

## A Scalable Orbit AnyTrust EVM-Compatible Blockchain for Web3 Gaming

designed for mass adoption

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PlayBlock, is a Layer 2 blockchain network designed specifically to address the evolving needs of the expanding Web3 gaming community. The rapid growth of the Web3 gaming community demands a blockchain infrastructure that caters to the unique requirements of game developers and users. PlayBlock aims to fill this gap by combining the familiarity of Web2 concepts with the power and decentralization of blockchain. The paper highlights the existing challenges faced by developers, particularly transaction fees, technical complexity, and introduces PlayBlock as a solution to enhance scalability and reliability while reducing dependencies and expenses.

PlayBlock leverages builds a scalable and reliable environment for developers and users in the gaming sector.

This whitepaper outlines the key features and innovations of PlayBlock, emphasizing its focus on automation, web3 functions, and a dedicated wallet designed for the gaming community.

## The Current State of Blockchain x Gaming

## Blockchain x Gaming – A Paradigm Shift

The gaming industry stands as a behemoth, with an astounding 2.9 billion players worldwide and a revenue of \$180.3 billion in 2021, projected to reach \$268 billion by 2025. This colossal growth, outpacing other entertainment sectors, has not come without its share of challenges, particularly in the treatment of the creative talent and indie dev studios behind the games. A perception of disposable labor have plagued the industry, creating an environment where passionate developers often sacrifice personal well-being for their love of creating games.

In this landscape, powerful gatekeepers, the game publishers, wield significant influence. These entities, such as Activision Blizzard, Valve, and Electronic Arts, dictate the development, monetization, and distribution of games, often controlling the entire lifecycle of a game.

<u>A recent report by Coingecko</u> sheds light on a significant trend within the gaming behemoths of Web 2.0. Over 70% of the top video game companies, including industry giants like Microsoft, Tencent, and Sony, are venturing into the realm of Web 3.0. Their foray into this new era of technology involves direct investments in gaming projects, their development, and the strategic recruitment of professionals specifically skilled in blockchain-related disciplines. Out of the 29 top video gaming companies that have ventured into Web 3.0, a significant portion, specifically 22 or 75.9%, have chosen a more measured and indirect approach. In contrast to the six companies actively engaged in the development of blockchain games, these industry leaders have strategically opted for investment and infrastructure development, showcasing a cautious yet forward-thinking stance.

This measured approach involves directing efforts toward blockchain game investments or laying the groundwork for essential infrastructure, thereby mitigating potential risks associated with the nascent technology. Microsoft, for example, has adopted a strategic investment strategy by backing WeMade, a company specializing in blockchain-based game production. Similarly, Tencent and Unity Software, two influential players in the gaming industry, have taken a strategic path by concentrating on the development of critical infrastructure for blockchain games. Their focus revolves around introducing innovative tools and resources that empower blockchain developers to create and expand upon the emerging landscape of blockchain-powered gaming experiences. This indirect involvement allows them to contribute to the growth of the blockchain gaming ecosystem while minimizing direct exposure to the uncertainties inherent in the early stages of this transformative technology.

The entry barriers for entrepreneurs, especially indie game developers, are formidable, leading to a situation where creative talent is either stifled or beholden to the decisions of major publishers.

However, amid this status quo, the arrival of blockchain technology emerges as a disruptive force, a perfect storm set to reshape the foundations of the gaming industry. The transformative potential of blockchain lies in its ability to decentralize power structures, enhance transparency, and provide new economic models that challenge the traditional dynamics of the industry.

Blockchain introduces the concept of true ownership of in-game assets, enabling players to have verifiable ownership and control over digital items. This not only revolutionizes the player experience but also opens avenues for play-to-earn models where players can monetize their in-game achievements. The era of centralized control by publishers is giving way to decentralized gaming ecosystems.

Smart contracts, a cornerstone of blockchain technology, offer a transparent and automated way to manage various aspects of gaming, from in-game transactions to revenue sharing among developers and players. This transparency mitigates issues related to opaque revenue distribution and allows for fair compensation for all contributors to the gaming ecosystem.

Moreover, the decentralized nature of blockchain technology empowers indie developers. Funding models like initial game offerings (IGO) and non-fungible tokens (NFTs) provide alternative means for developers to finance their projects, reducing dependence on large publishers.

