

MPRISE

Merritt Enterprise Software
& Applied Sciences

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1. Abstract

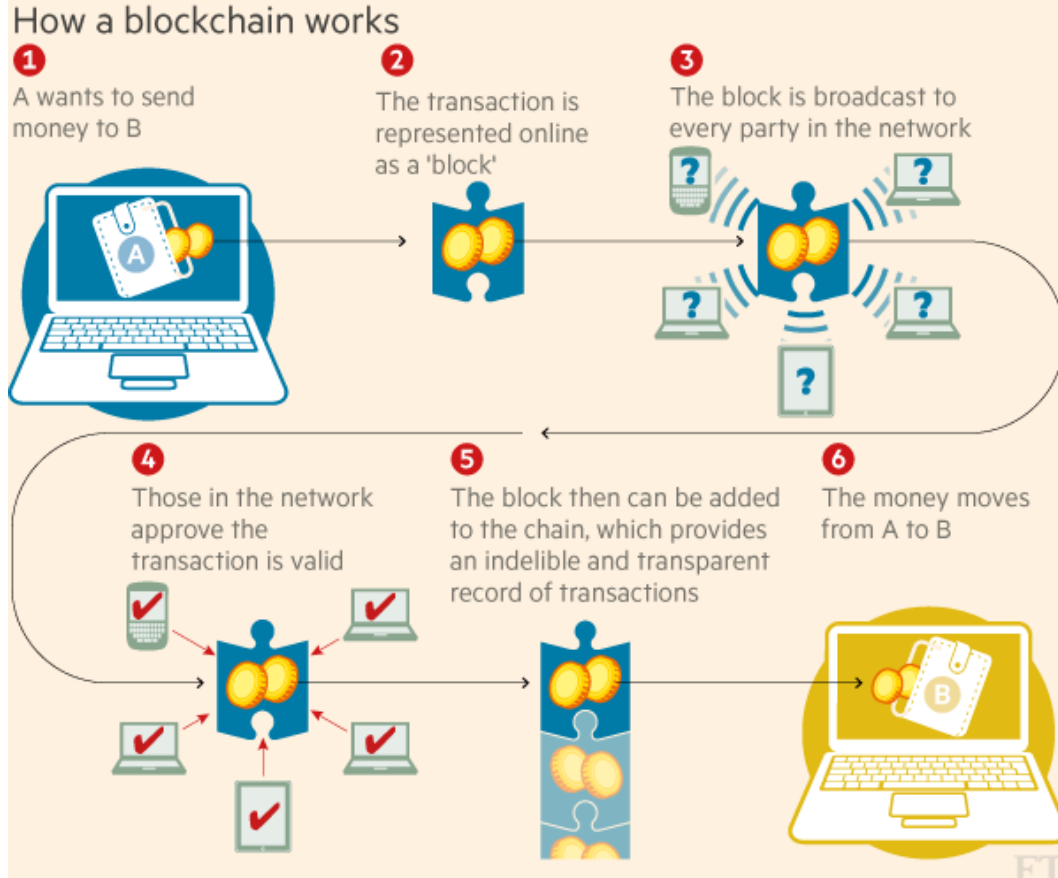
Mprise (Merritt Enterprise) is a Software Company that provides Security Products to help companies protect and secure their financial data. Mprise is also a digital asset and blockchain protocol that is representative of the broader health and appreciation of the cryptocurrency market. Mprise will be utilized to monitor and protect financial data for any organization. We combine Artificial Intelligence techniques to protect and make predictions on your data and our Blockchain Platform validates your data is 100% percent secure with end to end encryption. The Mprise blockchain protocol also provides both consumer and enterprise users with a supremely safe, more efficient host of intelligent platforms to protect your financial data. Mprise brings financial autonomy and control back to the community by whom it is being used.

2. Introduction to Blockchain Technologies

A blockchain is a digitized, decentralized, public ledger of all cryptocurrency transactions. Originally developed as the accounting method for Bitcoin, blockchain technology is primarily used to verify transactions, within digital currencies though it is possible to digitize, code and insert practically any document into the blockchain. It is indelibly safe in that the code's record/data cannot be changed.” According to IBM DeveloperWorks, Blockchain protocol mechanisms “provide the benefits of a consolidated, consistent dataset with reduced errors, near-real-time reference data, and the flexibility for participants to change the descriptions of the assets they own. Because no one participating member owns the source of origin for the information contained in the shared ledger, blockchain technologies lead to increased trust and integrity in the flow of transaction information among the participating members.”

