

# **PassPay Chain White Paper v0.1**

**Author: PassPay K.K**

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# Preface

PassPay Chain will be part of the future of Web3, bridging digital life by introducing a stablecoin backed by the Japanese government as a native token. We would like to thank the all contributor.

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# Chapter 1

## Problem

For those living off cryptocurrency, the most crucial aspect is the gas fees required for utilizing the blockchain. The high volatility in the exchange rate of native token to fiat mirrors the volatility in usage of infrastructure for livelihood. To address this issue, we introduce JPYW, a Japanese YEN based stablecoin, as the native token on the PassPay Chain. JPYW is a digital currency backed by assets guaranteed by the government, resolving the volatility concern.

## Chapter 2

# JPYW

### 2.1 What is JPYW?

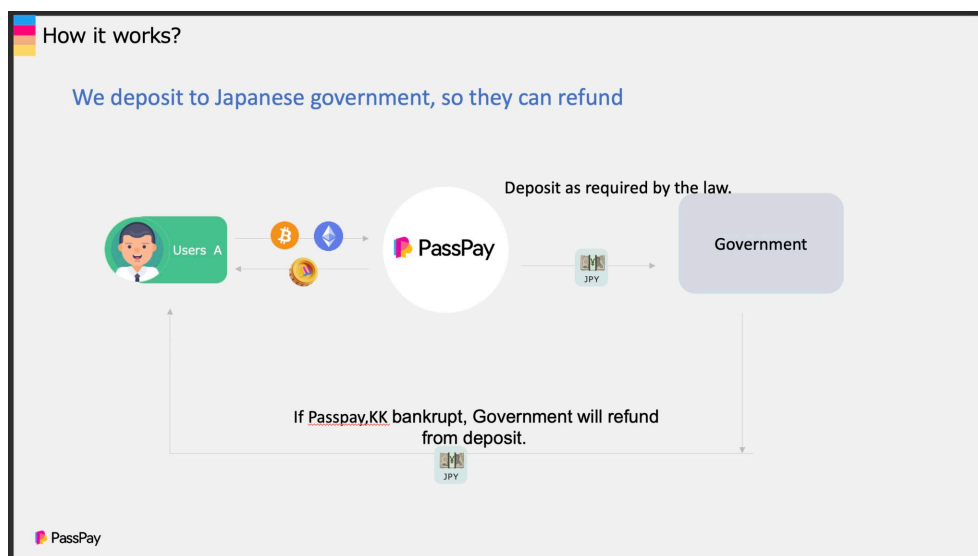
JPYW is Digital Japanese Yen which is ERC-20 based JPY stablecoin under the prepaid payment method law in the Fund Settlement Law in Japan. Users can purchase JPYW at the rate of 1JPYW=1JPY. We are authorized by the Japanese government, so its greatest feature compared to other stablecoins such as USDC is that even if the issuer goes bankrupt, the government promises a refund in accordance with the law.

Therefore, JPYW is the only stablecoin in the world with a value that is secured by trust in the government.

### 2.2 How the government backed assets?

Under the legal provision of "供託," as elaborated in the following section, PassPay is obligated to deposit with the government more than 50% of the total Japanese yen received in exchange for the sale of JPYW. Presently, we have deposited 100% of this amount.

## Chapter 2 JPYW



### 2.3 Japanese "Kyotaku" 供託

Kyotaku (Depository) refers to a system established for achieving certain legal objectives, wherein monetary funds, securities, or other valuable assets are submitted to a government entity known as a depository, entrusting their management, with the ultimate goal of allowing the depository to transfer ownership of those assets to a designated individual. During the deposit or withdrawal of such funds, officials from the legal affairs bureau (depository officer) conduct examinations from a specialized perspective to ensure compliance with legal requirements.

This legal framework extends to electronic money in general, with JPYW being the first asset on the blockchain to be deposited with the Japanese government.

