CARBONEUM

DEMOCRATIZED SOCIAL TRADING PLATFORM

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BY

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ABSTRACT

Carboneum is creating a democratized infrastructure of social trading platform with a proprietary application. Carboneum is an openly distributed protocol owned by every single user. Where traditional social trading platform helps solve complexity problem, it still lacks transparency, remains vulnerable to single point of failure risk and at the very core misaligns the interests of the parties involved. The platform will be completely immune to such problems. It is built to sustain and scale with a sound revenue model where ultimate alignment of interests is structured, creating a perfectly democratized trading platform for digital assets.

1. INTRO

For centuries, mankind has vowed to make simplification of investment process an ultimate quest and yet countless attempts have yielded only failures thus far. Investment procedure remains as complex and out-of-reach for majority of global population eligible to advance their asset allocation effort. Meanwhile, financial tools have become so powerful in today’s era, as a global ratio of stocks traded value to Gross Domestic Products (GDP) has been substantially growing throughout decades, constituting an astounding level of growth from 24 percent in 1991 to 125 percent in 2016, quintupled itself over the past 25 years.

While most people deem typical finance as a tool for their profit maximization of traditional asset investment, we desire to generate a much greater impact as a borderless decentralized social trading platform which effectively channels through the flows of digital assets in the Asian region. Despite a solid and comprehensive technological impact blockchain has laid on digital asset & cryptocurrency market, the need of simplified investment tools in this highly sophisticated field goes far beyond what we can comprehend and remains of great importance.

Inspired through our extensive experience in building Thailand’s number one analytical tool and trading platform for stock investment, we have developed a clear vision of how to make investment in digital assets & cryptocurrencies simple and accessible for everyone. It is conceivable blockchain technology is a crucial steppingstone that would pave way towards endless opportunities for the smartest, simplest and most user-friendly investment specialist tool that might change digital asset investment landscape one has never experienced before.
Carboneum: Democratized Social Trading Platform

Taking full advantage of such movement, we are hereby creating a decentralized social trading platform on ICON blockchain technology with an open protocol and token called Carboneum, that desires to bring the ultimate solution to the biggest roadblocks in digital assets and cryptocurrency investment; complexity, overwhelming information, lack of transparency, lack of decentralization and lack of direction for new entrants. The greatest belief of our core team lies in simplifying the investment experience. We strongly believe investment should be for everyone. Carboneum will be allied with all key digital asset and cryptocurrency exchanges, making it a go-to platform for digital assets and cryptocurrencies enthusiasts, to ensure seamless and borderless experience for digital assets and cryptocurrency investment for everyone.

Most importantly, to guarantee its technical feasibility, Carboneum will be developed by the team behind the success of Thailand’s leading stock analytical and trading platform, StockRadars. As StockRadars, the company has been chosen as an exclusive technological partner of LINE Thailand (a globally well-renowned chat application headquartered in Japan with over 40 million users in Thailand) in LINE FINANCE project, accumulated almost 5 million users. StockRadars also partners with over ten stock brokerage companies, most of those who have either global or regional footprints such as Maybank Kim Eng, Z Com Securities (also known as GMO in Japan), Krungsri Securities (Thai...
subsidiary of Mitsubishi UFJ Financial Group), Yuanta Securities (well renowned brokerage company in China and Taiwan), to name a few. In 2017, the company also established a joint-venture partnership with Longtun Man, the biggest and fastest growing community of stock traders in Thailand. StockRadars’ commitment to excellence is also evident in its multiple awards recognition both nationally and regionally, in which will be elaborated later on. Accordingly, StockRadars team should serve as the most ideal group to comprehend such task of creating Carboneum, a social trading platform aiming to revolutionize the investment landscape in global scale. This ICO project will be in good hands of a team with extensive experience not only in developing technological tools but also conducting business operations in investment field, making its greatest aspiration much closer to the reality.

To sum it up, Carboneum allows users who are not equipped and content with making their own judgement on digital assets transaction to simply follow industry experts and copy their trading orders, either automatically or manually upon final consent after being notified on real-time basis. The platform also promotes a great degree of customization, permitting users to adjust and match their fees, within a certain range predetermined by the platform, based on their altitude of risk preference and expected return.
2. OVERVIEW AND CONCEPTS OF SOCIAL TRADING

![Diagram of Social Trading/Copy Trading]

Figure 2: Key characteristics of Social Trading/Copy Trading – 1) Users can choose expert traders to follow, establishing a ‘follower & leader’ type of relationship, based on the expected returns and risk preferences and 2) Users can learn the trade & investment strategies implemented by more than one leader, depending on how many they choose to follow, and combine them in order to make the optimal one of their own.

Traditionally speaking, social trading or copy trading is defined as a service which enables any users to take a role of follower, giving the greenlight to them to duplicate the transactions of a leading trader. The concept was first introduced and practiced in financial market, especially stocks trading. Intriguingly, the greatest achievement social trading brought to this world is it allows new investors to simply take a shortcut and deem the need to educate themselves about financial products unnecessary. The sole responsibility users have is to make sure the right leader, whose assets allocation, success rate and risk tolerance are in line with their preference, is chosen.