The blockchain revolution in gaming is not merely a technological advancement; it is a paradigm shift that challenges the established norms, empowers creators and players, and ushers in a new era of decentralization, transparency, and economic inclusion within the gaming industry. The storm has arrived, and with it, the potential to reshape the gaming landscape for the benefit of all participants.

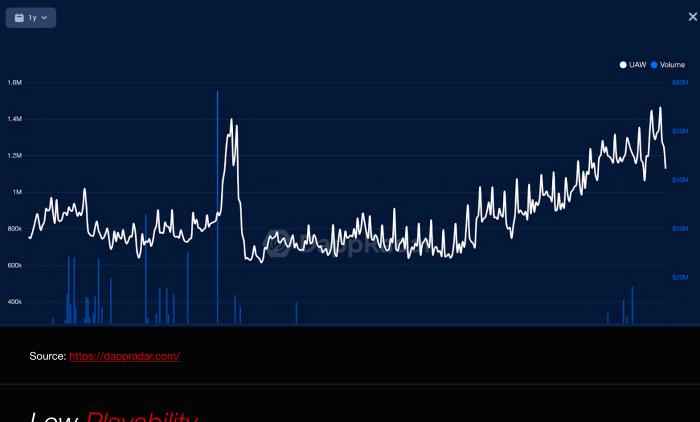
## Play-to-Earn Gaming – Growing & Scaling

Despite a more measured growth pace during 2024, the Web3 gaming market continues to expand, with unique characteristics and challenges. In the wake of the 2022 market correction, the Web3 gaming market exhibits resilience, showcasing growth, albeit at a moderated rate. A distinctive feature is the exclusion of most Web3 games from mainstream distribution channels. This report investigates the driving forces and nuances that characterize the ongoing evolution of Web3 gaming. The Web3 gaming sector primarily comprises indie-level and early-stage projects, with a limited presence of AA & AAA titles. Genre preferences reveal RPG, Action, Strategy, and Casual games as the front-runners. Platform-specific trends indicate RPG and Action's popularity on PC, a balanced mix on mobile, and Casual games leading in browser-based gaming experiences.

With over 500 active blockchain gaming cryptocurrencies and 1.2 million unique active wallets, the sector showcases significant potential and establishes itself as a vibrant and evolving ecosystem.

CoinMarketCap, a leading cryptocurrency data platform, reports that the blockchain gaming sector boasts more than 500 active cryptocurrencies. The collective market capitalization of these projects exceeds \$20 billion as of December 31, 2023. These metrics are signaling substantial financial activity within the space.

Dappradar, a prominent dapp analytics platform, sheds light on user engagement within the blockchain gaming sector. With approximately 1.2 million Unique Active Wallets (UAW) participating in blockchain gaming projects, the sector demonstrates a growing community of users actively involved in decentralized gaming experiences.



## Low Playability

Recent data from Tingbits.com reveals a noteworthy paradigm shift in the blockchain gaming sector as of 2023. The dominant platform is no longer Ethereum, but the Binance Smart Chain (BSC), hosting more than 38% of all blockchain games. Still, transaction fees on Binance Smart Chain have considerable fees of approximately \$0.02 while the capacity of the network is limited to 170 transactions per second. This unexpected shift underscores the dynamic nature of the blockchain gaming industry and the increasing diversity in platforms chosen by developers and we can conclude that devs will be ready to migrate if better alternatives are becoming available.

While Ethereum remains significant, it now accounts for 19.12% of total games. The decline in Ethereum's dominance reflects the increasing diversification and competition within the blockchain gaming space. This diversification aligns with the decentralized ethos of Web3 gaming, where no one-size-fits-all solution exists. Different platforms offer distinct benefits and trade-offs, allowing developers to choose what best suits their needs.

In essence, the evolving dynamics of platform dominance signal a healthy, competitive, and evolving blockchain gaming industry. As more platforms emerge and mature, the landscape is expected to continue changing, offering a broader array of choices for both developers and players. This dynamism and flexibility are integral to the Web3 gaming revolution and will likely shape its future trajectory.

The Playability Factor:

- Despite the surge in the number of blockchain games, Tingbits.com reports that only 14.49% of them are playable. This low percentage points to potential hindrances, including development challenges, regulatory concerns, and market reception.
- The complexity and technical challenges of developing games on decentralized platforms contribute to the limited playability of blockchain games. Overcoming these challenges, such as integrating smart contracts and ensuring secure transactions, is crucial for delivering engaging gameplay experiences.
- Market reception is pivotal in determining playability. Educating the gaming community about the benefits of blockchain-based gameplay, building trust, and showcasing immersive experiences are crucial for adoption.

