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OPTITOKEN: An algorithmically traded hyperdeflationary cryptocurrency

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ABSTRACT

Most people have a very hard time profiting when exchanging cryptocurrencies or currencies in general with a goal of achieving benefits in differing currency values. This type of currency exchange is highly complicated due to extreme volatility and abundant manipulation. Newcomers with a lot of will and very few skills stand to lose much value partaking in such exchanging as opposed to just using one cryptocurrency that focuses on price appreciation as a goal over time. Many constantly chase the mob and follow the latest trends of the hottest cryptocurrency or when there are price spikes. This causes people to exchange into a cryptocurrency after the fact, as opposed to the golden rule of buying low and selling high.

As an algorithmically traded cryptocurrency, adopters of Optitoken gain the benefit of utilizing a medium of payment that is exposed to 24/7 trading through code developed with the strategies used by traders in a portfolio of established and manually selected cryptocurrencies.

Essentially, the algorithm takes advantage of price swings among a select group of tokens, known as "The Basket," made up of a variable number of coin(s) deemed statistically or categorically undervalued. They will also be established and growth driven projects with high upside potential based on several factors based on past trends of growth and/or market averages. It will also take into account token supply and market capitalization.

The project aims **to create profits from this ongoing series of trades and infuse it into the market(s) of OptiToken itself to provide constant sporadic upward price pressure.** The tokens purchased are then destroyed by sending them to an unspendable address to **create ever growing scarcity in the token supply** and disallow the tokens from re-entering the ecosystem as 'sell pressure.' The remaining OptiTokens will gain value each time this cycle occurs.

DISCLAIMER

This whitepaper is for information only and does not constitute an offer or any kind of investment advice. Elements of this whitepaper may undergo significant changes as the project further develops. Please read the legal disclaimer at the end of this paper. Further questions can be addressed by email at info@optitoken.io

SNAPSHOT	An expertly curated and diversified portfolio of cryptocurrencies used to jet-fuel a single Cryptocurrency in a deflationary manner. Opti will be traded on at least one major exchange.
ALGORITHMIC TRADING	Exposure to an algorithm that has consistently outpaced Bitcoin. Developed by crunching data from the work of experienced traders. Will integrate machine learning.
24/7 ALGORITHM	Crypto doesn't stop and neither will OptiToken. Constant, round the clock automatic trading to identify trends in order to support the currency.
BUY PRESSURE	In every automatic buy cycle, a portion of the profits created will be used to buy OptiToken on the market thus providing upward price pressure.
STRATEGIC SCARCITY	100% of the tokens bought back will be sent to a provably unspendable address that can be verified transparently. OptiToken will be the first project to use this strategy for the purpose of raising value for adopters. It will in effect be the first hyper-deflationary currency in history.
TRANSPARENCY	The portfolio will be externally audited on an annual basis and as needed to maintain integrity for OptiToken. All movements can be tracked and verified using the blockchain.

History of Algorithmic Trading

Algorithmic trading is a method of executing a large order (too large to fill all at once) using automated pre-programmed trading instructions accounting for variables such as time, price, and volume, to send small slices of the order - technically called child orders - out to the market over time. They were developed so that traders do not need to constantly watch a stock and repeatedly send those slices out manually. Popular "algos" include Percentage of Volume, Pegged, VWAP, TWAP, Implementation Shortfall or Target Close. In the past years, algo trading has been gaining traction with both retail and institutional traders. Popular platforms for algorithmic trading include MetaTrader, NinjaTrader, IQBroker and Quantopian.

Algorithmic trading is not an attempt to make a trading profit. It is simply a way to minimize the cost, market impact and risk in execution of an order. It is widely used by investment banks, pension funds, mutual funds and hedge funds because these institutional traders need to execute large orders in markets that cannot support all of the size at once.

The term is also used to mean an automated trading system, which do have the goal of making a profit. Also known as black box trading, these systems encompass trading strategies that are heavily reliant on complex mathematical formulas and high-speed computer programs.

Such systems run strategies including market making, inter-market spreading, arbitrage, or pure speculation such as trend following. Many fall into the category of high-frequency trading (HFT), which are characterized by high turnover and high order-to-trade ratios. HFT strategies utilize computers that make elaborate decisions to initiate orders based on information that is received electronically, before human traders are capable of processing the information they observe. Algorithmic trading and HFT have resulted in a dramatic change of the market microstructure, particularly in the way liquidity is provided¹.