The emergence of social trading has effectively minimized heavy reliance on fundamental and technical analysis. Rather, it overtures the alternative way of evaluating financial information by comparing and copying trading orders, techniques and strategies. For instance, as we live in the world where social media is one of the most important driving forces in the society and vital parts of our daily routines, social trading exploits trading data-feeds and other indicators made available by other traders in the given networks, to come up with successful trading strategies. It is widely believed enhanced interaction among traders, a common practice in social trading, signifies knowledge sharing process and considerably helps shorten learning curve for new participants.
It is however of great significance to note implementing social trading for the purpose of short-term monetary benefit is considered detrimental from the moral and ethics perspective. At its core, social trading gives the opportunity for new traders to observe and learn by copying trading orders; to know which trading strategies fit their investment style and help them gain consistently.
3. PROBLEMS

- **Investment in Digital Assets and Cryptocurrencies is Complex**
  In order to invest, we need to understand – this simple correlation is proven factual over multiple centuries and across every asset class. But for those who have little to no prior exposure to any digital assets and cryptocurrencies, they could be severely limited to understand the mechanism behind those investment vehicles and extremely reluctant to enter the market. It is even probable to mention those who are already trading digital assets and cryptocurrencies could barely explain the true definition of what they have been transacting on. The degree of information one needs to study is absolutely overwhelming, especially for those without technical background. Ultimately, without thorough understanding of basic, fundamental and technical concepts and utilities of given digital assets, potential investors with excessive interest often left on the outside looking in due in a large part to reluctance resulted from their fragile comprehension of such market. Having said that, certain technological implementation, where social trading mechanism is profoundly involved, can be a kryptonite to such problems, and in turn making investment in digital assets more democratized and simpler than ever for everyone.

Above all, we have extensive experience and proven track record in building and maintaining an award-winning technological platform to help simplify investment process for stocks and mutual funds, in StockRadars and FundRadars, and we strongly believe the core foundation of our technology is entirely transferable and capable of replicating similar success in digital assets and cryptocurrency investment.

- **Centralized Trading Platform Lacks Transparency**
  Traditionally, social trading is executed on a centralized platform; an entity or website acting as a centralized agent, requiring users to transfer money into a server-owned account to set up initial trading balance. Such agent then carrying out copy trading mechanism by simply repeating trade orders submitted by expert traders (‘leaders’) for users who choose to follow them (‘followers’) and agree to pay a specific type of fee in exchange for that service.

  Nonetheless, the most critical drawback of centralized platform lies in the fact users by no means can verify if each and
every transaction carried out by leaders is actually copied to the followers. How can we really substantiate if strategies implemented on the followers’ social trading command completely mirrors that of the leaders? What if there are miscues or failure to copy trading orders on a timely basis? Despite those opportunity cost being monumental, the platform in which operates with centralized nature takes no accountability of such colossal mistakes. At the moment, there is no such platform able to provide solution to those disadvantages. Therefore, the lack of transparency observed in centralized platform is definitely a glaring concern for the actual underlying of wealth generation brought by copy trading mechanism.

- **Traditional Social Trading Platform is Seriously Exposed to Single Point of Failure Risk**
  Centralized platform is also extremely vulnerable to single point of failure risk, whereby an error of a single part could bring the whole system to collapse. The best example, building on the aforementioned section, is when the server of a copy trading website is under distributed denial-of-service (DDoS) attack or hacked. This could lead to serious consequences such as users’ inability to take the money out of the platform, or at the very worst, a total loss of money.

- **Existing Incentive/Revenue Structure of Traditional Social Trading Platform and Traditional Fund Managers Represents Imperfect Alignment of Interests**
  This is arguably one of the biggest challenges we aim to take on, in order to create a truly democratized social trading platform we aspire to do. Generally speaking, existing social trading platforms normally act as one of the exchanges and the revenue source mainly comes from the ‘spread’, which is the mark-up difference between buying and selling prices. It might also be viewed as a type of trade commission fee, whereby in each and every transaction customers have to absorb the spread overtime. Conventionally, the leaders or the copied investors on these platforms will be rewarded with spread discount, lowering their percentage of spread owed to the platform, proportionately but conversely with the amount of followers or copiers they can accumulate.

  On the other hand, for traditional fund managers, their mainstream source of revenue is management fee, calculated as a percentage based primarily, and almost solely, on their assets
under management (AUM). The industry standard shows 2 percent as a generic figure for such model. That basically explains why all mutual funds key objective is to grow the size of their assets under management as much as they possibly could.

These two aforementioned examples, nonetheless, are epitomes of severe misalignment of interests because they do not share the downside risks of their own customers. To make long story short, regardless of the results of their decision making, either they make good or bad trades, they still get paid for their services. Customers still have to compensate them even in the case those leaders/fund managers fail to bring about the monetary gain they desire, and ironically, that is in fact the reason why they agreed to take on the services provided by those leaders/fund managers in the very first place. Likewise, the leaders/fund managers are not perfectly incentivized to consistently come up with technically sound trade strategies, to ensure a good blend of both downside protection and profit maximization is taken into serious consideration at all time.

