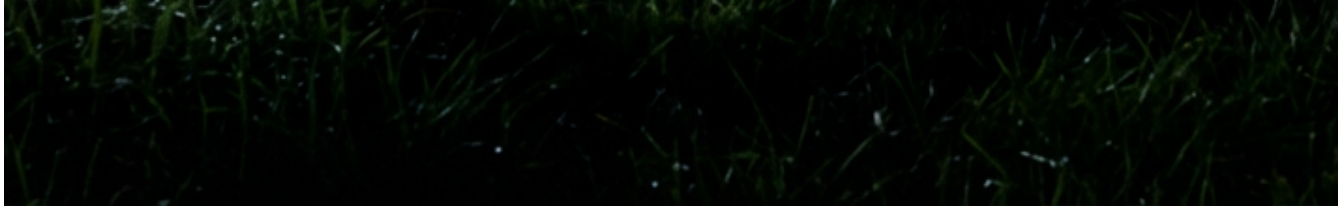

Table of Contents

1

Executive Summary

Computing is playing an increasingly crucial role in modern life, and this trend is expected to continue in the foreseeable future. The Web3 CyberPlaza Network Project aims to enable both individuals and institutions to benefit from this trend in an open and inclusive manner.

The Project introduces the CyberPlaza Platform, a decentralized marketplace that can be described as a "Taobao for Computing Resources" (□□□□□□). This platform matches the needs of users and service providers (SPs), covering the areas of High Performance Computing, Intelligent Computing, and Cloud Computing. Users gain access to a diverse range of computing power, storage, software applications, data and computing services in one place, meeting their specific needs cost-effectively. SPs, on the other hand, gain a global sales channel without limitations. Both SPs and users share in the success of the platform through ownership of CyberPlaza Tokens (CPTs[1]), representing governing shares of the "Taobao" Platform.

Payment and Settlement: Transactions on the platform are settled using USDC, a widely-adopted and regulated stablecoin, ensuring regulatory compliance and user familiarity. This approach eliminates the complexities and regulatory risks associated with proprietary stablecoins while maintaining transparent, dollar-denominated pricing.

Revenue Model: The platform generates revenue through multiple streams: SaaS Subscriptions (40–50%), which include monthly/annual subscriptions for platform access; Transaction Fees (25–30%), comprising 2–5% fee on computing resource purchases; API & Data Services (15–20%), offering premium API access and analytics; and Group-Buying (5–10%), generating margin from bulk purchasing as supplementary revenue. These revenues are distributed to CPT token holders through a transparent staking-rewards mechanism, enabling participants to earn sustainable yields (target 6–10% APY) by contributing to platform liquidity and governance.

[1]CPT is a conserved quantity in physics; all physical laws must not violate the conservation of CPT, similar to the conservation of energy. CPT (Carriage Paid To) is also an international trade term that means the seller will pay for the delivery of goods to the consumers. The name of our token carries both metaphors.

Decentralized Liquidity Pool: To support the platform's group-buying operations and ensure competitive pricing, the project implements a decentralized lending pool where participants can deposit USDC to earn interest (5–7% APY) plus CPT incentives (2–3% APY), while providing the platform with operational capital. This model replaces traditional reserve funds with a more transparent, auditable, and decentralized approach.

The CyberPlaza Platform does not directly own the computing resources listed on it. Instead, to ensure a continuous supply and competitive pricing, the platform leverages community-provided liquidity to secure computing resources through a "group buying" model (□□), inspired by the business model of Pinduoduo (□□□□□).

Note on Group-Buying: While group-buying is part of our strategy, it is a **supplementary revenue stream** (5–10% of total revenue) rather than the primary business model. Our main value comes from SaaS subscriptions and intelligent cloud management tools. Group-buying discounts will be pursued as the platform scales, but we do not depend on obtaining large bulk discounts from cloud providers for our core value proposition.

The group approach reduces the imbalance between a consumer and the providers, i.e., the industrial giants currently controlling all computing resources. This allows the platform to secure computing resources in bulk and offer them to users, creating a dynamic and thriving marketplace. The proceeds from the Pinduoduo business are distributed to CPT stakers through the staking rewards mechanism, with 30% of platform revenue allocated to the staking pool (reduced from 40% for better sustainability), 35% for operations and growth, 20% for buyback & burn, 10% for team, and 5% for emergency reserves.

The Core Team of the Project possesses extensive experience across areas relevant to the project, including distributed high-performance computing, public cloud services, heterogeneous computing, AI and Big Data applications, distributed system software development, DeFi investment, commercial crime prevention, and business and marketing of computing resources.

Overall, the CyberPlaza Network Web 3 Project aims to provide a decentralized marketplace for computing resources, benefiting both Users and Service Providers, while enabling all participants to share in platform success through CPT token ownership and staking rewards. With a strong Core Team and an innovative business model inspired by successful platforms like Taobao and Pinduoduo, the project creates a thriving, compliant, and sustainable ecosystem for all participants in the computing industry.

2

Vision and Mission

- Computing is a powerful means to advance humanity.
- The transformative potential of computing to advance humanity can be expedited through an open, inclusive and democratic Web 3 platform of computility.
- Taobao and Pinduoduo excel as businesses “for the people”, but they are not businesses “of and by” the people. A Web3 platform doing business on computility can be fully “for, of and by” the people.
- The ideal business is a shared-vision DAO[1], and the optimal DAO is a successful business.
- Our mission is to serve thy kind[2] by operating as a vision-driven DAO-business of computility.

[1] DAO stands for Decentralized Autonomous Organization

[2] “Thy kind” refers to humankind, emphasizing our commitment to serving all of humanity

3

Overview of Operation

3.0.1. The Challenges we aim to address

1. **Centralized Control**: The increasing significance of computing, specifically in the domains of Cloud Computing, High Performance Computing, and Artificial Intelligence (AI), is undeniable in our modern society. However, these crucial resources are predominantly controlled by major corporations, limiting the advantages to the majority of users. We believe that the solution lies in a decentralized marketplace, one that democratizes access to computing resources, fostering a more open and inclusive environment. In such a system, users are not just consumers, but also contributors who can influence the trajectory of computational development and have a stake in the future of computing.
2. **Inefficiency**: The current model of computing resource distribution often leads to imbalances, resulting in underutilization or oversaturation of resources. Our project aims to create a platform that efficiently matches the demand for computing power with available resources, thus optimizing utilization and minimizing waste.
3. **High Costs**: Currently, the majority of users face unnecessarily high computational costs. Our vision is to establish a marketplace platform that provides direct access to a wide range of computing power, storage solutions, software applications, data, and services at competitive prices. This not only reduces the overall costs but also widens the user base.
4. **Lack of Transparency**: The existing computing resource distribution system suffers from a lack of transparency regarding pricing, availability, and quality of service. We aim to build an open and impartial platform that empowers users to make well-informed decisions, backed by reliable information about resources, providers, and pricing.
5. **Lack of User Empowerment**: For most of us, executing ideas that require computation can be a cumbersome process, often requiring reliance on third-party services. For example, one has to rely on TV weather forecasts based on simulations carried out by a

government agency, or one has to entrust personal data to a centralized entity in order to create a digital twin for oneself. Our project aims at a decentralized marketplace that provides all necessary computational resources, enabling users to perform any computation they want while maintaining complete control.

For this important direction of development of the modern society, we need to solve the challenges of setting up a decentralized comprehensive ecosystem to enable a more accessible, and efficient allocation and utilization of computing resources.

3.0.2. Outline of Our Solution

1. We are launching a platform that operates as an open and democratic organization. The platform is akin to a marketplace for computing resources, reminiscent of platforms like Taobao (i.e., a "□□□□□□"). Ownership of this setup is disseminated among all holders of the CyberPlaza Token (CPT), who are the "shareholders" of our platform.
2. **Payment System**: Our platform uses USDC for all transactions, ensuring regulatory compliance, price transparency, and familiar user experience. This eliminates risks associated with proprietary stablecoins and aligns with global regulatory frameworks.
3. On the Platform, Service Providers (SPs) list their computing resources—including computing power, storage, software applications, data and services—for users to select according to their needs. In exchange for their services, SPs receive USDC payments directly, along with CPT token incentives based on their transaction volume.
4. The platform itself does not own the computing resources listed. However, it can procure computing resources through "group buying" (□□) for reselling to users. This model is akin to the □□□ (Pinduoduo) business strategy, using a decentralized liquidity pool where community members can deposit USDC to earn returns while supporting platform operations.
5. Our platform is open and inclusive. There are no restrictions on anyone assuming any or all of the four roles: Platform "shareholder", Liquidity Provider, SP, and User. This flexibility enables participants to engage with the platform in ways that best suit their needs and capabilities.

4

Description of the Roles in the Operation

4.1. The 4 roles of the Operation

The platform ecosystem consists of four distinct roles: Platform Role, Service Provider (SP) Role, Liquidity Provider Role, and User Role. There is no restriction on anyone taking up or leaving any or all of the 4 roles.