# *Current Challenges* facing the Blockchain x Gaming developers and community

#### Wallet Interaction User Experience

The necessity for users to interact directly with non-specialised cryptocurrency wallets remains a significant obstacle to mainstream adoption. This cumbersome process often discourages players unfamiliar with blockchain technology or those hesitant to manage wallets, hindering the seamless integration of a broader player base. Crafting interfaces that resonate with traditional gamers while integrating blockchain functionalities poses challenges in terms of optimizing user interactions. Navigating complexities such as wallet management, private key understanding, and token transactions necessitates solutions that simplify these processes without compromising security.

#### Gas Fees

Gas fees persist as a pervasive challenge in blockchain gaming. The inefficiencies and congestion on mainstream blockchain networks lead to steep transaction fees, rendering even simple in-game actions economically impractical. High gas fees not only deter potential users but also stifle the growth of blockchain gaming ecosystems. The problem becomes more intense considering that the majority of blockchain gaming users are coming from developing countries in Southeast Asia.

#### Unstable & Unscalable Blockchains

Blockchain networks, touted for their reliability and security, sometimes fall short in providing a stable infrastructure for gaming. Stability issues result in buggy gameplay and frustrating user experiences, making it challenging to attract and retain players consistently. Scalability emerges as a pivotal concern, requiring innovative approaches to enhance transaction throughput. The technical hurdle lies in developing consensus mechanisms, layer 2 solutions, and sharding techniques that can seamlessly scale blockchain networks without compromising decentralization and security.

#### Monetary-Focused Game Design

Many blockchain games exhibit an overemphasis on monetary rewards within game design. Prioritizing aggressive tokenomics over creative and enjoyable gameplay experiences alienates players seeking genuine entertainment value, rather than focusing solely on financial gains. Introducing diverse and captivating game content on the blockchain necessitates overcoming challenges in smart contract design and execution.

#### Lack of Integration with Traditional Blockchain Gaming

Bridging the gap between blockchain and traditional gaming requires standardization of protocols and middleware. Developing adapters and APIs that facilitate seamless data exchange between different gaming architectures poses a significant technical challenge.

## Complex Game and Economic Design

Some blockchain games feature overly complex game and economic systems, deterring new users due to a steep learning curve. The intricate nature of these systems inhibits user acquisition and mass adoption, creating a barrier for entry into blockchain gaming.

#### Complex Systems for Game Devs:

Simplifying developer tools, optimizing documentation, and enhancing user-friendly development frameworks are formidable technical challenges in making complex game and economic designs accessible.

#### Lack of Creativity in Blockchain Benefits:

While blockchain technology offers numerous advantages, such as interoperability and composability, there's often a lack of imagination in how these benefits are incorporated into game design. The industry needs to explore novel and innovative ways to leverage blockchain's capabilities to enhance gameplay and user experiences.

#### Lack of Network Effects:

Expanding the player base involves intricate technical considerations and marketing expenditure.



## Web 3.0 as a transformation for Gaming Experience

#### Evolution from Product to Catalyst

In the early days, blockchain technology itself was often the focal point. Now, it has transitioned into a powerful catalyst that enhances gaming experiences. Blockchain is no longer the end product; instead, it serves as a foundational technology driving innovation within the gaming ecosystem.

#### Lower Time-to-Market & Development Costs

Traditional game development, marked by lengthy timelines and substantial costs, has found a solution in blockchain technology. Acting as a foundational platform, blockchain reduces development barriers, allowing for faster, cheaper, and more efficient game creation. With advancements like Layer 2 networks and upcoming upgrades such as Ethereum's Cancun, scalability is improving, positioning blockchain as a best-in-class platform.

#### Digital Ownership

Blockchain and Non-Fungible Tokens (NFTs) introduce true asset ownership in gaming, a feature absent in traditional games. Gamers can verify ownership on the blockchain, ensuring security against the impact of updates on in-game achievements. Monetization opportunities outside the gaming ecosystem, such as selling items for real money or exclusive event access, provide new avenues for players.

#### Composability

The composability of blockchain games allows seamless integration of various components, including cryptocurrencies, NFTs, DAOs, and DEXs. Developers can leverage existing solutions, reducing the need to build everything from scratch. For example, integrating a decentralized exchange (DEX) or utilizing an identity solution like ENS for user logins becomes a straightforward process.

