

Voltpay APP

A Volterra Ecosystem MVP

INTRODUCTION

Blockchain technology is evolving at an incredible rate, with unimaginable adoption and renovations. Dozens of new blockchains and blockchain-powered projects are being launched at breakneck speed.

Despite the promising adoption of blockchain technology, little has been done to consider small-scale business adoption with a newbie mindset in mind; in other words, for small-scale businesses and non-technical people or individuals with no knowledge of cryptocurrencies to adopt these innovations or products, these tools or resources must be designed with simplicity, high-end security, low gas fees, and quick transactions in mind.

As a result, Voltpay is viewed as a user-friendly tool backed by cutting-edge technology that makes it easier for businesses to adopt crypto wallets and blockchain-based solutions.

Decentralization

What is the definition of decentralization?

The transfer of control and decision-making from a centralized entity (individual, organization, or group thereof) to a distributed network is referred to as decentralization in blockchain.

Decentralized networks aim to reduce the amount of trust that participants must place in one another and to prevent them from exerting authority or control over one another in ways that harm the network's functionality.

Why is decentralization important?

The concept of decentralization is not new. Three primary network architectures are typically considered when developing a technology solution: centralized, distributed, and decentralized. While decentralized networks are frequently used in blockchain technologies, a blockchain application cannot simply be classified as decentralized or not.

Rather, decentralization should be applied to all aspects of a blockchain application on a sliding scale. Greater and fairer service can be achieved by decentralizing resource management and access in an application.

Decentralization has some drawbacks, such as lower transaction throughput, but the benefits of improved stability and service levels outweigh the drawbacks.

Decentralization's Advantages

It creates an environment that isn't based on trust.

No one needs to know or trust anyone else in a decentralized blockchain network. In the form of a distributed ledger, each member of the network has a copy of the exact same data.

If a member's ledger is tampered with or corrupted in any way, the majority of the network's members will reject it.

Increases the accuracy of data reconciliation

Companies frequently share information with their partners. This data is then transformed and stored in each party's data silos, only to be resurfaced when it's time to pass it downstream. Each time data is transformed, the possibility of data loss or incorrect data entering the workstream increases. Every entity has access to a real-time, shared view of the data thanks to a decentralized data store.

Points of weakness are reduced

Decentralization can help to mitigate points of weakness in systems where specific actors are overly reliant. Systemic failures could result from these flaws, such as failure to provide promised services or inefficient service due to resource exhaustion, periodic outages, bottlenecks, a lack of sufficient incentives for good service, or corruption.

Distributes resources more efficiently.

Decentralization can also aid in resource distribution optimization, ensuring that promised services are delivered with better performance and consistency, as well as a lower risk of catastrophic failure.

How does decentralization stack up?

Wherever possible, decentralization should be used. Because it's a blockchain application, it doesn't have to be completely decentralized.

Any blockchain solution's goal is to provide what its users require, which may or may not include certain levels of decentralization. The table below compares decentralized networks to the more common centralized and distributed networks to help you better understand them.

	Centralized	Distributed	Decentralized
Network/hardware resources	A single entity in a centralized location maintains and controls the system.	Owned by a network provider and spread across multiple data centers and geographies.	Network members own and share resources; it's difficult to maintain because no one owns it.
Solution components	A central entity is in charge of maintaining and controlling the system.	The solution provider is in charge of maintaining and controlling the system.	Every member has an identical copy of the distributed ledger.
Data	A central entity is in charge of maintaining and controlling the system.	Typically, the customer owns and manages the business.	It was only after a group vote that it was added.
Control	A central entity controls everything.	Typically, network providers, solution providers, and customers share responsibility.	No one owns the data, and everyone owns the data at the same time.
Single Point of Failure	Yes	No	No
Fault tolerance	Low	High	Extremely high
Security	A central entity is in charge of maintaining and controlling the system.	Typically, there is a shared responsibility between the network provider and the user, solution provider & customer	Increases as the number of network members grow.
Performance	Maintained & controlled by a central entity	Increases as network/hardware	Decreases as # of network members increase

		resources scale up and out	
Example	ERP system	Cloud computing	Blockchain

Hundreds of small business owners are having trouble accessing or using scalable digital financial gateways due to a large number of government/central bank-related verifications and documentation that are extremely time-consuming to deal with. It is difficult for freelancers from underdeveloped regions or regions that have been blacklisted by certain financial gateways to receive payments from clients all over the world

Voltpay contributes to the solution of this problem by offering a simple to use a decentralized business wallet that is not regulated by the federal government or central banks. A wallet that does not require documents or verifications, and one that is unrestricted.

