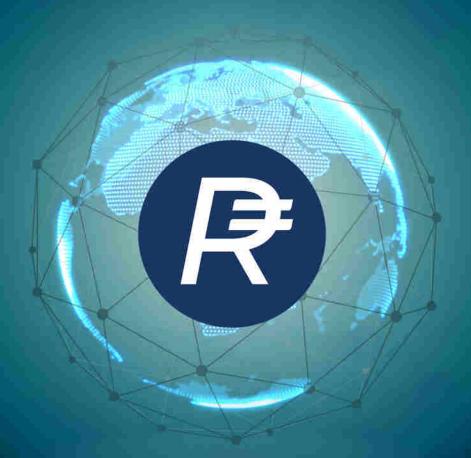
# Rupee

LEADING THE SOUTH ASIAN BLOCKCHAIN REVOLUTION



Whitepaper



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Rupee is a decentralised open-source blockchain cryptocurrency and is not related to fiat rupee currencies (backed and issued by their respective governments). Unless otherwise stated, the mention of 'Rupee' anywhere in this document refers to the cryptocurrency Rupee (symbol: RUP).



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# **OUR VISION**

Change. The world is changing. Life is constantly evolving. We can see this in our society, in business, in politics, in our relationships and even in the life cycles of everything around us. Change is everywhere. Nothing stays the same. Change is the only constant, and this is never more true then when it applies to the fast moving technology of commerce and business

Until the early 1800's we were still using precious metals such as copper, silver and gold to facilitate trade, or to fill up the coffers of the rich. Eventually the amounts amassed became a big problem for people to transport, and it became common practice to lock it away. This became risky too. So people looked for more secure means of deposit and storage. This became a business in itself, and those who stored the money became more and more powerful, based on the money they held for others. They could control the supply of money and they could also lend it, to facilitate trade. Banks were born.

In 1775 the issue of promissory notes against value or assets held by banks became common practice and paper money was born. Initially it was difficult to persuade people to trust paper money, especially as anyone who had enough of it could start their own personal bank. Yet it was only 140 years after the introduction of paper money that President Woodrow Wilson signed the Federal Reserve Act into law, it stood as a classic example of compromise—a decentralised central bank that balanced the competing interests of private banks and populist sentiment. Paper money had come of age.

From paper we moved to plastic, it took 171 years but, in 1946 John Biggins invented the "Charge-It" program between bank customers and local merchants. The birth of instant payments and consumer credit. Today, where we have properly functioning banking facilities, we almost never have the need for cash. Online banking is more readily available and less people see the inside of a bank than ever before. Some are predicting the end of cash altogether, a society where government and banks control the flow of money entirely, and where all financial transactions are watched and scrutinised by the authorities. Others are looking for ways to bring money back to the people, to democratise the supply and flow of cash, and to take money to the next level. A bankless society.

A mere 62 years after the invention of plastic money, in 2008, a paper entitled Bitcoin – A Peer to Peer Electronic Cash System was posted to a mailing list discussion on cryptography. And in 2009 Bitcoin introduced mining, with transactions recorded and verified on a digital blockchain. Since then the timeline has dramatically shortened, and today we stand on the brink of an entirely new world. A world of decentralised and encrypted cryptocurrencies. A world where money is democratised. A world where the people control the money. It has long been understood that whoever controls the money supply controls the people. With cryptocurrency, the people are taking back that control.



For over 20% of the world's population, the inability to prove their identity means the inability to access financial services. But crypto currencies do not need to know who you are, for you to access the benefits of online commerce. Everyone is equal to a digital blockchain. Crypto represents freedom for the unbanked and those marginalised by the current financial structure. Crypto levels the economic playing field for those previously ignored by the banking system. Crypto is the ultimate democratic process.

We can never go back in time. Nor should we want to. The future is coming at us fast. We must grasp it with both hands. This means creating the future we wish to see. For the Rupee team it means developing an infrastructure for over 251 million unbanked people in India, and for a general population of over 1.8 billion people throughout South Asia. By tapping into the possibilities this new decentralised blockchain technology offers, the potential for creating social change is almost unlimited. This, coupled with Asian businesses moving towards serving regional consumers, means we can expect intra-Asia trade to exceed \$8 TN by 2020, up dramatically from \$3.3 TN in 2012. Our vision for a democratised and decentralised digital currency available to everyone means we will be perfectly placed to facilitate business growth in this new and exciting digital world.

In 2015, remittances to India amounted to \$72.2 billion US dollars. That amount is greater than 3% of India's GDP. According to the World Bank, fees on remittances are typically between 10% and 15% of the principal amount – that is roughly \$10 billion US dollars paid in fees by Non-Resident Indians (NRIs) to send money back home. And so, in 2016, the Rupee crypto currency was created to service the Asian market. Rupee unlocks tremendous value for people by facilitating movement of money for extremely low fees, using the power of the blockchain technology. Thus, the goal of the Rupee project is to become the most commonly used medium of exchange and payments, and a trusted store of value across a world without borders.

