# JumpDao Whitepaper

Gamifying the Real World: Location-Based Web3 Local Economy Platform

## 1. Executive Summary

JumpDao is a location-based (LBS) Web3 value-creation platform designed to conceal digital treasures in physical spaces, directly transforming human movement into local economic vitality.

While traditional platforms fight for user "Attention" confined within digital screens, JumpDao incentivizes users toward actual physical "Movement." By seamlessly fusing gamified exploration, a digital asset economy, and a robust O2O (Online-to-Offline) reward system, JumpDao establishes a revolutionary M2E (Move-to-Earn) local infrastructure where physical foot traffic immediately translates into merchant revenue and platform value.

Furthermore, JumpDao transcends typical gaming platforms by operating as a DAO (Decentralized Autonomous Organization). It allows users, advertisers, merchants, and regional operators to collaboratively expand the ecosystem and equitably share in its financial success. Users can hide treasures on a live map, deploy monsters and events, operate digital stores, and create targeted Treasure Zones to drive traffic to specific commercial areas. Once a local user base is secured, operators can recruit regional merchants to generate sustainable, long-term ecosystem revenue.

JumpDao is a new form of real-world Web3 economic platform that combines location-based gaming, tourism influx systems, local commercial platforms, digital asset economies, community reward systems, and DAOs. The ultimate goal is to convert human movement into value and build an autonomous economic network where that value is fairly distributed to all ecosystem participants.

## 2. Core Vision & Value Proposition

"Turning the Physical World into a Game Map"
Traditional platforms show advertisements to grab people's attention, but JumpDao makes people physically move to specific locations.

* Limitations of Legacy Advertising: High fatigue from intrusive screen ads, failing

to convert digital engagement into real-world offline boutique visits or local consumer spending.
* The JumpDao Solution: Converting the physical world into a massive, interactive game map. It delivers immersion and financial incentives to users while guaranteeing high-conversion foot traffic and immediate revenue growth for local small business owners and municipalities.

[Users: Explore & Move] -> [Local Merchants: Traffic & Sales] -> [Agents/DAO: Growth & Yield]

3. Platform Architecture & Tri-Token Economy

JumpDao implements a robust Tri-Token Architecture engineered to isolate day-to-day gameplay volatility from the core governance and settlement layers.

[Asset Classification Matrix]

* JumpToken (Type: Utility / Decimals: 0)
Primary Functions: Convertible into Game Coins at a fixed ratio. Exchangeable for USDT on PancakeSwap DEX for value liquidity. Grants exclusive lifestyle perks (complimentary travel, accommodations, transport vouchers). Supports staking, protocol dividend distribution, and DAO voting rights.
* HEX (Type: Settlement & Payment / Decimals: 18)
Primary Functions: Supports fiat-to-crypto (KRW) onboarding channels. Maintains a 1:1 fixed peg with USDT via native external HEXDAO smart contracts. Used as the practical settlement and payment method for real-world offline merchants.
* Game Coin (Type: In-Game Utility / Decimals: None)
Primary Functions: Distributed as a free reward for treasure hunting, monster slaying, store operations, and event participation. Utilized for creating treasures, deploying monsters, strengthening stores, and purchasing commercial vouchers. Swap ratio is fixed at 1 JUMP : 100 Game Coins.

4. Core Content & Systems

4-1. Treasure & Tiered Random Box System
The entirety of the JumpDao treasure ecosystem is structurally engineered to trigger continuous utility and deflationary buy-side pressure on the JUMP token.

* User-Driven Treasure Deployment: Users and enterprise advertisers can deploy digital treasures containing Game Coins, rare items, commercial discount vouchers, and high-tier Random Boxes onto exact GPS coordinates. The Game Coins required

for treasure generation are obtained by exchanging JUMP tokens. JUMP can be easily acquired on PancakeSwap, one of the world's largest decentralized exchanges. Advertisers and regional operators deploy Treasure Zones and events to attract customers, continuously purchasing JUMP and converting it into Game Coins.
* Social & Merchant Synergy: An interactive NPC hint framework and integrated localized comments foster community-driven coordination. Furthermore, users accessing treasures within the physical boundaries of a partner merchant unlock Jackpot Rewards, exclusive items, additional Game Coins, and critical stat-boosting gameplay buffs.
* Tiered Random Box Framework: Rewards are algorithmically segmented into four distinct tiers: Common, Rare, Epic, and Legendary. Advertisers and store operators convert JUMP into Game Coins to create random box events. By linking these to physical real estate rewards, high-value luxury goods, discounts, or vacation packages, they create a powerful customer draw.