According to the Financial Times, Accenture has estimated that the biggest investment banks could save \$10bn by using blockchain technology to improve the efficiency of clearing and settlement. Richard Lumb, head of financial services at the consultancy, says: "The first place we will see it have an impact is clearing houses, such as Deutsche Börse, the Australian Stock Exchange and Depository Trust & Clearing Corporation [DTCC]." He adds: "Today it is managed through a myriad of messages and manual reconciliation. There is a big opportunity for blockchain to seriously restructure that industry.” Mprise plans to be part of that disruption allowing for anyone who joins the Mprise community to engage in autonomous finances and increase security and efficiency of their financial well-being.

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(Source: "How a Blockchain Works", Financial Times)

3. Criteria Behind our Digital Asset and Blockchain Protocol

3.1 Industry Challenges Presented by Other Alternate Coins

With over 1300 cryptocurrencies currently available for purchase or trade in more than 6500 markets and a current total market capitalization in excess of \$280 billion, there is no shortage of tokens in which one can invest. However, many of these tokens have arbitrarily determined values that are without any real-world use or utility. Subsequently, this equates to an inherent lack of stability in the value of these arbitrarily released digital assets. Should a major party purchase a substantial portion of shares only to sell them off shortly afterwards, other investors, merchants and users alike would find the value of their tokens plummeting almost immediately. There is an innately unstable element to many tokens on the market.

3.2 Payment processing and Escrow (In terms of ACH/Escrow is too slow)

Alternate coins like Bitcoin would add serious impediments to payment processing and ACH transactions because of its technologically limited ability to handle large volumes of transactions, it should be noted that smart contracts on the blockchain can prove to be the cheaper alternative by replacing escrow and clearing house companies bringing forth disintermediation of the entire process. Instead, the contractual agreement between both parties is programmed into a smart contract, with the funds being sent to the smart contract by the buyer. Through the use of blockchain, the smart contract can then determine that all the terms have been satisfied by both parties and execute its pre-programmed code, which in this case would be the sending of funds from the smart contract to the seller, as well as reducing counter party risk, the implementation of smart contracts in multiple areas of real estate transactions, not just escrow services, can and will offer significant cost savings.

3.3 Major Credit Cards

Major payment processing company WorldPay notes that, “any business that accepts credit card payments can be a victim of fraud. Well-publicized fraud attacks such as those that have occurred in the past few years certainly aren’t the only attacks that do damage to businesses’ reputations and bottom lines. Despite best efforts by the major players in the financial industry to thwart credit card fraud, it is on the rise. Javelin reported that in 2014, about 31.8 million U.S. consumers were victims of a credit card breach. That number had increased by more than threefold from 2013.” Furthermore, a 2015 IBM study noted that “the average consolidated total cost of a data breach is \$3.8 million, which was a 23 percent increase” from two years prior.

(Sources:

“Five Ways Banks are Using Blockchain”, Financial Times, ft.com, 20 Jun. 2018, <https://www.ft.com/content/615b3bd8-97a9-11e7-a652-cde3f882dd7b> 3 "Market Cap" CoinMarketCap, Coinmarketcap.com, 20 Jun. 2018, coinmarketcap.com 4 “The Risk of A Credit Card Security Breach is Serious Business” Vantiv WorldPay, 20 Jun. 2018, <https://www.vantiv.com/vantagepoint/safer-payments/risk-of-credit-card-security-breach>)

4. Introducing MPRISE

4.1 Solutions to Industry Problems(Cost/Benefit)

MPRISE provides a multitude of solutions to the issues of arbitrary valuation, arduous timeframes and security on financial data, or an inherent lack thereof. It boasts a suite of blockchain based solutions that all run its aforementioned protocol. From a

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cryptocurrency, to a supply chain management suite for your financial data, and a blockchain-integrated AI platform, MPRISE's design benefits are evident.

