Welcome to the World
of Future Cryptocurrency with Stability

Opportunity to participate in world's largest DAO with
stability and flexibility

WHITE PAPER

CONTENTS

01 INTRODUCTION

The disruptive blockchain technology provides new economic, business, and technological models that can bring profound, positive changes to business and society. Innovation leaders and enterprises are leveraging blockchain to benefit from its core benefits, such as greater security, transparency, and speed.

Blockchain-powered digital currencies, known as cryptocurrencies, are creating a money revolution. By making third party functions redundant, they call into question the role of central banks and financial institutions. It is opined that cryptocurrencies will wrest away some control from central banks and conventional financial players. In addition, cryptocurrencies eliminate geographical barriers, promising uninterrupted global use, and enabling real-time cross-border transactions.

Stablecoins, to be specific, have emerged as a reliable cryptocurrency gaining rapid adoption across diverse industries. Stablecoins bring the best of both worlds together – price stability of fiat and decentralization of cryptocurrency.

Blockchain and cryptocurrency together hold huge potential to transform the financial services industry – from operations to business models. As every industry stands to benefit from blockchain, the affiliate marketing industry is radically adopting the technology for a more accessible and transparent process.

02 THE PROBLEM

The traditional affiliate marketing business model is beset with inefficiencies, such as:

Distrust:

When any new company launches affiliate marketing solutions, it faces issues building credibility among participants.

Lack of transparency:

The traditional affiliate marketing process lacks transparency of information and transactions between participants.

Mutability:

The company offering affiliate marketing solutions can revise its incentive program anytime, leaving its participants uncertain about their earnings.

Delayed transactions:

Due to long transaction settlement time, companies are unable to ensure real-time transactions for their participants.

Geographical barrier:

Companies have to limit their offerings to national level as cross-border fiat transactions are plagued by high settlement time and higher transaction processing fees.

2.1 Problem of high volatility

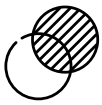
The price volatility of Bitcoin and other cryptocurrencies is one of the biggest barriers to widespread adoption that cryptocurrencies face today. Cryptocurrencies do not have a central bank to implement monetary policy to keep purchasing power stable, which means that changes in demand can induce massive fluctuations in price. If users cannot be sure that the purchasing power of their accounts will remain stable, they will never adopt a cryptocurrency as a medium of exchange over a price-stable alternative. Moreover, without price stability, it is difficult for credit and debt markets to form on top of a cryptocurrency because every contract taking payments in the future must charge a large premium to factor in price risk. For example, imagine you received a salary of 1 BTC per month—if the price of BTC dropped, you might miss the rent.

03 THE SOLUTION

Blockchain, with decentralization at its core, brings potential solutions to the pain points that can hold back the best of affiliate marketing projects, by ensuring the following:

Trust:

Blockchain lends trust to affiliate marketing companies' offerings and gives participants the peace of mind to invest in an affiliate marketing project with confidence.



Transparency:

Blockchain brings everything on a distributed ledger that is accessible to everyone on the network, thereby promoting transparency.

Immutability:

Owing to immutable smart contracts, companies cannot make any changes to their system once it has been defined, even if they want to.

Accelerated Transactions:

Blockchain drives automation, which eliminates the need for human-driven operations and results in real-time transactions.

Global Accessibility:

Blockchain combined with cryptocurrency expedite cross-border transactions while making them cost-efficient. Furthermore, since cryptocurrency is a global currency, it can be utilized by anyone worldwide, thereby enabling companies to offer their services to global participants while breaking the geographical barriers.

3.1 Stablecoin: Solution to Volatility

A stablecoin is a cryptocurrency that is collateralized by the value of its underlying asset which can be anything such as U.S. Dollar, gold, or another cryptocurrency. Stablecoins offer the benefits of cryptocurrencies – including transparency, immutability, security, privacy, quick transactions, and low fees – without losing without losing the guarantee of trust and stability as in case of fiat currency. By enabling a secure and stable decentralized system, stablecoins benefit everything – from cross-border payments to the financial ecosystem.

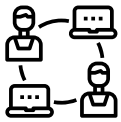
Stablecoins differ in types based on the assets that they are pegged to. One of the types is algorithmic stablecoin. It is designed to achieve price stability and balance the circulating supply of the asset by being pegged to a reserve asset like the US dollar, gold, or cryptocurrency.

Algorithmic stablecoins use an algorithm to achieve stability. The algorithm issues more coins when the price increases and buys the coins when the price falls.

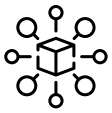
04 ABOUT RELIVECOIN

ReliveCoin is a blockchain-based, decentralized affiliate marketing program designed to incentivize individuals for participating in the program. Unlike the traditional affiliate marketing process, ReliveCoin will be built on the Ethereum blockchain and smart contract. The Ethereum blockchain will bring the following benefits to the platform:

Peer-to-peer transactions



Round-the-clock accessibility



Decentralization

Instant pay-outs

Greater transparency

The smart contract will contribute to immutability of the business logic. All of the business rules will be written in the smart contract which will then be deployed on the blockchain. Once the smart contract is added to the blockchain, it cannot be manipulated by any individual. Furthermore, the smart contract will automate and expedite transactions on the ReliveCoin platform while making third-party functions redundant. This will enable decentralization.