- **Existing Alternatives to Social Trading are Inefficient and Not Properly Monetized**

Despite being overwhelmingly demanded, existing tools in the market, ones that are trying to emulate social investment mechanism, for investment in digital assets and cryptocurrencies seriously lack efficiency and appropriate monetization method.

Technically speaking, these emulators come in the form of Telegram or Twitter group. And even though they are mostly free of charge (some might have a subscription fee requiring to be paid upfront), this again does not reflect a well-designed alignment of interest and compensation structure. More importantly, the mechanism behind this is essentially inefficient, as it requires the leaders to make the announcement in their groups and followers then have to conduct trades manually. The uncertain timing of these manual trade orders could be fatal because in investment field timing is always of essence.
To counter these problems, we are building decentralized social trading platform with an open protocol that communicates with all major digital asset and cryptocurrency exchanges directly. This concept imposes great significance in ideal transparency, and complete decentralization for trade order execution. The platform also comes with a truly democratized incentive structure whereby the interests of all parties are perfectly aligned. That protocol is named Carboneum, which will serve as a main catalyst that would eventually help bring ideal ecosystem for investment to reality. The concept will be clarified in the following parts of this paper.
4. CARBONEUM – DEMOCRATIZED SOCIAL TRADING PLATFORM FOR DIGITAL ASSETS AND CRYPTOCURRENCIES

Blockchain technology enables the community to replace business activities of individually centralized corporation at a global scale with networks of open, transparent and decentralized computing system that work across borders. For that reason, we then aim to create a trading and investment platform for digital assets and cryptocurrencies which authorizes the greatest degree of knowledge sharing, promotes the purest form of transparency whereby all trading activities and actions are recorded and become totally traceable, verifiable and auditable via utilization of blockchain technology. And most importantly, we are extremely determined to build a tool that helps simplify the trading decision for newcomers, who by and large are not as technologically and technically educated, compared to those industry veterans, by implementing the concepts of social trading/copy trading. Therefore, Carboneum has teamed with ICON Foundation aiming to provide support for both technical development of our project and further business expansion. Thus, Carboneum will run on ICON blockchain. We will closely work with ICON in developing our DApp, running various tests on ICON blockchain before our scheduled launch in October.

Before we move further, it should be highlighted one of the most striking characteristics of decentralized platform is mutual contribution. Every single user is momentous to the success of the platform. On Carboneum, blockchain is implemented primarily on the fundamental point of relationship in social trading mechanism, helping the system to identify and obligate one user to another, or in specific, a follower to a leader, via smart contracts. It also gives permission for the platform to standardize rules, penalty and settlement practice through such on-chain technology. Nevertheless, it is highly important to note blockchain alone, from a functionality standpoint, is not sufficient to make Carboneum operate in the most efficient way possible, as it cannot optimize trade order execution on a real-time basis, whereas timeliness in digital asset and cryptocurrency trading is of paramount importance. Most crucially, transaction cost on blockchain is too high and is considered unsustainable in longer term for the platform. We therefore need to build our own off-chain technology, an open protocol tailor-made for social trading purposes, called Carboneum.
4.1 Key Value Propositions of Carboneum

As aforementioned, Carboneum is a decentralized social trading platform embarking a new way of digital asset and cryptocurrency trading. We aim to build a world-class social trading platform for digital assets which is fully decentralized and totally independent of all exchanges. As borderless and limitless digital assets and cryptocurrencies are, we are building a platform that tackles such challenges in a global scale that works for anyone from anywhere in any markets in the world. Key value propositions of Carboneum are consisted of the following;

- **Transparency**
  Decentralization leads to transparency. Each and every transaction is processed and recorded using ICON blockchain technology in which traceability and ownership of action are at premium. To ensure the greatest level of independency, Carboneum will be working with, but not subject to, all leading digital asset exchanges. But more importantly, Carboneum also emphasizes on the transparency revolving around social trading elements. As a result, performance stats, historical trading positions, transaction records, of both the followers and leaders on our platform, will be completely accessible.