System Architecture

A traditional trading system consists of primarily of two blocks – one that receives the market data while the other that sends the order request to the exchange. However, an algorithmic trading system can be broken down into three parts:

Exchange
The server
Application

Traditional architecture of algorithmic trading systems:
Exchange(s) provide data to the system, which typically consists of the latest order book, traded volumes, and last traded price (LTP) of scrip. The server in turn receives the data simultaneously acting as a store for historical database. The data is analyzed at the application side, where trading strategies are fed from the user and can be viewed on the GUI. Once the order is generated, it is sent to the order management system (OMS), which in turn transmits it to the exchange.

Gradually, old-school, high latency architecture of algorithmic systems is being replaced by newer, state-of-the-art, high infrastructure, low-latency networks.

¹With info from: https://en.wikipedia.org/wiki/Algorithmic_trading#History

The complex event processing engine (CEP), which is the heart of decision making in algo-based trading systems, is used for order routing and risk management.

With the emergence of the FIX (Financial Information Exchange) protocol, the connection to different destinations has become easier and the go-to market time has since reduced, when it comes to connecting with a new destination. With the standard protocol in place, integration of third-party vendors for data feeds is not cumbersome anymore².

Problems & Solutions

PROBLEMS WITH AUTOMATION

The major problem to date is failure of robust and consistent safety measures. For example, in 2012 Knight Capital lost a total of \$440 million dollars when its stock trading automation accidentally sold all the stocks it had bought a few days prior.

Optitoken's theory on prevention of such events is to split the actively traded portfolio into smaller groups based on different fail-safe measures and also different strategies. A portion being left to human trading and rebalancing. Furthermore, OptiToken seeks to create customized solutions by working with the exchange itself to implement backup fail-safe measures and controls.

PROBLEMS WITH MACHINE LEARNING IMPLEMENTATION

The major idea that spurs development is to implement machine learning based on social network and media events. We believe this to be a fundamental flaw for several reasons.

a) The case is more often than not that once an event is in the "news" it is too late to partake in a particular trend. In the team's experience this is very common, and chasing trends is never a shrewd trading strategy. However, one may still answer, what if you programmed to "sell the news?" The problem here is that any machine in this day and age is not sophisticated enough to weigh the importance or relevance of any particular headline. It would be reckless to try to game this strategy in a contrary manner.

b) With little to no regulation in place as of now, headlines can be manipulated too easily to supply concrete data to quantify or execute actions for. Not to mention the presence of propaganda social media accounts and social automations. An automation set to track increase in the posting of a particular cash-tag such as "\$NMC" may be adversely affected by one individual acting as many, through the implementation of multiple fake accounts programmed to promote said coin in some public manner on the social media platform.

¹With info from: https://en.wikipedia.org/wiki/Algorithmic_trading#History

**OPTITOKEN'S
SOLUTIONS**

OptiToken is actively researching mechanisms peculiar to the space and will eventually implement learning patterns and behavior based on cryptocurrency metrics such as mining, transaction volume, hashing power movements, mempools and more. We believe these fundamental numbers tell the story of true sentiment and can be acted upon in small sized trades to "squeeze profit." We believe that this type of trading is best when done only with a small portion of portfolio as to hedge against its inherent risk, yet still allows accumulation of significant profit over time.

Indicators

**MARKET
CONTROLS**

The team has also developed a variety of indicators and actions to identify potential downward and upward trends. In the event of downward trend indicators, a portion of portfolio may be sold into fiat to wait out either the occurrence or non-occurrence of event. In the scenario of non-occurrence, stop-orders may be used at that time to re-enter the previous position fully, beyond or to a partial extent. Likewise if it becomes more efficient at any point to incorporate derivatives, the team may enact or put a new strategy to a vote with the community and project supporters. However, the latter - a vote- is not required in order to execute such activities. The goal is to outpace bitcoin and other indexes while at the same time enacting downside protections that some of these projects are unable to incorporate.

