Blue Horseshoe Foundation Inc.

Kevin Rucker

www.ilycoin.bluehorseshoe.org

Abstract

There has been a great revolution in the financial industry with the invention of Cryptocurrencies. The introduction of Bitcoin started it, which pioneered the revolution by introducing to the world, the first successful cryptocurrency. Before Bitcoin, attempts to create digital currencies were centralized, making them vulnerable to censorship and seizure. However, Bitcoin's consensus mechanism protects it from interference, its fixed monetary policy-induced extreme price volatility. Ilycoin solves this by issuing tokens that are attached to stablecoins targeted towards a commodity, hemp. The hemp market backs Ilycoin. The token is issued using a distributed collateral pool that derives its value from fees levied on transactions. Thus, growth in transaction volume increases the collateral value, allowing the expansion of the token supply to meet up with demand while simultaneously increasing the value of the commodity that Ilycoin is backed by, hemp. The best features of Bitcoin were retained by the resulting system, while the introduction of price stability through a commodity-backed cryptocurrency results in a superior form of money.

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1. Introduction

1.1 Payment Networks

The closed systems within which users can transfer value are known as payment networks. Examples of the systems include SWIFT Network, Paypal and all credit card networks. Interestingly, Proprietors of each of these networks are allowed complete control over the value within their networks. This implies that any transaction carried out on their networks can may be or be reversed at any time. As much as this was borne out of intentions to create protection for users, the resultant implications cannot be overlooked, as it will only instigate systemic risk for all participants. It will establish distrust, as no party can entirely trust that the value in their account is safe and accessible if the network gets compromised or the owner ceases to behave accordingly.

For instance, participants of traditional payment systems like American Express trust that fees charged are enough to service all the expenses incurred. In a case where the trust is lost, merchants will not participate. The value of the unit of accounts within this network is derived solely from a single entity and the trust that participants have in that entity. Thus, payment networks need to establish trust in users since basically, the viability of every network depends on the trust users have in their centralized authority.

Bitcoin solved problems like these with the accompanying Blockchain technology which is a trustless, permission-less payment network that allows participation at any time. Users of the network have sole discretion over the money in their account. Since users could enter and exit the system at any time without being exposed to the risks stated earlier, adoption was fast, and network effects were increased. Programmable blockchains allow the logic of a payment network to be decentralized transparently, allowing anyone to verify the solvency of

their network. This not only eliminates systemic risk, it also reduces the cost associated with centralized networks.

1.2 Cryptocurrency

Basically, the technology of money has three main functions; to act as a unit of account, a medium of exchange, and a store of value. As payment technology has advanced in recent years, money has become growingly invisible, it is often lost upon its users that, like any other technology, it can also be improved. Bitcoin and other forms of cryptocurrency represent a monumental technological advancement on pre-existing forms of money because they facilitate improved durability, portability, and divisibility. Further, they do so without requiring centralized control or sovereign enforcement from which to derive their value. Their fixed monetary policies protect them from debasement and devaluation, thereby allowing them to outperform other forms of money as a store of value. On the other hand, this also created the possibility for short-run volatility as they lack the mechanisms needed to dynamically adjust supply to the changing demand. Thus, Bitcoin is prone to be a poor medium of exchange and even, a worse unit of account. For a coin and/or token to efficiently serve as money, its purchasing power must remain firm against goods and services over the short to medium term.

1.3 Stablecoins

One way cryptocurrencies are a better form of money is that they present transaction immutability and censorship resistance. Still, their adoption growth has been hindered by the volatility deep rooted in their fixed monetary policies. With this, users cannot engage with such unstable systems as a medium of exchange if the purchasing power fluctuates.

Stablecoins were designed for price stability. They should ideally be as effective at making payments as fiat currencies like the U.S. dollar while retaining their other desirable properties. A decentralized payment

network built on stablecoins would be able to capture all the benefits of a permission-less system while also eliminating volatility. One approach to achieving price stability is to produce a coin whose price targets the value of a fiat currency. Targeting stability against fiat currencies obviates the need to respond to macroeconomic conditions, as the token then benefits from the stabilization efforts of large institutions acting in fiat markets.