- **Simplicity**
  Trading on Carboneum is exceptionally easy for beginners. Not only can they win the trade quickly but they also can learn by observing the strategies by following the right leaders. Carboneum understands real pain points of users and aspires to create the most intuitive and user-friendly investment platform, therefore we put user experience at the apex of our priority list. Our mission is to replicate how Instagram filters help turn ordinary smartphone users to professional photographers to the digital assets trading world. Additionally, Carboneum also offers fully customizable ‘Radars’ technology to help filter suitable digital assets based on investment behavior, expected returns and risk preferences unique to each user. Each radar is constructed based primarily on specific pattern of price movement while also incorporating other factors such as a significant change in trade volume into the formula. It is worth mentioning our Radars technology is fully compatible with digital asset and cryptocurrency market.
• **Knowledge Sharing**

Social trading exemplifies boundless knowledge sharing. It offers the opportunity for traders to work collaboratively on trading strategies, either by sharing information, working on multiple market research or pooling other resources together. In addition, Carboneum also capitalizes on free flow of information among digital assets and cryptocurrency investors in the network, allowing them to exchange any forms of knowledge liberally. Additionally, Carboneum would like to take the knowledge sharing aspect to the next level by organizing its own or sponsoring events, training or live broadcasts, bridging the gap of virtual world and reality, and promoting not only smart wealth-generating platform but also channels of acquiring the know-how of making good trade strategies (see Figure 3). It is also highly important to reemphasize Carboneum’s commitment to transparency, which in turn creates limitless opportunities for potential traders who desire to contribute as leaders in the platform; not only human can be listed as leaders on Carboneum but robot/AI traders can also participate in such role. Likewise, not only limited to amateur traders but also licensed fund managers can similarly join the platform, enhancing their asset allocation and exposing themselves to cryptocurrency market, as either a leader or a follower. In short, Carboneum seeks to be the most democratized investment platform for all user types, both followers and leaders. It is an ultimate platform that stages the opportunity for an amateur digital asset investor to become a high-performing fund manager, and earn a living like one. This would consequently lead to substantial job creation, similarly to how Uber plays an instrumental part in creating jobs or additional income for non-taxi drivers. Carboneum positions itself as ‘wisdom of the cloud’, a digital asset investment platform for everyone by everyone.

• **Incentivized Business Model**

It is reported by eToro, one of the world leading copy equity trading website, that approximately 78 percent of all copied trades were closed in profit since its launch in 2010. This has laid ground for future businesses where win-win-win situation is achieved due in large part to perfect alignment of interests and incentives. This system however still has flaws and will be elaborated further in this paper later on. On Carboneum nevertheless, by using smart contracts, based on ICON blockchain technology, we create the system to lock up leaders and followers and collect fee automatically when each positive gain is realized. Most notably,
followers will only be charged a certain percentage of fee, and leader will therefore earn majority proportion of that fee, only upon positive trade results. This motivates the leaders to be significantly more thoughtful and imposes basic accountability on them; they will only get paid if and only if they bring tangible results to the followers.

As digital assets trading is completely commoditized, customer touch point is highly crucial to the scalability of any platforms. Accordingly, all major exchanges would want to work with Carboneum voluntarily because their API is completely open and Carboneum’s platform is built on an open protocol itself. By working with Carboneum, in returns they will undoubtedly acquire more customer, gain access to more tools and achieve better customer engagement.

Figure 3: Interactive communication is valued at premium in social trading industry, which in turn could potentially provide complimentary business opportunities to serve the investment community more efficiently. For example, social trading events, interactive training and live broadcast by trading experts, to name a few.
This table summarizes, compares and contrasts key characteristics of the system and fee structure imposed on traditional centralized social trading platform and Carboneum.

<table>
<thead>
<tr>
<th></th>
<th>Traditional Social Trading Platform</th>
<th>Carboneum’s Social Trading Platform</th>
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<tbody>
<tr>
<td>Centralization</td>
<td>Centralized</td>
<td>Decentralized</td>
</tr>
<tr>
<td>Trust</td>
<td>Trust imposed on a middleman to guarantee security of the process</td>
<td>No trust imposed on a specific 3rd party</td>
</tr>
<tr>
<td>Fault Tolerance</td>
<td>Exposed to single point of failure risk</td>
<td>No single point of failure risk at all</td>
</tr>
<tr>
<td>Scalability</td>
<td>Limited to system owner’s resources</td>
<td>Users mutually contribute to the growth of a system that supports infinite number of nodes</td>
</tr>
<tr>
<td>Transparency</td>
<td>System owner can hide all the data from user</td>
<td>System may hide or show data from participant (by system design)</td>
</tr>
<tr>
<td>Fee Structure</td>
<td>1) Spread discount 2) Percentage of AUM</td>
<td>Success fee made from successful trades only</td>
</tr>
<tr>
<td>Fee Distribution</td>
<td>Majority of fee goes to the platform</td>
<td>Majority of fee goes to leaders</td>
</tr>
<tr>
<td>Payout Condition</td>
<td>Copied traders still earn by making bad decisions</td>
<td>Leaders can earn only by making good decisions</td>
</tr>
<tr>
<td>Ethics</td>
<td>Copied traders are not driven to perform</td>
<td>Leaders are driven to deliver tangible results</td>
</tr>
</tbody>
</table>

*Figure 4: Key differences between Other Traditional Social Trading Platforms VS Carboneum Platform in 9 major categories*
4.2 BUSINESS MODEL & TRADING MECHANISM – HOW DOES CARBONEUM WORK?

The model for major source of revenue is very simple; success fee will be collected upon each and every, but limited only to, successful, positive yielding trade.