* Core Economic Loop:
Purchase JUMP on PancakeSwap -> Convert to Game Coins -> Generate Treasures/Random Boxes -> Trigger User Movement/Offline Consumption -> Merchant Reinvestment -> Sustained JUMP Demand

4-2. Real-World Territorial Store System

* 1km Spatial Monopoly: Users can establish exclusive digital retail storefronts on the map. Each storefront claims an exclusive 1km radius territorial monopoly. Store owners automatically capture a 50% revenue share on all weapons, armor, and recovery consumables sold to passing treasure hunters.
* Territorial PvP Sieges: Store ownership is dynamic and vulnerable. If rival players deplete a storefront's HP through real-time combat, ownership of the territory and its associated cash-flow rights are forcibly transferred. To maintain dominance, operators must invest in defensive fortifications, level up their store's base stats, and strategically deploy defensive monsters.

4-3. QR & NFC Hybrid Missions
Verified full members hold the exclusive privilege to deploy physical-to-digital bridge markers to operate various real-world linked contents.

* Proof-of-Presence (PoP): Mandatory check-ins at historical landmarks, retail fronts, or tourist venues.
* O2O Activations: Large-scale offline treasure hunts embedded across local festivals, mega-malls, or urban expos.

* Peer-to-Peer Interactivity: Physical QR/NFC-triggered social challenges requiring real-world proximity between users.

## 5. Ecosystem Partners (Participant Models)

### 5-1. Local Merchants

Hotels, resorts, restaurants, cafes, and entertainment venues onboard as premium nodes. They digitize their storefront presence on the interactive map and host physical QR/NFC markers inside their facilities to secure guaranteed foot traffic. Transactions are seamlessly settled in HEX, which provides friction-free, instantaneous conversion back into stable liquidity without traditional credit card settlement delays.

### 5-2. Hyper-Incentivized Referral Program

New users onboarding via an existing member's personalized QR referral code are instantly credited with 1,000 Game Coins. The referring sponsor is systematically coded into the protocol layer to receive an automated, lifetime percentage split of all in-game item transactions, ecosystem fees, and off-chain merchant spending executed by their invitee.

### 5-3. Regional Agents

Regional Agents act as franchised operational administrators overseeing the macro-economic and event infrastructure of designated municipal zones.

* Core Mandate: Onboarding local commercial networks, coordinating city-wide tourism campaigns, and auditing spatial store defenses.
* Monetization Engine:

1. Activity Royalty: Lifetime transaction cut from all recruited users' network activities.
2. Territorial Franchise Cut: 50% base revenue share from all internal spatial stores operating within their jurisdiction.
3. B2B Merchant Fees: A structured revenue split derived from the gross transaction volumes of their recruited merchant network.
4. B2G/B2B Event Allocations: Direct operational funding secured from municipal tourism boards and corporate sponsorships for local marketing activations.

## 6. Tokenomics, Financial Models, & Distribution

### 6-1. Governance Staking & Protocol Dividends

JUMP holders can lock their capital into the core staking contract to acquire protocol voting rights and secure weekly HEX-denominated yield distributions.

* Dividend Treasury Sources: Platform-wide exchange fees + merchant transactional micro-fees + verified membership dues + premium voucher sales + exclusive Member Mall revenues + B2B corporate advertising distributions.
* Premium Staker Perks: Periodic distribution of complimentary luxury hotel stays, exclusive stock options vouchers, elite travel amenities, and priority access to premium VIP infrastructure.

6-2. Smart Contract-Driven Stock Option Vouchers
Long-term stakers and high-performing Regional Agents are systematically granted premium Stock Option Vouchers at deeply discounted rates.