Furthermore, if a coin price can be kept at $18.75 (i.e., the market value of the commodity that backed the token), then it can serve as a superior interface between fiat money and cryptocurrency. If stablecoins do not require an account in a traditional bank, then it can be effectively used for settlement and purchasing without the centralization and counterparty risk involved in fiat transactions. The calculated resultant effect of this is using stablecoins, exchanges that trade fiat for crypto will be able to reduce their transactional costs, thereby reducing the barriers for new users to enter the market.

1.4 Distributed Collateral

An asset or commodity does not back today's fiat money; its stability is obtained from the governments which issued it. These governments require that tax charges are listed in the currencies they control, which are used to fund active stabilization efforts. However, government control comes with the risk of centralization, debasement, and tyranny. Decentralized monetary systems don't have these powers, and so they must use collateral to provide confidence in the value of their coins and/or tokens. A decentralized system cannot use collateral assets outside the blockchain, as interfacing with these assets necessitates centralization with the failure mentioned above modes.

Meanwhile, crypto-asset prices have been dominated by abstract volatility. So, if a system uses real-world assets or crypto-assets to back a stable coin and/or token, if the collateral value is uncorrelated with the

coin and/or token demand, then the system is vulnerable to external price shocks. Large corrections can destroy the collateral value without any change in the demand for the coin and/or token issued against it. Clearly, in designing an asset-backed stablecoin, it is important to select the collateral asset carefully, and prior to the discovery made in this paper, no existing asset perfectly served the purpose. Through multiple components, this will be achieved. The following is the method to the process, Blue Horseshoe Foundation, Inc., Blue Horseshoe Systems, Inc., BlooRae, Cottin, and finally, Ilycoin.

1.5 Blue Horseshoe Foundation, Inc.

Blue Horseshoe Foundation, Inc. is a 501(c) 3 non-profit community organization. Blue Horseshoe's mission is to provide community programs and workshops to underprivileged communities that focus on health, education, and economic empowerment. Blue Horseshoe is the overall manager of Ilycoin, BlooRae, and Cottin. The parent corporate entity to Blue Horseshoe Systems, Inc. Blue Horseshoe has the unique benefit of having a credit history with no financial debt. Compared to other states that distribute a form of currency, it exhibits zero deficit and overall debt. This provides Blue Horseshoe with the unique position of being the first 501(c)3 tax-exempt organization that manages a stable commodity backed fiat cryptocurrency. Therefore, this provides the organization with a significant level of sovereignty since gross domestic and gross national product measures and estimates are equated into this whitepaper's mechanisms, which we will focus on in the hemp section of this whitepaper.

2. Blue Horseshoe Systems, Inc.

Blue Horseshoe Systems, Inc. is a systems management company that combines the application of enterprise-wide administration of distributed computer systems with the use of application performance management

(APM) technology to achieve productivity for the management and the circulation of Ilycoin, BlooRae, and Cottin. This is achieved through the combined process of event correlation, system automation, and predictive analysis, which is now all part of APM. More specifically, APM is application performance management which is the monitoring and management of performance and availability of software applications. APM detects and diagnoses complex application performance problems to maintain an expected level of efficiency. The Blue Horseshoe systems APM conceptual framework addresses the difficulty of managing highly distributed, multi-tier, multi-element applications that Ilycoin, BlooRae, and Cottin rely on. The Blue Horseshoe Systems APM Conceptual Framework was designed to help prioritize and implement an approach on how to prioritize the fundamental understanding of the multi-dimensional cryptocurrency distribution model that Blue Horseshoe Foundation manages. The following are the schematics of the transaction process of the blockchain algorithm and the peer-to-peer network.

2.1 End-user experience (primary)

Calculating the movement of traffic from user request to data and back again is included capturing the end-user-experience (EUE). The end result of this calculation is known as Real-time Application monitoring (aka Top-Down monitoring), and it has two components, passive and active. Passive monitoring is usually an agentless appliance carried out with the use of network port mirroring. A spotlight feature to put into consideration is its ability to support multi-component analytics (e.g., client/browser, database). Active monitoring is made up of synthetic probes and web robots designed to give reports on system availability and business transactions. Active monitoring is a good complement to passive monitoring, and together, these two components facilitate visibility into application health when transaction volume is low.