ReliveCoin aims to bring stability to transactions, which is why the platform has created a stablecoin, known as RLC$, which will maintain stability across the ecosystem.

05 RELIVECOIN TECHNOLOGY STACK

5.1 Ethereum Blockchain

Ethereum is an open-source, blockchain-based, decentralized software platform used for its own cryptocurrency, Ether. It enables the creation and operation of smart contracts and decentralized applications (DApps) without any downtime, fraud, control, or interference from any intermediary or third party.

The ReliveCoin ecosystem will be built on the Ethereum blockchain, thereby inheriting the benefits of the latter – such as greater security and transparency, accelerated transactions, reliability, and more.

5.1.1 Architectural Overview of Ethereum

Ethereum is a decentralized mining network and software development platform packed into one to facilitate the creation of new cryptocurrencies and platforms that share a single blockchain.

The architectural components of Ethereum include the following:

- **Node/Client:** A node, also known as a client, is a device/program that communicates with the Ethereum network.
- **Block:** A block is a package of data that comprises zero or more transactions, the hash of the previous block, and optionally other data.
- **Miners:** Miners add the block to the Blockchain. Miners are simply nodes in the Ethereum network who find new block, confirm transactions, and commit new transactions in a block.
- **Proof of work:** Proof of work is an activity that miners perform to write transactions to a new block. It is a mathematical value that serves as a proof of having solved a resource and time-consuming computational problem.
- **Ethereum Virtual Machine:** Ethereum Virtual Machine is the decentralized computing platform that forms the core of the Ethereum platform.
- **Smart Contract:** A persistent piece of code on the Ethereum Blockchain that has a set of data and executable functions.
- **Gas:** Gas refers to the pricing value needed to successfully perform a transaction or execute a smart contract on the Ethereum Blockchain platform.
- **Gas Limit:** The gas limit represents the maximum amount of gas you are willing to pay for a smart contract transaction execution.
- **Mining Pool:** A mining pool is simply a group of miners that work together to mine blocks for Ethereum network.
- **Main-net:** A main-net is a main Ethereum Blockchain network.

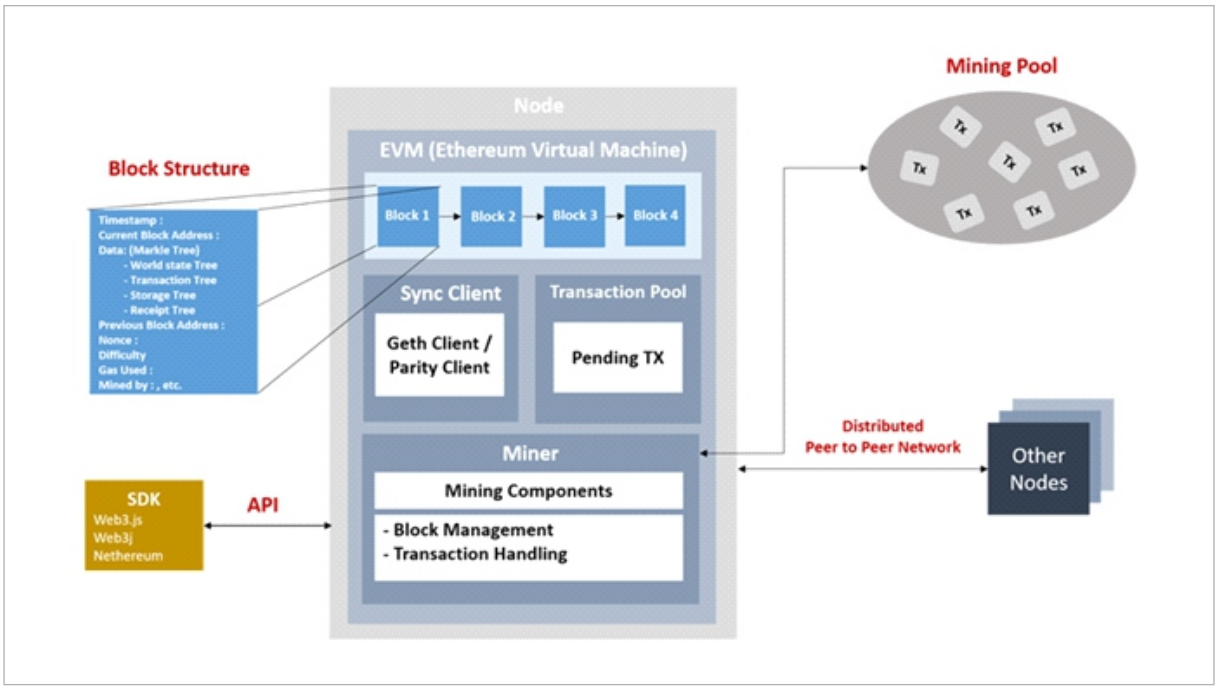
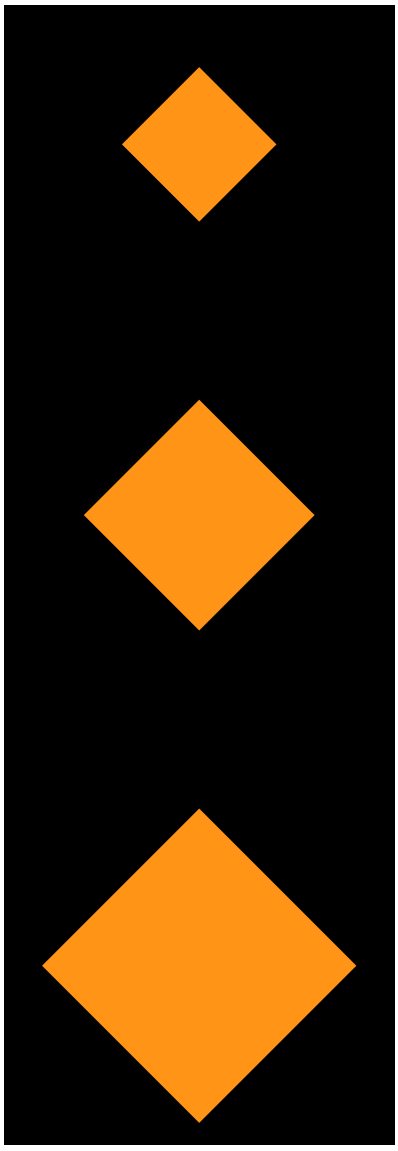