Regarding the deposition of assets operating on the blockchain, a new law will be enacted in Japan in 2025, further enhancing user protection and convenience.

## Chapter 3

# PassPay Chain

### 3.1 What is PassPay Chain?

PassPay Chain is a fully EVM-compatible blockchain that operates using the Delegated Proof of Stake Authority consensus algorithm. Its most notable feature is the introduction of JPYW, a Japanese yen stablecoin, as the gas token. This innovation aims to reduce the volatility of infrastructure usage costs for those living in the Web3 ecosystem.

Additionally, PassPay Chain introduces the PassPay Token(PPT) as a governance token. Our token economy designed to increase in value of PPT alongside the growth of the PassPay Chain.

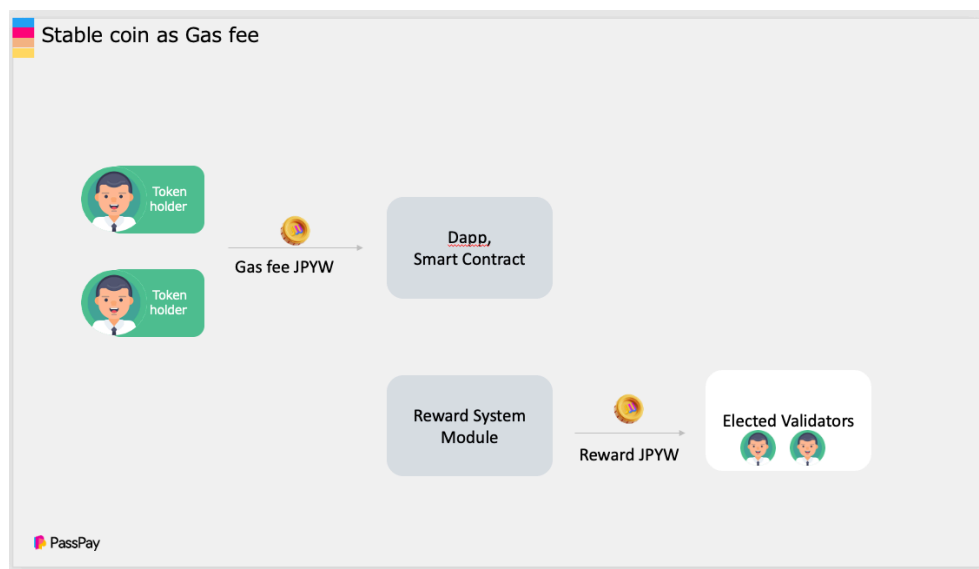
Those wishing to participate as Validators can stake JPYW to become Candidates, and subsequently gather PPT to be selected as Validators. PPT can be acquired through self-purchase or received from others. Validators then receive rewards in JPYW.

One of unique aspect of the PassPay Chain lies in its separation of tokens for gas fees and voting purposes. Staking JPYW is synonymous with staking assets backed by the government, namely, Japanese yen. The value of the PassPay Chain is determined by the total amount of staked JPYW and the expansion of its use cases. As a result, the value of the necessary Vote token, PPT, also increases in order to obtain JPYW.

Furthermore, by separating these tokens, it becomes possible to evolve PPT not only as a token for chain operation but also as a Governance Token for the entire ecosystem. This allows for the creation of a more flexible and adaptable token ecosystem.

### 3.2 Stablecoin as a gas fee

Users will pay JPYW as gas fees for executing functions in the smart contract. Validators contributing to the consensus receive rewards in JPYW.