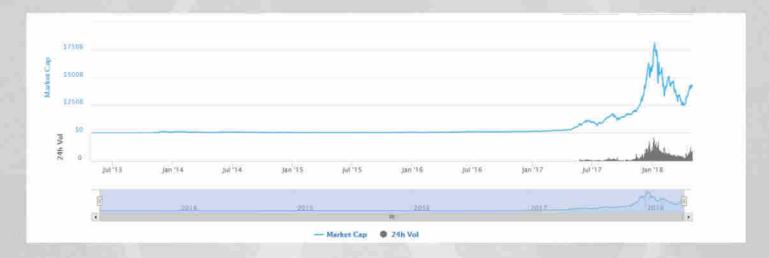
It is not a question of if, but a question of when. Crypto currencies and blockchain technology is the next step in the evolution of our monetary system. The internet was the last revolution. Digital blockchain is the next revolution. Our vision at Rupee is simple, we want to deliver an organic system that accommodates all walks of life, regardless of creed, colour, religion or status - to have the freedom of sending, sharing or buying anything from anywhere in the world. A simple, but trustworthy peer to peer electronic cash system. Crypto is freedom. Crypto is the future. We may not live forever. But we can all be a part of creating something that'll last forever. Rupee has arrived.



# **BLOCKCHAIN CRYPTOCURRENCIES & SOUTH ASIA**

### WHY BLOCKCHAIN CRYPTOCURRENCY?

Since the start of Bitcoin in 2009, the evolution of the cryptocurrency market has been remarkable and makes for an interesting case study. The combined market capitalisation of all cryptocurrencies stayed under \$25B USD until early 2017 when it jumped up to over \$100B USD in only a few months. In January 2018, the market capitalisation peaked at \$813B USD. The growth that cryptocurrencies have experienced within this short period of time is unprecedented. To debate the question of whether this rapid growth points at a bubble or not would require its own whitepaper. From what we understand from the available data, however, cryptocurrencies might very well be at the crossroads of mass adoption, disrupting many industries.



But have cryptocurrencies reached a size and scale yet where they can be considered disruptive? Cryptocurrencies at the current market capitalisation of nearly \$429B USD (as of May 2nd, 2018) are hundreds of times smaller than the traditional stock market (~ \$66.8T USD). For a more relatable comparison, consider the combined net worth of Amazon's founder Jeff Bezos, Microsoft's founder Bill Gates, Berkshire Hathaway's Warren Buffet, Facebook's Mark Zuckerberg and Google's Larry Page: It is almost as much as the total market capitalization of cryptocurrencies. This means cryptocurrencies are only in their infancy and have the potential for further growth.

India's GDP for 2017 was \$1.96T USD and remittances are typically 3% of the GDP but there are other aspects of economic activity worth considering. Crypto is considered to have the potential to be a store of value. This is an important value proposition in a country where many seek to protect wealth by holding gold rather than store cash in a bank. At present, Indian private gold holdings amount to 18 tonnes which is 11% (estimated to be\$900BN) of the global gold market. Once one of the fastest-growing economies in the world is educated about cryptocurrencies' ability to store value, the potential for the uptake of cryptocurrencies is clearly very significant.



Another interesting fact is that alternative coins, also known as 'Altcoins', make up only about 63% of the total market capitalization. This means that as new blockchain projects become successful and the overall market capitalisation of cryptocurrencies increases, there will be plenty of room for new projects to succeed. This is exciting news for the Rupee team, blockchain technology and cryptocurrencies are barely scratching the surface in terms of their disruptive potential in the financial sectors. Any product with a solid technical foundation and a good strategy for solving important problems will benefit tremendously from the growth potential of this sector. Real-world solutions to real world problems are key to the success of any crypto project, and we believe Rupee Blockchain is perfectly placed to change the world.





# SOUTH ASIAN MARKET

Analysing the market dynamics of blockchain and cryptocurrencies and observing the market conditions of countries in South Asia, the potential for a Rupee coin becomes evident. We present two use cases for India below.

### **USE CASE 1**

Let us look at foreign remittances first. Non-Resident Indian (NRI) communities in the US, for example, are extremely affluent. According to a World Bank report, 1.7 million NRIs live in the US and 200,000 (12%) of them are millionaires. Furthermore, NRIs earn 1.5 times more in the US than the national median income and 3 times more NRIs have college degrees compared to the US's national average. This means that Indians living outside of their home country are doing exceptionally well and send a lot of money back home. There is a similar level of performance for foreign residents of other countries in South Asia, namely Pakistan, Sri Lanka etc. Indian and Pakistani foreign residents sent a combined ~\$87B USD back to their respective countries in 2017. Of that amount, \$13B USD (at 15% fee per World Bank) was paid in fees.