Figure 1: Architectural components of Ethereum

Types of Nodes

Clients can run 3 different types of node – light node, full node and archive node. In addition, there are different sync strategies that enable faster synchronization time. Synchronization refers to how quickly it can get the most up-to-date information on Ethereum's state.



Light Node

- Stores the header chain and requests everything else
- Can verify the validity of data against the state roots in the block headers
- Useful for low capacity devices, such as embedded devices or mobile phones, which can't afford to store gigabytes of blockchain data

Full Node

- Stores full blockchain data
- Participates in block validation, verifies all blocks and states
- All states can be derived from a full node
- Serves the network and provides data on request

Archive Node

- Stores everything kept in the full node and builds an archive of historical states
- These data represent units of terabytes which makes archive nodes less attractive for average users but can be handy for services like block explorers, wallet vendors, and chain analytics

How does Ethereum work?

For Ethereum to work in a decentralized manner, it requires a distributed network of nodes that can verify blocks and transaction data.

- Key components of Ethereum include Clients, Transaction Pool, Miners, Mining Pool, and Ethereum Virtual Machine.
- Ethereum client or nodes interact with the Ethereum Blockchain via Ethereum SDK's like Web3.js, Web3, and more. Clients help create transaction, broadcast the transaction, read the data of block, get the Ethereum account balance, and more.

- Client broadcasts a transaction to its peer.
- Peers can be other nodes or miners.
- When the transaction is broadcasted to the network, the transaction goes to every peer's Transaction Pool and Mining pool.
- Miners choose the transaction with higher solving fees (Gas) from Mining pool. Miner solves the mathematical computation and broadcast the proof of work.
- Other miners validate the nonce given by miner and if the nonce is correct then the miner adds the block to the Blockchain.

5.2 Smart Contract

A smart contract is a program stored on the blockchain that executes automatically when a predefined condition is fulfilled. It is typically used to automate the execution of an agreement, ensuring that all of the participants are sure of the outcome without the involvement of an intermediary or any delay. A smart contract can also automate a workflow, triggering the next action that should take place when a condition is satisfied.

5.2.1 How does a smart contract work?

A smart contract simply works by following "if/when…then…." statement that is written into a code on a blockchain. A network of computers implements the actions when the conditions are fulfilled and verified. These actions can include releasing funds to the right parties, sending notifications, or issuing a ticket. When the transaction is completed, the blockchain is updated. This means that the transaction is immutable – it cannot be changed. Only the parties with the permission can see the results.

5.2.2 Benefits of the smart contract

Speed, efficiency, and accuracy: Once a condition is fulfilled, the contract executes automatically. As smart contracts are automated and digital, the smart contract eliminates the paperwork and the time spent on reconciling errors that often occur due to manual filing of documents.

Trust and transparency: Given that the smart contract eliminates third party involvement and shares encrypted record of transactions across participants, there is no question of the information being altered for personal advantage.

Security: Blockchain transactions are encrypted, making them hard to hack. Furthermore, since every record is connected to the previous and subsequent records on a distributed ledger, hackers would have to change the entire chain to alter a single record.

Savings: The smart contract makes third party functions redundant when it comes to handling transactions, thereby reduding the fees and processing time.

