



# Rupaya Platform White Paper

World-class cryptocurrency platform designed for South Asia

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## FORWARD LOOKING STATEMENTS

This document may include predictions, estimates or other information that might be considered forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could cause actual results to differ materially. You are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation. Please keep in mind that we are not obligating ourselves to revise or publicly release the results of any revision to these forward-looking statements in light of new information or future events. This document is for informational purposes only.

## ABSTRACT

The South Asia region faces several unique challenges which hinder access to even the most basic banking and payment solutions. Issues such as regular electricity outages and a unreliable or nonexistent internet access impose severe limitations on traditional banking, as well as the use of many Western cryptocurrencies for remittance and payment processing. The region also faces onerously high currency transfer fees. Our solution to allowing payments in the face of poor electricity and internet connectivity centers on providing an excellent mobile wallet experience that is secure and robust. Further, we will research, develop, and deploy smart Point of Sale systems designed for e-commerce and brick & mortar businesses. These Point of Sale systems will leverage SwiftTX technology, already present in Rupaya, for instant transactions and a fast and seamless customer experience. To solve the extremely high transfer currency fees within the South Asia region we propose the creation of a dedicated RUPX/Fiat<sup>1</sup> currency exchange. The cost of sending Rupaya is exponentially lower than sending traditional fiat currency. A low cost RUPX/Fiat currency exchange will enable the region to keep more of its money. Together the Rupaya solutions will empower people in South Asia and provide an increased opportunity for regional economic growth and vitality.

## OVERVIEW

Cryptocurrency technologies are evolving at mind-numbing pace. Initially, you could only purchase cryptocurrencies as a method of storing wealth. However, more altcoins have been developed which introduce new features and innovations. Even Bitcoin, the venerable granddaddy of them all, is now able to provide some form of remittance for merchants and vendors. More recent altcoins can complete transactions within seconds. This has opened up the opportunity for cryptocurrencies to be used for online and offline payment processing. As a result, older and more mainstream coins are improving their blockchain technologies while newer altcoins are specifically being created to provide this crucial service to vendors around the world.

## CHALLENGE OVERVIEW

### Access to Cryptocurrencies

Access to cryptocurrencies can be severely limited depending on the region of the world. Even though you can purchase and use popular digital currencies like Bitcoin and Ethereum, the historic increases in the price of these main cryptocurrencies put them out of the reach of most ordinary users in South Asia. Additionally, these currencies primarily rely on Western fiat currencies like the USD, Euro, and Pound. It makes it complicated because investors have to change from their native currencies to these international fiat currencies before they can invest in the popular cryptocurrencies.

### Lack of Consistent Electricity

Parts of South Asia also face a severe lack of consistent access to electricity. Most South Asian countries have frequent power cuts and high electricity costs in comparison to Western countries. This makes it ineffective to mine popular cryptocurrencies like Bitcoin and Ethereum because the cost of mining is greater than the rewards. Additionally, payment processing is also hampered by the electricity problems and the internet coverage. Most e-wallets are unable to work in areas with low connectivity or when there is a power outage, reducing the effectiveness of payment processing.

### Limited Access to Cryptocurrency Exchanges

Finally, most cryptocurrency exchanges are situated in Western countries because this is their main target. If you are lucky, there is only one exchange in most South Asian countries, with some having none at all.

## SOLUTION

Investors and merchants in South Asia would like to get an opportunity to use cryptocurrencies to receive the same benefits of decentralization, confidentiality, and security. However, the highlighted pitfalls necessitate a different approach. Western solutions will not work effectively in the region. As a result, there is a need for the development of a cryptocurrency specifically for the merchants and investors South Asia that will circumvent the unique problems in the region.

### A Better Way

The Rupaya platform will encompass three main pillars in order to effectively solve the key payment and transaction challenges facing South Asia.

### OWNING PART OF THE FUTURE

The Rupaya structure allows people in South Asia the ability to hold a direct stake in the currency through low-cost Masternodes. Masternodes not only give the owner governance

voting rights, they earn masternode rewards. Additionally holders of the coin can earn staking rewards, similar to gaining interest. Both the Masternode and POS rewards mean that holders of Rupaya can generate passive income at a fraction of the cost (both in terms of computational hardware and electricity) of coins that require mining<sup>2</sup>.

## Rupaya as Currency

At the very heart of the Rupaya platform is the coin's usefulness as an actual currency. The features and technology built into the coin have been purposefully included to ensure this.

### IMPROVING THE PAYMENT EXPERIENCE

Secure transactions are incredibly important for vendors and point-of-sale systems. On the immediate roadmap, Rupaya plans to launch a RUPX integrated point-of-sale system and work with vendors and financial entities in South Asia to use Rupaya as a main method of payment for goods and services. When standing at a kiosk or in a store, users will want a seamless and friction free way of paying. By integrating our core technologies with mobile wallets (solving the access to banking, internet and electricity problems) and secure point-of-sale systems, we will be able to make the purchase easier. Ultimately serving as a conduit for economic stimulation and growth in the South Asia region.