### **USE CASE 2**

The second area of potential for Rupee coin arises from South Asian people's limited access to banking facilities combined with increasing Internet usage. Consultants from PricewaterhouseCoopers estimated the number of unbanked people in India was around 251 million in 2017. After the publication of those figures, the Indian Government has reinforced its efforts to increase access to banking facilities.

At the same time, Internet usage in India is rapidly increasing and the number of Internet users now totals 369 million. This equates to an Internet penetration of around 28% and suggests that there is ample potential for growth. To remove illicit money from the market, the Government removed high denomination notes from circulation overnight in November 2016. This tactic (known as demonetisation) has increased the demand for digital payments and the Government released mobile applications to facilitate them. This means a significant percentage of the Indian population would experience an increase in their quality of life if given an Internet-based platform that executes transactions efficiently and cost-effectively.

So far, we have established a blockchain-based solution could positively impact a large portion of the South Asian population. But is such a solution even accessible to the people?

When comparing the Indian blockchain/cryptocurrencies market to the global market, the crypto markets of both India and the wider South Asian region are clearly lagging far behind the rest of the world in terms of crypto adoption (trading volume in fiat currencies to be a proxy for cryptocurrencies adoption). According to Coindesk data, USD, CNY, JPY, KRW and EUR trading volumes make up 99% of the total Bitcoin volume (Quarter 2, 2017). This means that outside of the USA, China, Japan, Korea, and Europe not many people are trading Bitcoins. Indians are potentially contributing to this volume via USD or other currency purchase of BTC, but the volume of their trades is only minimal compared to the total volume.





Given that the population of India and China are similar, logic dictates that it is only a matter of time until India's trading volume in cryptocurrency catches up with China's trading volume. Any project that focuses on the South Asian market and facilitates an easier trading of cryptocurrencies would, therefore, thrive in this currently underexplored market segment.



# THE FIRST CRYPTOCURRENCY FOR SOUTH ASIA - RUPEE

### RUPEE INTRODUCTION

As established in the previous section, it is clear that the South Asian region has great potential for growth in the blockchain technology sector. Many pressing problems of today could benefit from solutions based on decentralised blockchain technology. Easier access to cheap and fast transactions would improve the lives of millions of people.

Rupee aims to address these problems primarily for the South Asian market. Our ultimate vision is to become the decentralised default medium for payments and transactions for the 2 billion people of the South Asian region. Providing a decentralised and open network to buy, sell, and send/receive money online without the need for a credit card or bank account (facilitated by mobile wallets) will be life-changing for the people of this region.

### RUPEE BRAND

To realise the potential of Rupee as a brand, we must understand the history of the rupee as a fiat currency. How do we define fiat currency? Fiat money is currency that a government has declared to be legal tender, but it is not backed by a physical commodity. For instance, it's value is not based upon, or stabilised by gold or other physical stores of value. The value of fiat money is derived from the relationship between supply and demand rather than the value of the material from which the money is made. Supply and demand can be governed by factors such as interest rates, set by a central government.

The fiat rupee can be traced back to Ancient India in the 6th century BC. Since then, the rupee (fiat) has established itself through different dynasties, has spread across the region, and has became the national currency of several countries. Because India's economy is primarily cash-based, the rupee (fiat) is strongly recognised amongst the ordinary people. It is a familiar mode of payment which suggests a easy adoption of the Rupee cryptocurrency by the people.

Eight countries in the broader South Asian region use the rupee as their national currency. In 2016, the combined population of those countries was around 1.8 billion people (24% of the world population). The analysis earlier in this paper focused on the adoption of blockchain and the limited daily Bitcoin trading volume in relation to India. These points remain valid across the remaining seven countries and thus present a big opportunity.

	Population 2016 (millions)	Currency	Established
India	1324	Indian Rupee	1540
Indonesia	261	Indonesian rupiah	1949
Maldives Maldives	0.42	Maldivian rufiyaa	1945
Mauritius	1.26	Mauritian rupee	1876
Nepal	29	Nepalese rupee	1932
Pakistan	193	Pakistani rupee	1947
<b>Z</b> Seychelles	0.09	Seychellois rupee	1976
Sri Lanka	21.20	Sri Lankan rupee	1885
	Indonesia  Maldives  Mauritius  Nepal  Pakistan  Seychelles	India 1324 Indonesia 261 Maldives 0.42 Mauritius 1.26 Nepal 29 Pakistan 193 Seychelles 0.09	India 1324 Indian Rupee Indonesia 261 Indonesian rupiah Maldives 0.42 Maldivian rufiyaa Mauritius 1.26 Mauritian rupee Nepal 29 Nepalese rupee Pakistan 193 Pakistani rupee Seychelles 0.09 Seychellois rupee





Rupee, with its advanced technology network, mobile wallets, payment gateway, and a rupee-based ecosystem (Rupeebase.com) has the potential to disrupt the entire South Asian region. This potential is primarily based on the relevance and existing trust in the name "Rupee" and the increasing use of the Internet and smartphones in those countries.

