



COMMERCIMUM

WHITE PAPER



Abstract

Commercium is purpose built as a purely peer-to-peer electronic capital & commerce system harnessing a dual cryptography proof-of-work blockchain (dual-chain). Commercium is designed and engineered for trustless value transfer of specific financial instruments across capital markets, money markets and commerce markets. Commercium compliments the cryptography proof-of-work electronic cash system, **Bitcoin**, (a purely peer-to-peer electronic Cash system) by providing peer-to-peer functionality of financial instruments that are not electronic cash, across the electronic financial environment, in the modern world.

CMM is a proof-of-work (mineable) cryptocurrency. Its codebase stems from Bitcoin Cash, however, unlike many of the coins on the market, it does not carry over old transactions from the BCH chain. CMM includes 30 second block times for fast confirmation of transfers. It is the **only** conversion pairing and method for accessing the value stored in 'CMMX' or is various smart contracts. 'CMM' is paired to Bitcoin, in case a user requires electronic cash.

CMMX is also a proof-of-work (mineable) cryptocurrency, however based on the Ethereum codebase and built using solidity. It facilitates Apostille 2.0 as well as provides the technology for peer-to-peer and business-to-business (B2B) needs. It allows the creation & execution of smart contracts, multi-signature escrow accounts, data capture functionalities and **value store** functionalities allowing real world financial instruments an electronic cryptography peer-to-peer, clearing house platform where 'CMMX' to 'CMM' and 'CMM' to 'CMMX' are designed to facilitate an exchange to participants from either chain.

Commercium, inferring the entirety of the dual-chain of 'CMM & CMMX' and its ecosystem; harnesses technology of cryptographic proofs, to provide a decentralized and modernized settlements of transactions for transferring value, storing value, professional services, payment processing, commercial & private smart contracts, while offering added value layers of security, data reporting, expected of an immutable blockchain on par with Bitcoin. Purpose designed for reducing **cost, settlement risk, operational risk, crypto-ISAs and private equity** for the peer-to-peer connected world. Aiming to give internet & digital the ability to leverage and use Commercium for value transfer and commerce at scale (domestic or international).

Definition of Commercium¹

plural commercia \-(ē)ə\

Roman law

commerce, traffic : commercial transaction : business intercourse; also : jus commercii

¹ "Commercium." *Merriam-Webster*, Merriam-Webster, www.merriam-webster.com/dictionary/commercium.



Table of Contents

Abstract

Executive Summary

Blockchain History

- Cryptographic Assets Vs. Blockchain

- Multi-Signature Security

- Smart Contracts

- Real World Impact of Blockchain Technologies

Adoption of Cryptographic Assets

- Fees

- Ease of Use

Limitations of Cryptocurrencies

The Commercium Blockchains & Cryptocurrencies

Commercium Blockchain I (CMM)

- Commercium Wallet

Commercium Blockchain II (CMMX)

- Dual-Chain

- Commercium Fund

- Regulation

Conclusion

Technical Specifications

- Glossary

Forward Looking Statement

Disclaimer



Executive Summary

Consumers are consistently using the digital environment to transact. The expanse of digital transactions covers a wide arena of industries and sectors with a plethora of services, products and value transfer. Commercium is designed for the consumer of the digital environment and modern world, with an emphasis on capital & commerce markets.

Commercium comprises of cryptographic proof dual blockchain, decentralized and purpose built for real world uses with functionality enabling individuals and business entities to intuitively, and confidently facilitate and operate several electronic financial instruments and activities securely.

Commercium's ecosystem consists of cryptocurrency & blockchain technology architectures combined with business architectures segmented to facilitate seamless integrations for the electronic (digital) environment and serve as a conduit of physical assets into the electronic environment. This is achieved within being a store of value and value transfer through electronic financial instruments of contracts, swaps and swaptions, private equity interests, ISAs, which are created, modified, traded and settled within the commercium ecosystem.

Through its ecosystem Commercium will harness, being a store of value and value transfer in additional areas such as wealth management & death care markets. Aiming to work with and develop partnerships with regulatory bodies and create necessary entities as it continues to evolve. Modernizing blockchain and realizing the benefits of technological advancement starts with consumer level accessibility and delivering the tools that meet the demands of corporate and regulatory frameworks.