#### Permissionless Interoperability

Smart contracts enable permissionless interoperability, allowing in-game NFT assets to transcend multiple games and platforms. Players are no longer confined to closed ecosystems; instead, they can freely trade in-game items in open marketplaces, creating a secondary market and increasing the potential value of in-game assets.

#### Enhanced Experience for the Gaming Community

Blockchain integration enhances gaming experiences by introducing features like true ownership, decentralized economies, and play-to-earn models. The principles of Web3, characterized by decentralization and user-centric design, play a pivotal role in shaping the future of gaming, offering new possibilities for gamers and developers.

#### Pioneering Play-to-Earn Models

Play-to-earn models, facilitated by blockchain, revolutionize how gamers benefit from virtual environments. Gamers can now earn real-world value by participating in blockchain-based games, creating novel economic opportunities within gaming communities.

#### Community Engagement and Collaboration

The blockchain gaming space thrives on community engagement and collaboration. Gaming communities actively contribute to the development and improvement of blockchain games, ensuring that user feedback plays a crucial role in shaping future experiences. The industry embraces diverse applications of blockchain benefits, extending beyond tokenomics.

## Our vision for Blockchain x Gaming Engineered for mass adoption

## Building on Strong Foundations

PlayBlock emerges as a groundbreaking blockchain designed with a singular focus — to redefine the landscape of blockchain gaming. Built with scalability, security, and user-friendly integration in mind, PlayBlock leverages Arbitrum's Orbit Anytrust, as a purpose-built blockchain tailored explicitly for the gaming industry.

#### Purpose-Built Architecture

Technical Overview: PlayBlock's architecture is meticulously crafted for the dynamic requirements of games and applications. The design prioritizes scalability, ensuring that the blockchain can seamlessly handle the demands of an ever-expanding gaming ecosystem.

#### Environmental Stability

Technical Insights: PlayBlock adopts the energy-efficient consensus mechanism. This choice not only contributes to environmental sustainability but also enhances the scalability of the blockchain, enabling it to process transactions rapidly without compromising security.

#### NFT-Specific Functions

Technical Integration: At the heart of PlayBlock's innovation lies NFT-specific functionalities deeply embedded in the protocol. This ensures that NFTs, the backbone of blockchain gaming, are seamlessly integrated, facilitating a robust and standardized approach to in-game assets, collectibles, and virtual economies.

#### Easy Integration into Games

Technical Simplicity: PlayBlock redefines how developers integrate blockchain into games by offering an intuitive and straightforward process. The blockchain minimizes the need for extensive blockchain coding resources, allowing game developers to effortlessly incorporate into their projects with minimal friction.

#### Low-Cost NFT Integration

PlayBlock's design emphasizes cost-effectiveness. Developers can integrate blockchain into games and platforms at a low cost, making blockchain adoption more accessible to a broader range of game developers and contributing to the democratization of blockchain technology in the gaming industry.

#### User-Friendly Integration

Technical Accessibility: A key technical feature of PlayBlock is its commitment to userfriendly integration. Game developers, even those without extensive blockchain expertise, can seamlessly integrate PlayBlock into their games and platforms. This ease of integration opens new possibilities for a wider spectrum of developers to explore blockchain gaming.

## Key Components to Build a Blockchain Ecosystem

#### 01. PlayBlock Native Wallet Designed for the Gaming Community

Most existing wallets lack a tailored focus on the gaming niche. To address this gap, we introduce a blockchain wallet meticulously designed for the gaming community. The PlayBlock wallet streamlines user onboarding by incorporating automatic wallet creation. This feature eliminates the complexity of setting up a wallet, making it more accessible to gamers who may not be familiar with blockchain technology.

#### Password-Free Sign-On

Security is paramount, but usability is equally essential. The wallet implements a password-free sign-on mechanism, leveraging advanced authentication methods to ensure a secure yet seamless login experience. Users retain consistent control over their cryptographic keys and in-game possessions. The wallet prioritizes ownership and security, allowing gamers to manage their digital assets with confidence. This will be achieved with email and social media login.