BEP20 TOKENS

BEP-20 is a Binance Smart Chain token standard that extends ERC-20, the most widely used Ethereum token standard. It functions as a blueprint for tokens, defining how they can be spent, who can spend them, and other usage rules. It's compatible with both Binance Chain's BEP-2 and Ethereum's ERC-20 due to its similarity.

BEP-20 was created as a technical specification for Binance Smart Chain, to allow developers to launch a variety of tokens in a flexible format. These could be anything from stock in a company to money kept in a bank vault (i.e., a stablecoin).

BEP-20 token transfers, like BEP-2 token transfers on Binance Chain, are fueled by BNB. This incentivizes validators to include transactions in the blockchain because they will be paid in BNB as a reward for their efforts.

The Binance Smart Chain Blockchain

Let's take a look at Binance Smart Chain's properties and why it was created to get a better understanding of BEP20. Binance Smart Chain, or BSC for short, is a blockchain designed to run smart contracts. Binance Chain, Binance's first blockchain used on its non-custodial exchange, works alongside or in parallel with it.

Binance Chain was created with a single goal in mind: to improve the speed of trading on Binance's non-custodial platform. Binance focused on preventing network congestion in its design, learning from other Ethereum-based projects before it.

As a result, Binance Chain can handle a high transaction throughput without slowing down by foregoing expanded capabilities. Binance Chain is not flexible enough to support the launch of a full-fledged DEX due to this optimization (decentralized exchange).

Binance realized they needed to create a new blockchain designed specifically for smart contracts that automate transactions. Binance Smart Chain was created specifically for this purpose (BSC). BSC now serves as the foundation for the DEX project, which is a decentralized exchange.

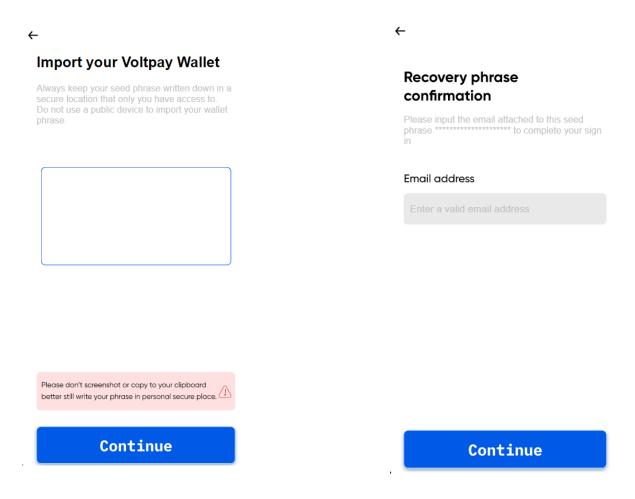
Voltpay uses the Blockchain's power to provide easy-to-use tokens for seamless transactions. Users can access a variety of three Bep20 tokens, VOLT, BSC, and BUSD, thanks to the integration of this blockchain, which provides low transaction fees, fast transaction speeds, and secure transaction data.

2FA WALLET AUTHENTICATION

The rapid advancement of technology necessitates an increase in the level of security associated with tech products to secure and protect consumer data.

Voltpay enhances wallet security by implementing a two-factor authentication system. Voltpay asks for the user's email address and ties it to the wallet holder's 12 (word) wallet phrase. As a result, the user's assets can only be accessed by entering both the 12-word wallet phrase and the email address used when the wallet was created.

Please note that neither the email address nor the wallet phrase can be changed, providing Voltpay users with a double layer of wallet asset/wallet security.



BUSINESS TOOLS/RESOURCES

Voltpay goes above and beyond other wallets by integrating business tools and resources that will be of tremendous assistance and value to business owners; one of these is the integration of a business calculator that allows users to easily perform complex business calculations without the need to know any complex formulas, such as Net Income, accounting equation, COGS, Break-even Point, ROI, and others.