4.1.1. The Role of the Platform

Ownership and Participation

The Platform is an open and democratic organization owned by all holders of the Cyber-Plaza Token, CPT. Anyone can obtain CPT by participating in the project through (i) providing services to the Platform, (ii) being a Liquidity Provider, (iii) being a Service Provider SP, (iv) being a User, or (v) buying CPT on the secondary market.

Platform Functions

The Platform serves as a distributor, match-maker and guarantor, ensuring trust and facilitating transactions between the Users, the Service Providers (SP's), and the Liquidity Provider. The Platform maintains a list of Certified SP's (CSP's), and a list of "ordinary" SP's. CSP's are those who offer value of service beyond a certain level (currently defined as "providing services worth $10,000+ USDC monthly for sales within the coming 10 days"). "Ordinary" SP's are those offering services below the threshold. The Platform will begin only with CSPs in its first stage, and introduce SPs later.

The Platform will evaluate the CSP's, considering factors such as their track records, reputation, and performance metrics of the CSPs, and list the evaluation results on the Platform so that Users can make informed decisions. The "ordinary" SP's are not evaluated and User

uses them at their own choice. The Platform's role as a trusted intermediary adds a layer of accountability and increases the likelihood of the SPs fulfilling their commitments according to their SLA's. The Platform earns a portion of the transaction fee (difference between the price the Users paid and the price the SPs obtained).

Reserve Fund Management

The Platform is responsible for the operation of the "Reserve Fund" in USDC established by the Liquidity Provider who depositing USDC Tokens, which is the currency of the web 3 project, used for transactions in the marketplace. The Reserve Fund will generate interests for the USDC Tokens holders through various means, hence making the minting of the USDC Token a high-yield investment. These means include obtaining computing resources at a discount through group-buying (□□) for resell to the Users, i.e., carrying out a □□□□□ (Pinduoduo) business with the Reserve Fund. The group-buying will be from major cloud services worldwide, including AWS, Azure, Google Cloud, Alibaba Cloud, etc., and supercomputing centers in the US, Europe and China etc. The platform also obtains profit through investing into revenue-generating computing assets, such as Bitcoin mining facilities, and obtains interests through decentralized finance or traditional finance investments which have high liquidity.

Platform Participation and Future Expansion

The Platform may also participate in the other roles (Liquidity Providers, SP and User) as needed to bootstrap liquidity and ensure service quality. The Platform may extend the □□□□ (Taobao) and the □□□ operation (Pinduoduo) to beyond □□ (computing resources) in the future, if the CPT holders vote for it through the governance mechanism.

4.1.2. The Role of the Service Providers (SPs)

Registration and Service Listing

The SPs register their services on the Platform to provide computility (core-hour, storage, bandwidth, application software, data and services etc.) to the Users. The SPs list on the Platform the availability of their computing resources for different periods (e.g. 1,000 core-hours of Intel Core i7 in the next 24 hours, 10,000 core-hours in the coming month) and the price list, for the Users to use/book. The SP will also post various benchmarks (as required by the Platform) of the resource they offer, as well as their SLA.

Payment and Incentives

The SPs receive USDC payments directly when their services are selected and used by Users. Additionally, they earn CPT token incentives proportional to their transaction volume (2–5% of transaction value in CPT equivalent). SPs who stake CPT tokens can also receive reduced platform fees and enhanced visibility on the marketplace.

Quality Assurance

The platform's evaluation system verifies the quality and reliability of the CSPs, ensuring that all major SPs listed (CSPs) are trustworthy. By leveraging a reputation system, user reviews,

and performance metrics, the Platform establishes a merit-based ranking system for the CSPs. The evaluation system let Users make informed decisions in selecting SP's for any substantial usage, reducing the chances of choosing an unreliable or unsuitable SP.

Flexible Service Configuration

An User may choose to use a combination of SP's for a job, e.g., the major part of the computation with a CSP, while the last leg of data analysis using an "ordinary" SP (e.g., the laptop put up by the User herself). The Platform provides evaluation for the CSP chosen but not non-certified SPs.

4.1.3. The Role of the Liquidity Providers

Overview

Liquidity Providers are participants who deposit USDC into the platform's decentralized lending pool to support operational capital for group-buying and platform operations. This role replaces the previous "Enabler" concept with a more transparent and decentralized model.

How Liquidity Provision Works

The liquidity provision mechanism operates as follows: Participants deposit USDC into audited smart contracts and receive rUSDC tokens (receipt tokens) representing their deposit. The Platform utilizes the pooled capital for group-buying operations and working capital. Participants can withdraw deposits subject to pool liquidity availability.

Accessibility

Anyone can become a Liquidity Provider by depositing USDC into the pool, including SPs, Users, and external investors. The minimum deposit is designed to be accessible while ensuring meaningful contribution.

Returns and Benefits

Liquidity Providers earn returns through multiple mechanisms. They receive Interest Earnings of 6–8% APY paid in USDC from platform operational profits, and CPT Token Incentives providing an additional 2–4% APY in CPT tokens (with vesting), resulting in a Total Expected Yield of 8–12% APY combined. Beyond financial returns, they gain Governance Rights through CPT accumulation providing voting power, and Platform Benefits including reduced fees, priority access, and early product launches. Risk Protection is ensured through smart contract audits, an insurance fund (10% coverage), and transparent tracking.

4.1.4. The Role of the Users

Accessing Computing Resources

Users can access computing resources on the Platform through a simple process: (i) Deposit USDC into their platform wallet, (ii) Browse and select Service Providers from the marketplace, and (iii) Submit jobs through the Platform Portal with USDC payment.

Competitive Pricing

By utilizing the Platform as a Taobao for computing resources [illegible], Users have access to computing resources most suitable to them at competitive prices, often 10–30% lower than direct purchasing from cloud providers due to group-buying benefits.

Payment Protection and Transparency

The platform implements comprehensive payment protection and transparency measures. Smart contract escrow holds USDC payments until service delivery is confirmed, with automatic refunds if SPs fail to meet SLA requirements. The system ensures transparent pricing with no hidden fees, real-time performance monitoring and reporting, and a dispute resolution mechanism through platform governance.

User Incentive Program

Users earn CyberPlaza Tokens (CPT) through platform engagement via multiple earning mechanisms. Consumption Rewards provide users with 1–3% of spending amount in CPT tokens. Referral Bonuses allow users to earn CPT for bringing new users or SPs to the platform. Loyalty Tiers offer higher rewards for consistent platform usage, and Quality Feedback mechanisms enable users to earn CPT for providing detailed service reviews.

The benefits of holding and staking CPT are substantial. Usage Discounts allow users to stake CPT to receive 5–15% discount on services. Revenue Sharing enables staked CPT to earn platform revenue distributions. Governance Rights permit voting on platform parameters and feature priorities. Premium Features provide access to advanced tools, analytics, and API services.

5

CyberPlaza Token (CPT) and Tokenomics

5.0.1. CPT Token Overview and Utility

Payment System

The platform uses USDC as the primary payment currency for all marketplace transactions. This approach eliminates regulatory risks associated with proprietary stablecoins while ensuring regulatory compliance with global stablecoin frameworks, familiar user experience (USDC is widely adopted and trusted), transparent dollar-denominated pricing, seamless integration with existing DeFi infrastructure, and no risks associated with algorithmic stablecoin failures.

CyberPlaza Token (CPT)

CPT is the platform's native governance and utility token, designed to align incentives among all stakeholders and capture platform value growth.

Core CPT Utilities

Governance Rights CPT holders can vote on platform parameters (fee structure, revenue distribution ratios, etc.), propose and vote on new features, partnerships, and strategic directions, and participate in treasury management and capital allocation decisions. Voting weight is based on staked CPT amount and lockup duration (veToken model). The platform implements quarterly governance calls and a transparent proposal process.

Revenue Sharing through Staking Holders can stake CPT to earn platform revenue distributions (paid in USDC). 30% of platform revenue is allocated to the staking rewards pool (optimized for sustainability). Staking rewards are distributed weekly or monthly (governance decides). Longer staking periods earn bonus multipliers (up to 2.5x for 4-year lock). Target APY is 6–10% based on platform performance (more sustainable) and staking ratio. There is no impermanent loss risk (single-asset staking).

Usage Benefits Staking CPT provides 5–15% discount on platform services (tiered system), access to premium features including advanced analytics, API access, and priority support, reduced transaction fees for high-volume users, early access to new services and beta features, and priority allocation for high-demand computing resources.

Ecosystem Incentives The platform provides incentives across all user categories. Users earn 1–3% of spending amount in CPT (cashback program). Service Providers earn 2–5% bonus in CPT on transaction volume. Liquidity Providers earn 2–4% APY in CPT tokens as additional yield. Referrals earn CPT for bringing new users or SPs to the platform. Community Contributions are rewarded through bug bounties, content creation, and code contributions.