**BROAD-MARKET
PARABOLIC
MOVES**

In order to optimize profits, there will be times when the portfolio will be partly moved into fiat, such as Euro or Japanese Yen. To do this the team has identified many market indicators that can be precursors to price corrections, upward or downward. In the beginning the focus will be on hedging the downside, which can be accomplished by moving a portion of the portfolio into fiat if and when these indicators occur. The main indicator is a chart of the broader market that is achieved as an extreme parabolic move in a short time frame. When these conditions are met, a relatively small portion of the portfolio will be sold into fiat or, in the future, may be devoted toward other downside hedging instruments such as options contracts, futures or margin positions. The downside positions will be set to rebuy or close upon further indicators, a trend reversal or, at the very least, a discount on previous positions. This strategy, along with other indicators that we will depict more after hard launch, will all be used to create the most optimal price discovery and development for OptiToken.

Token

OptiToken (\$OPTI) is an ethereum ERC20 token, which derives its value from an underlying portfolio and the price support created through careful buy pressure induced by buying Opti Token directly on listed exchange(s) with the profits of trading said portfolio. The tokens bought back are destroyed immediately afterwards creating scarcity. The trading of the basket is based on a simple algorithm that is designed to buy low and sell high, and uses the Euro as a fiat instrument for stability when no buy target is available at the time of a sell. Tokens in the basket were selected by the founder and team based on months of experiments and success creating profits from a similar but more primitive strategy. Tokens in the basket are not limited to a top market capitalization filter. The formula has been refined and will continue to be optimized as it moves forward. The picks that Opti will focus on are tokens with strong communities, sufficient volume, strong marketing presence, strategic partnerships and especially active open-source development on their respective source codes. Unique niche market coins that could be considered to have reasonable or undervalued market capitalization are also part of the strategy and in special cases Opti Token can seek to incorporate, in a small amount, cryptocurrencies or investments not listed on Bitfinex. All of the tokens in the basket should have concrete and active development.

A portion of the profits, 16% to start, created when selling or exchanging the token when completing a cycle will be used to buy OptiToken on available exchanges in equal parts, thus providing upward price pressure. A cycle would consist of coins meeting a certain criteria and than being sold into the next coin that meets buy criteria, assuming the two have a pair. If they don't, the trading balance will need to be turned into bitcoin or ether to be exchanged into the optimal cryptocurrencies that meet buy criteria. If no tokens meet the buy criteria, then a portion will be sold into fiat, primarily Euro, to stabilize and consolidate gains.

Along with the prior, the profit balance from each successful cycle would be split in the following way:

82% will go toward rebuying the next targeted oversold coins in basket in order to increase the portfolio's value.

16% will go towards buying Opti coins in order to create upward pressure on the price.

2% will go toward operating expenses.

Economics

We strongly believe there is a fundamental lack of understanding of the power of economics in the cryptocurrency space. Particularly how cryptocurrency and tokenization has changed what can be done with general asset exchange. Despite the disruptive nature of blockchain and similar technologies, this lack of emphasis is a common problem with many projects. There are few projects that effectively implement strategies to exploit this. It is perhaps possible to say that at this stage of development, any project that isn't taking measures to protect its coin's price, or to counteract negative price manipulation, is not fully grasping or utilizing the disruptive technology made possible by developments in cryptographic tokenization.

OptiToken uses supply and demand economics to affect the price of its cryptocurrency by nurturing demand and creating provably fair scarcity. Why is it fair? Because the tokens destroyed are removed forever to a verified, transparent unspendable address, as opposed to tactics implemented in history to create scarcity temporarily, such as locking an asset up in a vault for a given time period. Examples of this strategy are common, having normally been implemented by huge corporations with commodities they operate their core businesses on. The textbook examples of this are De Beers and the global diamond supply, or Standard Oil and the US oil supply.

Another great use case is what happens to prices in an economy when the opposite of scarcity is created. Take for example central banks and international governmental bodies, some of which still practice the mass printing of currency in their governments without simultaneously matching production growth in their economy, in hopes of fixing short term monetary problems at hand. Though immediate monetary obligations can be met with this strategy, this causes an influx in money supply, thus making each unit less scarce and less valuable. The result of overdoing this is a mass appreciation in the prices of goods in the economy, or in other terms, hyperinflation. The most relevant historical examples are Germany post WWII, Zimbabwe in the early 2000's or current day Venezuela. Obviously, the effects on a country can be devastating.