5.2.3 Use of smart contract in ReliveCoin

An Ethereum-based smart contract will be used for the following on the ReliveCoin platform:

- Automatic calculation of users' funds
- Peer-to-peer payouts

All of the transactions on the ReliveCoin platform will be driven by ReliveCoin Token, known as RLC.

5.3 ERC-20 Token Standard

ERC20 is a blueprint for creating fungible tokens that are compatible with the broader Ethereum network. ERC20 standardizes the core functionality of each token, which means that the tokens created using this framework are interoperable with each other and ERC20-compatible services.

5.3.1 Characteristics of ERC-20

The following are the characteristics of ERC-20:

- **Ethereum:** All ERC-20 tokens are deployed on the Ethereum network.
- **Smart Contract:** The function of every ERC-20 token is governed by a smart contract while ensuring that no entity or person needs to be trusted for the operation of the token. The code executes automatically when the rule or condition is satisfied. For example, to transfer a token to someone, a person does not have to trust anyone to pass it to the recipient.

06 RELIVECOIN GOVERNANCE TOKEN (RLC)

ReliveCoin token, RLC, will be an Ethereum-based governance token that will be used on the ReliveCoin affiliate marketing platform. RLC tokens will be created on ERC-20 standard.

6.1 Utility of RLC Governance Token

RLC tokens will be held in Ethereum wallets and will be supported on Ethereum and other popular blockchains.

RLC tokens will be easy to generate, access, and use. RLC will be generated by the ReliveCoin Protocol and once generated, it will enter into circulation after which the tokens can be bought. RLC tokens will be used for:

- Affiliate marketing on the ReliveCoin platform
- Giving payouts to network participants

6.2 Use of RLC Governance

The RLC token—the governance token of the ReliveCoin Protocol – will allow those who hold it to vote on changes to the ReliveCoin Protocol. Any voter-approved changes to the governance variables of the Protocol will not take effect immediately in the future. Rather, they could be delayed by 24 hours if voters choose to activate the Governance Security Module (GSM). The delay will provide RLC token holders with an opportunity to protect the system, if necessary, against a malicious governance proposal (i.e., a proposal that modifies collateral parameters in contrast to defined monetary policies or that disables the security mechanisms) by triggering a shutdown.