Blockchain History

Blockchain is a method of linking sets of data called 'blocks' using cryptography to create a continually growing, sequential, permanent record. Each block contains a link or reference to the previous block, transaction data and a timestamp. Blockchain is more permanent and resistant to modification than conventional accounting and data storage methods. Modifying any existing block requires a massive amount of computer power to modify all succeeding blocks in the chain in addition to the encryption process that creates data security as a whole.²

Distributed ledgers are blockchains facilitated by peer-to-peer networks that collectively power, validate and process transactions. The permanence of distributed ledger technology versus a private blockchain, results from the scale of the community supporting it, entities known as "miners". In order to modify any part of a blockchain facilitated through a distributed ledger network, collusion of the majority of network participants (miners) is necessary; thereby limiting and even preventing any unauthorized or untraceable data changes.^{3,4} Fraud and illicit activity are far less viable in a distributed network that is public and open versus a private blockchain.

Cryptographic Assets Vs. Blockchain

Cryptocurrencies, more aptly termed, cryptographic assets, are a digital medium of exchange that applies cryptography (data encryption), to execute secure transactions of value through a peer to peer network. Founded in 2009, Bitcoin was the first cryptographic asset and grand scale application of distributed ledger technology. Use cases for bitcoin began with trading card games,⁵ and online poker⁶, but early adopters refer to it as a new form of money. In 2015, Ethereum was introduced as a new way to not only transfer value but also perform contracts.

Cryptographic assets have introduced the ability to independently send and receive value securely and instantly and then to have it recorded to a permanent and immutable ledger. The original cryptographic assets were an experiment that succeeded and proves that processing monies or value, facilitating transactions and recording data through a distributed ledger is very much possible, reliable and secure.⁷

² vlabvideos. *Blockchain symposium*, YouTube, 18 Apr. 2016, www.youtube.com/watch?v=ybl5UatYsGI.

³ Peter Evans-Greenwood, Robert Hillard, Ian Harper, Peter Williams. "Bitcoin, Blockchain & distributed ledgers: Caught between promise and reality", *Deloitte*, 2016, <https://www2.deloitte.com/content/dam/Deloitte/au/Images/infographics/au-deloitte-technology-bitcoin-blockchain-distributed-ledgers-180416.pdf>.

⁴ "Financial Times: Crypto currencies are mirroring pre-Crash banking systems." *Financial Times*, www.ft.com/content/9b464912-76ae-11e7-90c0-90a9d1bc9691.

⁵ "Mt. Gox." *Wikipedia*, Wikimedia Foundation, 7 Dec. 2017, https://en.wikipedia.org/wiki/Mt._Gox.

⁶ Worstall, Tim. "Is Using Bitcoin The Way To Play Online Poker In The US?" *Forbes*, Forbes Magazine, 11 Jan. 2013, www.forbes.com/sites/timworstall/2013/01/05/is-using-bitcoin-the-way-to-play-online-poker-in-the-us/#51551bcf3637.

⁷ "John Wolpert talks about the timeline of blockchain." DeveloperWorks TV, 5 June 2017, <https://developer.ibm.com/tv/john-wolpert-talks-about-the-timeline-of-blockchain/>.

Blockchain Technology - How It Works

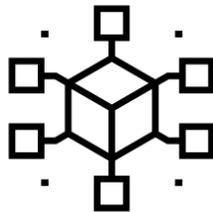
A blockchain is a distributed database which is shared and continuously updated by voluntary participants.

The blockchain stores a complete history of any transfer of data within the network. It is distributed across many computers and through a process called "mining" some of these computers update the database once a consensus has been reached. Originally defined in the source code for Bitcoin, the blockchain technology has now been used for variety of applications.

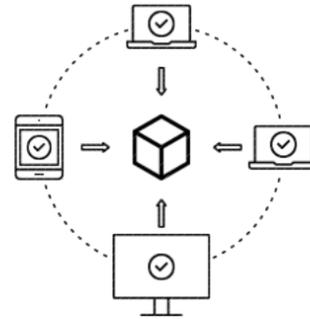


Two parties initiate a transaction by agreeing to exchange a unit of value

A unit of value can be any form of data, from funds to securities, to votes, medical records, or ownership.



The requested transaction is combined with other pending transactions to create a block



"Miners" then determine the validity of that block by competing to perform mathematical calculations based on mutually agreed upon rules to receive a reward

Miners "mine" by rapidly attempting possible solutions to these algorithms. To keep the distribution of rewards predictable, the algorithm increases in difficulty as more people are working on them.