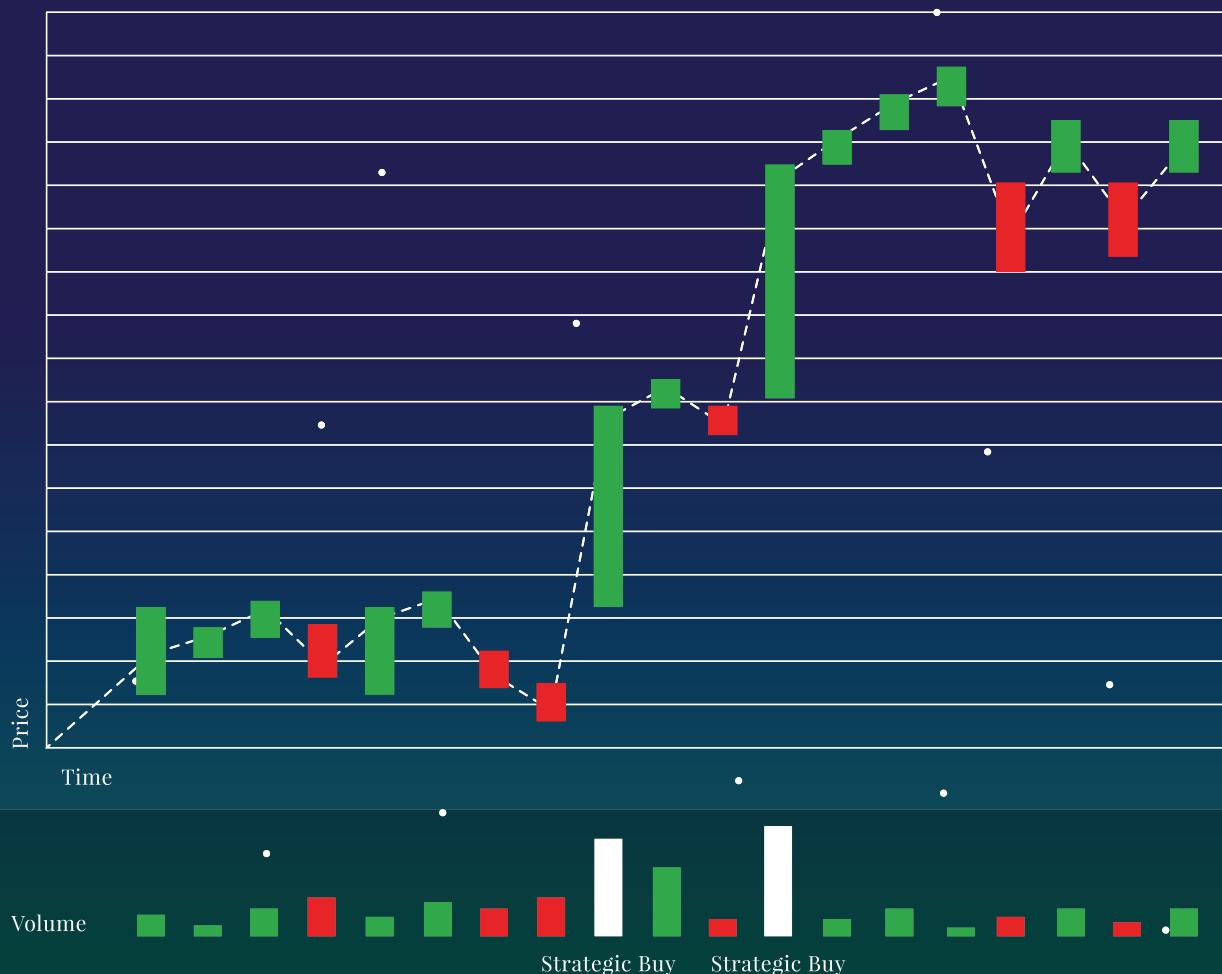
We argue that doing the opposite, that is, increasing the value of an economy's money, will cause the opposite effect to the benefit of all adopters. We do understand that when it is more profitable to save one's money, the propensity to consume decreases. However, we believe there is a threshold (that can be found using patterns in averages) that when crossed makes people spend more than they had in the past. This in turn nurtures the velocity of spending in an economy, which is exactly what central banks are trying to do when tampering with money supplies and interest rates. The benefit with OptiToken is that this economy is enriching its citizens, as opposed to trying to keep the bunny just a bit behind the carrot.