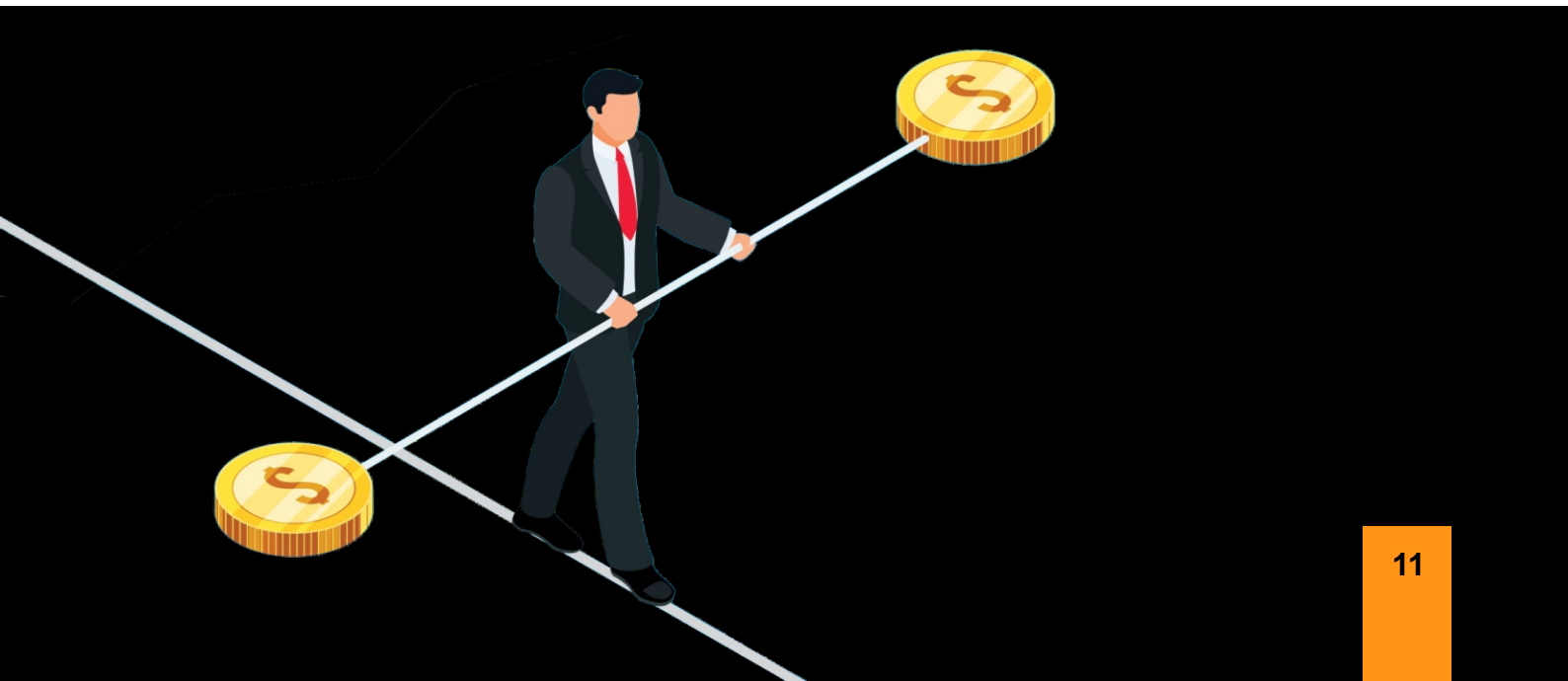
07 RELIVECOIN STABLECOIN

ReliveCoin stablecoin (RLC$) will be a decentralized, cryptocurrency-backed digital currency pegged to Ethereum. It will be an algorithm-based stablecoin – which means that it will use an algorithm to issue new coins when the price increases and buy them off the market when the price falls.

Blockchain technology provides an unprecedented opportunity to address people's growing frustration with—and distrust of—dysfunctional centralized financial systems. By bringing everything on a distributed ledger accessible to everyone on the network, the technology promotes greater transparency and eliminates the involvement of any third-party like banks or financial institutions. This leads to an unbiased, transparent, and highly efficient permissionless system—one that can augment existing global financial and monetary structures and serve the people in a better way.

Bitcoin was created with this goal in mind. Although Bitcoin succeeds as a cryptocurrency in a number of ways, it is not an ideal medium of exchange due to its fixed supply and high volatility. These limitations prevent Bitcoin from being used as mainstream money.

The ReliveCoin stablecoin, on the contrary, succeeds where Bitcoin fails precisely because ReliveCoin stablecoin is designed to minimize price volatility. A decentralized stablecoin, its value is in its stability.



7.1 How does Algorithmic Stablecoin Work?

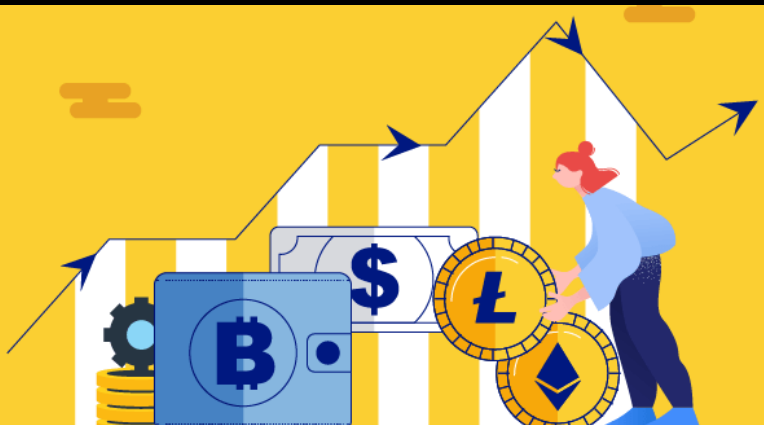
Algorithmic stablecoins truly represent the concept of decentralization. They eliminate the involvement of regulatory bodies to keep tabs on the proceedings as the smart contract manages the supply and demand as well as ideal target price.

As stated earlier, algorithmic stablecoins use algorithms to balance the circulating supply of the asset.

For example, assume that a stablecoin is priced at $1. If the price drops to $0.80, the algorithm identifies the imbalance between supply and demand and automatically sets a market buy order to push the price back. When the price goes above $1, the algorithm sells assets to maintain the price on the predefined level that keeps the peg.

7.2 How will ReliveCoin Implement Price Stability?

ReliveCoin will implement price stability using the same economic principles relied upon by central banks around the world, i.e. Quantity Theory of Money.



The Quantity Theory of Money

History has shown that as markets rise and fall, people's choices in an economy are vulnerable to frenzies and panics. During an economic boom, people have more money, so they want to buy more goods, causing the prices of goods to rise, which fuels demands for higher wages, which means people have even more money. This is an inflationary spiral, and it happened to Germany in the 1920s, Brazil in the 1980s, and Argentina in the 1990s. Similarly, in an economic bust, people are afraid to buy goods, causing the prices of goods to drop, driving people to put off purchases further until prices fall even more, and so on. This is known as a deflationary spiral—and it almost occurred during the global recession of 2008. In both of these situations, a responsible central bank can step in to cut off these destructive feedback loops. But how do central banks manage this task?

Imagine that prices in an economy are at some level—say, the average cost of a predefined "basket of goods" is $100. The Quantity Theory of Money says that if you doubled the amount of money that everyone had in their bank accounts, then, in the long run, that same basket of goods would cost $200. Why? While the nominal amount of money everyone has doubled, the true value of goods has stayed the same. This means that people should be willing to part with twice as much nominal money to get the same amount of value. The same principle applies in the reverse: If we yanked half of peoples' savings out of the economy, then in the long run, our same basket of goods would cost only $50.

