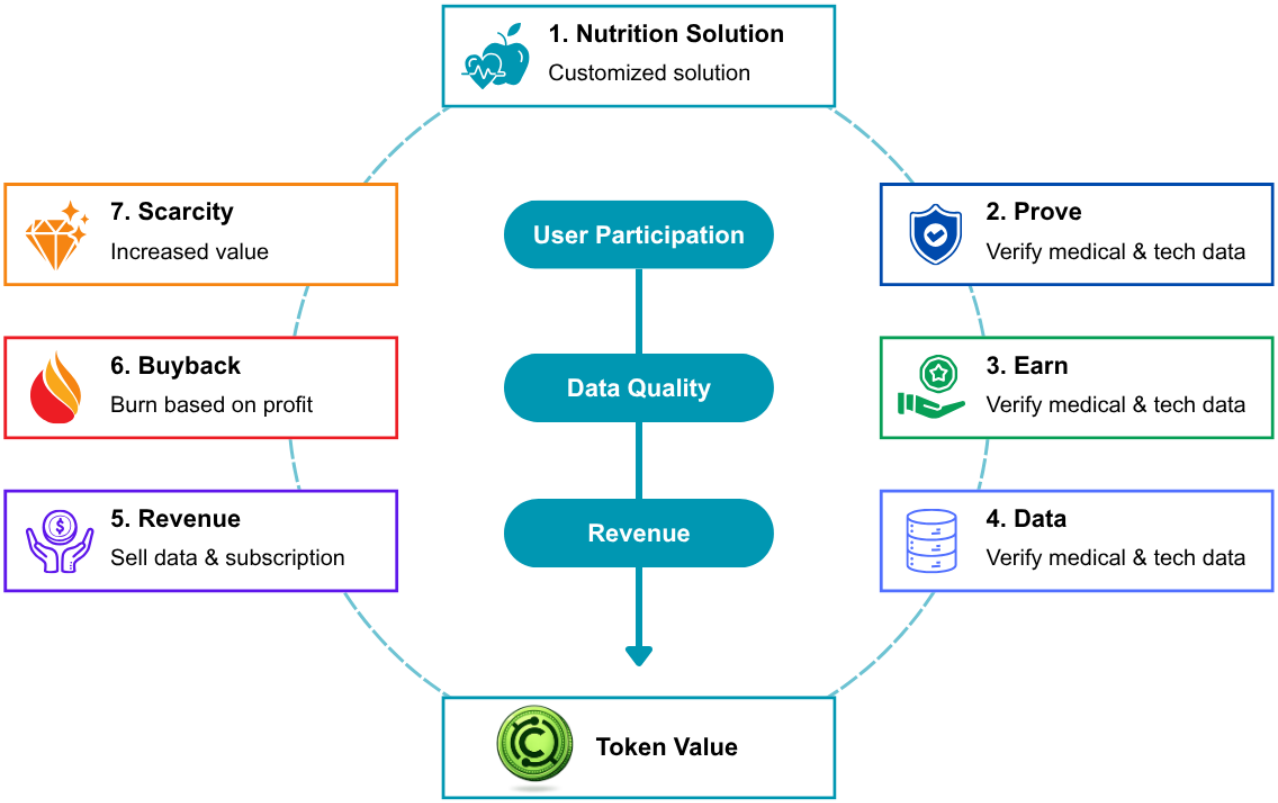
ARPU
Maximizing average revenue per user through subscription upgrades

Gross Margin
Driven by manufacturing and logistics efficiency

CAC
Cost reduction through data farm-based acquisition

LTV
Ensuring long-term subscription retention

5.4 Scaling Flywheel



5.5 Pricing Strategy (Indicative)

Tier	Price (Monthly)	Target Segment
Basic	₩10,000 – ₩30,000	Young users / Entry-level users
Standard	₩50,000 – ₩90,000	Working professionals
Premium	₩300,000+	High-value users

5.6 Long-Term Margin Expansion

- Expansion of private label (PB) product ratio
- Improvement in AI recommendation efficiency
- Logistics automation
- High-value data monetization

6. Token Economy

6.1 Ecosystem Flow

The CTOC ecosystem is structured as a closed-loop system in which real-world user activity generates data, data creates revenue, and revenue reinforces token value. This flow is directly connected to the platform's RWE (Real-World Evidence) production model and token economy design.