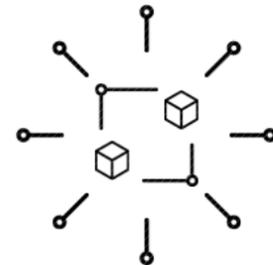
The transaction is complete, and the unit of value is exchanged between the two parties



Once a block is verified, it is added to the blockchain in a permanent, unalterable way

Blockchain entries are assigned a hash function, which contains information from previous blocks. If an attempt to alter a past transaction is made, all following blocks will invalidate this new transaction and it will be rejected.

A hash function is a mathematical operation that processes data of any size and outputs data of a fixed size.



The block is shared across a P2P network of computers, known as nodes, that store the transaction

A peer-to-peer network refers to a system of computers connected directly to one another via the Internet, rather than through a central server.



Multi-Signature Security

Multi-signature is an additional layer of security in processing a transference of value. The total number of signatures required to execute a transaction are predetermined upon creation of a contract or wallet and facilitates an escrow service that requires multi-party approval. Two or more parties are required to agree upon the terms of service and outcome, all signing the transaction to release its values to the intended parties. Multi-Signature Security is a process that ensures delivery of goods upon payment and payment upon delivery of goods while maintaining the opportunity to dispute terms when deliverables are unmet.⁸ This is how a letter of credit currently works to secure international sales and purchases. Multi-signature wallets and smart contracts will replace the need for letters of credit.

Smart Contracts

The enforcement of a negotiation or performance of obligation using a protocol that verifies that the parameters of a contract are met. Smart contracts can be both self-executing and self-enforcing with the intent of offering more security and superior execution than conventional contract law when completing transactions and services.⁹ Smart contracts can reduce the time, people and monetary costs associated with performing a contractual obligation.¹⁰ Smart contracts ensure project parameters are met before delivery of goods, services or payment.

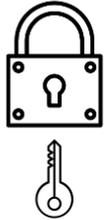
⁸ Davenport, Ben. "What is Multi-Sig, and What Can It Do?" *Coin Center*, 1 Jan. 2015, <https://coincenter.org/entry/what-is-multi-sig-and-what-can-it-do>.

⁹ "Smart Contracts." *Investopedia.com*, 18 Apr. 2017, www.investopedia.com/terms/s/smart-contracts.asp.

¹⁰ Dmitry Buterin @dmitry-buterin, et al. "What Are Smart Contracts? A Beginner's Guide to Smart Contracts." *Blockgeeks*, 2016, <https://blockgeeks.com/guides/smart-contracts/>.

Multi Signature - Explained

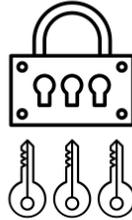
In cryptocurrency, a wallet must be signed by a private key in order to verify ownership and approve a transaction. While a wallet's public key is part of a typical lock and key pair with one private key to confirm ownership, MultiSig, short for multiple signatures, requires that multiple users, or a user with multiple keys, input their private keys in order to authorize a TX.



Traditional Transaction

A given public key can only be verified by a single associated private key.

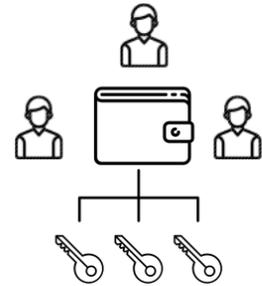
Think of a box with one lock and one key.



Multisig Transaction

A given public key must be verified by multiple private keys in order to validate a transaction.

Think of a box with several different locks.



M-of-N

Refers to a wallet which is associated to "M" amount of keys, and requires "N" amount of keys in order to validate a transaction. A MultiSig wallets typically range from 2-of-2 confirmations, all the way up to 15-of-15, and can adopt any combination in between.

History

Although introduced formally in 2012, The idea of "multisignature" to claim ownership is ancient. Multisig was not popular until 2014 and at the time, these still only accounted for 0.02% of all transactions. Currently, about 10% of all BTC are held in these types of wallets.

What's its purpose?

The main implementation is to increase the security of a transaction by minimizing opportunities for theft and dishonesty. In traditional transactions that only require one private key, the device on which the key is stored represents a single point of failure. Requiring multiple keys lessens the threat of theft as the transaction becomes increasingly difficult to compromise with each additional key.