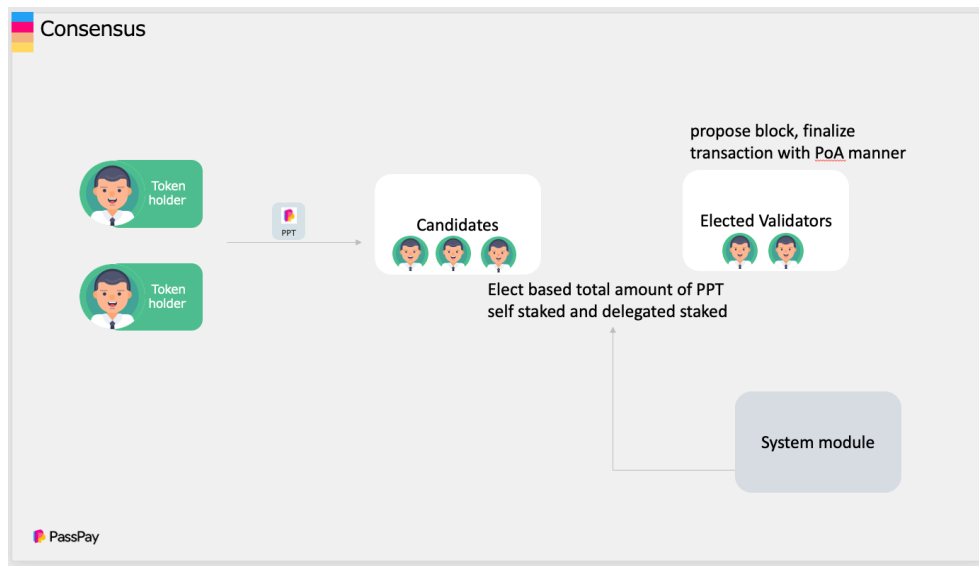


### 3.3 Consensus

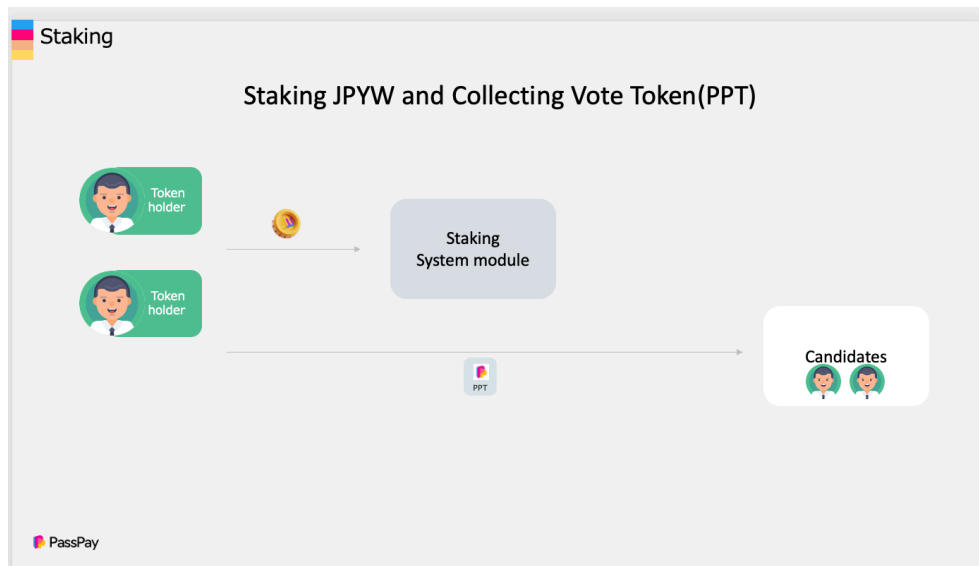
Delegated Proof of Stake Authority allows the token holders to vote and elect the validator set involving consensus operation. It is similar to Bsc. PPT token holder can send their PPT as Vote token.