#### Access to Gaming Community and Commerce

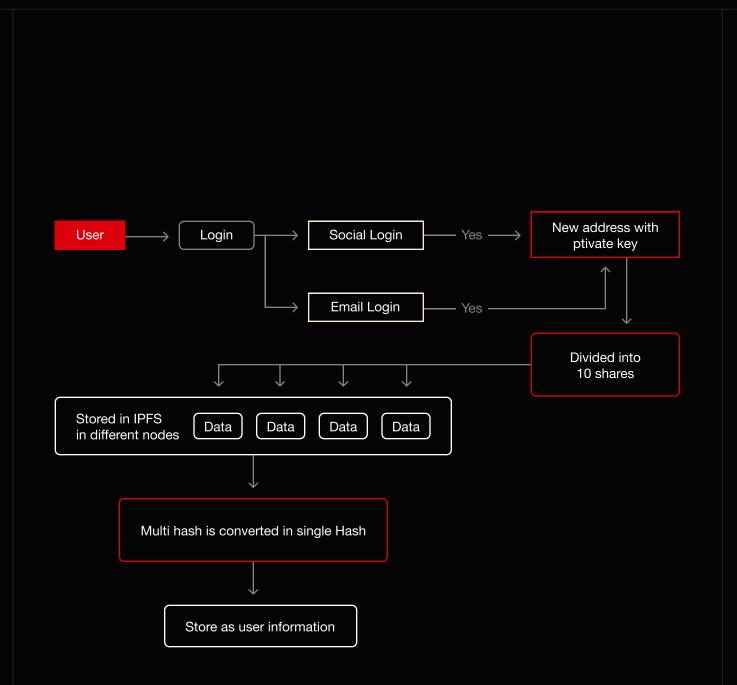
Beyond serving as a secure storage solution, the wallet functions as a gateway to a vibrant gaming community and online e-commerce platforms such as NFTs marketplaces. Users can seamlessly engage in peer-to-peer transactions, trade in-game items, and participate in the Web3 gaming ecosystem.

#### Community of Web3 Gamers

The wallet provides users access to a dedicated community of Web3 gamers through community-designed initiatives.

#### Our vision for Blockchain x Gaming Engineered for mass adoption / Key Components to Build a Blockchain Ecosystem

### PlayBlock



The PlayWall Blockchain Wallet represents a user-friendly solution in digital asset management, leveraging the latest in distributed storage and cryptographic security.

#### User Authentication

Social and Email Login: The system offers dual authentication mechanisms — social media integration and traditional email login. Utilizing OAuth2 protocols for social logins ensures secure and streamlined user authentication, while the email login is fortified with advanced encryption and password hashing techniques.

#### Address Generation and Private Key Management

Every user account is equipped with a unique wallet address and a private key. The address generation algorithm adheres to cryptographic standards, ensuring uniqueness and security. Private keys, essential for transaction authorization, are encrypted and stored securely to prevent unauthorized access.

#### Data Storage on IPFS

The InterPlanetary File System (IPFS) is employed to decentralize data storage. This not only enhances data availability but also contributes to the system's resilience against central points of failure. Data is split into ten shares, distributed across various nodes, enhancing both security and efficiency.

#### Hashing Mechanism

A sophisticated hashing mechanism transforms multiple data hashes into a singular hash value. This process, pivotal for data integrity, employs cryptographic algorithms to ensure that data remains tamper-proof and verifiable.

#### User Information Storage

User information, including authentication details and transaction histories, is stored with utmost security. This information is encrypted using industry-standard algorithms, ensuring confidentiality and integrity.

#### Security Considerations

Adhering to OWASP guidelines, the wallet architecture incorporates multiple layers of security. This includes regular security audits, encryption at rest and in transit, and robust access control mechanisms.

#### 02. Built-in Native No-Code RPG Game Engine

Our native No-Code RPG Game Engine serves as a comprehensive solution to democratize the creation process and unlock new possibilities for immersive gaming experiences.

#### Token Issuance on Blockchain:

One of the core features of the RPG game engine is its native capability to issue fungible and non-fungible tokens directly on the PlayBlock blockchain. Developers can effortlessly integrate in-game currencies, assets, and rewards as blockchain tokens, fostering true ownership and value within the gaming ecosystem. The engine boasts a user-friendly, nocode development environment, allowing developers of varying expertise levels to create RPG games without the need for extensive coding knowledge. This democratization of game development empowers a broader community of creators. Developers can implement complex game mechanics, in-game governance, and decentralized economies, all executed on the blockchain for transparency and security. Our RPG game engine supports dynamic world-building features, enabling developers to craft expansive and evolving game worlds. This includes the creation of quests, interactive environments, and a narrative structure that responds to player actions. In line with the blockchain's potential, the engine facilitates interoperability, allowing players to transfer assets seamlessly across different games and platforms. This feature creates a connected gaming ecosystem where virtual possessions hold value beyond individual game boundaries.