In short, Carboneum works in these simple steps (see Figure 5);

1) Users can choose expert traders to follow, establishing a ‘follower & leader’ type of relationship, based on the expected returns and risk preferences, and delegate the authority to execute copied trade orders automatically to Carboneum via smart contract system.

2) In the event that users generate positive results from any trade orders copied from the leaders, users will be charged a certain percentage-based amount of fee by the system. The system will then transfer the majority of that fee to the leader as a mark-up for their service, with the remaining amount being kept as platform’s revenue.

Figure 5: Flow Charts of Trading Mechanism and Fee Structure on Carboneum
To expand on the mechanism from a technical standpoint, it starts with a leader creating a copy trading agreement using smart contract on ICON blockchain with a follower accepting on their terms of profit sharing model by having a follower officially signing on the contract to start social trading distributed/decentralized application (DApp), using wallets that provide web3 provider for DApp browser. Once the follower decides to follow a leader (click a button), the DApp UI will prompt the follower to sign a smart contract along with the token allowance to activate automatic fee payment function and giving away API key to access exchanges of the follower to the leader/platform.

To epitomize the concept of decentralization, Carboneum endorses full customization of the desirable rate of fee for leaders on DApp. As any theory of basic finance would suggest, risk tolerance is a highly sensitive characteristic unique to any given investor. Likewise, a purely decentralized platform should allow followers and leaders to arrange different expected returns and risk preferences and match them freely. Some investors may enjoy greater magnitude of investment return, bearing in mind the higher level of risk associated to such option. Other investors, on the other hand, might be more contingent and have lesser risk tolerance, thereby lowering their expected return. In the same manner, the different yet uniquely optimal balance of risk tolerance and expected returns should be mirrored in the way varying rate of fee is charged by each leader, to reflect our collective effort to democratize investment landscape and embrace such diversity. The contract setup process comes with simple steps but is fully transparent and totally secured for all parties involved.

![Figure 6: Technicality of Contract Mechanism on Carboneum – both sides agree upon terms of contract via smart contract on blockchain](image)
The leader will provide the access to their investment account comparable to giving an API key to third parties. Follower then signs the contract to start copy trading command of the leader.

Follower is required to transfer Carboneum token to multisignature wallet for paying the fee in the system. Multisignature wallet can be used in this particular use case of the social trading app where it does not want to have full access or full ownership of the wallet, and the application provider simply allows user to login with traditional username and password - not the private key. This digital wallet however requires users to transfer Carboneum token, at a minimum reserve level, in order to activate trading activities. Users who fail to meet minimum reserve will be prohibited from executing trade orders, let alone using social trading feature. Further to the process, the order relay*** will automatically sign and onboard these contract to grant the right to process future trading operations to Carboneum.

*** The Relay is a computer running our software to operate off-chain trade order execution via exchange API ***

*Figure 7: Technicality of Trading Mechanism on Carboneum – a leader provides access to their investment account, similarly to the way website giving away API key to third parties, to Carboneum and a follower. Relay will keep track of any changes in the leader’s trading activities on their exchange(s) via exchange API and API key provided by the user.*
Relay will keep tracking trading activities on digital assets exchanges a user is associated with, and executing the trade operation for the follower such as opening position, taking profit order and closing position to the follower account on their exchanges. Once trading order is executed and positive gain is realized, relay will send a request to the contract to deduct fee from a digital wallet of a follower. The total amount of fee will therefore be collected by Carboneum once a given user decides to close their trade position. In short, a leader essentially gains 10% of capital gain earned by his followers, 10% of which goes to Carboneum platform. Please be noted the commission rate is subjected to future changes depending on the market situation.

Figure 8: Technically of Rewarding Mechanism on Carboneum – once Relay spots any movements, it will copy those actions and execute trade orders to the follower’s trading account proportionately to their asset allocation. In the event the trade yields positive results, relay will signal a request to smart contract to deduct a certain amount of fee from the follower’s digital wallet. Carboneum will settle and collect verifying fee once the follower close their trade position

*** Verifier is the relay which verifies the trade execution of the trade relay ***
It is of essence to note in a certain situation whereby substantial gain is potentially taking place, based on a clear steep price movement of targeted digital assets in a short period of time, and token balance of a follower is possibly insufficient to pay for the supposed amount of fee, Carboneum will signal a capital call directly to a follower. A notified follower then needs to fill up their balance to meet required amount to continue trading activities.

Carboneum platform also makes settlement to contractual indebtedness to the system possible in the most transparent fashion, via smart contract. This permits the platform to enforce follower who have insufficient balance to pay the fee to settle the amount owed to the system and leader later on.

One of the main benefits from using multisignature wallet technology is it helps the system to collect fees more efficiently. Multisignature wallet technically grants partial ownership to a specific entity to manage assets allocated in such wallet based on a prearranged purposes agreed upon by both parties. Furthermore, there will be a predetermined ceiling for value of digital assets Carboneum can deduct directly from the wallet but for a limited scope of services only. Alternatively, the platform can also issue credit to a user who is indebted to the system.