Extending this concept, consider the case of a central bank trying to calm inflation. High prices that are constantly rising mean that people are too willing to spend money. To restore prices, people should have less access to money. Similarly, the opposite applies with deflation, which makes people unwilling to spend money. To restore prices, people should be given more money. This simple but important idea is exactly what central banks do to stabilize prices. While the tools that central banks use to implement monetary policy can be abstruse and difficult to understand, e.g., open market operations and reserve requirements. A central bank does two things at a high level:

- Expand the money supply. If a central bank sees that prices are going down, it can expand the money supply to bring them back up.
- Contract the money supply. If a central bank sees that prices are going up, it can contract the money supply to bring them back down.

Expanding and contracting the money supply works because the Quantity Theory of Money states that long-run prices in an economy are proportional to the total supply of money in circulation. Below is an example of the theory, applied to keep price levels:

Stablity in a currency like ReliveCoin:

- Suppose you want to peg a currency like ReliveCoin such that 1 token always trades for 1 USD. This can be achieved by growing or shrinking the supply of tokens in proportion with how far the current exchange rate is from the desired peg.
- First, the concept of aggregate demand is introduced. Conceptually, aggregate demand describes how much people in aggregate want the coin:

demand = (coin price) * (number of coins in circulation)

This is also known as a coin's market cap, since market cap equivalently describes how much people in aggregate value the coin.

- Let X represent the number of coins in circulation, i.e., coin supply. Suppose that demand has risen over the past few months such that coins are now trading for $1.10:

demand = $1.10 * X

- To determine how coin supply can be adjusted to restore the peg of $1, assume that demand stays constant, and let Y represent the desired number of coins in circulation:

demand_before = $1.10 * X **demand_after = $1.00** * Y **demand_before = demand_after**

- Solving for Y implies that in order to get your coin to trade at $1, you need to increase the supply of your coin by a factor of 1.1:

Y = X * 1.1

As a rough estimate, the Quantity Theory of Money finds that if ReliveCoin is trading at some price P that is too high or too low, the protocol can restore long-term prices to $1 by multiplying existing supply by P.

7.3 Benefits of stablecoin

The launch of a fully-functional cryptocurrency is similar to launching smartphones for the first time. No one would have expected the transformation that smart phones brought – in terms of browsing, payments, bank accounts, and more. Smart phones have enabled people to take their banks with them everywhere, round-the-clock. In addition, any service is available at the tap of a button. Similarly, cryptocurrency offers multiple applications – while some are already being utilized, many others are ready to be rolled out.

7.3.1 Growing the cryptoasset ecosystem

Stablecoins have gained significant adoption as a means of exchange. A stablecoin can serve as a store of value and medium of exchange. In addition, a stablecoin is paramount to develop any distributed app economy.

However, before the distributed app technology acquires considerable adoption, the crypto industry will be an early adopter of its financial technology. A cryptocurrency holding a stable market value is likely to achieve a greater usage in cryptoasset trading, crowdfunding, commerce within the industry, and other industrial projects.

7.3.2 Strengthening evolving markets

The fiat currency of many flourishing markets is losing its value. This is having a significant impact on many individuals. Imagine a situation where you have to hold a currency that depreciates by 40% every year and you have no other choice.

The residents of inflation-affected countries can hold foreign currency instead of their inflationary native currency, but this would not be permitted by their governments. With more people selling the local currency, the value of the currency diminishes in the global market.

Stablecoins can address this problem and be a solution by allowing the citizens of inflation-affected countries to exchange their dropping currency holdings into a stablecoin.

7.3.3 Globalizing transactions

The conventional technology and the involvement of third parties delay cross-border payments while making them expensive. It takes three to five days for transaction settlement, and the transaction and currency exchange fees is somewhere between 4% and 4.5% of volume. Apart from this, Payment Service Providers (PSPs) struggle to interoperate due to lack of standardization of messaging formats. Similarly, back-end service providers struggle to transmit and reconcile transactions due to the same reason. Besides, the additional complexities have to be addressed, which ultimately increases transaction cost and processing time.

A stablecoin can eliminate these barriers and enable quick global transactions round-the-clock. Stablecoins – as a means of payment and store of value – can enable a global payments system that is quick and cost-efficient.

7.3.4 Eliminating problems with capitalism

Money is susceptible to manipulation. An example is manipulative gambling places such as casinos or the stock market that thrive on less informed participants.

Cryptocurrencies do not offer a solution to this problem with capitalism. In fact, these digital currencies are more likely to make the problem worse as these assets can be used for gambling and stealing money from others through volatile markets. However, a stable currency can provide better solutions to govern and regulate capital markets' behavior.

08 THE RELIVECOIN PROTOCOL

ReliveCoin will maintain its peg in the long run if token supply is adjusted to match token price. How does the ReliveCoin protocol measure token price? How does it adjust supply?