#### 03. GameFi & NFT Launchpad

PlayBlock will comes with a cutting-edge GameFi and NFT Launchpad designed to empower visionary developers in bringing community-driven gaming projects to life. In the rapidly evolving landscape of blockchain gaming, Our launchpad stands out as a GameFi and NFT Launchpad with a singular mission: to support and nurture the pioneering game projects of tomorrow. By integrating NFTs, virtual land, airdrops, and more into project releases, our launchpad enables developers to craft immersive experiences that extend beyond mere financial investment. This reward-driven approach not only attracts players but also builds a dedicated and enthusiastic user base. At the heart of our launchpad lies the "Magic of Mystery." The platform provides deeply customizable mystery boxes that serve as a compelling tool to inspire and engage communities. By incorporating mystery elements, developers can motivate players to actively participate in every stage of a project's release, fostering anticipation and excitement.

A cornerstone of out philosophy is the belief in community-driven decentralization. The platform empowers developers to create projects that are not only technically decentralized but also driven and sustained by an engaged and active community. PlayBlock serves as a launchpad for projects that prioritize the principles of transparency, fairness, and community participation.

Our GameFi and NFT Launchpad encapsulates a vision where gaming projects are not just about technology but also about building vibrant and participatory communities. By incorporating reward-driven initiatives, the magic of mystery, multi-chain compatibility, and a commitment to community-driven decentralization, PlayBlock is positioned as a catalyst for the next generation of groundbreaking blockchain gaming projects. As the gaming landscape continues to evolve, PlayBlock remains at the forefront, supporting and amplifying the creativity of developers who dare to redefine the gaming industry.

#### 04. Game Marketplace Hub

At the core of our gaming hub comes a robust game discovery portal. Users can explore and find the latest games across various genres, platforms, and themes. The portal utilizes advanced algorithms to tailor recommendations based on individual preferences, ensuring a personalized and enriching discovery experience. The gaming hub functions as a social platform, enabling users to connect, socialize, and form communities based on shared gaming interests. User-generated content is a key component of the gaming hub. Gamers can leave reviews and ratings for the games they've experienced, providing valuable insights to the community. Beyond gaming, the hub serves as a content-rich platform offering articles, blogs, and videos on a variety of gaming-related topics. Engaging content is curated to keep users informed and entertained. The gaming hub is not just a static platform but a dynamic space where users can participate in and stay updated on gaming events and tournaments. Integration with live streaming services and event calendars ensures users can immerse themselves in the excitement of competitive gaming.

## Core Technical Elements of PlayBlock Blockchain Network

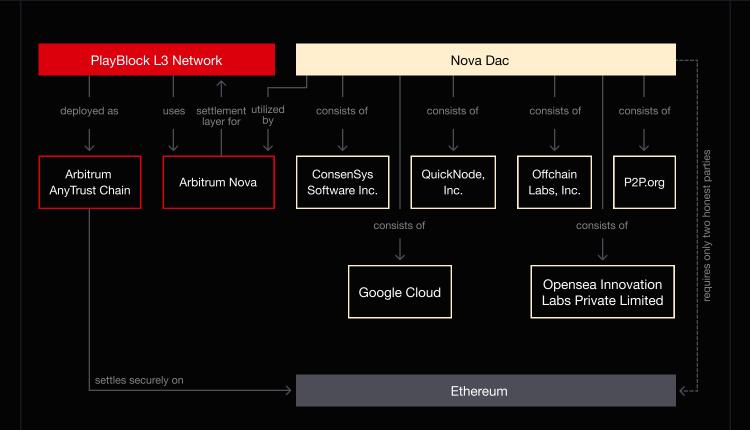
## A Blockchain Designed for Mass Blockchain Adoption

Game developers in the Web3 space predominantly build on general-use L1 networks, with EVM sidechains emerging as the prevalent subtype. While appchains currently power a small percentage of Web3 games, their notable growth in recent launches underscores a shifting landscape. A trend towards L2/L3 solutions is evident in new network launches, yet the EVM remains the primary execution environment for smart contracts in the gaming realm.

Blockchain technology has ushered in a new era of decentralized applications, but the challenges of scalability and data availability have persisted.

In response to these challenges, PlayBlock emerges as an AnyTrust L3 network, a variant of Abirum Nitro technology that lowers costs by accepting a mild trust assumption.