Use Case Examples

Increasing Security

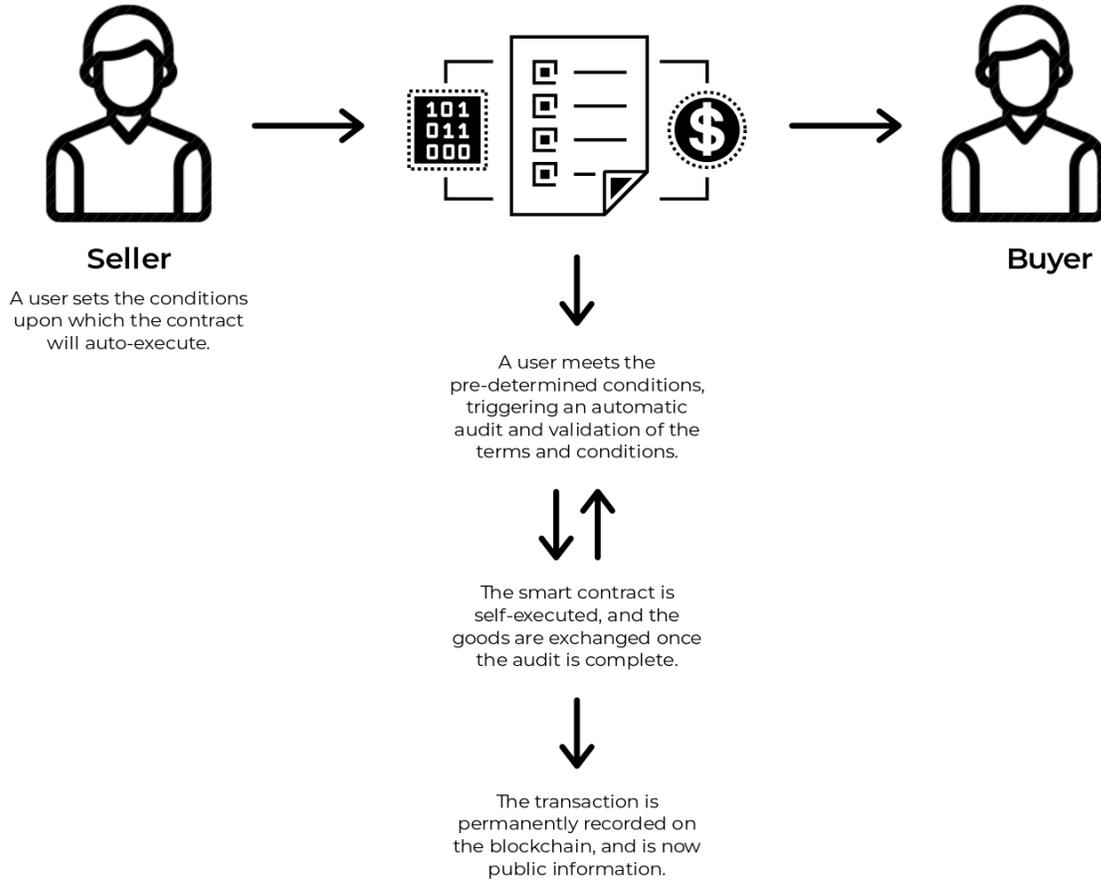
In a 2-of-3 wallet, storing all 3 private keys in different locations minimizes the risk of theft, and still allows you to access the funds should you lose one of the private keys.

Increasing Trust

In a 3-of-5 wallet, 5 individuals have a private key, so that every transaction must be approved by the majority (3) of key holders.

Smart Contracts - Explained

A Smart Contract represents a layer of code built on top of a blockchain protocol, which details conditions that must be met in order for an exchange to take place. Once these pre-determined conditions are met, the exchange of value is autonomously executed.



Traditional transactions require middle parties to facilitate their execution. Smart contracts rely on code to adhere to the terms and perform the exchange. The information is then stored on the blockchain and verification of ownership can always quickly be confirmed. This makes the transactions more secure, and indisputable once they have been completed.



Autonomous

Once created, the smart contract is fully self-sufficient.



Cost Effective

Removes middle parties, reducing costs associated to operation and administration.



Rapid

Reduces settlement time, resulting in a faster, hassle-free transaction.



Reliable

Offers a higher degree of trust by decreasing the risks of typical transaction.



Transparent

Distributed among nodes, and can be reviewed by both parties.



Permanent

Provides a permanent, verifiable record of contract conditions and transactions.