Deflationary Mechanism 20% of platform revenue is used for CPT buyback from the open market. Purchased CPT tokens are permanently burned (sent to 0x0 address), which reduces circulating supply over time, creating scarcity. The platform implements transparent quarterly burn events with on-chain verification, projected to reduce supply by 30–40% over 5 years. This benefits all CPT holders, not just stakers.

5.0.2. Revenue Model and Distribution Mechanism

Platform Revenue Sources

The platform generates revenue through multiple streams as shown in Table **??**.

Table 5.1: Platform Revenue Projections

Revenue Stream	Rate/Amount	Year 1	Year 2	Year 3	% of Total
SaaS Subscriptions	$50–500/month	$1.5M	$4M	$8–10M	**40–50%**
Transaction Fees	2–5% of GMV	$0.8M	$2.5M	$5–7M	**25–30%**
API & Data Services	Variable	$0.3M	$1.5M	$3–4M	**15–20%**
Certification Services	$5K–50K per SP	$0.3M	$0.8M	$1–2M	**5–8%**
Group-Buying Margins	5–10% margins	$0.2M	$0.7M	$1.5–2M	**5–10%**
Total Revenue	—	**$3.1M**	**$9.5M**	**$19–25M**	**100%**

Key changes from the original model include SaaS subscriptions now serving as the primary revenue source (40–50%) for predictability, group-buying reduced to supplementary (5–10%) which is realistic given early-stage scale, and API services emphasized (15–20%) as high-margin, scalable revenue. Conservative projections are based on 0.01% market penetration in Year 3.

SaaS Subscription Tiers

The platform offers tiered subscription plans as illustrated in Table **??**.

This tiered model provides predictable recurring revenue while still allowing freemium user acquisition.

Important Note: These projections represent our target scenario. We also model conservative scenarios with Year 1 revenue of $500K–1M to ensure financial sustainability even with

Table 5.2: SaaS Subscription Tiers (Illustrative)

Tier	Price/Month	Target Users	Features	Est. Users (Y3)
Free	$0	Individuals	2 cloud accounts, basic monitoring	10,000+
Starter	$50	Small teams	5 accounts, cost tracking, 1% CPT cashback	2,000
Professional	$200	Dev teams	10 accounts, AI optimization, API, 3% CPT	500
Enterprise	$500–2000	Companies	Unlimited, custom integration, 5% CPT	50–100

slower initial growth. Our business model does not depend on achieving large-scale group-buying discounts immediately.

Revenue Distribution Model

Platform revenue (100%) is distributed as follows: Staking Rewards Pool receives 30% (reduced for sustainability) and is distributed to CPT stakers in USDC proportionally. Operations & Development receives 35% (increased for growth), allocated to engineering & product development (15%), marketing & business development (10%), and infrastructure & security (5%). Buyback & Burn receives 20%, where CPT is purchased from DEX and permanently burned. Team & Foundation receives 10% for core team compensation (5%) and foundation operations (5%). Emergency Reserve receives 5% as a new buffer for volatility.

Staking Rewards Calculation Example

Consider a mature platform scenario in Year 3 with platform monthly revenue of $1,500,000. The staking pool allocation (40%) provides $600,000. If total CPT staked is 40,000,000 (40% of supply), and your stake is 10,000 CPT (0.025% of staked supply), then your monthly reward is $600,000 $\times$ 0.025% = $150 USDC, and your annual reward is $150 $\times$ 12 = $1,800 USDC.

If CPT price = $2, then your stake value is $20,000, and your APY is $1,800 / $20,000 = 9%. Plus additional benefits include voting rights on platform governance, service discounts (5–15%), and price appreciation from buyback/burn.

Liquidity Pool Returns for USDC Depositors

Liquidity Providers who deposit USDC into the lending pool earn returns as shown in Table **??**.

Key features include that deposits are utilized for group-buying operations (transparent on-chain tracking), a gradual withdrawal system prevents bank-run scenarios, an insurance fund covers up to 10% of pool TVL, smart contracts are audited by leading firms, and real-time APY updates are based on pool utilization.

Table 5.3: Liquidity Provider Returns

Component	APY	Paid In	Source
Base Interest	6–8%	USDC	Platform operational profits
CPT Incentives	2–4%	CPT	Token emission (vesting)
Total Expected	**8–12%**	**Mixed**	**Sustainable yields**

5.0.3. Token Allocation and Vesting Schedule

Total Supply and Allocation

Total Supply is 100,000,000 CPT (fixed, no inflation). The allocation breakdown is presented in Table **??**.

Table 5.4: CPT Token Allocation

Category	Allocation	Tokens	%	Lock & Vesting Terms
Community Incentives	**Total**	**55,000,000**	**55%**	**Performance-based release**
- User Rewards		25,000,000	25%	Released based on platform GMV milestones
- SP Incentives		20,000,000	20%	Released based on transaction volume
- LP Rewards		10,000,000	10%	5-year emission, front-loaded
Foundation		**17,500,000**	**17.5%**	**10% at TGE, 90% linear vest 24 months**
Private Sale		**12,500,000**	**12.5%**	**6-month cliff, 18-month linear vest**
Team		**15,000,000**	**15%**	**12-month cliff, 36-month linear vest**
Total		**100,000,000**	**100%**	

Key changes from the original include community allocation increased from 50% to 55% (removed USDC holders allocation), investor allocation reduced from 15% to 12.5% (community-first approach), team allocation reduced from 17.5% to 15% (stronger alignment), and elimination of the “Liquidity Provider” category (replaced with Liquidity Provider incentives).

Vesting Details

Community Incentives (55%) User Rewards (25M CPT) are released monthly based on platform GMV targets. The formula is: Monthly release = Base amount $\times$ (Actual GMV / Target GMV). The distribution period is 5 years, and unclaimed tokens roll over to the next period.

SP Incentives (20M CPT) involve quarterly releases based on transaction volume. Higher quality SPs (CSPs) receive bonus multipliers. The distribution period is 5 years, with performance-

based acceleration possible.

LP Rewards (10M CPT) feature front-loaded emission: Year 1 (40%), Year 2 (30%), Years 3–5 (30%). Weekly distribution goes to active liquidity providers, with bonuses for longer-term deposits. Vesting is 50% immediate, 50% vest over 6 months.

Team Allocation (15%) The team allocation includes a 12-month cliff (no tokens released in first year). After the cliff, there is 36-month linear vesting. The total vesting period is 4 years. The vesting contract is transparent and publicly verifiable.

Foundation Allocation (17.5%) 10% is released at TGE for initial operations (multi-sig controlled). The remaining 90% vests linearly over 24 months. These funds are used for partnerships, audits, legal, marketing, and grants, with quarterly transparency reports.

Private Sale (12.5%) The private sale includes a 6-month cliff period and 18-month linear vesting after the cliff. The total vesting is 2 years. An anti-dump mechanism limits selling to a maximum of 5% of daily volume.

5.0.4. Liquidity Incentives and veToken Staking Model

veToken Mechanism (Vote-Escrowed CPT)

We implement a veToken model inspired by Curve Finance, proven to align long-term incentives. Users lock CPT to receive veCPT (non-transferable). The lock duration determines the veCPT multiplier as shown in Table **??**.

Table 5.5: veToken Multipliers by Lock Duration

Lock Duration	veCPT Multiplier
1 week	0.01x
1 month	0.04x
3 months	0.25x
6 months	0.50x
1 year	1.00x
2 years	1.50x
4 years	2.50x (maximum)

Benefits of veCPT

Enhanced Governance Power provides 1 veCPT = 1 vote (vs standard CPT: 0 votes unless locked), where longer locks equal stronger voice in platform direction.

Boosted Staking Rewards include base APY of 8–12% (for 1-year lock), maximum boost of 2.5x (for 4-year lock), and boosted APY of up to 20–30% for maximum lock.

Fee Sharing Priority means veCPT holders receive revenue distributions first, and higher veCPT balance equals higher share of fee pool.

Exclusive Benefits include maximum service discounts (15%), priority access to oversubscribed resources, and exclusive governance proposals rights (requires minimum veCPT).

Liquidity Mining Programs

Phase 1: Launch Incentives (Month 1–6) features high CPT emissions to bootstrap liquidity. CPT/USDC pool on Uniswap V3 receives 2000 CPT/day. CPT single-stake receives 1500 CPT/day. USDC lending pool receives 1000 CPT/day equivalent.

Phase 2: Growth (Month 7–24) involves reduced emissions, focusing on sustainable yields. Total emission is approximately 2500 CPT/day, with increased weight on USDC lending pool (incentivize liquidity).

Phase 3: Maturity (Month 25+) features minimal new emissions (approximately 1000 CPT/-day). Revenue-driven yields become the primary attraction, and buyback & burn creates supply scarcity.

Anti-Whale and Fair Launch Mechanisms

The platform implements several protective mechanisms including maximum single purchase limit in private sale of $100K, vesting that ensures no large dumps at TGE, time-weighted voting that prevents governance attacks, gradual emissions that prevent farming-and-dumping, and community allocation greater than Team + Investors (55% > 27.5%).

Comparison: Traditional vs. veCPT Model

Table **??** compares traditional staking with the veCPT model.

