

ZEDPay White Paper

Abstract

The development of cryptographic assets, as well as blockchain-based computation and data sharing, has ushered in the open internet's next significant era. Crypto assets and blockchain technology will allow humans to exchange value and deal with one another in the same way as HTTPS, SMTP, and SIP allowed for free information sharing and communications: instantly, globally, securely, and at a low cost. An open internet of value exchange has the potential to further revolutionize and integrate the world, eventually removing arbitrary economic borders and enabling a more efficient and inclusive global marketplace that connects everyone on the planet. The global economy's future is open, sharing, inclusive, significantly more evenly distributed, and powerful, not just for a few select gatekeepers, but for everyone who will participate.

The ambition to actualize this vision led to the creation of ZEDPay.

Use Cases

Following Satoshi Nakamoto's publishing of the Bitcoin white paper in 2008, a slew of cryptocurrency initiatives sprung out, and the cryptocurrency market grew exponentially. Even now more than a decade later, however, cryptocurrency is still seen solely as a form of investment, with no cryptocurrency having made its way into our daily life. There are many reasons for this whether it be a difficult learning curve, volatility in price, or just plain suspicion. ZEDPay will change this perception.

Over the past half-decade, mobile-based digital wallets have popped up all around the world. These applications allow people to make person-to-person and person-to-merchant payments using their mobile phones. Mobile wallets have sprung up in every country, where they are offered by a mix of banks, mobile carriers, and technological firms. Each one claims to make consumer payments more convenient. Almost the majority of these, however, are only thin software shims built on top of the legacy banking and card network payment systems. Each one is compartmentalized and exclusive. They live in walled gardens, to borrow from the internet 1.0 era of online services. While we may freely exchange information and content and connect in open and global ways, money and payments are still trapped in old, closed-world silos.

ZEDPay is designed to offer a solution and new incentives for connecting the world's disparate digital wallets: a network scheme using a stablecoin, called ZEDCoin, that will enable money to flow between people in the same way that information moves between web browsers and servers, email between mail services, and text messages between SMS providers.

In order for global financial interoperability to function reliably and consistently, a price-stable medium of exchange and store of value is desired. Transacting in currencies which fluctuate with extreme volatility creates complexity and fragile settlement contracts, especially when compared to transacting in “tokenized fiat money” or fiat-pegged crypto assets. ZEDPay meets this challenge by providing a stablecoin framework involving a specialized algorithm.

Businesses and organizations will be able to support direct payments of ZEDCoin from compatible ZEDPay wallets. Just as an individual can use her web browser to browse the content of a business website, she will similarly be able to seamlessly use her ZEDCoin through her ZEDPay wallet to make payments to people and businesses and anyone who uses the ZEDPay wallet anywhere in the world instantly and safely.

ZEDPay provides a solution to exchange value for users using the same or different currencies. A user from Korea can buy ZEDCoin and make a payment to anyone in the world, who will be able to exchange ZEDCoin to their native currency seamlessly and with instant currency exchange.

In addition to transactional use cases involving global payments, ZEDCoins issued by ZEDPay also aims to address key use cases involving crypto-asset exchange risk. Crypto asset exchanges are online marketplaces in which buyers and sellers come together to trade crypto assets such as bitcoin, ethereum, and others. These crypto-assets fluctuate in price according to the market. Tokenized fiat money, such as ZEDCoin, does not fluctuate in value, but rather remains price-pegged to the value of its underlying backing asset (the value of one ZEDCoin is always intended to be priced at one US fiat dollar).

This makes price-stable tokens useful for providing fiat connectivity and for hedging risk on crypto assets. A hypothetical investor who wishes to use crypto for global payments may choose to protect himself from Bitcoin’s fluctuating value by instead purchasing ZEDCoin and be certain that the value of those ZEDCoin tokens will not fluctuate. In the same way, an investor from a country whose fiat currency is highly unstable, such as Venezuela, may choose to exchange his unstable fiat currency for ZEDCoin and be certain that he is holding an asset pegged to one of the most stable currencies in the world.

Proton blockchain

ZEDPay, which was built by our Japanese engineers, ensuring that functionality and efficiency were not compromised in any way, runs on top of the Proton public blockchain.