Real World Impact of Blockchain Technologies

Financial institutions and technology firms (Goldman Sachs, Bank of America, IBM, Microsoft, et. al)¹¹ are in a race to provide blockchain services and technology capable of digitizing and automating “middle man” industries and transaction processing, such as: banking, notaries, clearing houses, and freight forwarders.¹²

The speed, accuracy and efficiency with which a blockchain is able to catalogue data, execute transactions and manage contracts makes exploration of the new technology not just potentially lucrative but also a corporate responsibility to stakeholders.¹³ Blockchain can increase efficiency adding not just permanence, but trust, cyber security and potentially enormous cost savings.¹⁴

A highly speculative asset trading market with nearly 2000 cryptocurrencies and assets now exists, similar to FOREX, stocks or commodities exchanges, and yet it remains distinct for its infancy and volatility alone.¹⁵ Each cryptocurrency seeks to, or claims to, apply blockchain and distributed ledger technology in a novel manner, solving some real world problem or filling some critical niche. In this next-phase of implementing blockchain technologies, we move from theory to practice in managing all kinds of transactions and processes of value that we see in everyday life. Blockchain and distributed ledger technology enable superior ‘value chain management’ - creating, tracking and exchanging value, as well as collaborative value transparency. However, as the technology has evolved, significant functionality, accessibility and ease of use gaps are emerging.

Adoption of Cryptographic Assets

Cryptographic assets are not yet truly accessible and face much skepticism with novelty and complexity also obscuring the benefits and possibilities.^{16,17,18} In addition, limited wallet capabilities and user interfaces, impractical pricing, volatility and fees are barriers to the speed

¹¹ Kharif, Olga. “Big Banks Are Stocking Up on Blockchain Patents.” *Bloomberg.com*, 21 Dec. 2016,

www.bloomberg.com/news/articles/2016-12-21/who-owns-blockchain-goldman-bofa-amass-patents-for-coming-wars.

¹² Macheel, Tanaya. “Crypto Colonizing: B of A’s Blockchain-Patent Strategy.” *American Banker*, 1 Feb. 2016,

www.americanbanker.com/news/crypto-colonizing-b-of-as-blockchain-patent-strategy.

¹³ Kelly, Jemima, and Anjuli Davies; “European banks risk lagging Wall Street in blockchain race.” *Reuters*, Thomson Reuters, 19 Oct. 2016, www.reuters.com/article/us-banks-tech-blockchain/european-banks-risk-lagging-wall-street-in-blockchain-race-idUSKCN12J22L.

¹⁴ Long, Monica. “Ripple and XRP Can Cut Banks’ Global Settlement Costs Up to 60 Percent.” *Ripple*, 18 Aug. 2016, <https://ripple.com/insights/ripple-and-xrp-can-cut-banks-global-settlement-costs-up-to-60-percent/>.

¹⁵ “Bitcoin VS Forex.” *Bitcoin News*, 5 Feb. 2016, <https://news.bitcoin.com/bitcoin-vs-forex-2/>.

¹⁶ “Macquarie Analyst Rejects Jamie Dimon’s Bitcoin ‘Fraud’ Critique.” *CoinDesk*, 28 Sept. 2017, www.coindesk.com/wall-street-analyst-rejects-jamie-dimons-bitcoin-fraud-critique/.

¹⁷ Costelloe, Kevin. “Bitcoin ‘Ought to Be Outlawed,’ Nobel Prize Winner Stiglitz Says.” *Bloomberg.com*, Bloomberg, 29 Nov. 2017, www.bloomberg.com/news/articles/2017-11-29/bitcoin-ought-to-be-outlawed-nobel-prize-winner-stiglitz-says-jal10hxd.

¹⁸ McCrank, John, et al. “JPMorgan’s Dimon says bitcoin ‘is a fraud’.” *Reuters*, Thomson Reuters, 13 Sept. 2017, www.reuters.com/article/legal-us-usa-banks-conference-jpmorgan/jpmorgans-dimon-says-bitcoin-is-a-fraud-idUSKCN1BN2PN.



and scale of adoption in commerce and everyday use. These complications present a litmus test of both technical capability and practical understanding of business and economics.¹⁹

Fees

Inordinate transaction fees impede the adoption of cryptographic assets as some business may see increased costs from making the switch. Sending a small sum of money through bitcoin is now so costly that one must use an alternative when working in smaller amounts of money for any kind of transaction of value.²⁰

In order for cryptographic assets (cryptocurrencies) to be widely adopted as a standard means to conduct business, the fees cannot be so high they impede usability.²¹ Converting back to fiat incurs significant additional fees, sometimes in the neighborhood of 10-15% or individuals must revert to the archaic models of value transactions, which are totally based on trust and contrary to the design of blockchain.