It is of paramount importance to underline Carboneum’s social trading mechanism allows the whole portfolio of the leader to be copied to the follower’s account in the right proportion. Also, as we are not positioning ourselves as an exchange, trading/following on/across multiple exchanges will also be made possible on Carboneum protocol, thanks to our comprehensive API integration. In order to maximize potential capital gains, all trading pairs listed on exchange are basically available, to ensure the trade orders are executed at the best prices possible.

We also have alternative revenue channels in the pipeline waiting to be implemented in the future, such as affiliate fee from exchange and offering of other premium features and services which can also be paid using our own token.

To summarize, Carboneum plans to revolutionize the incentive structure by creating the ultimate alignment of interests, whereby the only circumstance the platform will earn money (and the users have to pay the fee) is when a successful trade is taking place. This is in stark contrasts to the way traditional social trading platform and traditional asset-management company charges their own customers (see Figure 9). The
leaders on our platform will be mechanically and perpetually incentivized to make sound decisions, where the best interests of every single party are taken into consideration. We firmly believe this would be a crucial stepping stone to create a sustainability for our democratized social trading platform.

Figure 9: Revolutionary Incentive Structure on Carboneum – there is only one condition for the platform to generate revenue from social trading activities; when the leaders lead the followers to profitable trades, a ‘win-win-win’ situation is taking place
5. CARBONEUM TOKEN (C8)

We will issue our token called ‘Carboneum Token’ (C8), to be used primarily on, but not exclusively to, social trading features for digital assets. C8 certainly offers other utilities for premium services in the future, such as substantial discount on every type of fee, including premium features on StockRadars and FundRadars application or fee of events and seminars held by StockRadars team.

Carboneum is also an open protocol for decentralized copy trading on ICON blockchain. It intends to serve a basic functionality for copy trading and benefits distribution between copying and copied investor, or in our terms, follower and leader. Using a publicly accessible system of smart contracts can act as shared infrastructure for a variety of decentralized applications (DApps) and platforms. It allows creating sophisticated platform tailored for investor requirements. C8 token is smart contract which allows follower to pay their leader and be used in other activities on CoinRadars platform.

Specifically, C8 token holders will be benefited greatly in terms of discount on premium services, in which the fee will be reduced in half if paid by C8 token. That rate will be gradually reduced to 8 percent entering the 4th year and remain at that level perpetually for C8 token holders. Nonetheless, followers who want to pay commission fee using C8 token (to exercise a huge discount) need to inform their leaders in advance. Most importantly, it is of great significance to note at this stage C8 token can also be used in StockRadars and FundRadars applications to activate extra discounts on premium and exclusive features (see Figure 10).

![Figure 10: Different discount rate applied from Year 1 to Year 4 to C8 token holders](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Discount Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>50%</td>
</tr>
<tr>
<td>2nd Year</td>
<td>25%</td>
</tr>
<tr>
<td>3rd Year</td>
<td>10%</td>
</tr>
<tr>
<td>4th Year</td>
<td>8%</td>
</tr>
</tbody>
</table>
5.1 Carboneum (C8) Token ICO – Allocation and Fund Usage

In this ICO effort, a fixed amount of 200 million C8 shall be issued and shall never be reproduced in any forms. Out of that amount, 120 million C8 tokens will be offered publicly at a fixed price of 0.1 USD per unit. Due to our partnership with ICON, ETH and ICX will be accepted during the public sale. The allocation and fund usage is as shown below. It should be noted non-public tokens will be subjected to a 1-year silent period, effective from 8 March 2018. Similarly, pre-arranged tokens will be legally bound by a 3-year silent period. Nevertheless, a specific proportion of tokens allocated to be used in business partnership and rewarding program (see below) will not be constrained as such.

Carboneum Token

Token Name: C8
Token for Sale: 120,000,000
Tokens Hard Cap: USD 12,000,000

Allocation Chart

- 60% Pre-Sale & ICO
- 20% Company
- 12% Team & Partner
- 5% Advisor
- 3% Rewarding Token (user acquisition)

Fund Usage

- 50% Platform and Protocol Development
- 25% Marketing and Business Development
- 10% Operating Expenses
- 10% Research & Consultancy Fee
- 5% Legal & Compliance Fee
5.2 CARBONEUM ROADMAP

The pre-sale period starts on 8 March 2018, followed by the public sale on 25 June to 8 July 2018. Other key dates and related actions are listed in the following timeline (see Figure 11).

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**Figure 11: Carboneum Roadmap – the ICO-related dates & the launching dates of Carboneum’s platform**
5.3 Carboneum Token Repurchasing Plan

It is our intention to gradually reduce the number of C8 by using our profit to repurchase and terminate them over time. Entering the second year after its launch, 20 percent of our net profit will be used to repurchase C8. In third year, we will do this semi-annually. And from fourth year onward, C8 will be repurchased and burnt on the blockchain on a quarterly basis until half of C8 coin is repurchased, leaving 100 million C8 coins in the open market. All repurchasing effort will be recorded on the ICON blockchain. Our primary objective is to mechanically but gradually stimulate the setup of an environment whereby only long-term C8 token holders remain in the market because, by design, the majority of C8 token holders will be the one who use the platform very actively and we seek to create a perfect ecosystem in the long run where only our active users are our token holders.