### REDUCING CURRENCY TRANSFER FEES

Much of the South Asia region suffers from extremely high currency transfer fees. Rupaya will be able to provide secure currency transfers for a fraction of what a fiat money transfer costs today. Reducing these fees will allow people in the region to keep more of their own money, enabling them to improve their lives.

## Developing a Fiat Exchange

South Asia is home to many traditional fiat currencies. Many people in this region have no way to exchange their fiat money for any type of cryptocurrency. Rupaya plans to explore all avenues, including researching all legal and regulatory requirements, starting in Q4 of 2018 in order to build the first fiat exchange dedicated to the South Asia region.

Western countries have their own fiat exchanges. Places like Coinbase allow anyone to exchange USD into ETH, BTC or several other cryptocurrencies. However, not only are crypto exchanges few and far between in South Asia countries, there has yet to be a major player who services all the regional currencies and gives the people of South Asia access to the exploding cryptocurrency marketplace.

We anticipate that development of an exchange with Rupaya as one of the main trading pairs will take time and a significant investment. However, by providing a safe and secure way to exchange fiat money for RUPX this will establish Rupaya as the dominant force for cryptocurrency transactions. The goal is to begin development in the first half of 2019.

## ABOUT RUPAYA

Rupaya is the first blockchain specifically made for the South Asian region. The region has its unique challenges, and the Rupaya blockchain combines multiple blockchain architectures together in order to provide merchants, masternode owners and ordinary users with a cryptocurrency that can be used for both online and offline payment processing in the region.

### Features

In order to achieve the desired goal, Rupaya has specific features that make it effective for use in South Asia. First, is the acceptance of most of the currencies in South Asia. As a cryptocurrency truly made for the region, most of the fiat currencies in the region can be exchanged for Rupaya. Additionally, international fiat currencies like the Euro and USD can also be accepted. Rupaya also has a low supply. The coin supply is capped at 78 million coins to ensure that hyperinflation doesn't become an issue.

Rupaya can retain value as an asset. As a result, it will rise in value as demand for the coin increases. This makes it an effective store of wealth for investors.

The Rupaya blockchain evolves beyond the latest Bitcoin codebase and is built on Masternode Proof-Of-Stake (POS)<sup>3</sup> architecture.

The price of the Rupaya currently trades at 1/10 of a US Dollar. This is affordable to most of the users in the region. The architecture uses smart contracts to ensure that the transactions are fast and that the platform can accommodate high volumes. Finally, since the South Asian community supports the coin, it is future proof. With time, it is expected to increase in popularity among vendors, consumers, and investors in the region who finally have a cryptocurrency of their own.

### Technology

#### ZEROCOIN

To enhance transaction privacy, Rupaya implemented the Zerocoin<sup>4</sup> protocol. Zerocoin solves a major Bitcoin issue, the lack of privacy guarantees that one expects. Zerocoin provides full privacy to the users of Rupaya. The implementation of the Zerocoin protocol converts publicly view-able RUPX into anonymous zRUPX. When a user wishes to spend or transfer (that is send from A to B) zRUPX, the zRUPX appear in the receivers wallet as regular RUPX without traceable history of where that RUPX was sent from.

## SWIFTTX

Instant Transactions: SwiftTX transactions are confirmed and become spendable within seconds at the expense of an extra fee. This is guaranteed by the network of masternodes and there is no need to wait for multiple confirmations in order to be confident in the validity of the transaction. SwiftTX transactions are key to point-of-sale terminals and will be a key platform differentiator for vendors and consumers.

## DIGITAL AUTONOMOUS ORGANIZATION

Masternode governance enabled, community based proposals and Masternode owner voting firmly positions Rupaya as a Digital Autonomous Organization (DAO)<sup>5</sup>. This structure will allow the Rupaya platform to grow organically and respond quickly to user demand and feature requests, all the while rewarding those most actively engaged in building the platform.

## Endnotes

- 1 "Fiat Money", *Investopedia*, <https://www.investopedia.com/terms/f/flatmoney.asp>
- 2 "Proof of work", *BitcoinWiki*, [https://en.bitcoin.it/wiki/Proof\\_of\\_work](https://en.bitcoin.it/wiki/Proof_of_work)
- 3 "Proof of Stake (PoS)", *Investopedia*, <https://www.investopedia.com/terms/p/proof-stake-pos.asp>
- 4 "What is a DAO?", *CoinDesk*, <https://www.coindesk.com/information/what-is-a-dao-ethereum/>
- 5 "What is Zerocoin", *The Zerocoin Project*, <http://zerocoin.org/>