Ease of Use

Cryptographic asset wallets generally lack a user-friendly interface with a simple yet secure process for conducting an exchange of value or for creating, implementing and executing smart contracts which all currently require some level of technical expertise and programming abilities. The current learning curve of digital assets inhibits mass adoption of blockchain technologies as adopters are typically more technically educated or skilled.⁵⁰ Mass adoption requires a simple, secure and effective means to exchange, store, process, send and receive value and execute contracts through one user interface as an individual or business.

Limitations of Cryptocurrencies

The adoption of blockchain and distributed ledger technologies is cost prohibitive and currently no service, tool, or business exists to provide a simple user interface that resolves issues of practicality and functionality. Commercium (CMM & CMMX) seeks to eliminate this gap by providing the optionality and usability of two independent blockchains (dual-chain) delivered through multiple applications with consumers front of mind.

Today, participation requires subject matter expertise that goes beyond traditional business, finance and trading realms to ensure the successful integration of cryptographic tools and

¹⁹ Baird, Nikki. "Blockchain and Retail: Four Opportunities." *Forbes*, Forbes Magazine, 9 Aug. 2017, www.forbes.com/sites/nikkibaird/2017/08/09/blockchain-and-retail-four-opportunities/#33d2cd7972bf.

²⁰ Shin, Laura. "Will This Battle For The Soul Of Bitcoin Destroy It?" *Forbes*, Forbes Magazine, 25 Oct. 2017, www.forbes.com/sites/laurashin/2017/10/23/will-this-battle-for-the-soul-of-bitcoin-destroy-it/#2f128fc3d3c0

²¹ Ver, Roger, @rogerkver. "Full blocks cause high fees and unreliable confirmations which destroy usability. Usability drives adoption. Adoption drives price. #BitcoinCash." *Twitter*, 13 Nov. 2017, 07:16, <https://twitter.com/rogerkver/status/930091962597699584>.



distributed ledger technologies. Removing the expert level barrier to entry will ensure that blockchain technology and cryptocurrencies can become a common and standard means to conduct business with as an alternative medium for value transactions.^{22,23}

Technological advancement has always been revolutionary, but true adoption and benefit to humanity comes from functionalities that drive ease of use and accessibility. Computers, originally workstations, were adopted by the masses when a simple interface was developed and no longer required coding expertise (the first Apple and IBM personal computers). The internet was a massive leap forward, but the desktop browser, how we interface, drove its adoption. E-trading in capital markets was introduced in the 90s and delivered autonomy and cost savings to retail investors. Technological advancement leads to accessibility, expands reach, and drives productivity. It creates independence.

²² Baird, Nikki. "Blockchain and Retail: Four Opportunities." *Forbes*, Forbes Magazine, 9 Aug. 2017, www.forbes.com/sites/nikkibaird/2017/08/09/blockchain-and-retail-four-opportunities/#33d2cd7972bf.

²³ Young, Joseph. "McAfee: Bitcoin is too complex for the average individual." *NEWSBTC*, 2 Jan. 2016, www.newsbtc.com/2016/01/02/mcafee-bitcoin-is-too-complex-for-the-average-individual/.



Commercium Blockchains & Cryptocurrencies

Commercium utilizes cryptographic proofs from decentralized dual-blockchain technology to facilitate electronic financial instruments to modernize settlements of transactions. Additionally introducing a newly layered architecture to go beyond master nodes; Apostilles 2.0 delivers opportunity for the many in a variety of ways, one such being an ISA equivalent, a cryptographic **Individual Savings Account**, along with additional cross-functional business end-points into the digital era.

No (peer-to-peer) mechanism exists to make settlements, provide private equity and offer a capital market cryptographic financial instrument facilitation (with the exception of electronic cash), over a communications channel without a third party. Leveraging cryptographic proof, (as achieved with Bitcoin - electronic cash system), Commercium, will provide such a mechanism.

The products and services create and improve market efficiencies by streamlining the way value is transacted, recorded, without the need for third party facilitators. The Commercium platform accomplishes this by leveraging custom development and network infrastructure designed to integrate distributed ledger technology into one seamless experience for consumers and business adopters.

The commercium blockchains will be delivered through a public distributed ledger network, where individuals (miners), may contribute hashing power (computing power) through a process known as mining. Adopters benefit from the additional data security, speed and accuracy offered by a distributed ledger network through immutable and permanent records. The design of the dual model public blockchain makes Commercium uses broader vs a private blockchain. Commercium serves commerce and capital markets use-cases, in consumer markets inclusive of smart contracts and agreements viable in the business to business markets.