Figure 12: Carboneum Token Repurchasing Plan – 20 percent of our net profit will be used to repurchase the token from the public market, starting at once a year. The effort will then be doubled in the second year and quadrupled in the fourth year, and remain at such rate until only 100 million C8 coins remain in the open market.
6. Why Us?

StockRadars is the team ideally made to tackle this challenge as proven in commendable success and well-documented track record in building and developing Thailand’s number one online stock trading and analytical platform with 680,000 app downloads, double digits local and regional brokerage partners (see Figure 13) and 76 versions updated since launched. StockRadars also managed to achieve 25 percent market penetration based on the number of monthly active internet traders; in every four people who trade stocks online, one of them actively uses StockRadars. Above all, StockRadars is the only exclusive partnership of LINE Thailand, the provider of a market-leading chat application, in developing a service called LINE FINANCE and together they have accumulated a large and still-growing user base of 4.8 million people. This is more than tripled the number of people with internet trading accounts in Thailand (1.35 million as of December 2017, according to Stock Exchange of Thailand). With the help of StockRadars’ technology, not only LINE FINANCE successfully approaches the uncharted territory, but it also empowers people to buy and sell stocks inside LINE application for the first time in the history of Thailand. The abovementioned list of accomplishments shows why nobody could epitomize ‘investing made simple’ more appropriately than our team.

Figure 13: StockRadars major achievements as of March 2018

At StockRadars, we champion crowdsourcing and knowledge sharing to the greatest magnitude and we firmly believe the uprising
importance of blockchain technology would only further signify a change of investment landscape and provide limitless opportunities in borderless market of digital assets and cryptocurrencies. We have been relentless in our preparation process, spending countless hours on research and development to make sure the platform we are creating is completely transitional and applicable with stocks, digital assets and other investment vehicles in the pipeline, making this the go-to platform for the future regardless of what you are looking to invest in.
7. Board of Advisors

Korn Chatikavanit


Batara Eto

Co-founder and Managing Partner at East Ventures, Pte. Ltd. Investor with technical background. Always looking to connect with company founders and engineers. Mr Barata experience and in startup growth and fundraising increase the confidence into the company towards a wise and trustful growth.
Pawoot Pongvitayapanu

Pawoot Pongvitayapanu (Pom), often called Thailand's E-commerce Pioneer, is an internet entrepreneur, and CEO & Founder of TARAD.com and the e-rastructure Group. He has been active in the internet community since 1999, and is a start-up investor in more than 10 companies. He has two Masters degrees in Internet & E-Commerce from ABAC University, and an Executive MBA from Sasin School of Management. He is also President of the Thai E-Commerce Association and founder of the Thai E-Payment Association and the Thai E-Logistic Club. He also serves on the Thailand Fintech Association, the Thailand Tech Startup Association, Consultant for Thai Webmaster Association.

Krating Poonpol

Krating serves as a Venture Partner at 500 Startups. Mr. Poonpol also serves as the Founder at dtac Accelerate. Prior to firm, he served as a Global Lead Product Marketing Manager at Google Earth. Prior to that, Mr. Poonpol served as the Asia Pacific's Regional Lead of Quantitative Marketing at Google. Prior to that, he served as a Consultant at McKinsey. Prior to that, Mr. Poonpol also served as the Chief Executive Officer at Moblitz. Currently, he serves as a Director of HUBBA Co., Ltd. Mr. Poonpol was named Thailand’s Business Man of the Year by The Nation in 2016 and was included in Asia21 Young Leader 2017. He has been a Speaker at Global Entrepreneurship Summit 2016 hosted by President Barack Obama and White House; MIT Asia Business Conference 2016;
Kai Tsang

Mr Tsang has more than 20 years of experience in creating digital products and services which enriched the lives of millions. In 2012, Mr Tsang set up and managed the App Store team in Asia for Apple. His work shaped the app economy and created vast opportunities for start-ups in the region.

In the 2000s, Mr Tsang held senior product management positions at Yahoo!. Products he managed included Search, Answers, Sports and Games. He created Yahoo! Mahjong, a legendary multiplayer online game tapping into the Chinese population globally.

Mr Tsang also has extensive integrated marketing experience with major brands such as Colgate Palmolive and Logitech, where he transformed the traditional marketing team into a digital marketing organisation. He is also an advisor for startups which focus in blockchain, machine learning and the app economy.
Somboon Sukheviriya

President and Founder of Comanche International Public Company Limited, Comanche is now operating in 18 countries and territories in Asia, namely Myanmar, Vietnam, Laos, Australia, Cambodia, Hong Kong, Macau, China, Taiwan, Japan, Indonesia, Philippines, India, Maldives, Malaysia, Sri Lanka, Singapore, and its home base of Thailand. Somboon is one of the first specialists in Thailand to work directly with hotel industry computer systems, who believe that the future for hotel software systems is to provide complete solutions, all of them developed in-house, and all fully compatible with international standards and local operating conditions.