User experience management (UEM) is a subcategory that surfaced from the EUE dimension to monitor the user's behavioral context. Evident from this day's practice, UEM has gone beyond being available to capture latencies and inconsistencies as human beings interact with applications and other services. UEM is usually agent-based, and it may include JavaScript injection to monitor the end-user device. UEM is regarded as another surface of Real-time Application monitoring.

2.2 Runtime application architecture (secondary)

Application Discovery and Dependency Mapping (ADDM) offerings exist to automate the process of mapping transactions and applications to root infrastructure components. When preparing to implement a runtime application architecture, it is best to see that up/down monitoring is in place for all nodes and servers within the environment (aka, bottom-up monitoring). This helps lay the basis for event correlation and also provides the background for a general understanding of how network topologies interact with application architectures.

2.3 Business transaction (primary)

Focus on user-defined transactions or URL page definitions that have some importance to the business community. For example, if there are 200 to 300 unique page definitions for a given application, group them into 8-12 high-level categories. This enhances meaningful SLA reports and provides accurate trending information on application performance from a business perspective. Begin with broad categories and rectify them over time.

2.4 Deep dive component monitoring (secondary)

Deep dive component monitoring (DDCM) needs agent installation and is broadly targeted at application and middleware,

focusing on web and messaging servers. DDCM should supply a real-time view of the J2EE and .NET stacks, connecting them back to the user-defined business transactions. A robust monitor shows a clear path from code execution (e.g., spring and struts) to the URL rendered and to the user request. DDCM is closely related to the second dimension in the APM model, and as part of their offerings, most products in this field provide application discovery dependency mapping (ADDM).

2.5 Analytics/reporting (primary)

The two vital ends involve arriving at a common set of metrics to fetch and report on for each application and systemize on a common view on how to present the application performance data. Collecting raw data from the other toolsets across the APM model provides flexibility in application reporting. Despite the different platforms each application may be running on, it allows for answering a wide variety of performance questions as they arose. Too much information is overwhelming. That is why it is necessary that reports are kept, else they will just get stored and will not be used.

2.6 BlooRae

BlooRae is a decentralized payment exchange network where users transact directly in a price-stable cryptocurrency. Those who use the BlooRae exchange pay fees to management, Blue Horseshoe Foundation, Inc., which collateralizes the network, compensates collateral providers, who accept risk by providing both collateral and stability. Blue Horseshoe Foundation, Inc. control the money supply, and fees are distributed in fair proportion to each commodity’s stabilization performance. Thus, Blue Horseshoe rewards suppliers of stability and charges those who demand it.

Blue Horseshoe Foundation Inc. implements a linked token and coin to achieve this objective;

3.1 Ilycoin

"The stablecoin, whose supply floats." Its price is measured in fiat currency and commodity value which will be stable. This coin is useful insofar as it provides a superior medium of exchange. Thus, in addition to price stability, Blue Horseshoe Foundation, Inc. will encourage adequate Ilycoin liquidity. The scarcity of stablecoin will provide additional value since only 1 billion Ilycoins will ever be generated.

3.2 Cottin

Cottin is the token that provides the collateral for the system and also has a static supply. Its market capitalization reflects the system's aggregate value. Ownership of Cottin tokens grants the owner right to possess a specific amount of Ilycoins proportional to the dollar value of Cottin placed in an escrow. If a user wants to release his/her escrowed Cottin, they must first present the system with the quantity of Cottin that was previously issued. The Cottin token is a novel decentralized asset whose intrinsic value is derived from Ilycoin, which is represented as tranches within the Cottin token. This provides a form of representative money that will bypass the requirement for a physical asset, thus eliminating trust and custodianship problems. The system incentivizes the issuance and destruction of Ilycoin in response to changes in demand, but ultimately, the intrinsic value of the Cottin will reflect the required Ilycoin supply. With this stablecoin backup system, transparency over the number of tokens issued against available collateral is facilitated. It will also provide a firm foundation for trust in the solvency of the network built. This provides a solid basis for confidence in the solvency of the payment network built upon it.

