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TOKES
PLATFORM

Lightpaper

A brief overview of the Tokes Platform, a Multichain Ventures company.

Multichain Ventures, Inc.
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<https://multichain.ventures>
<https://tokesplatform.org>





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Company Summary

Tokes Platform

<https://TokesPlatform.org>

The Tokes Platform is a blockchain focused company building software solutions for merchant adoption of cryptocurrency and data provenance of supply chains within the legal cannabis industry. This includes, but is not limited to, point-of-sale processing software, ecommerce storefronts, mobile applications, and supply chain visibility tools. The platform was developed for the legal cannabis industry as a solution to the cash-only problem caused by federal prohibition resulting in banking restrictions. To solve this issue, the company created a suite of software for tokenized transactions encompassing consumer to business, business to business, and business to state transactions (i.e., taxes). Within the cannabis industry however, blockchain provides utility for more than payments, as ensuring the provenance and transparency of cannabis supply chain data from seed-to-sale is not only a preferred scenario for consumers but regulated by state agencies. Tokes produces supply chain visibility solutions on blockchain for integration with seed-to-sale software to ensure the accuracy and availability of cannabis data for regulators and business stakeholders.

The ecosystem of Tokes software products for payments encompasses a full loop from consumer acquisition of tokens (via on-site kiosk partner [VaultLogic](#)), to merchant processing at the point of sale, and business to business transactions. Additionally, through strategic partnerships, Tokes offers custody solutions, allowing merchants to accept tokenized payments, trade these tokens for other digital assets, and subsequently initiate wire or ACH transfers through the custody agent to third parties. Custody solutions are optional, as sophisticated cryptocurrency users will want self custody of their digital assets. Further, the Tokes team has worked hand in hand with legislators at the state level to help guide regulatory language for the adoption of this technology with cannabis verticals (see Nevada's [Assembly Bill 466](#)).





Core Products and Services

Digital Currency Payment Processing

A core service of the Tokes Platform is digital or cryptocurrency payment processing for the legal cannabis industry (e.g., dispensaries, cultivators, processors, suppliers, and tertiary services). Due to federal prohibition of cannabis, businesses within the legal industry must operate primarily in cash. These cash transactions occur at the point of sale, for business to business transactions (e.g., dispensary to cultivator), and for employee payroll. Until conventional banking allows cannabis businesses to utilize their services, this cash only ecosystem has an added liability of potential loss and increased accounting difficulty in a compliance heavy market. From the perspective of regulatory or tax authorities, this cash dependence also adds a layer of complexity to financial reporting of cannabis revenue and tax remittances.

The Tokes Merchant Gateway software provides a point of sale application for cannabis business to accept the tokenized asset Tokes (TKS) or other cryptocurrencies in lieu of cash payments. Consumers are onboarded to the process using in-store kiosks or by loading their mobile wallet prior to visiting a merchant. The result is a fast, auditable, and inexpensive way to transact, which removes the cash handling liability of the merchant, while providing an auditable history of transactions, all on blockchain. The Gateway point of sale software has fully functional product management, employee sales tracking, exportable sales history, and integrations with state auditing systems like [Metrc](#).

While many users have transacted in Bitcoin or alternative cryptocurrencies using a mobile wallet or exchange account, readily available tools for merchant adoption are scarce and still require businesses to track their cryptocurrency transactions by manually reconciling them within existing accounting or inventory management software – while processing the transactions on a desktop or mobile wallet.

The software produced by Tokes Platform for digital currency processing eases cannabis merchant adoption of cryptocurrency while providing a number of benefits to the user. The self custody of digital currencies provides a self sovereignty that prevents against asset seizure or freezing of assets which can occur in conventional banking. However if preferred by the merchant, a third party custody solution is available.





A common consideration with the acceptance of cryptocurrency from a merchant processing standpoint is the price volatility risk typically associated with cryptocurrencies. This burden is eliminated with the features built into the Merchant Gateway. Specifically, a merchant can accept any number of cryptocurrencies but choose a portfolio or settlement allocation that is preferred. The software will then programmatically execute trades on cryptocurrency markets, returning to the merchant their preferred selection of settled assets, including the option for asset backed stable tokens pegged to the U.S. Dollar.