The cycle begins with user participation through subscription-based services and health programs. As users engage in activities such as supplement intake, lifestyle tracking, and continuous health management, real-world data is generated and accumulated within the system.

- User participation through subscription services (B2C)
- Continuous health data generation (intake, behavior, biometrics)
- Accumulation of real-world datasets

This data is then processed through the CTOC infrastructure, where it is structured, validated, and transformed into high-quality RWE. The combination of AI analysis (C-BRAIN), medical validation, and multi-source data integration ensures that the data reaches a level suitable for industrial use.

- AI-based data processing and filtering
- Medical validation and reliability enhancement
- Conversion into structured RWE datasets

Once validated, the data is monetized through B2B channels. Pharmaceutical companies, insurance providers, and research institutions utilize this data through licensing or data partnerships.

- B2B data sales and licensing
- Enterprise demand for high-quality RWE
- Generation of platform revenue

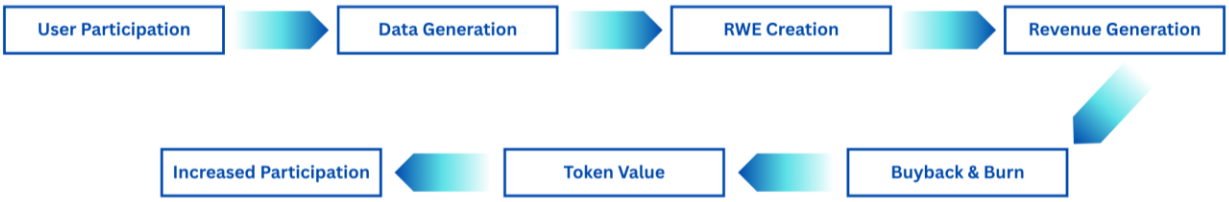
Revenue generated from both B2C subscriptions and B2B data monetization is then used within the token economy. A portion of the revenue is allocated to market buybacks of CTOC, followed by token burn mechanisms.

- Revenue-based market buyback of CTOC
- Token burn reducing circulating supply
- On-chain transparency of major actions

As circulating supply decreases, token scarcity increases, contributing to long-term value stability. This, in turn, incentivizes further user participation and strengthens the overall ecosystem.

- Reduced circulating supply
- Increased token value stability
- Reinforcement of user participation

This creates a self-reinforcing loop:



6.2 Token Utility

The CTOC token functions as the core utility asset within the ecosystem, directly linked to service usage, data transactions, and governance participation. Its utility is designed to align user activity, platform demand, and data monetization into a unified economic structure.

At the user level, CTOC is primarily used as a payment method within the platform. Users can utilize the token to access subscription-based services, with additional incentives provided when paying in CTOC compared to fiat currencies.

- Payment for in-app subscription services
- Discount incentives compared to fiat payments
- Increased token demand through recurring usage

At the premium service level, CTOC acts as a required payment mechanism for advanced healthcare services. High-value services such as DNA analysis and blood-based diagnostics are designed to be accessed through token-based payments, creating direct buy-side demand.

- Payment for premium services (DNA, blood analysis, advanced diagnostics)
- Access to high-value, data-intensive programs
- Structural token demand driven by premium users

At the enterprise level, CTOC is utilized within the data market as a medium of exchange for B2B transactions. Companies purchasing RWE datasets use the token for data acquisition, creating large-scale and continuous demand.

- Payment for B2B data packages
- Enterprise-level token demand (pharma, insurance, research)
- Integration into data licensing and partnership models

In addition, CTOC provides governance utility, allowing participants to contribute to key decisions within the ecosystem. Token holders can participate in discussions related to data policies, service direction, and ecosystem development.