### 3.3 Consensus



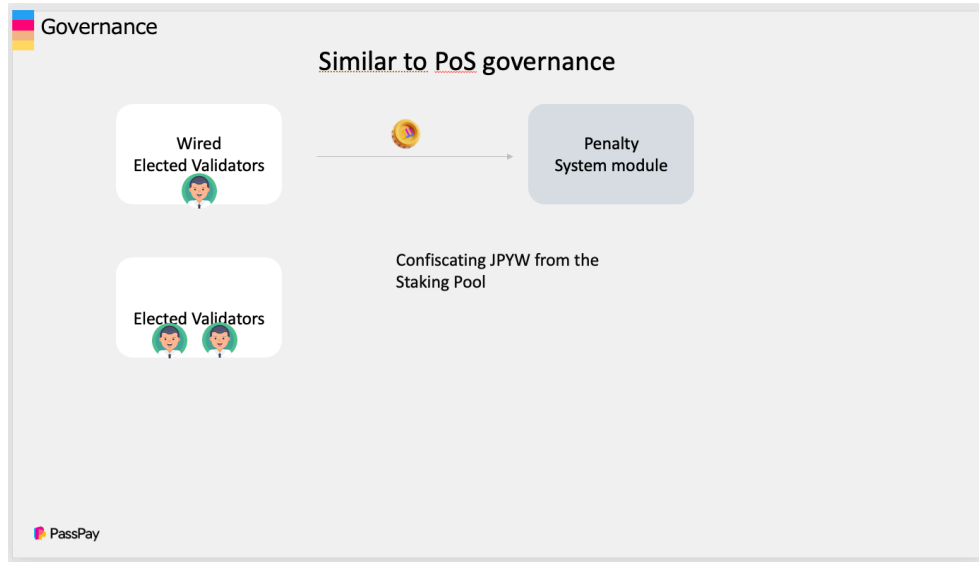
In compare to Bsc and other DPoS, our unique aspect lies its separation of tokens for staking and voting. Token holder can staking JPYW to Staking system module to become candidate. Once become candidate, gather PPT to be selected as Validators.



Governance is similar to PoS. Penalization is initiated when a validator fails to

## Chapter 3 PassPay Chain

propose their assigned block. The Consensus module observe the count failed to propose block and activates the Penalty logic similar to PoS.



Furthermore, it maintains network security equivalent to that held by other PoS and DPoS, including preventing 51% attacks.

### 3.4 Token Economy

PPT initiates as the Governance Token of the PassPay Chain. Becoming a Validator on the PassPay Chain and earning JPYW, or essentially earning Japanese yen, necessitates the possession of the Vote Token, which is PPT. Thus, PPT can be regarded as a proxy for earning JPYW. With the growth of the Japanese yen and the PassPay Chain, PPT becomes optimal for anyone seeking to earn Japanese yen. As reiterated, the most unique aspect of the PassPay Chain is the separation of tokens for gas fees and voting purposes. This allows for the creation of a token economy centered around PPT that is independent of the PassPay Chain, enabling the continuous evolution of the token economy. PPT token holders can participate in discussions on building various use cases and increasing the value of PPT.

## Chapter 4

# Roadmap

1. 2024 Q1 ~ Q2: Proof of Concept
2. 2024 Q3 ~ Q4: Launch as Testnet
3. 2025 Q1 ~: Develop use cases
4. 2025 Q2 ~ : Launch as Mainnet

## Chapter 5

# How to use

Users can access the PassPay Chain Demo through the PassPay Wallet.

1. Download the PassPay Wallet: <https://apps.apple.com/jp/app/passpay/id1645009398>
2. Request tokens from the Faucet: <https://form.run/@passpayio-faucet/>
3. Test sending JPYW on the PassPay Chain Testnet via the PassPay Wallet.

We aim to enable Smart Contract deployment and Validator participation by Q3 2024. If you have any requests or inquiries, please feel free to express them in our Telegram Group. <https://t.me/+FDGyqwKaEcVlZmY1>

# About Team

## Founder - Yoshikazu Kitano



Yoshikazu Kitano holds a master's degree from Kyoto University and stands as a distinguished senior blockchain investor with hands-on involvement in numerous blockchain initiatives. His focus encompasses blockchain technology innovation, adept team building, effective project management, strategic planning, and seamless execution. Notably, he founded Cryptocurrency Media in 2019, a consultancy catering to blockchain enthusiasts. In 2022, he founded PassPay to take a significant step by spearheading the introduction and proliferation of stablecoins in Japan.