Buy Pressure & Strategic Scarcity

Below is a graphic representation of how price action would work once OptiToken is being traded openly on an exchange. The effect of this strategy is to nurture a market that has very strong buy support. It also solves an extremely common problem of new ICO's, that hit exchanges and cannot find any volume. Not only does OptiToken solve this, but uses tokenization in a innovative new way to create a cryptocurrency that has the potential to appreciate, or offer support, in price even in bear markets.

Our test portfolio, that uses the strategies that will be adopted by the algorithm, has been consistently outpacing bitcoin by 40 to 100% since November. You can view the movements live and transparently on our website. Given that the portfolio's value can increase even in bear markets like the last one, OptiToken's price on exchanges can grow even when most coins are in the red. This in turn can create serious organic marketing in the form of FOMO, as foreign buyers jump on the trend of spikes in price.

Strategic Buy Pressure



As our algorithm trades automatically between the basket of tokens, a portion of the profits created will be used to buy OptiToken on the market, thus providing upward price pressure. Then those tokens will be sent to an unspendable address and be destroyed, creating scarcity and increasing value.

Supply Scarcity



Imagine the world only has 100 Bitcoin



When Satoshi burns 20 coins as "a donation to the network", the remaining coins share the same market cap, making each more valuable than before.



Now there is less Bitcoin. As it becomes more scarce people were less willing to part with their precious coins, making it more valuable.



The early supporters and adopters were rewarded with an appreciating asset.



Optitoken purposely uses this strategy to create the first hyper-deflationary cryptocurrency

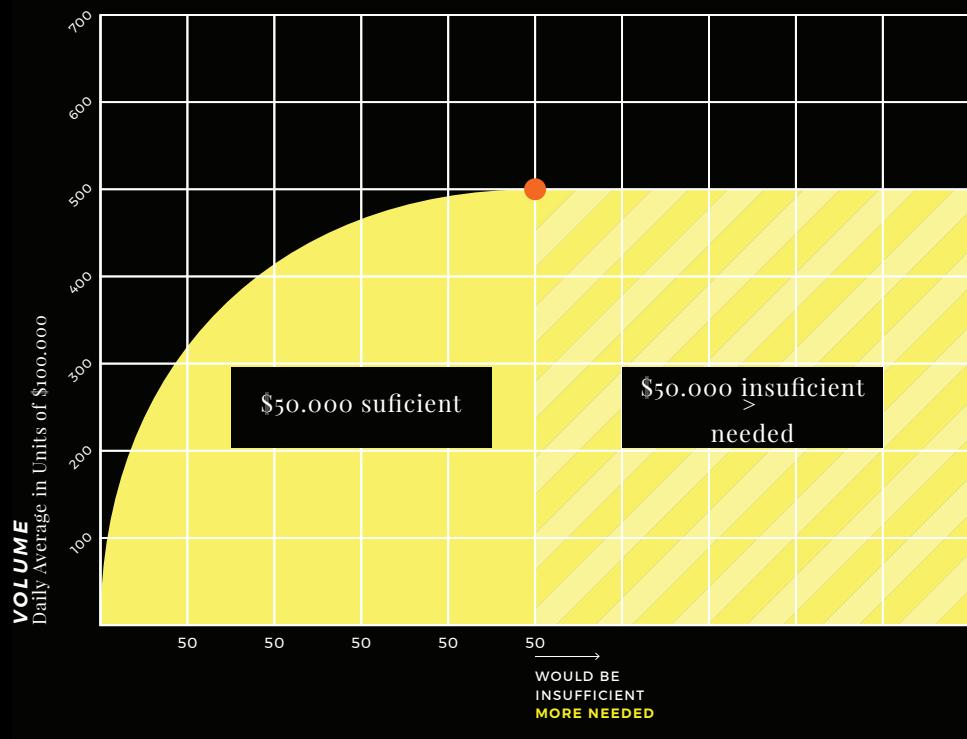
Every coin lost is a gift for the community

Scalability of OptiToken, Illustrated Graphically

The following charts represent abstractly the effect of buys on the simple moving average of Optitoken's price.