Denominating the value of the Ilycoin in an external fiat currency means that stability is for that currency only. Originally, this currency will be the US dollar. However, through BlooRae, any currency (crypto or fiat) can be exchanged for relative value, and the system will support

additional “flavors” of stablecoin that are denominated in other currencies.

4. Hemp: The Commodity

As explained previously, a stablecoin is a cryptocurrency designed for price stability. Ilycoin has been designed for maximum stability because it is a fiat currency backed by an actual commodity. As identified earlier, the commodity that Ilycoin is backed by is the hemp plant, also known as cannabis sativa. Hemp, or industrial hemp, is a variation of the cannabis sativa plant species grown mainly for industrial use. It can be used to make a wide range of products.

Alongside bamboo, hemp is one of the fastest-growing plants on Earth. It is also one of the first plants to be spun into usable fiber 50,000 years ago. It can be re-processed into various commercial items, including paper, rope, textiles, clothing, biodegradable plastics, paint, insulation, biofuel, food, and animal feed.

The correlation between cryptocurrency and the hemp industry has been mentioned a few times in the past. But things have evolved in a very different direction compared to what people assumed at first. Various hemp farmers have suffered from issues with their banking partners. Ilycoin can offer them a way to continue their operations at a fraction of the costs. Growing and selling hemp is not illegal. It was made legal by the 2018 United States Farm Bill, and the works of various institutions calling for/working towards environmental reform like the Green New Deal opened up new and exciting opportunities for people who want to explore business in the hemp industry.

Unfortunately, like every other business, running a hemp business is not without its inherent problems, especially when it comes to banking. Only a few financial institutions keep an open mind towards hemp farming. Despite being a legal form of cannabis, there is still a stigma attached to hemp producers. Most financial institutions clearly prefer not

to deal with these types of clients. That leaves the producers with very few options, forcing them to think outside of the box. Ilycoin provides an alternative financial solution, and through Blue Horseshoe, it also creates an entire economic structure that can provide each hemp producer with a legitimate autonomic solution.

Blue Horseshoe's strategy of investment management and marketing of commodity and distributed products created from the commodity is a holistic economic structure that is based on a gross domestic product measure, which is a monetary measure of the market value of all the final goods and services produced by the commodity in a specific period, as well as the gross national product estimate, which is the final products and services that are distributed and provided in a given period using production owned by the participants of the hemp industry.

Unlike financial institutions, Ilycoin will not tell users what to do, nor will it direct hemp producers on how to run their businesses. Ilycoin ecosystem is open to everybody worldwide, and people can control their funds as they see fit. Our economic structure will provide the average hemp producer something that the producer never previously had; legitimacy that comes from producing an existing commodity. While there are existing commodities, such as sugar, corn, orange juice, or gold, none of those commodities provide as stable a position as hemp, regarding the versatility of the commodity, which in the process provides a steady circulation of economic saturation that benefits the cultivation of the commodity. Put simply, there is an ongoing scarcity position since the supply of the commodity can never match the demand because of the multiple uses of the commodity.

5. Omega Garden

While the overall economic benefit of using hemp to back Ilycoin is evident, the investment opportunity of the Cottin ERC-20 token must also be addressed. While the establishment of Ilycoin as a unit of

account, a medium of exchange, and a store of value is evident, to stimulate the economic process, a level of financial trust must be applied. This is done through the production, storage, and distribution of the commodity and accounting for the trade of the commodity produced. Production is achieved through a device called the Omega Garden.

The Omega Garden is a revolutionary, internationally patented rotary hydroponics system. It is designed to produce hemp 365 days of the year in an urban setting. This provides Blue Horseshoe with a completely controlled environment that can produce the commodity consistently and pursue multiple avenues to achieve solvency, the direct sale of the commodity, with the opportunity to produce the commodity in any location in the United States or on the planet.

Specific, custom-designed Omega Gardens will be designed to allow maximum harvest return on Blue Horseshoe's commodity. The commodity currently has a market price of 18.75 USD an ounce (which would be the value of one Ilycoin). Producing products will assist in the stimulation of the commodity, and therefore gradually raise the value of the cryptocurrency. This will add capital gain to Cottin token owners, along with the exchange fees that Blue Horseshoe will manage, that was mentioned in previous sections in this white paper.