These questions can be tackled by providing a full specification of the ReliveCoin protocol. At a high level, the protocol can be understood as having all the technical properties of a traditional cryptocurrency like Bitcoin, but with these additional features:

- The protocol defines a target asset to stabilize against. This is a cryptocurrency – Ethereum (ETH).
- The blockchain monitors exchange rates to measure the price. The blockchain sources a feed of the ReliveCoin-ETH exchange rate via an oracle system. This can be done in a decentralized way.
- The blockchain expands and contracts the supply of ReliveCoin tokens in response to deviations of the exchange rate from the peg.

If ReliveCoin is trading for more than $1, the blockchain creates and distributes new ReliveCoin.

If ReliveCoin is trading for less than $1, the blockchain will take coins out of circulation.

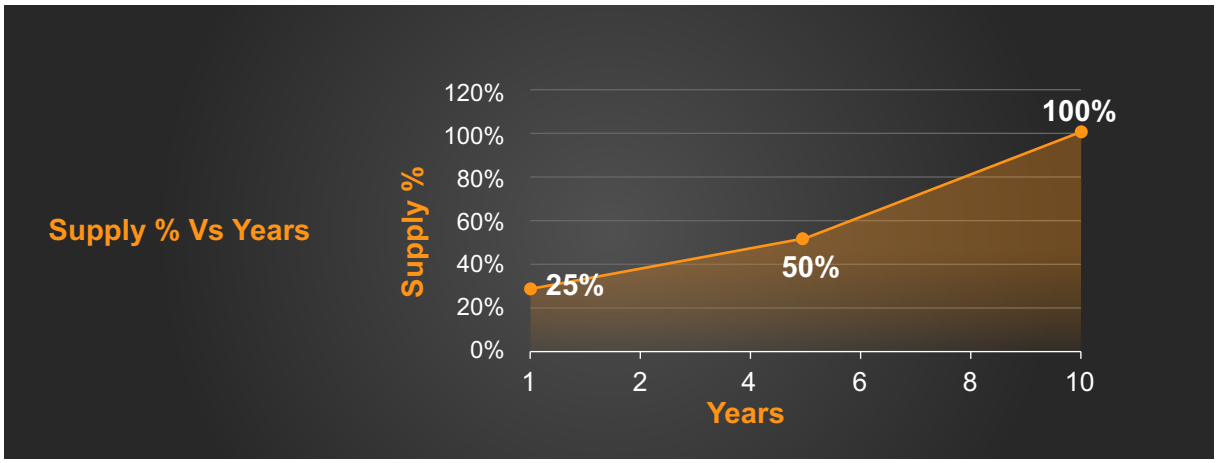
The ReliveCoin protocol might be better understood by comparing it with the Fed. Like the Fed, the ReliveCoin blockchain monitors price levels and adjusts the money supply by executing open market operations, which in our case consists of creating ReliveCoin tokens. Like for the Fed, these operations are predicted by the Quantity Theory of Money to produce long-run price levels at the desired peg.