4.2 Design Benefits

MPRISE's value is partially tied to the mathematical value of our index of the 300 most active cryptocurrencies publicly available. Our token will be proportional to the performance of this index with the index dictating approximately 30% of the token's value. Additionally, there will be a 25% sell-off smart contract. This means that no more than 25% of outstanding MPRISE tokens will be able to be sold at once until at least 5% of outstanding tokens are purchased to offset price devaluation.

MPrise will store your Financial data (code) in a network of multiple servers (node's) on our Blockchain and can transfer your data to multiple servers on the blockchain anytime to protect your Financial data. By applying our Artificial Intelligence techniques onto the blockchain to protect your financial data, MPrise AI will be able to protect and make predictions on your data and the blockchain will validate and ensure the data you give us is 100% safe and secure. All users can check their data because the blockchain is publicly verifiable, publicly immutable/audit trail.

4.4 An Equal-Weighted Index

MPRISE's Index is driven by a diversified and equal-weighted. Unlike most security indices, which are typically market cap weighted) our index is equal weighted to smooth out unsystematic risk events, granting less control to digital assets and cryptocurrencies with larger market capitalizations over assets with mid-sized market capitalizations. Mannik Dhillon, President of Victory Shares and Solutions notes that "when you invest in a market-cap weighted index, the performance and risk profile are driven by a small group of stocks at the top, which raises the question of whether you're getting actual exposure to the entire stock market, or just to the sliver where the most capital is...what this essentially means is that the smallest companies — which also tend to be the most volatile — have an outsized influence. In periods of rising markets, this form of index construction posts appreciably stronger returns." 5

4.5 Zero Knowledge Proof Implementation

In addition to its proprietary index, MPRISE, while built on a proprietary blockchain based on the Ethereum protocol, is fundamentally safer than almost all of its contemporaries. Its protocol implements zero-knowledge proofs (ZKPs) for

unparalleled data security. The Knowledge Complexity of Interactive Proof Systems defines a zero-knowledge proof protocol as “a method by which one party (the prover) can prove to another party (the verifier) that something is true, without revealing any information apart from the fact that this specific statement is true”⁶. Simply put, ZKPs allow users to confirm and validate a transaction without revealing any of the transaction’s underlying data.

(Sources: 5 “Want more portfolio diversification? Try different weights, not different assets”: R. Vlastelica, MarketWatch.com, May 2017 <https://www.marketwatch.com/story/want-more-portfolio-diversification-try-different-weights-not-different-assets-2017-05-08>

6 “The knowledge complexity of interactive proof systems”, S. Goldwasser, S. Micali, C. Rackoff, MIT (1985) <https://groups.csail.mit.edu/cis/pubs/shafi/1985-stoc.pdf>)

5. Use Cases

5.1 Hospitality/Dining Use Case

While Blockchain technology has proven to be inherently safer in regards to logistics than a traditional infrastructure, the potential applications and uses among a multitude of industries is virtually limitless. In many cases, the elimination of third parties and intermediaries saves time and money. NewsBTC considered the application of Blockchain technology in the hospitality industry, saying “booking a stay online for a hotel will still usually see around 25% of the transaction being spent on booking platform and financial transaction fees. And consider that those 25% are calculated on the gross revenue, which for example in EU contains up to an additional 20% VAT. This practically means that hotel owners pay an additional commission to Booking.com on the VAT amount that they remit to the state budget.”⁷ The hospitality industry no longer needs all of these costly intermediaries to verify transactional components. MPRISE’s protocol suggest that the price and time it takes to conduct a hotel reservation can each be greatly reduced with use of blockchain technology with smart contracts tailored around supply chain management and price regulation. This also presents an opportunity for use of MLEARN, MPRISE’s supply chain management platform. Unlike many popular supply chain management clients that run into issues with compatibility and up-to-date information, MLEARN uses the MPRISE blockchain protocol to update inventory, room requests, check-in/out times and more in real-time while calculating cost efficiency. Moreover, consider a simple fishing company supply chain that connects fishermen to fisheries and fisheries to restaurants. The restaurant owner