Table 5.6: Traditional Staking vs. veCPT Model

Metric	Traditional Staking	veCPT Model
Minimum commitment	None	1 week
Maximum rewards	Fixed APY	Up to 2.5x boost
Governance power	Linear (1 token = 1 vote)	Time-weighted
Long-term alignment	Low	High
Mercenary capital risk	High	Low
Price stability	Lower	Higher

Why this model works: It is proven by Curve ($CRV) and battle-tested since 2020. It aligns incentives for long-term holders, reduces sell pressure from short-term farmers, creates strong governance participation, and provides sustainable tokenomics not dependent on perpetual inflation.

5.0.5. Go-to-Market Strategy and Conservative Scenarios

Cold Start Strategy

Successfully launching a two-sided marketplace requires careful sequencing. Our approach consists of three phases.

Phase 0: Seed Users (Months 1–3) Target is 50–100 paying users. Source includes ClusterTech existing customer base plus Web3 projects. Incentives include 3 months free trial, 50% lifetime discount for early adopters, and initial CPT airdrop (100K CPT total budget). Budget is approximately $150K (marketing + incentives).

Phase 1: Early Adopters (Months 3–12) Target is 500–1000 paying users and 10 enterprise customers. Tactics include referral program with $50 credit for both referrer and referee, content marketing through technical blogs and YouTube tutorials, hackathon sponsorships (Web3 community), and cloud reseller partnerships. Budget is approximately $500K (marketing + sales).

Phase 2: Growth (Months 12–24) Target is 2000–5000 users and 50 enterprise customers. Tactics include CPT staking incentives fully activated, strategic partnerships (Infura, Alchemy, etc.), and conference presence and thought leadership. Budget is $1M+ (scaled with revenue).

Financial Scenarios

To provide transparency to investors, we model three scenarios.

Conservative Scenario (High probability) Table **??** presents the conservative financial scenario.

Table 5.7: Conservative Financial Scenario

Metric	Year 1	Year 2	Year 3
Paying Users	200	1,000	3,000
ARPU ($/month)	$40	$60	$80
MRR	$8K	$60K	$240K
Annual Revenue	$96K	$720K	$2.9M
Operating Costs	$600K	$900K	$1.5M
Net Income	-$504K	-$180K	+$1.4M
Cumulative Cash	-$500K	-$680K	+$720K

Base Case Scenario (Medium probability) Table **??** presents the base case financial scenario.

Optimistic Scenario (Lower probability) Table **??** presents the optimistic financial scenario.

Key Assumptions Scenarios reflect different market penetration rates and pricing power. Operating costs scale with growth but benefit from economies of scale. The conservative scenario assumes minimal group-buying contribution. All scenarios assume primary revenue from SaaS and transaction fees. CPT incentive costs are included in operating costs.

Table 5.8: Base Case Financial Scenario

Metric	Year 1	Year 2	Year 3
Paying Users	500	2,500	8,000
ARPU ($/month)	$50	$75	$100
MRR	$25K	$188K	$800K
Annual Revenue	$300K	$2.25M	$9.6M
Operating Costs	$800K	$1.5M	$3M
Net Income	-$500K	+$750K	+$6.6M

Table 5.9: Optimistic Financial Scenario

Metric	Year 1	Year 2	Year 3
Paying Users	1,000	5,000	20,000
ARPU ($/month)	$75	$100	$150
MRR	$75K	$500K	$3M
Annual Revenue	$900K	$6M	$36M
Operating Costs	$1M	$2.5M	$8M
Net Income	-$100K	+$3.5M	+$28M

Funding Requirements Seed/Angel funding of $500K–1M will cover Year 1 losses and product development. Series A funding of $3–5M is planned for Year 2, if base case trajectory is confirmed. Series B funding of $10–20M is planned for Year 3+, for international expansion.

Break-even Analysis Conservative scenario reaches break-even in Month 30–36. Base Case reaches break-even in Month 18–24. Optimistic scenario reaches break-even in Month 12–18.

This range provides investors with realistic expectations while demonstrating scalability potential.

6

Technology and Architecture

6.1. Project Governing Infrastructures

6.1.1. General Description

CyberPlaza Network consists of CyberPlaza Foundation and CyberPlaza Community.

CyberPlaza Foundation is a non-profit decentralized organization dedicated to the successful operation of the CyberPlaza Platform, the promotion and development of computing technologies and applications, and supporting decentralized community building and development on the platform. The Foundation is owned and controlled by the CPT holders in the CyberPlaza Community. The Foundation is run by the Core members of the Network (See Sec. 8 of the White Paper) and Advisors appointed by the Foundation from time to time as needed. The Foundation will establish CyberPlaza Labs responsible for developing and researching new computing resource technologies and applications to promote technological innovation and progress needed by the platform.

CyberPlaza Community is the community section of the Network, composed of the Liquidity Providers, Users, and SPs, who participate in Foundation governance, development, and promotion together. Community members can promote the development and growth of the Platform by participating in governance, making proposals to the Foundation on business directions, technology developments and in exchanging and sharing experiences.

The tight connection between the CyberPlaza Foundation and the CyberPlaza Community is essential in achieving the Vision and Mission of the Network.

6.1.2. Smart Contract Modules

We will deploy CPT as an ERC20-compliant smart contract on Arbitrum (Layer 2 of Ethereum), chosen for its low transaction costs and high throughput. The platform will also bridge to other chains as needed for ecosystem expansion.

The CPT token contract includes the following key features: Standard ERC20 functionality

(transfer, approve, etc.), staking and lock functions for veToken mechanism, governance voting integration, reward distribution mechanisms, emergency pause functionality (governance-controlled), and upgradeable proxy pattern for future enhancements.

Note: The platform uses USDC directly for payments, eliminating the need for a proprietary stablecoin and associated regulatory risks.

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";

contract CPTToken is ERC20 {
  struct LockInfo {
     uint256 amount;
     uint256 lockTimestamp;
     uint256 unlockTimestamp;
  }

   mapping (address => LockInfo[]) public locks;

   constructor(uint256 initialSupply) ERC20("CPT Token", "CPT") {
     _mint(msg.sender, initialSupply);
   }

   function lock(uint256 _amount, uint256 _lockTime) public {
     require(_amount <= balanceOf(msg.sender), "Not enough CPT to lock");
     require(_lockTime > 0, "Lock time must be positive");

       uint256 lockUntil = block.timestamp + _lockTime;

       LockInfo memory newLock = LockInfo({
           amount: _amount,
           lockTimestamp: block.timestamp,
           unlockTimestamp: lockUntil
       });

       locks[msg.sender].push(newLock);

       _burn(msg.sender, _amount);

   }
```

```
  function unlock(uint256 lockIndex) public {
    require(lockIndex < locks[msg.sender].length,
            "No lock found at this index");
    require(block.timestamp >= locks[msg.sender][lockIndex].unlockTimestamp,
            "CPT still locked");

        uint256 amountToUnlock = locks[msg.sender][lockIndex].amount;
        locks[msg.sender][lockIndex] =
            locks[msg.sender][locks[msg.sender].length - 1];
        locks[msg.sender].pop();

        _mint(msg.sender, amountToUnlock);
    }

   function calculateLockedAmount(address user, uint256 lockDuration)
       public view returns (uint256) {
     uint256 totalLockedAmount = 0;

        for (uint256 i = 0; i < locks[user].length; i++) {
           if (block.timestamp - locks[user][i].lockTimestamp > lockDuration) {
               totalLockedAmount += locks[user][i].amount;
           }
        }