* On-Chain Automation: Upon expiration, the underlying smart contract verifies lock-in conditions and automatically executes the right to purchase JUMP at the predefined, below-market strike price.
* Unrestricted Liquidity: These options vouchers operate as fully tokenized yield-bearing vehicles, allowing P2P trading and transferability on open marketplaces prior to maturity. All execution rights automatically transfer to the final on-chain holder.

6-3. Supply Metrics

* Total Supply: 1,000,000,000 JUMP (Fixed. No minting functions present in the smart contract).

6-4. JUMP Utility Token Holder Ledger (As of May 30, 2026)

* Smart Contract Address: 0xA3C35c52446C133b7211A743c6D47470D1385601

[Rank and Allocation Share]
Rank 1. DAO Governance Treasury : 505,618,821 JUMP (50.5618%)
Rank 2. DAO Native Exchange Pool : 490,063,000 JUMP (49.0063%)
Rank 3. Team & Founders : 4,000,000 JUMP (0.4000%)
Rank 4. Early Contributors Tier 1 : 250,000 JUMP (0.0250%)
Rank 5. Early Contributors Tier 2 : 44,000 JUMP (0.0044%)
Rank 6. Early Contributors Tier 3 : 12,489 JUMP (0.0012%)
Rank 7. Early Contributors Tier 4 : 6,000 JUMP (0.0006%)
Rank 8. Development Dev Loss (Alpha) : 5,600 JUMP (0.0005%)
Rank 9. Development Dev Loss (Beta) : 90 JUMP (0.0000%)

* Total Processed Share: 99.9998%

## 7. Technical Architecture

JumpDao utilizes a highly optimized, dual-layer hybrid architecture designed to maintain institutional-grade security, prevent location fraud, and handle concurrent real-time transactions at scale.

### 7-1. Anti-Spoofing GPS Verification Engine

Utilizes the native client navigator.geolocation combined with the Google Maps API for high-fidelity spatial telemetry tracking. To completely negate GPS spoofing and location emulation software, critical actions—such as opening treasures, checking in to stores, and initiating PvP sieges—must pass an asynchronous, double-coordinate validation algorithm executed via serverless Firebase Cloud Functions.

### 7-2. Web2-Friendly Custodial Wallet System

Built on the hyper-scalable opBNB Mainnet utilizing ethers.js v6. To eliminate the standard onboarding friction of Web3, JumpDao implements an invisible custodial wallet infrastructure. Users do not need to manage mnemonic seed phrases. Private keys are encrypted using bank-grade AES-256-GCM and safely stored in sandboxed servers, while transaction gas costs are fully abstracted away through an automated Gas Mentoring relayer contract paid by the operator.

### 7-3. Real-Time Map Rendering & Low-Latency Comms

Implements a custom high-performance HTML5 Canvas overlay engine pinned directly atop Google Maps API to seamlessly render thousands of concurrent monsters, interactive chests, and dynamic player nodes at 60 FPS. By utilizing an optimized IntersectionObserver coupled with stateful client-side throttling, browser overhead is reduced. Real-time battle calculations and positional vectors are handled via a dedicated Railway Node.js WebSocket server to achieve near-zero latency.

### 7-4. Decentralized Database & Infrastructure Optimization

User state, structural metadata, and authentication profiles are managed via a distributed Firestore + Firebase Auth + Cloud Functions v2 stack. High-frequency transaction logs, real-time battle ticks, and ephemeral spatial telemetry are routed completely away from Firestore into a standalone WebSocket architecture backed by a relational PostgreSQL instance, eliminating database read/write cost inflation while maximizing operational throughput.

7-5. Web-Native WebAR Module
Completely eliminates application store boundaries. By utilizing standard web-native getUserMedia hardware camera access combined with device gyroscope/magnetometer data (DeviceOrientation), JumpDao overlays high-fidelity 3D assets directly into the user's physical environment through any basic mobile web browser.

8. Strategic Competitive Matrix (Global Project Comparison)

JumpDao marks the third major evolution in decentralized incentive design, advancing past the structural flaws of early P2E and M2E platforms by directly linking with the physical economy.