- Participation in governance and policy decisions
- Influence over data usage and platform direction

Through these utility layers, CTOC is embedded across all major activities within the ecosystem. It is not only a transactional token but a core component that connects service usage, data economy, and governance into a single, demand-driven structure.

6.3 Token Algorithm

The CTOC token algorithm is designed to directly connect real-world revenue, token demand, and supply reduction into a single value reinforcement mechanism. Unlike inflationary reward systems, CTOC operates on a revenue-linked deflationary model where token supply is continuously reduced based on actual business performance.

At the core of the algorithm is the buyback and burn mechanism. Revenue generated from both B2C subscriptions and B2B data monetization is partially allocated to market buybacks of CTOC tokens. These tokens are then permanently removed from circulation through a burn process.

- Revenue generated (Subscription + Data sales)
- Allocation of a portion of revenue for buyback
- Market purchase of CTOC tokens
- Permanent token burn (supply reduction)

This structure creates a direct link between platform growth and token value. As revenue increases, the scale of buyback and burn also increases, leading to a continuous decrease in circulating supply.

- Higher revenue → larger buyback volume
- Larger buyback → increased token demand
- Token burn → reduced circulating supply
- Reduced supply → long-term price support

In parallel, the token distribution is designed to balance incentives and long-term sustainability. Tokens are distributed across ecosystem growth, community rewards, team, liquidity, and strategic partners, ensuring both early-stage expansion and long-term alignment.

- Ecosystem and platform growth allocation
- Community incentives and reward distribution

- Team and advisor allocation with vesting
- Liquidity provisioning for market stability
- Strategic allocation for partners and investors

Additionally, CTOC incorporates mechanisms to prevent excessive short-term sell pressure and maintain market stability.

- Controlled reward distribution
- Anti-dump structure (cooling-off mechanisms)
- Utility-based token consumption (utility sink)

Through this algorithm, CTOC establishes a closed-loop system in which real-world economic activity continuously drives token demand while simultaneously reducing supply. This creates a structurally deflationary model aligned with long-term ecosystem growth.

6.4 Value Correlation Between Token and RWE

The value of the CTOC token is structurally linked to the generation, quality, and monetization of RWE (Real-World Evidence) data. Unlike speculative token models, CTOC establishes a direct correlation between real-world data activity and token value through a revenue-connected economic loop.

At the foundation of this relationship is data generation. As users participate in the platform through subscriptions and health programs, continuous real-world data is produced. The scale of user participation directly impacts the volume of data accumulated.

- Increased user participation → higher data volume
- Continuous engagement → longitudinal data accumulation

The next layer is data quality. CTOC enhances the reliability and industrial usability of data through AI processing and medical validation. Higher-quality data increases its value in B2B markets.

- AI-based filtering and structuring
- Medical validation ensuring reliability
- Higher-quality data → higher industrial demand

As data becomes more valuable, it is monetized through enterprise demand. Pharmaceutical companies, insurers, and research institutions purchase RWE datasets for analysis, modeling, and product development.

- B2B data sales and licensing

- Increased demand for high-quality datasets
- Revenue generation from data utilization

This revenue is then directly connected to the token economy through the buyback and burn mechanism. As more revenue is generated from RWE, more tokens are purchased and removed from circulation.

- Revenue increase → expanded buyback
- Token burn → reduced circulating supply

This creates a clear correlation:

a. Data volume increases

b. Data quality improves

c. RWE value increases

d. Revenue increases

e. Buyback and burn scale increases

f. Circulating token supply decreases

g. Token value strengthens

In this structure, the token is not driven by speculative demand alone, but by the measurable growth of real-world data and its economic utilization. As the RWE layer expands in both scale and quality, the token's value is reinforced through actual revenue and supply reduction mechanisms, establishing a fundamentally grounded value model.