should be paying prices for fish based on how much the fishery had to pay the fisherman. How can the restaurant owner be sure they're paying a fair price that's accurately based on what the fisheries paid? If all parties involved were apart of the MPRISE blockchain via MLEARN and all transactions were recorded on a collective blockchain, the restaurant owner could be guaranteed that the price they paid was accurately derived from a provable transaction on the blockchain. Smart contracts provide the ability to carry out code executions when certain transactions occur. In the previous example, the price that restaurants pay could be automatically calculated based on the previous transactions between the fishermen and fisheries (Sources: 7 NewsBTC, "Can the Hotel Industry Benefit From Blockchain Technology?"NEWSBTC, 3 Oct. 2017,www.newsbtc.com/2017/10/03/can-hotel-industry-benefit-blockchain-technology/.)

5.2 Retail Use Case

In the consumer goods sector, retail quite possibly has the most to gain from adoption of blockchain technology. Walmart has already begun to implement blockchain technology in their logistics and inventory tracking. During Walmart's annual shareholder's meeting on June 2, 2017, Executive Vice President John Furner explained, "in China, we're doing a traceability pilot with pork using blockchain technology...what blockchain does is it allows someone to track a product from the farm all the way to the shelf and then have a record of it each and every step along the way."8

5.3 Real Estate Use Case

This optimization is not limited to just supply chain management. Smart contracts can demonstrate to be the cheaper alternative by replacing escrow companies and postulating disintermediation of the entire process. Instead, the contractual agreement between both parties is programmed into a smart contract, with the funds being sent to the smart contract by the buyer. Through the use of a blockchain oracle, the smart contract can then determine that all the terms have been satisfied by both parties and execute its pre-programmed code, which in this case would be the sending of funds from the smart contract to the seller. As well as reducing counter party risk, the implementation of smart contracts in multiple areas of real estate transactions, not just escrow services, offers significant cost savings.

5.4 Entertainment Industry Use Case

The same advantages can be applied to the entertainment industry, in which consumers often interact within a frequently-inflated secondary ticket market. Greg Consiglio of Ticketmaster affirms that “tickets created on a blockchain would come with fixed rules about pricing that prevent ridiculous price hikes no matter how many times a ticket is resold. This solution would also eliminate ticket fraud by making each ticket unique and immutable, by creating a smart contract between the event organizer and the fan.”⁹

(Source: 8 Wong, Joon Ian, and Jason Karaian. “Execs Are Obsessed with Blockchain Because They Can't Afford to Ignore It Anymore.” Quartz, Quartz, 15 Nov. 2017, qz.com/1130015/the-blockchain-obsession-in-corporate-boardrooms-is-spreading/.)

⁹ “Why Blockchain Matters for the Live Event Ticketing Industry”: G. Consiglio, NASDAQ <https://www.nasdaq.com/article/whyblockchain-matters-for-the-live-event-ticketing-industry-cm971579>)

6. The Economics of MPRISE

6.1 For Consumers

In addition to a wide variety of use cases across several different verticals, MPRISE’s index provides even more opportunity to enhance the purchasing experience for everyday consumers. Taking into consideration the fact that MPRISE’s index value increases by an average 9.2 percent week-over-week, merchants can offer a discount to customers without losing any gross profits. For example, if a merchant offers a pair of sneakers at \$100.00 USD, they can offer the same pair of sneakers at a 10 percent discount, with the sneakers only costing the customer \$90.00 USD worth of MPRISE.