        return totalLockedAmount;
    }

}
```

6.1.3. Token Standard and Decimal Handling

The CPT token adheres to the standard ERC20 specification with 18 decimals, while USDC operates with 6 decimals. The platform employs SafeMath libraries for all conversion operations to prevent overflow and underflow errors. Price oracles incorporate decimal normalization logic, and minimum transaction thresholds mitigate dust attack vectors. For fractional amounts, the protocol implements conservative rounding mechanisms.

6.1.4. Vote-Escrowed Token Mechanism

The platform implements a vote-escrowed (ve) token model to align long-term stakeholder incentives. Users lock CPT for periods ranging from one week to four years, receiving non-transferable veCPT tokens that determine both governance weight and reward allocation.

The veCPT balance follows the relationship:

$$\text{veCPT} = \text{CPT}_{\text{locked}} \times \min\left(\frac{t_{\text{lock}}}{t_{\text{max}}}, 1\right) \times 2.5 \tag{6.1}$$

where t_{lock} represents the chosen lock duration and $t_{\text{max}} = 4$ years defines the maximum lock period. The multiplier of 2.5 provides maximum governance weight for four-year commitments.

As the lock period approaches expiration, veCPT balance decays linearly:

$$\text{veCPT}(t) = \text{CPT}_{\text{locked}} \times \frac{t_{\text{remaining}}}{t_{\text{max}}} \times 2.5 \tag{6.2}$$

This decay mechanism incentivizes continuous participation through lock extensions or token relocking.

Reward Distribution

Platform revenue collected in USDC is distributed with 30% allocated to the staking rewards pool on a weekly or monthly basis. Individual rewards are calculated proportionally to veCPT holdings:

$$\text{Reward}_{\text{user}} = \text{Revenue}_{\text{pool}} \times \frac{V_{\text{user}}}{V_{\text{total}}} \tag{6.3}$$

where V_{user} represents the user's veCPT balance and V_{total} denotes total veCPT supply. The effective APY varies dynamically based on staking participation and platform performance:

$$\text{APY} = \frac{\text{Annual Revenue Pool}}{\text{Total CPT Staked Value}} \times \frac{\text{veCPT Multiplier}}{\text{Average Multiplier}} \tag{6.4}$$

Security and Optimization

Smart contracts undergo third-party audits following OpenZeppelin standards, with multi-signature governance controlling parameter modifications. All reward distributions are tracked on-chain for transparency. Security features include reentrancy guards on external calls, role-based access control, emergency pause functionality, and upgradeable proxy patterns. Critical parameter changes enforce a 48-hour timelock.

Gas optimization employs Merkle tree-based batch claiming, lazy evaluation of veCPT balances, packed storage variables, and event-driven off-chain indexing. These techniques reduce transaction costs while maintaining security guarantees.

6.1.5. Oracle Integration

The platform integrates Chainlink decentralized oracles for price discovery and data aggregation. CPT/USD price feeds aggregate data from Uniswap V3 time-weighted average prices and centralized exchange quotations. USDC/USD verification employs Chainlink's verified feed with a 0.5% deviation threshold. Oracles update at 5-minute intervals or upon 1% price movements, with manual fallback mechanisms for redundancy.

For computing resource pricing, off-chain aggregators monitor public APIs of major cloud providers (AWS, Azure, GCP, Alibaba Cloud), calculating real-time market rates for compute, storage, and bandwidth. Aggregated pricing publishes to on-chain oracle contracts daily or when deviations exceed 5%.

Oracle security relies on consensus from at least seven independent Chainlink nodes. The system rejects price updates deviating beyond 10% from the median or data older than one hour. Circuit breakers automatically halt trading upon detecting manipulation attempts.

6.1.6. Governance Architecture

Critical platform operations require multi-signature approval through Gnosis Safe implementation. Treasury movements exceeding 100K USDC require 5-of-9 signatures, while smart contract upgrades mandate 7-of-9 approval with a 48-hour timelock. Parameter adjustments operate under 4-of-9 consensus, and emergency security responses utilize a 3-of-5 rapid response configuration.

The governance process follows a structured timeline: holders of 100K+ veCPT may submit proposals, followed by a 7-day community discussion period and 5-day on-chain voting phase where 1 veCPT equals 1 vote. Approved proposals execute after a 48-hour delay. The multi-signature council retains veto authority over malicious proposals, subject to quarterly review.

6.1.7. Cross-Chain Infrastructure

The platform implements LayerZero omnichain protocol for multi-chain deployment. Arbitrum serves as the primary chain for its low transaction costs and high throughput. Ethereum mainnet support targets institutional users requiring Layer-1 security, while Polygon integration offers reduced transaction costs for cost-sensitive users. Future expansion includes Optimism (Q3 2024) and Base (Q4 2024) for broader ecosystem integration.

Bridge security incorporates multiple safeguards: liquidity caps restrict bridged supply to 10% per chain, rate limiting constrains throughput to 1M CPT per hour, emergency pause mechanisms respond to anomalies, and a 5% insurance fund collateralizes bridged value against potential exploits.

6.1.8. Wallet Infrastructure

As a standard ERC20 token, CPT supports all compliant wallets including browser extensions (MetaMask, Rabby, Rainbow), mobile applications (Trust Wallet, Coinbase Wallet, imToken), hardware devices (Ledger, Trezor), and smart contract wallets (Argent, Gnosis Safe). Institutional custody integration with Fireblocks and Copper.co is planned for future deployment.

The web portal implements WalletConnect and Web3Modal protocols for standardized wallet connectivity. Upon connection authorization, the platform queries user balances, staking positions, and veCPT holdings to enable full feature access. Transaction signing follows EIP-712 standards for typed structured data, presenting human-readable messages that improve security against phishing vectors.

6.2. Marketplace Computing Infrastructure

6.2.1. System Architecture

The platform implements a three-tier architecture. The Web3 interface layer manages wallet authentication (WalletConnect), USDC payment processing, and CPT reward distribution through React.js and ethers.js frameworks. The orchestration layer coordinates the CHESS cluster management system, job scheduling, resource allocation, performance monitoring, and SP certification processes. The computing resource layer aggregates CSP clusters, public cloud APIs (AWS, Azure, GCP, Alibaba), private HPC centers, and future edge computing nodes.

Transaction flow proceeds through job submission with USDC deposit, smart contract escrow until completion, CHESS-mediated resource matching, execution on allocated SP infrastructure, real-time SLA compliance monitoring, result delivery with automated payment settlement, and proportional CPT reward distribution (1-3% users, 2-5% SPs).

6.2.2. HPC Infrastructure Components

High-Performance Computing infrastructure comprises specialized node types: compute nodes execute numerical simulations and data analysis with multi-core processors and substantial memory; visualization nodes render large datasets using GPU acceleration; I/O nodes manage data transfer between storage and compute fabric; storage nodes provide high-concurrency file systems; management nodes coordinate resource allocation and job scheduling.

Network fabric employs high-speed interconnect technologies (InfiniBand, Ethernet) for inter-node communication. Parallel file systems enable concurrent multi-node read/write operations for large datasets and intermediate results.

Software Stack

Monitoring and management tools provide administrators real-time health and performance data across system components including CPU utilization, memory consumption, and network traffic patterns. Cluster management software coordinates overall system operations with provisioning, monitoring, and maintenance capabilities for compute nodes across geographically distributed installations.

Resource allocation employs specialized schedulers managing CPU time, memory, and other computational resources to maximize system utilization efficiency. User interfaces span command-line tools and web portals for job submission and management. The HPC Application Center aggregates domain-specific applications and templates, enabling users to download and deploy computational tools directly. Integrated billing systems implement transparent pricing strategies across resource types and billing cycles, facilitating rational resource utilization and accurate cost accounting.

6.2.3. Payment and Settlement Infrastructure

Escrow Mechanism

Job submission initiates an escrow process wherein users approve USDC spending to the platform's smart contract. The escrow contract calculates estimated costs incorporating resource type (CPU/GPU/Storage), duration projections, oracle-derived market pricing, and a 20% buffer for potential overruns. USDC transfers to escrow upon approval, locked against the unique job identifier.

Upon job completion, actual resource consumption determines final settlement. Service Providers receive 95-98% of the fee directly in USDC, while the platform retains a 2-5% transaction fee. Excess escrowed funds return to users automatically, and CPT rewards distribute proportionally to both users (1-3%) and SPs (2-5%).

Dispute Resolution Protocol

SLA violations trigger graduated resolution mechanisms. Jobs failing within five minutes qualify for automatic full refunds. Partial completion generates pro-rated refunds based on actual delivery. Users may file disputes within a 72-hour window with supporting evidence. Cases exceeding 10K USDC value escalate to platform governance arbitration, while the insurance fund covers validated claims up to 100K USDC.

Service Provider Certification

Service Provider certification requires a multi-stage verification process. Initial registration demands company verification documents, infrastructure specifications, payment wallet addresses, and security compliance certificates (SOC 2, ISO 27001). Technical verification employs industry-standard benchmarks including High-Performance Linpack (HPL), High-Performance Conjugate Gradient (HPCG), STREAM memory bandwidth, MLPerf for AI workloads, and network latency assessments. Security audits verify AES-256 encryption, network isolation, and DDoS protection capabilities.

Approved candidates enter a 30-day probationary period with enhanced monitoring and a 10-job concurrency limit. Successful completion grants Certified Service Provider (CSP) status, enabling access to institutional clients and group-buying participation. CSPs appear in the premium directory with verified badges.

Ongoing compliance mandates 99.5% monthly uptime, sub-5-minute job initiation, and performance within 10% of advertised benchmarks. Quarterly re-certification validates continued capability. Security patches for critical vulnerabilities must deploy within 48 hours. Violations trigger graduated penalties: first offense warnings with 7-day remediation, second offense 30-day suspension, third offense certification revocation.