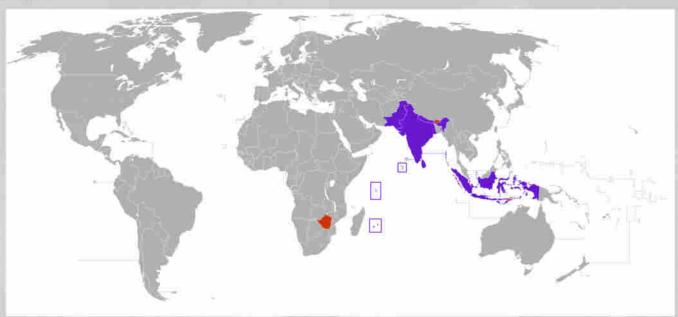


Figure 1 - Purple: Countries using the rupee as an official currency India, Indonesia, Maldives, Mauritius, Nepal, Pakistan, Seychelles, Sri Lanka - Orange: Countries where a foreign country's rupee is legal tender Indian rupee:

Bhutan, Nepal, Zimbabwe Indonesian (Source: Wikipedia)

### **RUPEE CRYPTOCURRENCY & FIAT RUPEE**

It is important to understand the difference between fiat rupee and Rupee cryptocurrency. Fiat rupee is the money the Government creates. It is without intrinsic value and it can be created on a whim because total supply limit has not been set. The creation of fiat rupee is centralised which means its value can be easily manipulated by the Government through rules and regulations. Rupee cryptocurrency, however, cannot be created out of thin air. It uses a Proof of Stake algorithm and needs computing power and energy to be created, and then for the network to be maintained, through masternodes and staking wallets. Moreover, there is only a fixed total supply available. No central authority exists to manipulate its value or increase/decrease its availability. Quantative easing, so beloved by central banks, the sudden creation of additional Rupee, is impossible.

### **OUR STORY**

Created in 2016, Rupee was an open-source cryptocurrency based on the Litecoin source code.

In 2017, a motivated worldwide team realised the potential of Rupee and started working on the project. They spearheaded a relaunch initiative in September 2017. It included additional team members, an improved placeholder website, streamlined social media, and marketing initiatives, an in-depth code and technology review and updates, Rupee development work, and the listing of Rupee on a new exchange (Cryptopia).





In April 2018 the decision was made to announce Rupee Coin 2.0, A new coin on a new code. New team members were recruited and a largely new team was formed around a nucleus of the old team. The decision was made to put an end to mining Rupee completely by introducing "Proof of Stake" on a hybrid of the Dash code. The new code allows its owners to support the blockchain by staking their coins in an open wallet and to be rewarded for doing so. Along with staking, Masternodes were introduced allowing holders to run a Masternode with their coins, thereby supporting the network and being significantly rewarded for doing so.

### RUPEE ECOSYSTEM

The Rupee team is working on finalising the legal framework of registering Rupee blockchain as a non-profit organization in the USA (consultations with cryptocurrency legal experts and attorneys are ongoing). After investing in Rupee infrastructure and development, a portion of earnings will be donated to education and welfare in South Asia. To ensure the spending of our revenue has the highest impact, we invite non-profit organizations with a focus on the South Asian region to get in touch with us to discuss partnership opportunities.

Rupee will generate revenue from the following streams:

- 1.By providing a payment gateway and Point of Sale (POS) application to merchants who accept Rupee in their online and brick-and-mortar stores. Since Rupee blockchain is an open-source network, any merchant can develop a payment gateway to accept Rupee (or any other cryptocurrency) himself or through a third party. As Rupee will need the gateway and POS app developed and tested specifically for the rupee, we would charge a nominal fee to merchants for the provision of both.
- 2. From transaction fees charged to merchants who sell their goods using the Rupee payment gateway and POS app. The Rupee merchant payment gateway and POS app will extract a 1% fee from each transaction. All fees will be generated in RUP (or the respective cryptocurrency used for the respective transaction). This fee is significantly lower than fees charged by the vendors who process credit card payments. Merchants should take note that this fee supports Rupee's non-profit activities and does not add to the corporate profits of traditional payment processors. A fiat currency conversion service will be added once Rupeebase.com is operational.

# **Average Credit Card Processing Fees**

Rupee Gateway/POS1%

MasterCard 1.55% - 2.6%

Visa1.43% - 2.4%

Discover 1.56% - 2.3%

American Express 2.5% - 3.5%

Rupeebase.com will be a separate legal entity with its own revenue streams. Details on Rupeebase.com are included later in this document.