Cryptocurrency adoption, while growing rapidly, has been hindered by the learning curves associated with new technology. Private key management and self custody of digital assets is a fairly obtuse concept to the average technology user. One of the core goals of Tokes Platform is to produce software solutions with a workflow that fit conventional expectations of the user, but provide functionality needed for the edge user and adoption of new payment trends. As such, our interfaces offer clean, user-friendly design with both mobile and desktop deployment in mind. New technologies like cryptocurrency need entry points that reduce friction for the average user. We develop our technologies with this in mind, in order to onboard the average user without confusion or headaches.

Point of Sale (via Merchant Gateway)

To facilitate easy merchant adoption of cryptocurrency, the first of our core product offerings is a full featured point of sale. The current feature set of the POS includes the following:

- Digital currency payment checkout via QR scan by mobile wallet
 - Includes price conversion from US dollars to equivalent value in chosen cryptocurrency. Additional fiat currencies can be added easily.
 - Creates a single invoiced order and “cart” for each transaction, along with total settlement value.
- Acceptance of multiple digital currencies (Tokes, Bitcoin, Litecoin, Waves, and Dash - with other in development)
- Price conversion (from USD cost to digital currency equivalent)
- Trade processing into desired allocation of digital currencies & USD (e.g., accept Bitcoin, but have this settle as a portfolio of selected assets 50% Tokes, 25% Bitcoin, 25% USD stable asset, etc.)
 - Avoid price volatility with USD backed stable assets





POS Features Continued:

- Product & inventory management
 - Fulfilled via integration with Pimcore.
 - Allows the merchant to easily add product category, price, and ID numbers.
- Sales performance widgets
 - Displays regularly queried sales analytics (e.g., month over month sales, top selling products, highest grossing salesperson, and more).
- Employee sales management
- Accounting & reporting (exportable formats for accounting software)
- Deployable on tablets, desktops or mobile
- Coming soon: credit/debit & cash payment options

A demo of the Tokes Platform version of the Merchant Gateway is available at: <https://gateway.tokesplatform.org>

In order to ease consumer acquisition of cryptocurrencies and foster digital currency adoption and point-of-sale use, Tokes Platform has a strategic partnership with Vault Logic for deployment of their multi-crypto Smart ATMs inside of brick and mortar businesses. These Smart ATMs provide both traditional ATM cash withdrawal and cryptocurrency buying and selling options. More information about these Smart ATMs and their services is available at VaultLogic.com

eCommerce (via Merchant Gateway)

Currently, using the same admin panel as the point-of-sale, the Merchant Gateway facilitates easy ecommerce integrations to existing web stores via QR codes at checkout. The eCommerce integration of the Merchant Gateway enables users to leverage all the trade processing and settlement features as the point-of-sale.

Given the market share of such services like [Shopify](https://Shopify.com) and [WooCommerce](https://WooCommerce.com) in the online retail space, Multichain Ventures is in the process of developing a number of ecommerce plugins for integration with existing these web storefronts, with a Shopify integration to launch in Q4 of 2019, followed by integrations with popular services WooCommerce and Magento.





Supply Chain Visibility

Modern supply chains, built on centralized systems, face incredible strain from increased demand in the digital ecosystem (i.e., online sales surpass retail), furthering exposing concern about item originality, security, and integrity, as well as diversion into illicit channels. By adding a layer of decentralization to supply chain visibility, efficiencies can be produced that provide trustless data provenance to track the physical movement of goods and procurement of services. Combining these benefits with the GS1 global business language standards establishes an interoperable data layer that will streamline supply chain standards for the future.

Decentralization of servers creates an immutable distributed ledger for trustless recording and visibility of event data, both within and across enterprises. This enables stakeholders to gain a shared view of physical (or digital) objects, as they travel throughout the supply chain, from business to business and ultimately to consumers. Transparency, traceability, and security are the three imperatives of this system, and the implementation of blockchain further enhances governance standards with permissioned data access on a case by case basis (e.g., regulatory agencies vs. trusted business partners).

Tokes serves as the cannabis deployer of the EPCIS Decentralized Network (EDEN) Blockchain - the immutable ledger for improvement of seed to sale tracking of cannabis goods. The team is working with ERP providers like [Theracann International](#) to improve cannabis supply chains.

See the [EDEN Product Specifications](#) document to learn more and visit <https://eden.software>