## Appendix About Team

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### CTO - Hiroshi Chiba



Beginning his career as an iOS engineer at a startup, he later founded and successfully sold a mobile application development firm, gaining valuable experience in PMI. Additionally, he contributed as the CTO at AudioMetaverse, Inc.'s US headquarters, focusing on developing metaverse applications specialized in audio experience and utilizing blockchain technology. Since 2022, he have served as the CTO at PassPay.

Linkedin Profile: <https://www.linkedin.com/in/bati668/>

### CDO - Zhangyue Yao



He aims to drive the development of Web3 and crypto brands through design thinking and strategic insight as an experienced and creative design strategist, enhancing user experience and supporting businesses in achieving their objectives. With over 20 years of experience, I specialize in brand management and creative design. I explore

future trends in Web3 and cryptocurrency brand building, adept at assisting companies in formulating effective crypto brand strategies. Possessing sharp insights into emerging markets in Web3 and a forward-thinking mindset, I predict trends, adjust brand strategies promptly, and conduct unique brand image designs.

### **Chief Architect/Lead Blockchain Engineer - Zen**

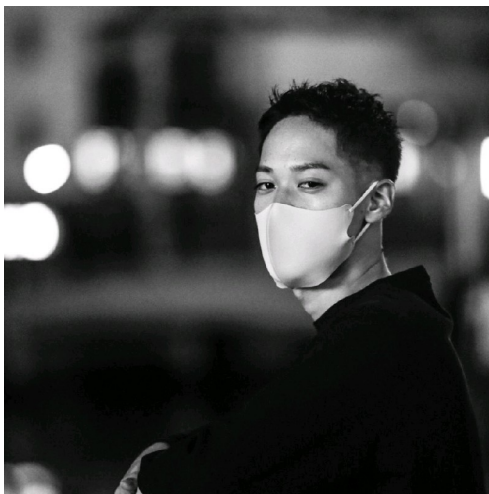


As a keen Fullstack Blockchain Engineer, I bring a solid understanding of Web2, Web3, blockchain technology, smart contracts, and decentralized application development. My journey so far has been filled with learning and contributing to the development of Web2, Web3 applications and blockchain infrastructures. I'm passionate about utilizing my skills to further explore and innovate in the realm of blockchain, aiming to support and advance projects that tackle complex challenges in this exciting field.

## Appendix About Team

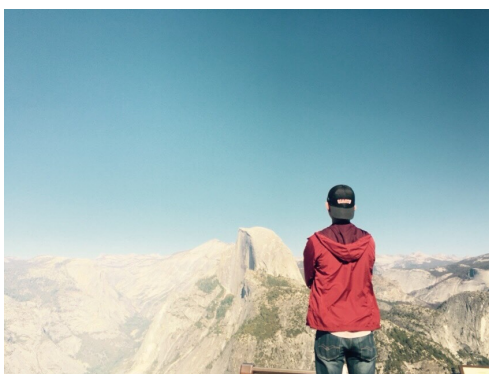
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### Lead Infrastructure/Dev Ops Enginner - Naoya Ito



Software development experience 7+ years.

### Lead Mobile Application Enginner - Taiki Tsujubayashi



Since his student years, he have been developing mobile applications across various industries, gaining extensive experience on both iOS and Android platforms. After earning a master's degree in Information Science from Kobe University in Japan, he contributed to the development of advertising SDKs, enhancing their functionalities



to optimize ad delivery. He also worked closely with product and marketing teams to align SDK capabilities with business goals. More recently, he have focused on the development of Web3 wallets, implementing secure and user-friendly features and integrating blockchain technologies into financial applications.

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Author PassPay K.K

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