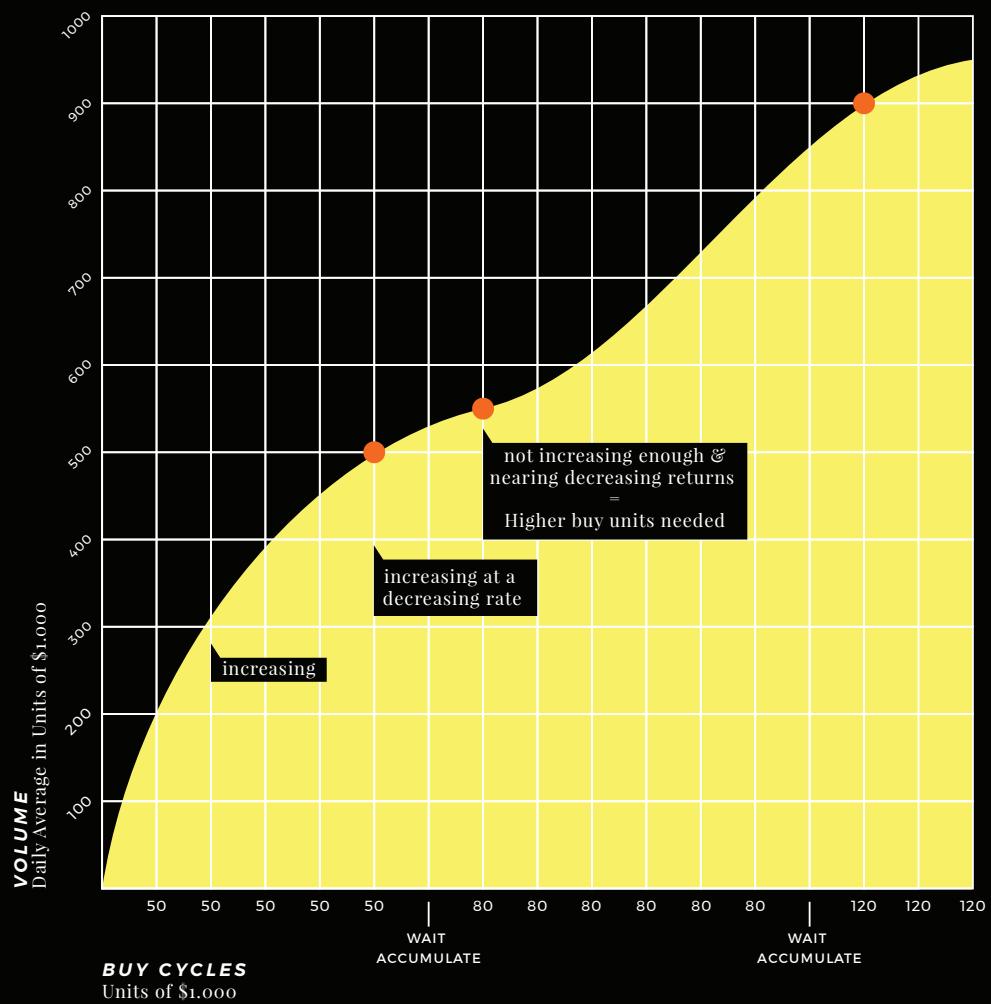
The first one shows something that some many consider a given. However, we want to illustrate it for those that may wonder if and how we adjust buys, as well as how that is calculated. At a first glance someone see a project that executes one-size-fits-all buys and wonder, won't the effectiveness dwindle as the project goes on? It would in that scenario indeed. However, the size of buys will scale alongside the price and daily average volume which brings us to our second graph.

Improper Utilization of Buy Support



This one is a rough example of how OptiToken utilizes daily average volume and price to calculate the amounts needed to affect price in the most optimal manner possible. It doesn't give us the exact optimal amount, but it does give us the minimum amount necessary. Knowing that buying above the minimum, we tweak as we progress, is it best to inject the market with one large buy that drives price up parabolically? Or is it better to buy in waves, meaning more profits from OptiX trading operations need to be saved and accumulated? With the latter the psychological impact on those gaming the system changes. The buy low sell spike idea becomes imperfect for traders or arbitrageurs. Theoretically, we believe utilizing randomness to some extent will offer the best outcome long term for price. What we do need to know is these minimums, which is easily attainable. How and when we execute the buys is a variable based on how buy pressure tends to be best utilized after some live testing early on in Optitoken's ecosystem, once live in exchanges yet still provide sufficient transparency and learning opportunities for those who take interest in the project.