# RUPEE TECHNOLOGY

As stated earlier, Rupee is an open-source crypto currency based on the Dash source code. Its key technical specifications are as follows.

Algorithm POS/Masternodes Current Supply 30 Million Block Halving 545000 Block Reward50 RUP Difficulty Retarget 1 Block Block Target 5 Minutes Max Supply 84 Million

### Rupee Explorer:

http://rupexplorer.com

# POS/Masternode Algorithm

The Rupee team implemented a code update on June 1st, 2018 This update includes;

### Masternodes

Rupee uses special servers called Masternodes to power the blockchain, PrivateSend and Instant Send, Users are rewarded for running a Masternode. 65% of the block reward is allocated to pay the Masternode network holders.

Masternodes enable the following services:

- InstantSend allows for near-instant transactions. Rupee InstantSend transactions are confirmed within seconds.
- 2. PrivateSend gives financial privacy by obscuring the source of funds on the blockchain. This is optional for each transaction.

Masternode owners must be in possession of 20,000RUP, which they prove by signing a message and broadcasting to the network. Those coins can be moved at any time but doing so will remove the Masternode from the queue and the rewards will stop.

### Staking

The cryptocurrency era is here, and with it are multiple opportunities for people to make money. One of the easiest ways to make money in the crypto space is through staking.

So what exactly is staking? Staking is simply the term for holding a cryptocurrency in your wallet for a fixed period, then earning interest on it. The reward that one earns from staking varies depending on the length of the time that one holds it. The longer the stake duration, the higher the returns.

Staking is common with alt-coins. You cannot stake Bitcoin. That's because bitcoin rewards people through a different system known as the proof-of-work system, where the reward is determined by how many coins a person mines.





One of the main advantages of staking is that it eliminates the need to invest in expensive mining hardware. You just need to buy the coins and hold them in your wallet. The next thing to do is to sit back and watch as your wallet balance grows in value. It's quite an easy way to make money.

The other advantage of staking is that it gives you a guaranteed and predictable source of income. That's because the value of coin increases in predictable figures. It's the same as putting money in a fixed account. You are always guaranteed of getting your money back.

Users are rewarded for wallet staking. 35% of the block reward is allocated to pay the staking network.

Masternodes and staking are the next step in the evolution of cryotocurrency. Mining was difficult and expensive. It did not democratise currencies, because it favoured the technologically advanced and wealthy. Masternodes and staking are truly democratic because they are both simple and cheap to create and maintain.

### PrivateSend

PrivateSend gives you true financial privacy by obscuring the origins of your funds. All the Rupee in your wallet are comprised of different 'inputs' which you can think of as separate, discrete coins. PrivateSend uses an innovative process to mix your inputs with the inputs of two other people, without having your coins ever leave your wallet. You retain control of your money always.

The PrivateSend process works like this:

- 1. PrivateSend begins by breaking your transaction inputs down into standard denominations. These denominations are 0.01 RUP, 0.1 RUP, 1 RUP and 10 RUP --just like the paper money you use every day.
- 2. Your wallet then sends requests to specially configured software nodes on the network, called "Masternodes." These Masternodes are informed that you are interested in mixing a certain denomination. No identifiable information is sent to the Masternodes, so they never know 'who' you are.
- 3. When two other people send similar messages, indicating that they wish to mix the same denomination, a mixing session begins. The Masternode mixes up the inputs and instructs all three users' wallets to pay the now-transformed input back to themselves. Your wallet pays that denomination directly to itself, but in a different address (called a change address).
- 4. To fully obscure your funds, your wallet must repeat this process a number of times with each denomination. Each time the process is completed, it's called a "round." Each round of PrivateSend makes it exponentially more difficult to determine where your funds originated.
- 5. This mixing process happens in the background without any intervention on your part. When you wish to make a transaction, your funds will already be anonymised. No additional waiting is required.





### InstantSend

InstantSend is a feature of the Rupee protocol that utilises transaction locking and Masternode consensus to facilitate instantaneous transactions on the Rupee blockchain. InstantSend allows Rupee to compete with existing centralised payment platforms such as VISA, who offer rapid transaction times. Rupee's InstantSend technology offers this, but in a decentralised and trustless manner.

The first element of the InstantSend feature is transaction locking. This mechanism is designed to prevent double-spends in the Rupee network. Currently, in order for merchants to protect against double-spends in systems such as Bitcoin, they must usually wait until a block has been confirmed, to ensure that the transaction being sent is valid. However, the limitation with this is that, on average, it takes 10 minutes for a block on the Bitcoin blockchain to be confirmed. Transaction locking is designed to improve upon the way double-spends are currently being dealt with in existing cryptocurrency systems, which in turn produces significantly faster transaction times.