6. RaePay

RaePay is a cryptocurrency payment service provider (PSP) that offers merchants and consumers online services for accepting electronic payments through different payment methods. It will include credit cards, bank-based payments like direct debit, bank transfer, and real-time bank transfer based on online banking. It is a software that is a service model that forms a single payment gateway for their clients (merchants) to multiple payment methods. In conjunction with BlooRae, RaePay will be used to not only convert Ilycoin into other forms of

currency but also allow individuals and merchants to convert all forms of currency, including Ilycoin, into tangible paper forms of currency.

7. Coin Circulation

It will be necessary to promote the use of Ilycoin through peer-to-peer transactions. This can be done through the same model that has made Bitcoin successful. The advantage that Ilycoin has in the current financial climate is in the fact that the trust of cryptocurrency among the general public has substantially increased since the creation of Bitcoin. Due to this, we can expect maximum coin circulation through four potential outlets that can create massive exposure, which in turn can create significant coin circulation. The following are ways Blue Horseshoe Foundation will aggressively promote Ilycoin and succeed at maximum coin circulation.

7.1 Social Media

Undoubtedly, Social media is the first way that can be expected to enhance coin circulation. It is the single most effective tool in today's marketing climate to create and sustain coin circulation. Incentives that have been used in the Bitcoin market and its offshoot industries, such as payment processors like Coinbase (which BlooRae is based on), will also increase coin circulation through their social media marketing campaigns.

7.2 Chamber of Commerce

Various Chambers of Commerce in the country are key partners in the growth of coin circulation for Ilycoin. The involvement of small and mid-sized businesses in the circulation of Ilycoin will lead to economic empowerment of these types of businesses and stimulation of the middle-class economy of the United States. Another potential benefit can be the inclusion of hemp-based companies that previously were not necessarily welcome among the various commerce organizations. This

can provide a new legitimacy for hemp-based businesses and the commodity in general.

7.3 Commodities Brokerage Firms

A commodity brokerage firm is a firm that executes orders to buy or sell commodity contracts on behalf of clients and charges them a commission in return. A firm that trades for its account is called a commodity trading firm. Commodity contracts include options, futures, and similar financial derivatives. People who trade commodity contracts are of two categories, they are either the hedgers who are using the derivative markets to manage risk or are speculators willing to assume the risk from hedgers in hopes of a profit. These broker and trader firms are crucial in advancing hemp as a commodity and, in turn, the growth of Ilycoin. Commodity contracts will provide even more legitimacy for industrial hemp as a commodity and provide concrete proof of stability in the Ilycoin, which will substantially increase the value of Ilycoin as a stable cryptocurrency.

7.4 Foreign Exchange platforms

Once the distinct outlets that have been previously mentioned have gained momentum, the implantation of foreign exchange platforms will create a global footprint for Ilycoin. It will spread Ilycoin worldwide as an international currency that is financially solvent and economically stable since Ilycoin is the first commodity calculator for the commodity of hemp.

8. Conclusion

Ilycoin, Cottin, BlooRae, and RaePay are all novel solutions to the problem of individual and collective economic empowerment. The current money market needs a tangible form of currency that has real value. Blue Horseshoe Foundation, Inc. is dedicated to advancing less fortunate people in the United States and the world. By creating this cryptocurrency and the management of the first investment of the cryptocurrency through the Cottin ERC-20 token, Blue Horseshoe can generate a non-zero-sum solution to the zero-sum problem that has been created through years of greed in the form of abuse of the financial market. Investors of Cottin can expect a significant return on the initial coin offering purchase since the growth of the value of Ilycoin can be expected to skyrocket practically overnight. The introduction of industrial hemp as a commodity will create even more dialogue about the thousands of potential uses of the plant since all potential uses will increase the commodity's overall value. Hemp organizations like the National Hemp Association and news outlets like Hemp Industry Daily will provide consolidation and information for the hemp production and manufacturing community and the general public. All these elements will lead to an innovative new world. This world can finally be free of climate damage since hemp is the most biodegradable and sustainable plant on the planet.