[Project Comparison Matrix]

Dimension: Core Model

* Axie Infinity (Vietnam): Play-to-Earn (P2E)
* STEPN (Australia): Move-to-Earn (M2E)
* JumpDao (DAO): Move-to-Economy (M2E 2.0)

Dimension: Core User Action

* Axie Infinity (Vietnam): Turn-based game play
* STEPN (Australia): Linear walking or running
* JumpDao (DAO): Strategic real-world venue check-ins

Dimension: Real Commerce Integration

* Axie Infinity (Vietnam): None (Isolated Virtual Loop)
* STEPN (Australia): None
* JumpDao (DAO): Native (Direct Offline Retail Linking)

Dimension: Tourism Sector Synergy

* Axie Infinity (Vietnam): None
* STEPN (Australia): Extremely Restricted
* JumpDao (DAO): Native (Municipal & B2G Integrations)

Dimension: Merchant Revenue Models

* Axie Infinity (Vietnam): None
* STEPN (Australia): None
* JumpDao (DAO): Integrated (50% Local Revenue Splits)

Dimension: B2B Ad Capital Ingestion

* Axie Infinity (Vietnam): None (Relies entirely on new users)
* STEPN (Australia): None
* JumpDao (DAO): Native (Advertisers drive token utility)

Dimension: Core Scale Mechanism

* Axie Infinity (Vietnam): In-game asset dilution
* STEPN (Australia): Virtual sneaker inflation
* JumpDao (DAO): Regional Agent Franchise Expansion

Dimension: Real Economy Integration

* Axie Infinity (Vietnam): Extremely Weak (Ponzi structure limitations)
* STEPN (Australia): Weak
* JumpDao (DAO): Absolute (Backed by Off-Chain Capital)

* Global Precedent Analysis:

* Axie Infinity: Developer Sky Mavis is a game studio headquartered in Ho Chi Minh City, Vietnam. Co-founder and CEO Nguyen Thanh Trung is also a Vietnamese developer. During the 2021 NFT/GameFi boom, it grew to a peak market capitalization of approximately $10 billion, serving as the first global blockchain success case originating from Vietnam.
* STEPN: Developed by Find Satoshi Lab (FSL), led by co-founders Yawn Rong and Jerry Huang, it is generally classified as an Australia-based Web3 project. It ignited the Move-to-Earn craze in 2022, growing its market cap to billions of dollars based on the GMT token.

From JumpDao's perspective, Axie Infinity proved that gaming actions can be tokenized into an economy, and STEPN proved that physical activity could be financialized into an asset class. JumpDao introduces the next phase: Move-to-Economy. Instead of just playing games or walking without a purpose, it connects actual store visits, tourism, and local consumption directly to a sustainable token economy.

## 9. Conclusion & Expansion Roadmap

JumpDao is not just a mobile game. It is a spatial computing-based Web3 economic platform that connects the physical world into a massive protocol economy map. As people move, tourists influx, and local commercial districts activate, economic activities within the ecosystem multiply, directly accelerating the growth of JUMP token and platform value.

Furthermore, JumpDao rejects structures where a single enterprise or operator monopolizes profits. Instead, it realizes a decentralized autonomous organization (DAO) where users, advertisers, merchants, regional agents, and staking participants all actively participate in ecosystem growth and transparently share the yields. Advertisers successfully drive foot traffic, users acquire fair rewards, merchants gain solid revenues, and stakers receive the fruits of platform growth.

By standardizing our verified deployment template across university campuses, entertainment hubs, and premium shopping strips, JumpDao aims to establish 100 core regional Treasure Zones globally. Securing a conservative benchmark of just 1,000 highly active daily users per territorial zone scales the platform into:

* A unified 100,000-user hyper-local network
* One-stop integration of thousands of physical offline merchants
* A permanent corporate advertising token-sink that drives token demand

Completely differentiated from traditional web-based GameFi projects, JumpDao is positioned to lead the market as a massive Web3 ecosystem deeply rooted in the physical real-world economy. Proving real-world value through digital assets—JumpDao begins the new economy of movement.