**What’s So Cool About Polkadot Parachain and Why It Matters in Web3 Gaming**

**Introduction**

**Polkadot's 2016** pioneering vision in blockchain technology - to achieve a ‘scalable heterogeneous multi-chain network - came into fruition with the release of Polkadot 1.0. It is a blockchain that can connect multiple blockchains, enabling these to communicate with each other. Polkadot is characterized by future-proof upgradeability, interoperability, and scalability.

Polkadot Parachains are those heterogeneous blockchains connected to Polkadot. A Parachain runs parallel to the Polkadot Relay Chain thus the name ‘parachain” for “parallel chain.” They are interoperable with Polkadot Network and other Parachains.

In this blog, let’s find out what makes a Polkador Parachain so important and why it matters in Web3 gaming.

**In The Beginning**

In 2008, developers working under the pseudonym Satoshi Nakamoto published the white paper ”A Peer-to-Peer Electronic Cash System.” It introduced the concept of “Distributed Blockchain.” Nakamoto’s system became so useful that Blockchain became the backbone of Cryptography.

A year later, he released the Bitcoin White Paper which was the application of his distributed ledger concept. He implemented the first blockchain as the public ledger for transactions made using Bitcoin. Bitcoin’s consensus mechanism is Proof of Work.

**In 2014**, Blockchain technology was separated from the currency Bitcoin, and Blockchain 2.0 was born. Financial institutions and other industries started shifting their focus from digital currency to the development of blockchain technologies.

**In 2015**, the Ethereum Frontier Network was launched, thus enabling developers to write smart contracts and dApps that could be deployed to a live network.

**In 2016**, Dr. Gavin Wood, co-founder of Ethereum, published the Polkadot White Paper. The main challenge Polkadot aims to address is the lack of interoperability between different blockchains.

**In 2020**, Stablecoins were in demand as they promised more stability than traditional cryptocurrencies. The same year Ethereum launched Beacon Chain in preparation for Ethereum 2.0.

**In 2021**, Polkadot’s launch of the Relay Chain genesis block culminated with the launch of parachains. [Polkadot was listed on Coinbase](https://cointelegraph.com/news/polkadot-price-soars-37-after-coinbase-pro-dot-listing-first-parachain-auction). Polkadot consensus mechanism uses Nominated Proof of Stake.

**In 2022**, Ethereum has shifted from a Proof of Work(PoW) to a Proof of Stake(PoS) consensus mechanism. The original Ethereum mainnet merged with Beacon Chain which has Proof-of-Stake. Now it exists as one chain. Ethereum’s energy consumption has reduced by ~99.95%.

**Polkadot Interoperability is Key**

Take our banking system, for example. If each bank is limited to its siloes and not allowed to transact with competing banks, how easy do you think banking would be? But because of interoperability among banks, withdrawing money from, say your BPI account from a BDO ATM is possible. The same with emails: your email from your Gmail account is readable from a Yahoo account. Because they have interoperability.

Blockchain is an awesome technology, but these blockchains lived in their own silo. They are isolated from each other, with little to no information exchanged between them. This lack of interoperability is preventing the mass adoption of blockchain technology. Polkadot fills this gap.

The Polkadot blockchain is made up of its main engine, the Polkadot Relay Chain, and the Parachains running parallel to the Relay Chain. By design, Parachains share the Polkadot’s cross-chain composability and interoperability. Because of this, they can send or receive any type of data or asset with other Parachains. Plus they benefit from the security, scalability, and governance of Polkadot.

**What are the benefits of Polkadot Parachains?**

1. **Flexibility** - Polkadot has given optimum flexibility. You are an independent Parachain. The only mandate criteria required by Polkadot is that the Parachain must follow the consensus of the relay chain. Parachain can be developed as a chain with its individualistic design. It can be run as a public or private network and can have its own native token, and governance process. At XGame Web3 gaming, our native token is Genesis Native Token or GNT.
2. **Scalability** - One of the key factors that define the scalability of any blockchain is interoperability. While legacy blockchains have to rely on layer-2 solutions for interoperability, a Parachain achieves interoperability at layer-1 itself. This way, Parachains have a more decentralized and efficient means to achieve blockchain scalability and throughput because their transactions can be spread out and processed in parallel over an ecosystem of specialized layer-1 blockchains.
3. **Interoperability** - One of the biggest advantages of a Parachain is that it inherently acquires Polkadot’s cross-chain composability. So, Parachain as a layer-1 blockchain can provide full control and sovereignty to blockchain communities. It also allows them to engage in free trade with other Parachains and external networks. Leveraging Polkadot Interoperability, Parachains can exchange not just tokens but also any type of data, including verifiable credentials, off-chain information from oracles, and smart contract calls. Thus, a Parachain doesn’t function in siloes and is open to new possibilities. Right here is the XGame Web3 gaming secret sauce: you can take your in-game assets as NFTs from the fantasy game world into the real world.
4. **Governance** - As mentioned earlier, Parachains can adopt their governance model. Access to sophisticated on-chain governance mechanisms reduces the likelihood of hard forks of the Parachain. Besides, on-chain governance also provides the Parachain communities with accountable transparency. You are safe and secure with XGame Web3 gaming because our Humidefi-Genesis Parachain shares the Polkadot governance and security mechanisms.

**Conclusion**

Polkadot Parachain as an integral part of the Polkadot ecosystem fosters greater transparency, decentralization, safety, efficiency, and participation from the community. XGame Web3 gaming runs on the Humidefi-Genesis Parachain precisely for these reasons. It shares the interoperability of Polkadot. That’s why we are confident that we will deliver our bold claim: that XGame Web3 gaming is your portal from the fantasy world into the real world. Where your in-game assets transcend the limits of the in-game economy and have value in the real world.