6.2.4. Technical Stack

The platform employs React.js 18+ with TypeScript for frontend development, ethers.js v6 and WalletConnect v2 for Web3 integration, and Material-UI for interface consistency. Backend architecture utilizes Node.js/Express.js or Python FastAPI for API services, PostgreSQL for

relational persistence, Redis for caching, RabbitMQ/Kafka for asynchronous job queuing, The Graph for blockchain event indexing, and Prometheus/Grafana for observability. DevOps infrastructure containerizes all services via Docker, orchestrates production deployment through Kubernetes, implements CI/CD via GitHub Actions, distributes content through Cloudflare CDN, and load balances traffic via Nginx.

Entry-level CSPs require 100+ CPU cores (Intel Xeon/AMD EPYC), 500 GB RAM, 10 TB NVMe SSD or 50 TB HDD, 10 Gbps network uplink, and optionally 4+ NVIDIA A100/H100 GPUs. Enterprise CSPs scale to 10,000+ CPU cores, 50 TB+ aggregate RAM, 1 PB+ parallel file system storage (Lustre/GPFS), 100 Gbps InfiniBand backbone, and 100+ high-end GPUs.

6.2.5. Platform User Functions

The CPT portal serves three primary constituencies: visitors exploring project information, users procuring marketplace resources (public cloud, HPC providers, hardware, software, storage), and Liquidity Providers executing USDC deposits and minting operations.

Public cloud consumers select between vendors including FQ, Amazon, and Huawei Cloud with pricing denominated in USDC alongside promotional offerings. Vendor selection redirects users to native portals (e.g., AWS) where standard operations proceed with payment routing through CPT platform escrow. The platform subsequently settles with vendors in legal tender.

HPC resource consumers compare vendors (CT clusters, regional providers, Huawei, AWS) across price points, hardware specifications, performance metrics, and regional bandwidth. Vendor selection and job submission occur through CHESS portal following adequate USDC deposit, with funds escrowed until completion whereupon fiat settlement proceeds. Storage procurement follows identical workflows.

Software options encompass user-provided applications or platform-listed solutions from Ansys, HPC software vendors, and the CHESS application center. Vendor onboarding accommodates hardware, storage, software, and ancillary computing products. The system validates hardware-software compatibility when both components originate from platform listings, ensuring execution compatibility. The architecture accommodates future functional extensions as requirements evolve.

6.2.6. Public Cloud Integration

The marketplace aggregates computing resources from major public cloud vendors including AWS, Azure, Google Cloud, and Alibaba Cloud. Pricing displays in USDC denomination with active promotions and availability status.

Vendor Integration Models

The platform employs three integration methodologies. Direct API integration utilizes reseller credentials for real-time provisioning through vendor APIs (AWS EC2, Azure Resource Manager, GCP Compute Engine), enabling automatic instance lifecycle management. The coupon code system addresses capacity constraints through pre-generated codes preventing overselling, available in value-based ($100 universal credits) or resource-specific (1000 GPU

hours, 10 TB storage) formats. The Managed Service Provider model positions CyberPlaza as an MSP with bulk pricing agreements, managing vendor accounts and providing consolidated billing.

Real-time pricing comparison displays compute, storage, and network costs with total ownership calculations. Group-buying discounts highlight potential savings relative to direct procurement.

Job Submission Workflow

The HPC job submission process encompasses resource selection through filtered CSP listings (CPU type, GPU availability, region, pricing), job configuration via Application Center templates or custom code with specified requirements (nodes, cores, memory, runtime, GPUs) and I/O locations, cost estimation with USDC breakdown and projected CPT rewards, payment authorization transferring USDC to escrow with contingency buffer, execution through CHESS scheduler allocation with real-time status monitoring, and completion settlement delivering results with automated payment distribution, excess refunds, and CPT reward issuance.

Advanced capabilities include batch submission supporting 100+ jobs with parameter sweeps, workflow dependencies defining sequential execution, checkpoint/restart for fault tolerance, spot instance bidding yielding 50-70% discounts on preemptible capacity, and auto-scaling for dynamic resource adjustment.

Service Providers manage operations through a centralized dashboard encompassing resource allocation, job oversight, financial tracking (USDC revenue, CPT accumulation), and performance analytics (customer satisfaction, utilization metrics).

6.2.7. Multi-Cluster Management System

The CHESS (Cluster High-performance Execution and Scheduling System) platform provides unified management across geographically distributed computing resources. The system integrates monitoring, scheduling, and resource allocation through a centralized web portal with role-based access control.

Core Capabilities

The platform supports comprehensive data management through web interfaces and SSH protocols, enabling file operations including upload, download, compression, and extraction. Node management operates through batch commands controlling power states, remote access (VNC, shell), and supporting heterogeneous hardware configurations (CPU, GPU, FPGA). Resource quotas enforce administrative policies on storage and compute allocation with automated alert generation upon threshold violations.

High availability architecture eliminates single points of failure through redundant management nodes and database replication. The system coordinates multiple geographically distributed clusters with unified user role propagation across sub-clusters.

6.2.8. Performance Monitoring Infrastructure

High-performance and cloud computing systems aggregate substantial hardware resources interconnected via high-speed networks forming low-latency, high-capacity configurations. Effective cluster management necessitates monitoring and management tools providing resource configuration, real-time performance tracking, fault detection with alerting, and usage state visualization.

CHESS Monitoring Capabilities

The CHESS monitoring system provides comprehensive cluster oversight through aggregated dashboards displaying CPU and memory usage, load status, storage state, and network throughput across Ethernet and InfiniBand fabrics. Custom time interval selection enables historical trend analysis and performance tracking. Dashboard displays offer customizable large-screen presentations with dynamic metric refresh for storage usage, job scheduling, and network statistics.

Multi-cluster monitoring extends across geographically distributed installations with adaptive screen layouts and resolution optimization. Rack visualization renders physical topology with integrated power management and VNC remote access controls. Single-node monitoring captures granular CPU, memory, storage, load, and network metrics while providing fault diagnostics and recovery recommendations. GPU monitoring tracks device-specific usage rates, memory utilization, temperature, and bandwidth. Job monitoring analyzes real-time execution status and queue composition with detailed CPU utilization, memory consumption, and node load statistics. Cluster alerts implement configurable thresholds with email and system notification routing.

Performance metrics collect at user-defined intervals capturing CPU, memory, disk, and network data. Physical topology visualization encompasses rack and node arrangements with threshold-based fault alerting.

Schedulers and Resource Management

Efficient scheduling and resource management are critical in multi-cluster systems. CHESS offers flexible scheduling policies including FIFO, preemption, and backfilling strategies. The system supports resource reservations with Quality of Service (QoS) configurations, advanced job submissions spanning serial, parallel, and GPU workloads, and queue management for load balancing optimization.

Job Submission and Management

Users submit jobs via command-line interfaces, web-based GUIs, or application templates for common workflows. Administrators configure resource quotas, priority levels, and submission policies to govern system access and utilization.

User Management

The platform supports self-registration and administrator-configured accounts with LDAP authentication integration for centralized management. Role-based access control implements

default roles (admin, department admin, user) with flexible privilege assignment governing system access and capabilities.

Notifications and Messaging

Users receive automated alerts for billing and usage messages alongside administrative announcements.

6.2.9. Application Center

The Application Center provides access to pre-installed HPC applications (Ansys, MATLAB, TensorFlow) through a browsable library. Users submit jobs via graphical templates with interactive parameter configuration. Output management encompasses log viewing, error analysis, performance metric tracking, and integrated visualization tools (TensorBoard for AI applications).

6.2.10. Hardware Performance Evaluation

The hardware performance evaluation module executes benchmarking tests measuring CPU and GPU performance alongside network throughput and latency. Resource efficiency analysis optimizes allocation strategies based on workload characteristics. Fault recovery metrics assess hardware reliability and recovery performance under failure scenarios.

6.2.11. Security Architecture and Compliance

Multi-Layer Security Model

The platform implements defense-in-depth security across three layers. Smart contract security employs formal verification using Certora or equivalent tools, annual third-party audits by CertiK, Trail of Bits, or OpenZeppelin, bug bounty programs offering up to $500K for critical vulnerabilities, upgradeable transparent proxy patterns with 48-hour timelocks, and circuit breakers for emergency exploit response.

Platform security encompasses API protection through OAuth 2.0 and JWT authentication with 100 requests/minute rate limiting, IP whitelisting for SP access, and 90-day API key rotation. Data encryption implements TLS 1.3 for transit protection, AES-256 for data at rest, end-to-end encryption for sensitive workloads, and Hardware Security Modules for key management. Infrastructure security deploys Cloudflare DDoS protection, Web Application Firewalls with OWASP rulesets, quarterly penetration testing, and SIEM systems for event monitoring.

Data privacy and compliance measures address GDPR requirements through account deletion rights, data portability, privacy-by-design principles, and EU data residency options. KYC/AML procedures implement basic verification for transactions exceeding 10K USDC monthly, enhanced verification for CSP certification, transaction monitoring for suspicious activity, and FATF Travel Rule compliance. Data isolation employs containerized or VM-based job execution, network segmentation, automatic post-completion data wiping, and cross-user leakage prevention.