Prinn Panitchpakdi

Governor The Stock Exchange of Thailand. Member, Corporate Governance and Social Responsibilities Committee, The Stock Exchange of Thailand Member, Securities Investor Protection Fund Committee, The Stock Exchange of Thailand Managing Director, CLSA Securities (Thailand) Limited Director, Association of Thai Securities Companies.
Wenwei Wu

Ranked as a Top 30 young venture capitalist in China, during his career serving CyberAgent Ventures as general manager of Shanghai branch, and Evolution Media Capital as investment director, Wenwei Wu invested in one unicorn and several startups with multi-hundred million valuation. He has profound experience and wide network in China’s blockchain and internet industry. Wenwei is also a CFA and CICPA.

Louis Ryu

CEO and Founder of Shift, accelerator working with the best startups for Asia market expansion to generate and implement businesses.
Sakolkorn Sakavee

Co-Founder of Bitcoin Thai Club and former Chief Executive Officer and founder of Playinter and Garena Online (Thailand). He has over eight year experiences in the online gaming industry. Mr. Sakavee started his career as a freelance writer for a well-known game-focused magazine in Thailand. He is always creating new things for the ecosystem of online gaming and the industry itself. His first startup business was Playinter back in 2009. Mr. Sakavee is also known for starting and fostering the e-sport industry in Thailand wherein the e-sport "fever" started in Thailand because of his efforts.

Jakraphan Saetiao

Altcoin Trader group founder with over 16000 followers in his Facebook page, he is one of the early investor in ICO in Thailand. Experiences in invest with many ICO from the early day. He helps shape Carbonium to meet the ICO investor’s need and design for the best value of retail investor. He’s considered as one of the most prominent crypto influencer in Thailand’s crypto community.
Chalermruth Narkvichien
CEO of GMO-Z.com NetDesign Holding Company. Board of Director and member of audit committee and director of GMO financial holding inc. First and only Thai who was named The Best Young Asian Entrepreneur 2009 by Bloomberg Business week.

Rawit Hanutsaha
Managing Director of Srichand United Dispensary Co.,Ltd. and Public Speaker at Mission to the Moon. Rawit breathed new life into his family’s well-known, but dated Srichand facial powder brand. This third generation managing director rescued the struggling business armed with an engineering degree from Chulalongkorn University and an MBA from Vanderbilt University in the U.S. His strong determination and marketing skills helped revamp the 68-year-old brand, saving it from decline. Since he took over 10 years ago, Srichand has been rebranded with new additions to its product line. With significant revenue increases each year, Rawit hopes to list the company on the stock exchange by 2020. This marketing guru is also a respected industry speaker and writer.
8. AWARDS

- Financial Industry Software at TICTA, Thailand ICT Awards (TICTA) is the organizer for the software competition, which has been supported by Ministry of Information and Communication & Technology and Thai Federation of ICT Technology Association.

- Financial Industry Application at APICTA 2014, the Asia Pacific ICT Alliance Awards is an international awards program organized by APICTA, which aims to increase ICT awareness in the community and assist in bridging the digital divide.

- Honorable award, FRIT (Foundation for Research in Information Technology) organization which supports researches and developments of Thailand’s information technology. Determined to be part of developing projects related to information technology towards international competency standard.

- Finalist Fintech Challenge at Securities and Exchange Commission Thailand (SET) 2017, Finalist Fintech Challenge is award SET and partnership; FinTech foster innovation that addresses the real barriers of capital markets and Thailand insurance and adapt to the business model to meet the needs of customers to have more choices.

- Stock Exchange of Thailand New Venture Award. The ABC award was held by 4 organizations; Capital Nomura Securities PLC (CNS), Securities and Exchange Commission Thailand (SET), Small and Medium Enterprise Development Bank of Thailand (SME BANK) and University of Thai Chamber of Commerce (UTCC) to support Thai entrepreneurs and to be a stage for showing their new ideas and innovations.

- Bronze award as private sector at ASEAN ICT Award in 2016. Private sector award is any application software, hardware or its combination that serves the needs of the private sectors such as Industrial Application, e-Logistics and Supply Chain Management, Finance Industry Application, Communication, e-Health, and Tourism.

- Rice bowl Startup Award as Finalist Tech Startup of the year. The award for best Marketing Campaign of the Year and can be in terms of growth, impact, sales, product or service.
Award & Recognition

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Figure 14: StockRadars awards & recognition

StockRadars Existing Customers & Partners

Figure 15: StockRadars existing brokerage partners & business partners
9. Version History

This document is subjected to further amendments and the change log of version history will be recorded on GitHub. You may visit the following link for your own reference.

https://github.com/CarboneumProject/whitepaper