Proton is improving and streamlining the verification and speed at which payments are processed either between banks or merchants. Currently, for traditional payments, users aren't asked for consent before payment is processed, unless going over a comfortable limit, from the credit card processor, and the second layer of authentication is usually an insecure telecom network.

Cryptocurrency has no native compliance tools for anti-money laundering, identity, source of funds, or risk scoring for financial institutions to adopt it.

Previously, there wasn't a way to push or pull funds (or for legacy finance to interact with crypto finance) in real-time on the blockchain from credit/debit/ACH/IBAN.

Proton solves this problem.

But beyond being an app platform with a unified identity model, the Proton blockchain was designed to allow websites and apps to push payment requests directly to Proton-compliant wallets.

Proton will solve this problem by creating a namespace that works across multiple payment providers, identity verifiers, and payment transmitters. Gone are the days of entering your bank password or credit card number online; crypto and fiat wallets alike now interact as one network to streamline the process of making and receiving payments.

A unique Proton blockchain address will be created and linked to your account after the initial simple registration and verification process. The blockchain address will be used to load your account directly with ZEDCoin, and to send and receive transactions.

We chose the Proton public blockchain as it is designed for both consumer applications, peer-peer payments, and stable coins. ZEDPay is a combination of all 3. Proton is capable of processing 4,000 transactions per second and has been stress-tested at over 40 million transactions per day. It can handle far more traffic than blockchain apps are currently collectively capable of.

In addition, all user transactions on the Proton blockchain are completely gas-free. The only cost for using ZEDPay is a small 2.5% fee on each transaction, which is far lower than traditional payment rails such as Visa and Mastercard. For the reasons mentioned above, we believe that the Proton blockchain gives us the greatest chance to fully realize our vision.

ZEDCoin

In order for global financial interoperability to function reliably and consistently, a price-stable medium of exchange and store of value is desired. Consider this example: Bob uses bitcoin to buy a cup of coffee, only to have the price of bitcoin skyrocket, whereas he would have been able to buy 2 cups of coffee for the same amount of bitcoin only a few days later. ZEDPay meets this challenge by providing a stablecoin framework called ZEDCoin, involving a specialized algorithm. By being pegged to the US dollar, you don't have to worry about volatility when sending money or making payments.

Expand your reach beyond borders to the underbanked and people who prefer to transact in digital currencies. By offering your services in ZEDCoin, you are embracing a new form of money that moves just like other digital content — at the speed of the internet, and far less expensively than traditional payment systems — while retaining a stable value.

ZEDPay manages the minting and the redemption/burning of ZEDCoins, which can be used for both the exchange and wallet use cases.

Users who on-board by downloading the app and creating an account/wallet can purchase ZEDCoins with virtually any credit card, which are then minted and instantly deposited into that user's account and ZEDPay wallet. The ZEDPay network verifies, mints, and validates the ZEDCoins. The user can then transfer those tokens to whoever they wish or use them to complete a payment.

Redemption follows the reverse sequence: ZEDCoins are burned when a user wants to off-ramp and exchange their ZEDCoins for fiat. This ensures that there are no excess ZEDCoins in circulation and that the algorithm will always maintain a stable 1:1 peg with the US fiat dollar.

Furthermore, ZEDCoin will not be listed on any exchanges, and the only way to purchase ZEDCoin will be through the app. This has the benefit of avoiding speculative short sellers, and further adding to the price stability of ZEDCoin.

Regardless of the amount you need to send or where you need to send it, ZEDCoin provides a scalable solution to move money swiftly and cost-effectively, whether across the street or across borders. ZEDCoin is available to everyone with an internet connection.

Conclusion

ZEDPay is a revolutionary new blockchain-based system utilizing the Proton public blockchain to enable a purely peer-to-peer payment network. This system allows payments to be sent directly from one party to another without going through a financial institution, and with much lower fees than legacy payment rails. With ZEDCoin, we enable users and businesses to transact across the globe and entirely avoid the volatility that comes with traditional cryptocurrencies. ZEDPay allows users to do business in a more global, scalable, and efficient way through blockchain infrastructure, the same way the internet allows users to freely share information.