With transaction locking, a client relays an intention to lock funds from a specific input to a specific output to the entire network. This is accomplished by sending a message that consists of the transaction, and the accompanying lock command. Once the locking message has propagated across the Rupee network and reached everyone, a set of deterministically selected Masternodes, which is the second element of Rupee's InstantSend feature, will form a consensus. Once consensus is successfully achieved, another message will be propagated across the network, and at this point, all clients will respect the lock on the funds.

Once a group of algorithmically selected Masternodes receive a transaction locking message, they will begin voting on the validity of the transaction lock. If consensus is not achieved amongst the Masternodes, then the transaction will require a standard confirmation to assure that it is valid. The utilisation of Masternodes in this manner can be contrasted with how merchants must, at present, prevent against double-spends in other cryptocurrency systems, which is to use clients that observe a network, that will then signal to a merchant if any double-spending attacks are identified. By using Masternodes as observers and giving them greater authority with regard to InstantSend transactions, double-spend protection can be guaranteed in a manner that does not result in high transaction times.

An example of an InstantSend transaction on the Dash network would be the following:

- Raj decides to send a transaction of 5 RUP for an item from Sandeep's (merchant) online store, using a locked transaction.
- 2. This transaction is then broadcasted to the whole network and eventually reaches a set of selected Masternodes.
- 3. These Masternodes form a consensus as to the validity of the locked transaction message. If consensus is not reached, then Raj's transaction will require a standard confirmation to ensure its validity. If consensus is achieved, then the Masternodes will sign a 'consensus transaction' message, which is propagated to the network.
- 4. When a node sees all the consensus messages, they can consider the transaction as confirmed.





### RUPEE PRE-MINE

The original Rupee team sold 90% of the pre-mine to early investors on exchanges for development funding. The current team has roughly 3.5 million of their own purchased Rupee. Rupee coin 2.0 will pre-mine 24.3 million coins (current circulation at time of code change) and a further 6 million Rupee for development, meaning the circulating supply as of May 10th, 2018 will be 30.3 million coins with a max supply of 84 million coins.

### LISTED ON EXCHANGES

Crypto-Bridge https://crypto-bridge.org/ Bitibu https://bitibu.com/ Graviex https://graviex.net/

C-Patex https://c-patex.com/

Next.Exchange https://next.exchange/ (Coming Soon)
Coin Recoil https://www.coinrecoil.com/ (Coming Soon)



# WHAT'S NEXT? - RUPEE ROADMAP

The team is actively working on the upcoming releases and will continue to plan and optimise all remaining deliverables. The developments below are currently planned for Rupee coin:

# September 2017 - Relaunch (COMPLETED)

The relaunch of the Rupee coin was concluded on September 18, 2017, with the following completed steps:

oAssembly of a new relaunch team to support the founding team oA temporary WordPress-based website oFix of the code issues for blocks difficulty retarget oListing of Rupee on a new exchange (Cryptopia)

# November 2017 - Improved Website (COMPLETED)

Followed by the relaunch of the Rupee coin, efforts were immediately concentrated on improving the design and content of the website (keeping future scalability in mind). In November 2017, a new website with additional sections such as profiles of the full Rupee team, FAQs, and a blog was delivered.

# November 2017 - Whitepaper v1.0 (COMPLETED)

For the benefit of investors who share the vision of the Rupee team, this whitepaper was written to document the vision of the team, the history, and the roadmap of Rupee. It was released in November 2017.

# November 2017 - Fork and Code Review (COMPLETED)

Based on the code review completed during the relaunch phase, a code update increased the speed of transactions by implementing the Dark Gravity Algorithm to counter the known issue of rogue miners using ASIC rigs. This resulted in faster transactions and eliminated Adblock delays which improved the user experience of Rupee. Future development efforts will prioritise stabilising the transaction speed.

### November 2017 - Machine Wallets (COMPLETED)

New wallets for Windows, Mac, and Linux were released along with the new code.

### April 2018 - Lyra2Rev2 Fork (COMPLETED)

After a review of the code the decision was made to change the Rupee code to Lyra2Rev2 to allow everyone with a Nvidia or AMD Graphics card to mine Rupee at a much more affordable price.



# June 2018 - Rupee 2.0 Launch (COMPLETED)

Based on a review of the recent Lyra2Rev2 fork the decision was made to change the Rupee algorithm to POS/Masternode using a hybrid of the Dash code. This was done to counter the issue of large multi mining pools exploiting RUP, and will allow all holders of Rupee to be rewarded without the need for any mining equipment.

# June 2018 - Rupee 2.0 Website (COMPLETED)

Following the launch of Rupee 2.0, an entirely new website was created, introducing a different layout and color scheme.