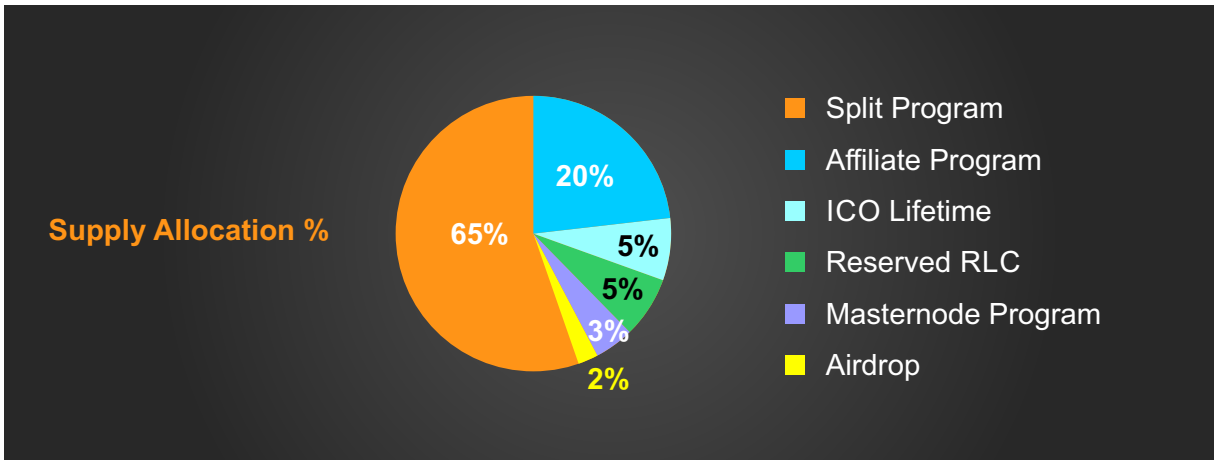
09 RLC TOKENOMICS

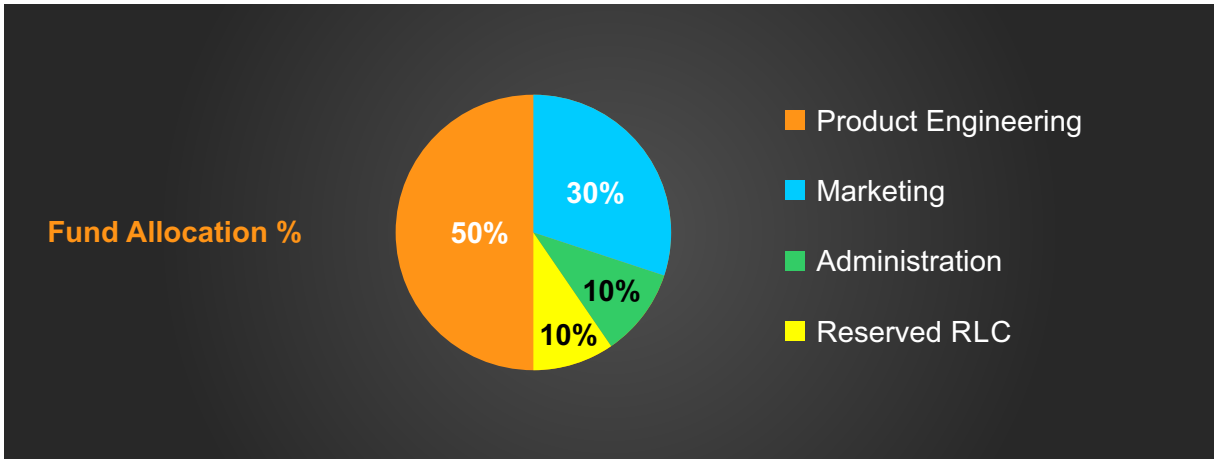
A total of 210 million ReliveCoin will be created and offered for use on the ReliveCoin affiliate marketing platform.

ReliveCoin Name	**RLC** Symbol	**ERC-20** Standard	**ETH** Can be bought against	**10 Decimal Places** Divisible up to

9.1 Distribution of ReliveCoin







10 ROADMAP

Aug 2020

First Release
- Website Launch, Smart Contract integration, White Paper First Look.
- Media Promotion

Sept'20 to Nov'20

Airdrop
- Free Coins to Selected Persons
- People who have lost their money in Alt coins or Failed Project will get Priority

Official Release

Official Release
- ICO Launch

Q2 2021

Registration
- Launch of ReliveCoin 2.0
- Exchange Listing
- Global Community Formation

Q3 2021

Ecosystem
- Decentralized Autonomous Organization setup (DAO)
- E governance setup
- Updates on regulatory licenses
- Key product development and team setup
- 210 governing counsel members selection

Q4 2021

Expansion
- Hotels and flight booking
- B2B partnership network & ongoing marketing efforts
- Merchandise online stores, (shops will have Items which can be purchased by RLC$)

Q1 2022

Payment System Integration
- Debit card program
- Users can interact with non-crypto system

Long Term

- Decentralized fiat crypto brokerage networks, fiat back up, setting up new corridors
- Full decentralization with external audit system, proof of authority, development of Blockchain 5.0, offline data transfer, artificial intelligence
- Academic and university collaboration, university and outreach and hackathons, scholarship and research support

11 RELIVECOIN TEAM

ReliveCoin team comprises individuals and service providers, who may be contracted through ReliveCoin Governance to provide specific services to ReliveCoin. Members of ReliveCoin team include independent market actors and are not employed by the ReliveCoin Foundation. The flexibility of ReliveCoin Governance allows the ReliveCoin community to adapt the ReliveCoin team framework to cater to the services required by the ecosystem on the basis of real-world performance and emerging challenges.

The roles of ReliveCoin team members include the Governance Facilitator, who supports the communication infrastructure and processes of governance, the Developers, who take care of the successful development and deployment of the ReliveCoin ecosystem, and Risk Team members, who support ReliveCoin Governance with financial risk research and draft proposals for onboarding new collateral and regulating the existing collateral.

The four pillars of ReliveCoin

Adept developers

Alen R

Alen is Founder Member at Relive Coin, Alen brings more than 10 years of legal experience to the role with expertise in financial services and regulatory affairs. He's been General Counsel and part of the executive leadership teams at CIT Group. Alen began his career in private practice and was a partner with the international law firm of LeBouef, Greene and MacRae where he specialized in litigation.

Wei Quin

Wei was formerly a software developer at Tower Research Capital for nearly 9 years, specializing in HFT strategies in equity markets. Prior to that, he taught at the ECE department of Boston University. Wei holds a PhD from Princeton University.

Richard

Richard was formerly the Head of International Product at Mobike, bringing their product from one to fifteen countries. Prior to that, he worked at Google and Amazon in business management and software engineering capacities. Richard holds a BA in economics from Harvard.

Brains behind ReliveCoin

Nader Al Nazi

ReliveCoin is the brainchild of Nader Al Nazi. Nader worked on Search and Ads at Google and in algorithmic trading at D. E. Shaw & Co. He became obsessed with Bitcoin in 2012, and set up a mining rig in his dorm. His obsession sparked a passion for monetary theory, culminating in the insights behind Basis, after The Failure of Basis he is the Man behind ReliveCoin.