This technical paper delves into the foundational principles and design choices that define PlayBlock's innovative approach.



PlayBlock is a Layer 3 Network, deployed as an Arbitrum AnyTrust chain and utilizing Arbitrum Nova as its settlement layer. PlayBlock inherits Arbitrum's AnyTrust properties, that introduce a trust-minimized ecosystem that settles securely on Ethereum.

Arbitrum, a leading Layer 2 scaling solution for Ethereum, offers a framework for building decentralized applications with enhanced scalability and lower costs. Arbitrum Nova emerges as a key component in PlayBlock's architecture, offering a unique blend of ultra-low transaction costs and enhanced security. The AnyTrust protocol, introduces a cost-reduction mechanism through a Data Availability Committee (DAC), significantly lowering fees for end users. This protocol underpins the efficient and secure data management system that PlayBlock leverages for its Layer 3 network.

#### AnyTrust: A Cost-Effective Solution

AnyTrust addresses the challenge of data availability by introducing an external Data Availability Committee (DAC), which stores data off-chain and provides it on demand. This innovative approach significantly reduces costs by eliminating the need to post all transaction data on L1 Ethereum, while still maintaining a trust-minimized environment.

The DAC is central to PlayBlock's operation, ensuring data integrity and availability. Comprising reputable entities like ConsenSys Software Inc., QuickNode, Inc., P2P.org, Google Cloud, Offchain Labs, Inc., and Opensea Innovation Labs Private Limited, the DAC offers a robust, trust-minimized framework where at least two members are assumed to be honest.

The DAC's primary function is to store Layer 2 transaction data off-chain and make it available upon request, thus facilitating the efficient functioning of the PlayBlock network. The trust assumption in the DAC—that at least two members are honest—ensures that data availability is never compromised, enabling PlayBlock to operate with integrity and reliability.

By leveraging Arbitrum Nitro technology under the AnyTrust model, PlayBlock offers a cost-effective, scalable, and secure solution for decentralized applications.

The future of PlayBlock include further innovations and expansion. Potential developments include deeper integration with Ethereum's evolving ecosystem, increased decentralization, and the exploration of new applications and services that leverage PlayBlock's unique capabilities. As the blockchain space continues to evolve, PlayBlock remains at the forefront, driving progress and redefining what is possible in a decentralized world. Looking ahead, PlayBlock aims to further refine its technology stack, exploring new opportunities for scalability and efficiency within the Arbitrum ecosystem.

## Built for developers - PlayBlock's gasless mechanism

PlayBlock is committed to delivering the best user experience, a vision brought to life through its gasless transaction mechanism. One of the significant hurdles in blockchain game development has been the management of transaction fees. These fees can deter developers from implementing complex or high-frequency interactions within games, limiting creativity and the scope of gameplay.

This mechanism consists of three key components:

#### Initial Gas Token Distribution

Upon their first connection to a game or dApp on the PlayBlock chain, users holding Playnance Game Token (Token Symbol - USDP tokens) in their wallets are automatically credited with PBG (Playnance Gas Token). These tokens cover the transaction fees on the platform, facilitating a smooth and uninterrupted gaming experience.

#### Daily Wallet Scan and Top-Up

To ensure users continuously enjoy a gasless experience, while avoiding spamming on the network, PlayBlock implements a daily wallet scan to identify users with USDP tokens. Wallets with PBG balances below a certain threshold receive an automatic top-up of PBG tokens, keeping the gaming journey on the PlayBlock chain seamless.

#### Faucet for PBG Tokens

Acknowledging the diverse needs of its community, PlayBlock provides a PBG token faucet. This allows users, especially new or infrequent ones, to request PBG tokens daily if their balances fall below the set threshold. This inclusive feature ensures every user can access and enjoy dApps on the PlayBlock chain without concerns about gas token balances.

By eliminating concerns over transaction fees, PlayBlock empowers developers to explore new dimensions of gameplay and interactivity. This freedom paves the way for richer, more complex game worlds, leading to more engaging and immersive experiences for players.

For users, the gasless mechanism translates to hassle-free access to blockchain games and applications. This ease of use is crucial for attracting a broader audience to blockchain gaming, breaking down barriers to entry, and fostering a more inclusive and vibrant gaming community.