# June 2018 - Rupee 2.0 Machine Wallets (COMPLETED)

New wallets for Windows, Mac, and Linux were released along with the new code.

# June 2018 - Whitepaper v2.0 (COMPLETED)

For the benefit of investors, an updated Whitepaper was released in June 2018 to coincide with the Rupee 2.0 launch and improved website.

# June 2018 - Litepaper v2.0 (COMPLETED)

For the benefits of investors, a new Litepaper was released in June 2018. The Litepaper would enable investors with limited time to read the key details as to what Rupee can offer, in a compact form.

### Starting Q3 2018 - Language Translations

Once the development of the Rupee core functionality is complete, the team will widen accessibility by offering services in other South Asian languages. This will rely on the use of professionals who will translate the applications, the website, and the whitepaper in multiple languages such as Hindi, Urdu, Tamil, and others.

### By end of Q4 2018 - Android and iOS Wallets

Rupee will launch mobile wallets with electrum server which can be used by the general population for day-to-day transactions. These wallets will be the first steps towards digitising payments, making it easy to send/receive money through Rupee. After the launch of these wallets, a payment gateway and Point of Sale application will be developed.

### Q1 2019 - RUPEEBASE.COM Beta Release

Rupeebase.com is a crypto-powered eCommerce portal and an exchange. It represents the ultimate completion of the Rupee vision. The Jewel in the Crown of Rupee 2.0. With the rise of Alibaba and Amazon, it is time for merchants, brands, and other businesses to leverage the power of blockchain technology. Rupeebase.com will facilitate this transition.





# Q1/Q2 2019 - Payment Gateway/Point of Sale Application

Early in 2019, the Rupee team will focus on developing a payment gateway for Rupee which allows merchants to accept Rupee in their eCommerce websites and physical stores. This will be the second step towards the wider adoption of Rupee in South Asia. This fiat connection for merchants who use the Rupee payment gateway will be provided once Rupeebase.com is fully functional. An instant RUP/INR (and to other South Asian fiat currencies) conversion will be offered which will eliminate any RUP price volatility for merchants. It will also allow merchants to accept Rupee through an API and show users which merchants accept Rupee. Additionally, users will be able to save their favorite merchants for quick access.

Rupee has already partnered with Cointopay.com for API access for vendors to accept Rupee. Cointopay.com is a reputable Netherlands-based company which provides plugins for Shopify, WordPress, and other popular development programs to accept Rupee and other cryptocurrencies.

# Starting Q2 2019 - Merchant Onboarding & Partnerships

Once the payment gateway is released, the Rupee team will focus on onboarding merchants and partners to start offering Rupee coin as a form of payment in their stores. This will be an ongoing process as wider penetration of Rupee is sought among merchants.

# Ongoing - Marketing

An extensive marketing campaign is planned immediately after releasing the new Rupee 2.0 coin. This campaign will include content creation and publishing across established crypto outlets, social media campaigns, bounty campaigns, video updates and interviews with key team members.

### Ongoing - Exchange Listings

To facilitate greater liquidity for Rupee, the team realizes that Rupee should be listed on multiple exchanges. The team will continue to work towards getting Rupee listed on bigger and better exchanges to make the currency available to the masses. Listings on Indian cryptoexchanges and other South Asian exchanges will be the primary focus.

### Disclaimer

The dates written in the roadmap are to be used as a guide and a guide only. Every reasonable effort will be made to achieve the timescales set out in the Whitepaper. Any delays to these deadlines will be communicated accordingly.



# RUPEE ECOSYSTEM - RUPEEBASE.COM

### WHAT IS RUPEEBASE.COM

The Rupee team envisions a future, primarily for, but not limited to, South Asia, where people can send and receive money quickly and inexpensively, and pay for goods/services using Rupee (powered by Rupee blockchain). A future in which people can convert their Rupee coins into fiat currency (especially INR, PKR, and other South Asian currencies) and other coins if needed, and sell and buy goods on a platform using Rupee (powered by Rupeebase.com). The vision of the Rupee team is this will all take place on Rupeebase.com. Rupeebase.com will be the exchange and eCommerce portal powered by Rupee coin as the default form of payment.

Rupeebase.com will offer the people of South Asia a place to securely conduct business and exchange currencies hassle-free, in a cryptocurrency they are familiar with. Access to bank accounts or credit cards won't be necessary.

Rupeebase.com will be a separate legal entity with its own whitepaper (expected to be released by Q1/Q2 2019).

### RUPEEBASE.COM REVENUE STREAMS

Rupeebase.com will primarily generate revenue from the following two businesses:

# Exchange - RUPEx

Rupeebase.com will provide exchange services to convert RUP into INR and other major fiat currencies (especially South Asian). RUP to other major cryptocurrency pairs will also be offered (BTC, LTC, ETH).