6.5 Community Growth & Token Mining Structure

The CTOC ecosystem is designed to drive community growth through a structured token mining system that rewards real-world participation and long-term engagement. Unlike traditional mining models based on computational power, CTOC adopts a behavior-based mining structure where users earn tokens by generating verifiable health data.

At the core of this system is participation-driven mining. Users receive token rewards by engaging in daily health activities and contributing data to the ecosystem.

- Supplement intake tracking and verification

- Lifestyle and health activity logging
- Continuous participation in health programs
- Integration with wearable data inputs

In addition to basic participation, CTOC incorporates a quality-based reward mechanism. Token distribution is not solely based on activity volume but also on the reliability and consistency of the data generated.

- Higher rewards for consistent long-term participation
- Data accuracy and validation reflected in reward levels
- Reduced rewards for low-quality or irregular data

The system also includes a subscription-linked mining structure. Users who participate through paid subscription services generate more structured and higher-value data, resulting in enhanced rewards.

- Subscription users receive higher mining efficiency
- Premium services linked to higher-value data generation
- Alignment between revenue contribution and reward allocation

To accelerate community expansion, CTOC integrates referral and group-based growth mechanisms.

- Referral rewards for inviting new users
- Group participation through family and enterprise programs
- Data farm-based onboarding for large-scale user acquisition

At the same time, the platform maintains a controlled emission model to ensure long-term sustainability.

- Gradual reduction of token emission over time
- Balanced distribution between incentives and ecosystem growth
- Mechanisms to prevent excessive short-term sell pressure

Through this structure, CTOC creates a community-driven ecosystem where user growth directly leads to data expansion, and data expansion reinforces token value. This establishes a sustainable loop in which participation, data generation, and economic incentives continuously strengthen one another.

7. Growth Strategy

7.1 B2B and B2C Growth

CTOC's growth strategy is designed to achieve rapid user expansion, scalable data accumulation, and long-term ecosystem dominance by combining B2C acquisition, B2B partnerships, and infrastructure-driven network effects.

At the initial stage, the focus is on aggressive B2C user acquisition through accessible entry products and subscription-based services. By lowering the barrier to entry and targeting broad user segments, CTOC aims to quickly build a large user base and generate continuous real-world data.

- Expansion of entry-level subscription products (C-CYCLE)
- Targeting mass users across different life stages
- Increasing daily active users through simple onboarding
- Building a large-scale initial data pool

7.2 User Growth

As the user base grows, the strategy shifts toward increasing data quality and ARPU through goal-oriented and premium services. This phase focuses on converting users into higher-value segments while improving the depth and reliability of collected data.

- Upselling to goal-based programs (C-GOAL)
- Integration of wearable devices for continuous tracking
- Transition to premium services (C-DATA)
- Improvement of data quality and monetization potential

In parallel, CTOC accelerates B2B expansion by leveraging accumulated RWE data. High-quality datasets are utilized to establish partnerships with pharmaceutical companies, insurers, and research institutions.

- Expansion of RWE-based data sales and licensing
- Strategic partnerships with healthcare and research organizations
- Positioning as a data infrastructure provider
- Creation of high-margin revenue streams

To scale efficiently, CTOC also adopts a group-based expansion strategy through Data Farm and C-TOGETHER models. This approach reduces customer acquisition costs while enabling large-scale onboarding.

- Enterprise and institutional onboarding (B2B2C)
- Family and group-based subscription packages

- Reduction of CAC through bundled acquisition
- Rapid scaling through network-based expansion

7.3 Geographic Expansion

From a geographic perspective, CTOC is designed for global scalability. The platform expands into multiple regions by adapting to local regulations while maintaining a standardized core infrastructure.

- Entry into key global markets
- Localization based on regulatory environments
- Standardization of data structure and protocol
- Cross-border scalability of the ecosystem

Ultimately, CTOC's growth strategy is built on a multi-layered approach:

- Rapid user acquisition → data accumulation
- Data accumulation → data quality improvement
- Data quality → B2B monetization
- Revenue → token value reinforcement

Through this structured expansion model, CTOC aims to establish itself as a leading global health data infrastructure platform driven by real-world data and sustainable token economics.