6.2 For Merchants

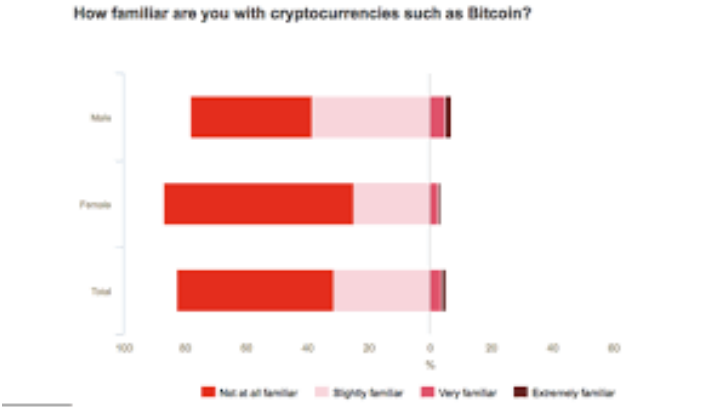
While the merchant takes an immediate loss from the discount on the customer’s sneakers, by the time the merchant is paid out (on a typical bi-weekly schedule) MPRISE’s index has increased by an assumed weekly average of 9.2 percent (over two weeks) equating to an 18.4 percent increase in value of MPRISE. Instead of being paid out the \$90.00 USD worth of MPRISE, the merchant is paid \$107.38 while the customer takes advantage of a 10 percent discount. New merchants using the MPRISE platform will be required to acquire 10% of the previous yearly revenue in debit/credit sales in MPRISE TOKENS in reserve allowing them to take a stake in the value of the token. This 10% of MPRISE purchased by new merchants in the network will be newly created tokens. Tokens will be held in cold storage for the first 6 months of joining. After the 6 months the merchant will be able to opt into a buyback program over the

following 6 months in 2 month intervals. This will allow the supply of tokens to be scalable with adoption. Inversely, if a merchant decides to terminate their payment solution coins created in relation to the merchant will be burned after a steady, incremental, discounted, buy back or further discounted lump sum buy back in order to safeguard price stability in the market.

7. Adoption of MPRISE

7.1 Barriers to Entry

All potential benefits considered, the most consistently addressed barrier to entry for acquisition and adoption of cryptocurrency and blockchain technology are typically concerns with security and familiarity. In a 2015 survey conducted by PwC, 51% of participants said that they are “not at all” familiar with cryptocurrency or blockchain, with 31 percent admitting to being only “slightly familiar” and a mere 1 percent of participants claiming to be “extremely familiar”. Taking this into consideration, we are working tirelessly to make MPRISE a Blockchain company known for its ease of use in the real world, both on and offline. In the fourth fiscal quarter of 2019, MPRISE will be available for use through peer-to-peer payment platforms such as Apple Pay, Android Pay and Samsung Pay. The MPRISE Supply chain management system will also be made available to merchants for use either alongside or instead of their current POS systems. We believe that this provides consumers with an undeniable ease of use while they conduct transactions online and in person at physical locations.



(Source: “2015 PwC Consumer Cryptocurrency Survey“ (2015) <https://www.pwc.com/us/en/financialservices/publications/consumer-cryptocurrency-survey.html#/A/0/stackedbars?cut=Gender>)

7.2 Scalability/Timeline

Reflecting the intrinsically safe and practical nature of MPRISE and the blockchain platform upon which it is built, the next logical action is to further adoption and use of MPRISE Tokens and MPRISE protocol-based technologies by creating real-world value and seamless use.

3rd QUARTER 2024

June 2024: Seed funding, preliminary blockchain development

May 2024-July 2024: Pre-ICO raise, press campaign

July 2024: ICO & Vendor/Merchant Contract negotiation

July 2024: Apple/Samsung/Android Pay testing & implementation

July 2024: MPRISE Security Product Client Testing

August 2024: Additional Vendor/Merchant Contract negotiation

4th QUARTER 2024

September 2024: Vendor/Merchant implementation

September 2024-October 2024: Testing of Institutional use of MPRISE Coin and Products (particularly in colleges and universities)

October 2024: MLEARN and MMODEL implementation

October 2024: MPRISE Pay implementation. This will allow users to seamlessly convert MPRISE Coins into a currency format of their choosing (i.e: AMG to USD to BTC to ETH to EUR to JPY et cetera).

December 2024: Beta testing of MLEARN and MMODEL, MPRISE's blockchain-based AI platform.

8. Conclusion

While MPRISE's core platform and premise are based on safety and ease of use, the practicality of MPRISE as a digital asset commodity, and blockchain protocol are contingent upon the adoption of the token by the public. We're using our proprietary blockchain protocol to decentralize Artificial Intelligence and create a Decentralized Autonomous Organization (DAO). DAOs are organizations that are able to operate autonomously and in a decentralized way through smart contracts without having a central party pulling the strings and making decisions. The users of DAOs, who constitute its network, will decide how a DAO functions and operates. Furthermore, MPRISE's unprecedented multi-tiered encryption and safeguarded value present a myriad of applications that transcend any one particular industry.