Commercium Blockchain I (CMM)

Commercium (I) is a proof-of-work (mineable) cryptocurrency. Its codebase stems from Bitcoin Cash, however, unlike many of the coins on the market, it does not carry over old transactions from the BCH chain. Commercium (I) referred to as 'CMM' includes 30 second block times for fast confirmation of transfers. It is the **only** conversion pairing and method for accessing the value stored in 'CMMX'. 'CMM' is paired to Bitcoin, for ease of use and conversion to electronic cash system.

'CMM' is available on a few exchanges. It serves to provide an anchor and conduit for seamless conversions between the electronic cash system of the Bitcoin ecosystem and the capital & commerce markets of electronic financial instruments from within the Commercium eco-system.



CMM

CMM will function as a conversion medium, and is intended for simple, real-time transactions of and for value transfer into the Commercium ecosystem. CMM is an entirely new genesis of the bitcoin codebase. This codebase offers speed and privacy in transactions of value.

The Commercium blockchain is the most highly functional and secure iteration of distributed ledger technologies to-date and its development team is dedicated to continuous improvement and contribution to blockchain technologies that enable consumer level adoption and application.

Commercium Wallet

The Commercium wallets are pivotal to experiencing the entire digital Commercium ecosystem. There are a variety of wallets for the various user types and operating systems. Currently an OSX, Windows, Linux and web wallets are available.

The mobile wallet will be a unified commercium wallet offering joint and integrated functionality to experience the digital commercium ecosystem with essentials such as; reporting, seamless transactions of value and intuitive contract creation among many other planned developments. Enhancing the experience and potential application of blockchain technologies for everyday users by, delivering a simple and seamless, mobile wallet, is an important goal of the Commercium development team.

Over the course of Commercium development, the wallets will include manage tools for supply chains, reporting, auditing, smart contract creation, token & funding creation, death care services, inheritance wealth management and additional services from modular business units from the commercium ecosystem. As a settlement system, additional easy pay system for the mobile device users will be created, with use-cases for financial instrument uses alongside NFC payment use-cases. Commercium intends to improve the user experience to become an easy to use portal, providing the essentials for capital and commerce market access, at the fingertips of the everyday mobile phone user. We believe Crypto shouldn't be difficult and neither should the user experience.



Commercium Blockchain II (CMMX)

Commercium (II) is also a proof-of-work (mineable) cryptocurrency, based on the Ethereum codebase and built using solidity with a limited supply. It facilitates Apostille 2.0 as well as caters to business-to-business (B2B) needs. It allows the creation & execution of smart contracts, multi-signature escrow accounts, data capture functionalities, **store of value** functionalities allowing real world financial instruments to an equivalent electronic cryptography peer-to-peer clearing house where 'CMMX' to 'CMM' and 'CMM' to 'CMMX' are designed to facilitate an exchange within the commercium ecosystem.

While CMM is a conduit to enter, CMMX is a conduit to exit the Commercium ecosystem of electronic financial instruments.

Dual-Chain

The two separate blockchains will enhance user efficiency and limit bottlenecks where an overload of both simple transactions as well as contract execution can grind a single network to a halt. A dual-chain platform creates separation between transferences of value and executing smart contracts, ensuring sophistication is simple. The Dual-Chain enables a more seamless experience for adopters, limiting the waiting times during periods of high network traffic.

Commercium Fund

The Commercium Fund is designed to support the Commercium technologies and Commercium group of companies, performing as modular business units within the ecosystem. Upon initiation of the primary CMM blockchain, a onetime endowment of ten million units of CMM have been deposited into a wallet owned by Commercium. In addition to the initial endowment, Commercium reserves the right to add a % of each Commercium block reward from mining to the Commercium Fund to meet the obligations of maintaining the infrastructure and rewarding developers of the Commercium Platform and blockchains.

Commercium is not a community coin but an international platform backed by incorporated organizations and a series of business units. We understand that transparency is essential to building trust with adopters, regulators and lawmakers therefore we will aim to provide clarity to our stakeholders as and when required.

Regulation

The regulatory landscape is continuously evolving and different around the world. Of late, some governments have shown strong opposition to cryptocurrencies and assets, while others simply



want to impose consumer and investor protections, better define the new industry and ensure that taxes owed are actually being paid while reducing or eliminating criminal activity.^{24,25}

Regulation and guidance from lawmakers will take some time to be realized and applied, but given the attitude of world leading nations, this road block will be removed over time and to the benefit of the cryptocurrencies, assets, blockchain technologies and their adopters.