8. Roadmap

2026 Q1

- Whitepaper 1.0
- AI CareToc 3.0 RX Launch
- 500 Hospital Network
- 2,500 Medical Specialists Secured
- 38,000 Data Points

2026 Q2

- Platform Beta Testing
- Smart Contract Audit
- Whitepaper Domestic and International Legal Opinions Obtained
- Platform Beta Planning

2026 Q3–Q4

- Cryptocurrency Exchange Listing
- Platform Beta Testing
- 4,000+ Community Achieved
- CTOC App v2.0 + Wearable API
- CTOC Health Center Opening
- Data Farm (B2B) Pilot Launch

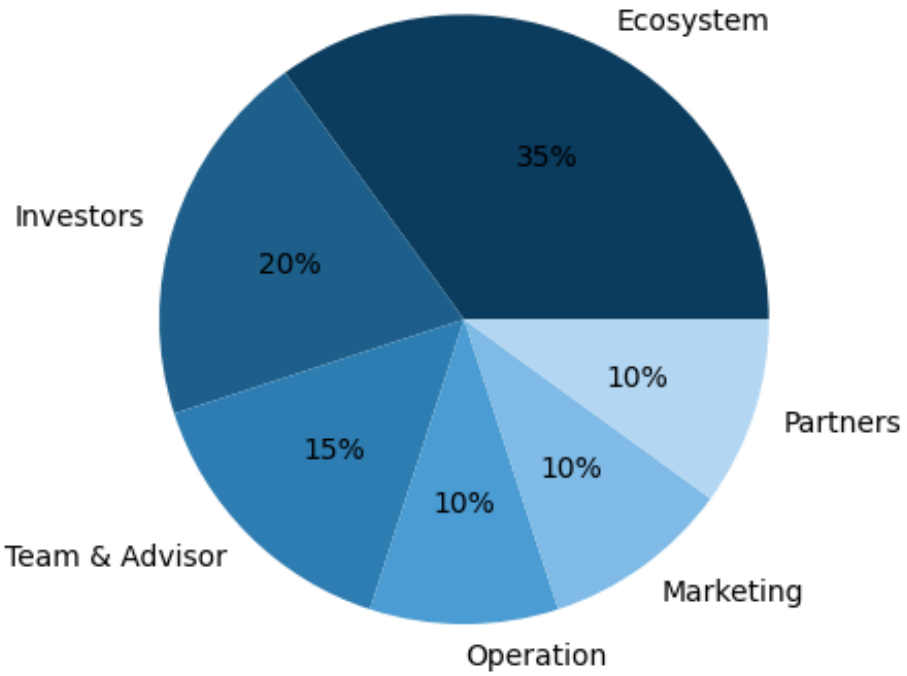
2027 Q1

- Platform Alpha
- 10,000+ Subscribers Achieved
- C-LINK Wearable IoT Launch
- Establishment of Local Corporation in Japan
- Launch of B2B Data Monetization

2027 Q2–Q4

- Expansion into 3 Southeast Asian Countries
- Launch of the Global Data Market
- Implementation of DAO Governance

9. Token Allocation



- Ecosystem (35%)
  Core allocation for platform growth, user incentives, and overall ecosystem expansion
- Investors (20%)
  Allocation for early investors and strategic backers supporting initial funding and growth
- Team & Advisor (15%)
  Reserved for core team and advisors with long-term incentives and alignment
- Operation (10%)
  Used for platform operations, infrastructure, and ongoing business execution
- Marketing (10%)
  Allocation for user acquisition, branding, and global marketing activities
- Partners (10%)
  Reserved for strategic partnerships, collaborations, and ecosystem expansion initiatives

10. Team

Jang Jeong Woo, CEO
“Healthcare business development expert specializing in pharmaceutical and biotech industries”
Education: Konkuk University, Graduate School of Medicine
Experience:

- CEO, LabswiseNet (Current)
- Operator of Korea’s first functional medicine platform, Caretoc
- Head of Planning, Dongkoo Bio & Pharma
- CEO, Kukmin Bio
- Selected as one of Korea’s Top 80 Representatives (SME sector, 2025)

Lee Ho Sung, CFO
“Extensive experience across diverse industries and business functions”
Education:

- MBA, University of Texas at Austin
- Yonsei University
  Experience:
- Former CEO, Daiso
- GS Home Shopping
- Andersen Consulting
- Samsung Electronics

Cho Hyun Jun, CSO
“Expert in international healthcare business planning, marketing, and consulting”
Education: Master’s Degree in Tourism, Hanyang University
Experience:

- Marketing Director, LabswiseNet (Current)
- Executive Director, H&Consulting
- Deputy Director, International Healthcare Business Division, Himchan Hospital
- Director, Hyundai Medis
- Consultant, Korea Health Industry Development Institute (KHIDI) / KTO

Park Seong Min, CTO
“Full-stack developer specializing in AI, Web/App, and DApp”
Education: B.S. in Computer Science, Soongsil University
Experience:

- Head of Development, LabswiseNet (Current)
- Kakao Group
- CTO, NagelTech
- Launched global edutech service ‘Hangeulu’

Kang Joo Hyoung, CMO / M.D.
“Key opinion leader in functional medicine, former director of top-tier obesity and dermatology clinics in Korea”
Education: Sungkyunkwan University, School of Medicine
Experience:

- Head of Medical System Research, LabswiseNet (Former)
- Director, Yeppumju Clinic
- Director, Sangsang Clinic
- Specialist in Family Medicine, Seoul National University Hospital

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Jeong Jung Sub, COO
“Expert in health functional food and beauty product development and operations”
Education: TAFE Business Course
Experience:

- Deputy Head of Operations, LabswiseNet (Current)
- Team Lead, Online Business, Iroom
- Head of Sales, Hanseng Cosmetics
- Team Lead, New Business, Biosmart
- Strategy Planning Team Lead, Indonesian Chamber of Commerce

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Im Hae Won, Art Director (AD)
“Branding expert in beauty and healthcare network systems”
Education:

- Ecole Supérieure des Beaux-Arts de Toulouse, France (DNAP)
- Konkuk University, Fine Arts
  Experience:
- Head of Healthcare Branding, LabswiseNet (Current)

- CEO, Design Company MENU.C
- Head of Brand Marketing, Jinioas
- Published illustrator (“A Good Day”), created medical illustrations for functional medicine publications

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Song Tae Young, Head of Sales
“Expert in health supplement sourcing, sales, and marketing execution”
Education: Shinsung University, Department of Mechanical Engineering
Experience:

- Head of Sales Operations, LabswiseNet (Current)
- BluePro Partners (Hospital Sales, MD)

Baek Seung Tae, Planning Manager
“Expert in health supplement product development and pharmaceutical marketing strategy”
Education: Kongju National University, Department of International Trade
Experience:

- Marketing & Planning Lead, LabswiseNet (Current)
- Korea Pharm (Sales & Planning)

Jeong Hyun, Sales Associate
“Practitioner in health supplement product development and platform operations”
Education: Yonsei University (Future), Data Science
Experience:

- Product Development & Operations, LabswiseNet (Current)

Kim Bo Hee, Marketing Manager
“Expert in health supplement product planning, design, and online marketing”
Education: Inje University, Department of Interior Design
Experience:

- Head of Product Planning & Design, LabswiseNet (Current)
- Pointnix Marketing

Yu Hui Beom, Associate
“Practitioner in raw material R&D and sales marketing for health supplements”
Education: Konkuk University, Department of Food and Nutrition
Experience:

- Sales & Marketing, LabswiseNet (Current)

Lim Bo Yeon, Assistant Manager
“Specialist in platform management and accounting”
Education: Yongin Songdam College, Department of Tax Accounting
Experience:

- Operations Management, LabswiseNet (Current)
- Sungnam F&G (Sales Management)

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