Incident Response

A continuous security operations center monitors for anomalous activity including unusual withdrawals, smart contract exploits, and API abuse. Incident classification follows a four-tier severity model (Critical, High, Medium, Low) with 15-minute assessment targets. Critical incidents trigger immediate contract pausing and multi-signature notification within one hour. Public disclosure occurs within 24 hours for critical events, while post-mortem reports publish within 7 days. Recovery procedures deploy patches through governance channels and compensate affected users from the insurance fund.

Regulatory Compliance

The platform pursues SOC 2 Type II certification for data security and availability (Year 1 target) and ISO 27001 for information security management (Year 2 target). Cloud Security Alliance STAR certification validates CSP security posture. PCI DSS compliance remains under consideration for future payment method expansion.

6.2.12. Scalability and Performance Optimization

Horizontal Scaling Architecture

The platform scales horizontally through distributed database architecture employing PostgreSQL read replicas across regions, user data sharding by ID hash, Redis clustering for hot data (sessions, pricing), and Cloudflare CDN for static asset delivery.

Microservices architecture decomposes functionality into independently scalable services: User Service (authentication, profiles), Job Service (submission, scheduling, monitoring), Payment Service (USDC escrow, settlement, CPT rewards), SP Service (onboarding, certification, rating), Pricing Service (oracle aggregation), and Notification Service (email, push, on-chain events). Each service scales autonomously based on demand.

Load balancing implements geographic distribution across US, EU, and Asia regions with Kubernetes Horizontal Pod Autoscaler for dynamic capacity adjustment, Hystrix circuit breakers preventing cascading failures, and RabbitMQ queuing for asynchronous job processing.

Performance Targets

Metric	Target (Year 1)	Target (Year 3)
API Response Time	<200ms (p95)	<100ms (p95)
Job Submission Time	<5 seconds	<2 seconds
Payment Settlement	<30 seconds	<10 seconds
Page Load Time	<2 seconds	<1 second
Platform Uptime	99.5%	99.9%
Concurrent Users	10,000	100,000
Daily Transactions	50,000	1,000,000

Blockchain Scalability

Arbitrum Layer 2 deployment provides sub-$0.10 transaction fees and 40,000 TPS throughput for primary operations. Batch transaction processing groups reward distributions to amor-

tize gas costs. The Graph protocol handles off-chain event indexing. Future development includes state channels for high-frequency micro-payment scenarios.

Gas optimization techniques reduce transaction costs through Merkle proof-based reward claims (80% savings), lazy veCPT balance evaluation, packed storage variable encoding, and preferential use of event logs over state variables where functionally equivalent.

6.2.13. Disaster Recovery

Backup Infrastructure

Database backups execute daily (full) and six-hourly (incremental) with continuous transaction log replication. The system maintains 30-day retention before cold storage archival. Smart contract state leverages blockchain's inherent immutability, supplemented by archive node deployment and quarterly decentralized storage snapshots (IPFS/Arweave). User job results backup to designated storage endpoints, with platform metadata retention for 90 days and on-demand export capability for GDPR compliance.

Recovery Objectives

Table **??** specifies component-level recovery time (RTO) and recovery point (RPO) objectives.

Table 6.1: Recovery Time and Point Objectives

Component	RTO	RPO
Smart Contracts	N/A	0
Web Portal	1 hour	6 hours
Database	2 hours	1 hour
Job Scheduler	30 minutes	15 minutes

Active-active deployment across US and EU regions enables automatic DNS failover upon 5-minute primary region unavailability. Real-time inter-region data synchronization maintains consistency, with manual override capability for operational intervention.

6.2.14. Development Roadmap

Near-term development (6-12 months) prioritizes mobile applications for iOS and Android, enhanced API offerings (RESTful, GraphQL) for third-party integration, machine learning-based cost optimization, and additional blockchain bridge deployment (Polygon, Optimism).

Medium-term objectives (1-2 years) expand platform capabilities through edge computing support for IoT deployments, confidential computing integration (Intel SGX, AMD SEV) for sensitive workloads, decentralized storage protocols (Filecoin, Arweave), specialized AI/ML resource marketplaces, and exploratory quantum computing partnerships.

Long-term vision (2-5 years) encompasses full DAO governance transition, open decentralized compute protocol development, zero-knowledge proof implementation for privacy enhancement, cross-chain interoperability via IBC or equivalent protocols, and NFT-based tokenization of physical computing resources.

6.2.15. Summary

This chapter detailed the technical architecture integrating Web3 blockchain infrastructure with established HPC systems. The hybrid design bridges decentralized incentive mechanisms (CPT token, vote-escrowed governance) with the proven CHESS cluster management platform. Security architecture implements multi-layer protection through smart contract audits, infrastructure hardening, and regulatory compliance pathways (SOC 2, ISO 27001). The system scales from thousands to hundreds of thousands of concurrent users while maintaining sub-200ms API response times.

Relative to existing decentralized computing projects (Golem, iExec, Render), CyberPlaza differentiates through mature infrastructure (20+ year CHESS platform history), enterprise compliance orientation, multi-cloud integration beyond peer-to-peer architectures, pre-integrated application ecosystem, and hybrid marketplace combining decentralized access with professional SP certification. This positioning addresses enterprise computing requirements while enabling Web3 economic participation.

7

Development Roadmap

7.1. Roadmap and Fundraising Plan

7.1.1. Project Roadmap

The project development follows a phased approach commencing in 2026 Q1. Initial phase activities encompass fundraising initiatives, core team expansion, official website deployment, white paper publication, and community establishment across Twitter and Discord platforms.

2026 Q1 initiates alpha testing of protocol architecture and tokenomics mechanisms, validating core functionality and economic model parameters.

2026 Q2 delivers testnet release for public participation, enabling community testing and feedback collection across distributed infrastructure.

2026 Q3 launches mainnet for public access alongside Initial DEX Offering (IDO), marking full operational deployment and token distribution commencement.

7.1.2. Fundraising Plan

The fundraising strategy implements a three-stage token allocation approach. Initial offering in 2026 Q1 allocates 5% of CPT tokens targeting $4M USD capital raise, providing early supporter access at favorable valuations. Comparative market analysis positions the project against established decentralized computing networks, notably Golem's $200M valuation with sub-8,000 core infrastructure and $30K monthly utilization.

Subsequent funding rounds in 2026 Q2 and 2026 Q3 each allocate 5% of CPT supply at prevailing market valuations, enabling capital acquisition aligned with achieved milestones and demonstrated network growth. Progressive pricing reflects platform maturation and computational resource expansion.

8

Core Team, Foundation and Advisor

The Core Team

The Core Team assumes responsibility for establishing, maintaining, and advancing the platform's technical infrastructure. Development and maintenance scope encompasses the CHESS computing power distribution software, quality evaluation systems for listed computing resources, blockchain platform architecture, smart contract implementation, and supporting technical infrastructure.

Team expertise spans distributed high-performance computing, public cloud services, heterogeneous computing architectures, decentralized finance investment strategies, artificial intelligence and Big Data applications, financial technology solutions, distributed system software development, and computing resource commercialization.

Core Team Members

Dr. Wai-Mo Suen brings 25 years of expertise in high-performance computing technologies and modern computing business operations. As Founder and CEO of ClusterTech since 2000, he has delivered HPC, cloud computing, AI, and Big Data solutions while receiving multiple awards recognizing achievements in High-Performance Computing Business and Fintech innovation.

Dr. Harry Yu specializes in FPGA technologies as Founder and CEO of CTAccel, which secured Intel Capital funding in 2018. His investment acumen includes two years of decentralized finance experience achieving an 18% annualized ROI with a 4.6 Sharpe ratio.

Mr. Eric Leung contributes 15 years of HPC system administration experience complemented by a decade leading operations for a public cloud service provider.

Mr. GY Han provides 15 years of specialized experience in HPC system management software development.

Mr. Terence Leung offers nearly three decades of law enforcement expertise specializing in anti-money laundering and fraud investigations, augmented by extensive compliance and risk management experience. He has served as advisor and financial controller for quantitative and DeFi investment funds for five years.

Mr. Pong Po Lam Paul (□□□) founded Pegasus Fund Managers Ltd. and co-founded The Institute of Financial Planners of Hong Kong, The Institute of Financial Technologists of Asia, and the HK Institute of Financial Analysts & Professional Commentators. His public service encompasses roles with the Financial Services Development Council, MPF Advisory Committee, The Hong Kong Institute of Certified Public Accountants, and Securities & Futures Commission. He holds Certified Financial Planner (CFPCM) and Certified Financial Technologist (CFT) credentials.

Mr. XXX contributes extensive experience in IT business and marketing operations.

The Foundation, Investors, and SPs

The Foundation

The Foundation manages project development, promotion, and maintenance to ensure long-term sustainability. Responsibilities encompass token allocation and management, community building and engagement, marketing and promotional initiatives, project governance oversight, and technical and economic ecosystem support.

Foundation composition includes Core Team members and advisors possessing expertise in high-performance and cloud computing resource provisioning, AI and Big Data infrastructure, financial investment strategies, financial product development, and compliance with commercial regulations and anti-money laundering requirements.

The Investors

To be confirmed.

The Service Providers (SPs)