## Bridging Accessibility for Decentralized Gaming Markets: Introducing Playnance Game Token (Token Symbol - USDP tokens)

Playnance Game Token (USDP), is a non-speculative token that connects the decentralized PlayBlock ecosystem to revolutionize the Web3 gaming market. Addressing the critical issue of speculation and complex accessibility layers, Playnance Game Token aims to provide a seamless user experience by facilitating ultra low-cost transactions and ensuring security within the PlayBlock ecosystem. This token is serves as a medium for accessing the PlayBlock network and engaging with decentralized applications (dApps), emphasizing its utility over speculative value.

#### Stability and Confidence through Asset Backing

To ensure the stability of Playnance Game Token (\$USDP), the token is fully backed by a basket of stablecoins, including USDC, USDT, and DAI. This backing mitigates volatility and provides users with confidence in the token's value, distinguishing Playnance Game Token (\$USDP) from speculative cryptocurrencies and aligning it closely with the ecosystem's utility-focused philosophy.

#### Building a prosperous Gaming Ecosystem

PlayBlock as a community-driven venture, is crafted with the support and input of the community. This approach ensures the platform remains adaptable, fair, and inclusive, meeting the needs and interests of its diverse user base.

As a gasless blockchain, the founding team needs to offset the concept of spamming in order to protect our digital ecosystem, hence it introduces the concept of taxation.

INITIAL TAX RATE: Introduced at a 0% rate to foster initial usage and adoption.

MAXIMUM TAX RATE: To maintain transactional fairness and predictability, the tax rate is capped at a maximum of 1%. This limit ensures that any necessary adjustments remain reasonable, providing stability for users and developers alike.

TAX WALLET: A specifically designated wallet for collecting tax revenue is established. This feature allows for transparent management of collected taxes, directly involving the community in the ecosystem's financial health.Additionally to the taxation mechanism, PlayBlock is introducing a whitelist mechanism.

TAX EXEMPTIONS: The system includes a mechanism for exempting specific addresses from transaction taxes, enabling certain users to conduct tax-free transactions. This feature is designed to promote greater accessibility and encourage participation from key ecosystem contributors.

MANAGEMENT AUTHORITY: The authority to manage the whitelist, including the ability to add or remove addresses, will allow a dynamic response to the evolving needs of the community, ensuring that the ecosystem remains welcoming and equitable.

#### **On-Ramp & Off-Ramp Solutions: Broadening Accessibility**

Understanding the importance of easy entry and exit points in the blockchain space, PlayBlock introduces user-friendly on-ramp and off-ramp services. These services simplify the process of converting fiat to digital currencies and vice versa, removing significant obstacles for newcomers to the decentralized gaming world. Additionally, an integrated crypto bridge enhances the fluidity of asset transfer, further promoting an inclusive and accessible gaming environment.

#### Empowering the Community and Developers

A core tenet of PlayBlock's mission is to empower the gaming community and indie developers. By subsidizing gas fees for selected dApps and launching development grant programs, PlayBlock directly supports innovation and growth within the gaming sector. This initiative not only benefits developers by reducing operational costs but also enriches the ecosystem with diverse and engaging gaming experiences.

The introduction of PlayBlock Game Token empowers in realizing PlayBlock's vision for a more accessible, stable, and developer-friendly decentralized gaming ecosystem. By addressing key challenges such as high gas fees and limited market accessibility, PlayBlock Game Token is set to become a cornerstone of the PlayBlock platform, driving adoption and fostering a vibrant community of gamers and developers.

#### Looking ahead

Looking ahead, PlayBlock aims to seamlessly integrate traditional games into the Web3 gaming ecosystem. This paper provides a comprehensive exploration of PlayBlock's architecture, highlighting its technical intricacies, community-driven ethos, and its role in shaping the future of blockchain gaming.

After extensive research, PlayBlock has chosen a configuration of the Gelato network to power its backend functions. This strategic partnership enhances the reliability and scalability of PlayBlock, leveraging Gelato's proven capabilities in decentralized automation and off-chain computation.

PlayBlock addresses critical challenges faced by the blockchain gaming community, particularly related to scalability and reliability. By focusing on optimizing the network for increased transaction throughput, PlayBlock aims to become the backbone infrastructure for blockchain gaming, fostering growth and innovation within the indie gaming development community.

PlayBlock embraces a design that encourages experimentation and customization. PlayBlock's roadmap includes ongoing optimization efforts to further increase transaction throughput. Additionally, the development team is committed to enhancing tooling support for developers, ensuring a seamless and efficient development experience within the PlayBlock ecosystem.