RUPEx will be integrated with the Rupee payment gateway and POS application to offer merchants an option to instantly convert their RUP to a fiat currency of their choice and avoid any cryptocurrency volatility.

Transactions will incur a small fee. The percentage is yet to be determined but will be equal to or lower than other exchanges.

### eCommerce Portal - Dukaan

For RUP coin to achieve mass adoption Rupeebase will provide merchants and customers with an e-commerce platform. Rupeebase e-Commerce aims to be superior to traditional banking payment and merchant processing platforms utilising and integrating blockchain technology, smart contracts and RUP 2.0. The goal is not to compete with traditional merchant processors, but to be superior to them in every way possible. This is a realistic goal as banks typically lose money with merchant portfolio due to business operational costs. Banks recover this money by offering merchants other forms of business (lending, credit cards, mortgages, loans etc.). Rupeebase can disrupt this market with better merchant customer service, significantly lower processing rates & faster/safer transaction processing.



# **Key points of RUPEEBASE E-COMMERCE:**

- Rupeebase e-Commerce will feature mobile application and website portal and customer access.
- Easy sign up Merchant on-boarding page and instructions. Sign up web page and design will be intuitive and optimised for the best user experience.
- 3. Speed of On-boarding time (3-4 business days with KYC verification) with Rupeebase e-Commerce vs weeks to months with traditional payment processors and platforms. Traditionally, the bank and payment processors must process the merchant application as part of merchant on-boarding process which takes weeks, even months. With Rupeebase and blockchain technology, sign-up is done simply and effectively without the use of a bank account.
- 4. Ease of sign up without using a Fiat bank account. For crypto to Fiat conversion, Merchant will provide Fiat bank settlement account information for direct deposit as Merchant portal feature.
- 5. No need for bank account set-up: Rupeebase will provide Merchant Wallet Address (full account) and Rupeebase will store Merchant Private Key. This ensures that Merchant Wallet Address is not accessible from other wallets and Account cannot be hacked or lost. Rupeebase e-Commerce assumes that merchants are not technically inclined, so steps must be taken to ensure that minimal/zero technical knowledge is needed for full on-boarding and merchant portal usage.
- 6. Merchant Processing Fees will significantly undercut current processor fees which is a big incentive for merchant payment processing.
- 7. Merchant account maintenance fee will be less than traditional merchant platforms and bank accounts. For small merchants, this is key as traditional merchant processors charge premiums for account maintenance. An account maintenance fee may be needed as merchant data needs to be stored in data warehouse or on a block chain which has developer and service costs to RUP if outsourced.
- 8. Know Your Client (KYC) will be in full effect for newly on-boarded merchants to verify merchant credentials. This safe guards Rupeebase customers for fraud which has the potential to disrupt mass adoption of the Rupeebase platform. Rupeebase reputation relies on having valid merchant on-boarded who will sell viable and quality products.
- 9. Rupeebase merchant accounts will feature merchant and product rating system designed to ensure customer receives quality products.
- 10. Rupeebase merchants and customers will have mobile app and web access to Rupeebase e-Commerce. Traditionally banks and merchant processors charge merchant's separate fees for adding multiple platforms e.g.: Mobile and e-commerce.



- 11. All Rupeebase merchant data will be stored on a secure Rupeebase blockchain. This blockchain is a merchant data warehouse that stores all data which cannot be destroyed or altered.
- 12. For ease of mass adoption, Rupeebase will feature an analytics dashboard to track sales, transaction volumes with easy to reach graphs and easy to select data points.
- 13. For ease of main stream adoption and usage, Rupeebase merchants will have a screen option to view all transactions in RUP and Fiat USD equivalent.
- 14. Rupeebase merchants will have superior account flexibility as they are able to withdraw funds without any limits. A merchant wallet account cannot be frozen allowing merchants to have complete control/ freedom of funds.
- 15. Rupeebase merchants will have a reduced RUP transaction fee if their account settlement balance is held in RUP currency.

### Rewards Program - Inaam

- 1. A rewards program called "Inaam" (Hindi for "gift") will be integrated into Rupeebase.com for merchants who accept RUP.
- 2. Merchants who use the Rupee payment gateway and POS application could give their customers rewards units either in RUP or based on a points system convertible to RUP.
- 3.Triggered by either the payment gateway or the POS application, the rewarded RUP will be automatically credited from a merchant's seller account to a buyer's account on Rupeebase.com. The buyer could then either use these RUP coins to buy something else from Dukaan, move the RUP coins to another wallet, or exchange them for any other currency on RUPEx.

# Role of Rupee on Rupeebase.com

Rupee will be the fuel for Rupeebase.com. All transactions will be executed in RUP and all pairs offered in RUPEx will be RUP pairs with either fiat or other cryptocurrencies. Rupeebase.com will be the ultimate completion of the Rupee ecosystem.