At platform launch, five Certified Service Providers (CSPs) have registered, contributing computational resources comprising xx CPU cores (equivalent to ??? X86 cores) delivering ??? FP64 TFLOPS, yy GPUs (equivalent to xxx TOPS for 32-bit tensor operations), zz FPGAs (equivalent to ??? TFLOPS of FP32 operations), and ??? PB of storage capacity.

Resource growth projections target 10× CPU expansion, 20× GPU scaling, 5× FPGA growth, and 10× storage capacity increase within one year following launch.

9

Partnership and Collaboration

Channel Partner

The Channel Partner is responsible for reselling services on the platform for clients or service providers who choose not to participate in tokenomics.

- **ClusterTech Ltd.**
  - (Additional partners can be added here.)

10

Market Position and Competitive Advantages

10.1. Market Context and Growth Dynamics

Global computational demand exhibits exponential growth, doubling approximately every two years, with acceleration anticipated in subsequent periods driven by artificial intelligence, machine learning, and data-intensive applications. This expansion necessitates a marketplace infrastructure combining the distributed vendor model of Taobao with the demand aggregation mechanisms of Pinduoduo, enabling efficient matching between computing resource providers and consumers at scale.

10.2. Positioning Against Asset Tokenization Platforms

The platform differentiates itself from conventional asset tokenization projects through focus on computational infrastructure as productive real-world assets rather than passive financial instruments. While traditional tokenization platforms primarily address illiquid physical assets or securities, CyberPlaza tokenizes active computing capacity, creating liquid markets for computational power with immediate utility and measurable performance metrics. This approach bridges decentralized finance primitives with tangible computing infrastructure, generating sustainable value through actual resource utilization rather than speculative dynamics.

10.3. Competitive Analysis: Web3 Computing Platforms

10.3.1. Market Landscape Overview

The decentralized computing ecosystem encompasses several specialized platforms: Golem and iExec target general-purpose computation, Filecoin and Arweave focus exclusively on data storage, while Render addresses graphics rendering workloads. CyberPlaza distinguishes it-

self through comprehensive infrastructure supporting heterogeneous computing requirements across CPU, GPU, FPGA, and storage resources with integrated orchestration capabilities.

10.3.2. Technical Differentiation

The platform leverages CHESS (Cluster HPC Efficient Scheduling System), representing over two decades of distributed computing development and production deployment experience. CHESS provides enterprise-grade resource management, application orchestration, and performance optimization absent in competing platforms. The system incorporates extensive Application Centers offering pre-configured software environments for diverse computational domains, reducing deployment friction and enabling immediate productivity.

10.3.3. Operational Maturity

Team expertise encompasses three decades of distributed and high-performance computing experience spanning research, development, and commercial operations. This background provides comprehensive understanding of computational workload characteristics, customer requirements, operational challenges, and market dynamics. The team maintains established relationships with computing resource providers and enterprise consumers, facilitating rapid network effects and adoption acceleration.

10.3.4. Resource and User Base

Platform launch benefits from pre-existing relationships with cost-effective computing infrastructure providers and organizations with substantial computational requirements. Current pipeline indicates demand exceeding Golem and iExec aggregate utilization by multiple orders of magnitude, reflecting enterprise adoption potential and established market presence. Resource diversity spans traditional HPC clusters, cloud infrastructure, and edge computing deployments, enabling workload optimization across performance, cost, and latency dimensions.

10.3.5. Integrated Ecosystem Approach

Unlike competing platforms addressing isolated computational needs, CyberPlaza implements a comprehensive ecosystem integrating resource provisioning, workload orchestration, application deployment, and usage monetization. This vertical integration reduces operational complexity, improves resource utilization efficiency, and creates stronger network effects as platform growth benefits all stakeholder categories simultaneously. The approach mirrors successful centralized cloud platforms while maintaining decentralization benefits through blockchain infrastructure and tokenized incentive mechanisms.

11

Current Status After 3 Months of Test Operation

12

FAQ

12.1. Frequently Asked Questions

1. **What can I get as a user on the □□□□□□?**

   Answer: You can choose for your usage the computational resources from many providers listed on the Platform, including CPU, GPU, FPGA computing power, storage, application software and services (e.g., to optimize your software on a particular hardware platform or migrate your cloud application from one cloud vendor to another). You can make a well informed choice of services, as the performances of the computing resources are evaluated and broadcasted by the Platform, the SLA's of the SPs are guaranteed by the Platform, and at a discounted price (like □□/□□), for using resources like AWS, Azure, GCP, and many computing centers and data centers. Further, through using it, you share the ownership of our Platform, and hence part of the profit of the Platform with the CPTs you are awarded (a □□ you partly own).

2. **Who are the users? The general public may not be the major users of computing resources. On the other hand, many institutional clients may not be able to participate in tokenomics.**

   Answer: The general public is currently using over $40B worth of computation on public cloud worldwide, which is indeed a small fraction of that of the institutional clients. For the institutional clients who cannot participate in tokenomics they can buy their computational usage in the usual B2B manner from the channel partners of the Platform (see the Partnership Section of the White Paper), paying legal tender.

3. **Some institutional service providers, e.g., AWS or a supercomputing center in China, may not be able to accept tokens in providing services. How can their resources be used by our Users through the Platform?**

   Answer: The Platform uses the "Reserve Fund" to buy the services of these service providers

with legal tender. Through Group-Buying (□□□), the Platform can offer the services with discount.

4. **Why would a cloud vendor like AWS yield to the pressure of Group-Buying?**

   Answer: Our Platform will be a valuable sales channel to AWS providing access to the web 3 and DeFi community. Further, with the pressure of competition between many SPs on the Platform, and for a large enough group-buying (□□) deal with some amount of pre-payment from the "Reserve Pool", a discount makes perfect sense to all cloud and computing resource vendors.

5. **How much business may the □□□□□□ have, assuming perfect operation?**

   Answer: The annual revenues of AWS was 35B (2019), 45B (2020), 62B (2021), 81.4B (2022) (of which approximately 93% consumed by institutional clients, and 7% by individual users, according to Gartner). If we take the worldwide total commercial computational business value to be 7 times that of AWS (in 2022, it was 552B worldwide, i.e., 7 times of AWS (Allied Market Research)), the total worldwide revenue would exceed 1 Trillion in 2024. If the □□□□□□ can capture 0.1% of the total market, it would be over 1B per year and would be increasing rapidly.

6. **What benefits can I get from participating as a Liquidity Provider or CPT holder?**

   As a Liquidity Provider (depositing USDC): Participants earn 5–7% APY in USDC from platform operational profits, receive additional 2–3% APY in CPT tokens (with vesting), achieve total expected return of 8–12% APY, maintain USDC liquidity (can withdraw with some notice period), and support platform growth while earning sustainable yields.

   As a CPT Holder/Staker: Participants can stake CPT to earn 8–12% APY (up to 15–20% with 4-year lock and boost), receive USDC revenue distributions from 40% of platform profits, benefit from deflationary buyback & burn mechanism (20% of revenue), receive governance rights (vote on platform direction), get 5–15% discounts on platform services when staking, access premium features and priority support, and gain early participation in new product launches.

   Why These Returns Are Sustainable: Unlike algorithmic stablecoins or ponzi schemes, our yields come from real transaction fees (2–5% of marketplace activity), group-buying margins (10–20% from bulk purchasing), value-added services (certifications, subscriptions, APIs), and transparent, auditable revenue streams.

7. **Why would money (either minter or investor) like to join the Platform (□□□□□□), instead of to other Web 3 projects?**

   Answer: For details, see the page on "Competitive Analysis against other 'asset tokenization projects' ", and "Competitive Analysis against other Web 3 computing resource projects". In short: Comparing to other assets, the value of □□ is growing more rapidly; and our team is particularly well qualified to establishing a □□□□□□.

8. **Some potential users or service providers may not be able to participate in tokenomics. How can they participate?**

Answer: These clients after finding suitable products on our Platform can buy them through the Partners of the Platform (see Agents listed in Section 10). Service Providers can also list their products on the Platform through the Partners. The transactions between the Partners and the Users/providers can be carried out through legal tenders without involving tokens.

9. **Some consumers have the impression that products on □□ and Pinduoduo are of lower quality. How can the Platform safeguard against this?**

   Answer: All products with listed price more than $10,000 USDC monthly must be Certified by the Platform. As described in Sec. 4 above, the Platform requires the Service Providers to list the performance of their services in terms of standard performance tests (including High-Performance Linpack, High-Performance Conjugate Gradient, STREAM Sustainable Bandwidth, HPC Challenge, MLPerf, ResNet-50 Image Classification, BERT Language Processing, CUDA Benchmark Suite, SPECviewperf graphics performance, DeepBench etc.). The Platform will verify the performance claimed by the service provider periodically, and list the performance index along with the price of the service for Users to choose from.

10. **Why do companies like AWS or Huawei Cloud want to sell their services on the Platform?**

    Answer: The cloud computing companies currently offer discounts to distributors to sell their services. The distributors employ sell teams to sell the services. The Platform in a sense serves as a distributor to these vendors, except that with the Web 3 setup, the vendors gain access to the web 3 and DeFi community.