Commercium hopes to work with regulators and lawmakers wherever possible to help guide a seamless transition and the adoption of blockchain technologies as vehicles for the transference of value by consumers and businesses around the world. In order to begin facilitating this, the Commercium Wallet application will focus on immediately offering a simple record keeping tool that will output the information necessary for consumers and businesses to meet their essential income reporting needs.

Conclusion

Accessibility, privacy, ease of use and simplicity will drive the evolution and adoption of blockchain technologies and new payment, settlement and transaction mediums by everyday people. Eliminating misconceptions and learning curves that bar entry into the space is the objective of the Commercium Platform. The development team is dedicated to creating an all encompassing, secure, “push of a button”, software platform that integrates CMM and CMMX blockchains to facilitate peer-to-peer and business capital & commerce market functions, settlements, agreements, value stores and value transfer of multiple transaction, by minimising operational risk and costs. Commercium strives to contribute to blockchain technology and the next wave of implementation.

Historically technology advancements resulted in the rapid growth across the fields of science, medicine, law, economics, infrastructure and wealth distribution. For example, E-trading was introduced to the masses in the early 1990's and brokers, firms and fees were reduced or removed from the process of investing in capital markets. Retail investors were able to independently pour millions of dollars into stocks, into their retirement funds and save massive amounts of money from fees that were cost prohibitive to potential investors. E-Trading made capital markets accessible and efficient. It increased the rate at which money was able to enter and exit markets, reduced fees, increased liquidity, forced transparency and caused fairer pricing (tightening the spread of an assets value).²⁶

²⁴ Sharp, Alastair. “Canada regulators say most crypto currency offerings need oversight.” *Reuters*, Thomson Reuters, 24 Aug. 2017, www.reuters.com/article/us-canada-regulation-digital/canada-regulators-say-most-crypto-currency-offerings-need-oversight-idUSKCN1B42CA.

²⁵ “SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities.” *SEC.GOV*, Securities and Exchange Commission, 25 July 2017, www.sec.gov/news/press-release/2017-131.

²⁶ E-trading - https://en.wikipedia.org/wiki/Electronic_trading



This simple advancement and application of internet technology through an interface changed the investment world, taking capital markets from billions of dollars, to trillions of dollars, with real-time, accurate and independent investing. Blockchain and distributed ledger technologies are the next technological revolution and the Commercium Platform will provide a new gateway that creates the same accessibility for individuals that e-trading, the personal computer and the internet browser did in the 1990's.

Distributed ledger technology will create unity in commerce, increases profits, savings and efficiencies and is superior to private blockchains. Commercium brings functionality and ease of use to the masses.

Technical Specifications

CMM - Primary Blockchain	CMMX - Secondary Blockchain
Algorithm: Equihash Coinbase: Bitcoin ABC Block Time: 30 Seconds. Block Reward: 32 Maximum Supply: 210,000,000	Algorithm: Dagger-Hashimoto Fork: Ethereum Block Time: 30 Seconds. Block Reward: 3 Maximum Supply: 30,450,000



Glossary

- **Currency** - a medium of exchange for goods or services within an economy.
- **Commodity** - a marketable item produced to satisfy wants or needs.
- **Asset** - represents a value of ownership that can be converted into cash.
- **Securities** - interchangeable or negotiable financial instrument that holds some type of monetary value.
- **Capital markets** - Markets for buying and selling equity and debt instruments.
- **Fiat** - Currency which value is determined by government and free market.
- **Fee** - represents an amount beyond the initial cost estimates and reflects factors such as processing.
- **Volatility** - the velocity at which the price of a given asset, security, commodity fluctuates and can denote risk.
- **Clearing** - activities from the time a commitment is made for a transaction until it is settled.
- **Regulatory body** - A government institution intended to protect consumers, prevent fraud and illicit activities.
- **Cryptocurrency, cryptographic asset** - digital assets designed to facilitate transactions, monetary or otherwise, seek to solve a problem and provide another option to store and use value.
- **Blockchain** - A series of records known as blocks are recorded in a chain where each additional record is dependent on the previous.
- **Distributed ledger technology** - A blockchain supported over a vast decentralized network where there is no central server, body or node which it operates from.



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This white paper describes the functionalities of the Commercium platform and the critical needs it can fulfill; it also provides an overview of blockchain including, distributed ledger technology, cryptocurrencies, and critical gaps in the current blockchain based payments systems, notably with respect to ease of use, accessibility and seamless and borderless transactions of value.