Line Effect on Price of Opti



Transparency

Because of its nature, the OptiToken project aims to be completely transparent throughout all of its activities and endeavors. This includes making all software programs and API's open-source. Audits will be conducted periodically both for transparency and compliance purposes.

The tokens in the basket being traded will all be reported on fully with the most tax-efficient and allowable accounting basis. The project is incorporated in the Cayman Islands and will follow all reporting requirements required of Cayman Island exempt companies. In general, the official accounting method in any current or new country OptiToken operates in will be implemented and determined by founder and legal, taking into account what is most beneficial for the company. The token exchanged and used in each basket will be displayed after their each respective cycle. This is to protect the project's desirability and maintain an element of secret that can only be appreciated by those who purchase OptiTokens, yet still provide sufficient transparency and learning opportunities for those who take interest in the project.

Roadmap

NOVEMBER 2017	- Launch of testnet tracking gains and gathering data for use in the final algorithm. - Initial starting team assembled - including one dev, one business developer/project manager, one quant and legal team.
DECEMBER 2017	- Launch of website and initial press releases and marketing strategies. - Launch of social media channels to start building a community.
JANUARY 2018	- Targeting and acquisition of initial purchases. - Launch of ANN, white-paper to follow soon. - Onboarding of further help and developers. - Further development of BETA testing algorithm infusing more value and growing initial portfolio. Acquisition of advisor team.
FEBRUARY 2018	- Final draft white paper released. - Further onboarding of advisors and team. - Further development on algorithm and any user interfaces phase 1, wallet etc.
MARCH 2018	- Token sale marketing and PR campaign - Begin coding and implementation of backend testing interface on exchange
APRIL 2018	- ITO: 90 days - Start work on algorithm
MAY 2018	- BETA launch on exchange(s), growing the portfolio right away after 1 month of ICO. Portfolio will not sit idle but instead go right to work after a month. - Further work and optimizing of algorithm and security - ALPHA interface launch on Exchange(s) and continued token sale push
JUNE 2018	- Last month push of token sale and continued business development and second addition of ITO sales to portfolio.
JULY 2018	- After the token creation event is finished, distribution of tokens to ICO buyers. - Begin the purchasing of tokens phase on exchange(s) for buy pressure of OptiToken with profits to date and then the addition of remaining ICO.
SUMMER 2018	- Creation and testing on any 2.0 user interfaces. - Continue to grow find and improve algorithm, possibly starting an integration of machine learning.
ONWARD	- Continue growth driven operations along with searching for new ways to improve e.g. do we incorporate pre-sale discounts since there will be ability to buy the minimums? This can be very interesting strategy in times of an overbought market.

Legal Disclaimer

The project is not open for participation of US, Chinese, Cayman Island citizens or any other citizens who reside in countries that prohibits the participation in Initial Coin Offerings or the attaining of certain cryptocurrencies.

OptiTokens are available for purchase from the entity “Opti Token” only in those jurisdictions and to those persons where and to whom they lawfully may be offered for sale and only during the pre-ICO and ICO events. This fact sheet does not constitute an offer to subscribe for securities. Nothing in this fact sheet is intended to create a contract for investment into OptiToken, and each potential ICO Participant acknowledges that OptiToken will rely on this assertion of a ICO Participants statements with respect to compliance with the laws of the jurisdiction in which the ICO Participant legally resides.

This document does not constitute an offer to sell or the solicitation of an offer to buy to any person for whom it is unlawful to make such offer or solicitation. Prospective ICO Participants should inform themselves as to the legal requirements and tax consequences within their respective countries of their citizenship, residence, domicile, and place of business with respect to the acquisition, holding or disposal of the Tokens, and any foreign exchange restrictions that may be relevant thereto. The distribution of this fact sheet and the offer and sale of the Tokens in certain jurisdictions may be restricted by law.

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