

Bithemoth Whitepaper

Technical Version
Draft #4

Last edited Feb 15, 2018

BITHEMOTH EXCHANGE WHITEPAPER

1.0 Introduction

1.1 Team Experience

2.0 Current Issues

2.1 Initiation

2.2 Poorly Designed U.I's

2.3 Platform Speeds

2.4 Customer Service

2.5 International & Multilingual Support

2.6 Security Overview

2.7 Registration, Licensing, and Regulations (Multiple Jurisdictions)

2.8 Summary

2.9 Direct Payment Process - Cryptocurrency and Fiat Support

2.9.1 Trading GUI

2.9.2 Leverage

2.9.3 Risk Limitation

2.9.4 Exchange Fee Structure

2.9.5 Ecosystem Growth

2.9.6 Decentralization and Atomic Pair

3.0 Key Distinguishing Features

3.1. Portfolio Management

3.1.1 Quick view - Portfolio Distribution Tool

3.1.2 In House Portfolio Manager

3.1.3 Special Trading Features

3.2 Ease of Entry into the Crypto-currency Market

3.2.1. Buying Made Simple

3.3. Crypto on-the-go

3.3.1. Development of a Mobile App

3.4. Dedicated Crypto-Marketplace

3.5. Enhanced Security

3.5.1. Development of Specialized Hardware Wallets

3.5.2. Innovating the Future of Security on Cryptocurrency Exchanges

3.6 Were Here to Support You

3.6.1. Dedicated Call Center and other Support System

3.7 Utilization of Your Cryptocurrency

3.7.1. Access to Your Crypto When You Need It

3.8 Development of Brick and Mortar Locations

3.8.1. Teaching the Public

3.9 User Interface

3.9.1 Security Details

3.9.2 Two-factor Authentication

3.9.3 DDOS Protection

3.9.4 Cold Storage

4.0 Tech Stack

4.1 Web Application

4.1.1 Rest API

4.1.2 Database and Database Security

4.1.3 Order Management System

5.0. Bithemoth Fundamentals Overview

5.1 Turnkey ICO Solutions

5.1.2 Easy DAO Registration

5.1.3 Fiat and Cryptocurrency Deposits

5.1.4 Smart Contracts

5.1.5 Quick to Market

5.1.6 White Labeling Opportunities

5.2. Bithemoth Coin (KOIN)

5.2.2. Presale Schedule

5.2.3 ICO Schedule

5.2.4 KOIN Value

5.2.5 Repurchasing Plan

5.2.6 Long Term Stability of KOIN

5.2.7. Bonus Structure for Pre-Token Sale and Token Sale Participants

5.2.8. Risk Disclaimer

1.0 Introduction

Blockchain is becoming the cornerstone of modern innovation and has the potential to revolutionize the world. Recognizing this potential, we at Bithemoth have assembled a professional team of budding entrepreneurs and seasoned investors to create an all-encompassing blockchain trading platform.

Since cryptocurrency is designed for mainstream adoption, our platform will be a stop-shop for clients that intend to earn huge returns on investment. We will create a user-friendly system that incorporates both traditional markets and the blockchain based assets. Bithemoth Ecosystem will offer the following;

- Fast and intuitive exchange
- A rich trading platform embedded with digital asset investment opportunities
- A turnkey ICO Incubator

Our services will be accessible through a streamlined platform that is embedded onto the blockchain technology. It is our belief that newcomer investors do not need to pass through a laborious process before benefitting from the crypto market. Our vision at Bithemoth is to mentor new investors for them to become skilled in the crypto-space through our supportive, simple and user-friendly platform. While on the other hand, allowing experienced traders to enjoy highly flexible, fast, and secure environment that is inherently laden with familiar features.

Bithemoth will not stop at providing a user-friendly platform to investors; we will also offer an integrated marketplace and ICO Incubator that will provide our users more opportunity to utilize their crypto or take advantage of new developments.

Bithemoth will refine the way crypto-currencies are traded and will be a key leading innovator in this sector. This platform will incorporate multiple novel features to distinguish itself from existing platforms solidifying itself in the crypto-sphere. Utilizing the diversity of the team we are creating a powerful and robust exchange, which will not only satisfy the needs of traditional stock investors but will also simplify the trading process allowing any person to be part of this technological renaissance.

1.1 Team Experience

Members of Bithemoth platform are premium level experts in the financial sector and related fields. Our vision is to build a successful business in this space and to create a solid bridge that will connect the digital asset ecosystem to existing institutions. Blockchain technology will no doubt introduce a paradigm shift in the way businesses is conducted, however, we will leave no stone unturned in the blockchain space when applying basic business ethics to develop users' applications.

According to Dr. Garrick Hileman, during a global cryptocurrency benchmark study at the Cambridge University in 2017, "Cryptocurrency will not be useful when it is at a close vacuum, but with the effort of connecting bridges, it can be used to improve the economy". We align ourselves with the position of Dr. Garrick that is why we parade top-notch professionals to build these connecting bridges. Bithemoth plans to improve on the existing fintech space rather than starting from the scratch with a view to seamlessly integrate traditional brokerage services into the growing digital asset economy and the proven blockchain platforms.

2.0 Current Issues:

The following are a list of common issues that militating against the growth of existing exchange platforms. Bithemoth strives to provide solution using a user friendly, fast and fully licensed platform to ensure that these issues are mitigated.

2.1 Initiation:

This first issue we would like to focus on is how cumbersome and tedious it is to sign-up and deposit funds into current exchanges. In some instances, it can take days and even weeks to get verified on an exchange. For most investors, this period of time is extremely stressful and can feel like an eternity with the market continually changing. As we all know, time is of the essence when it comes to investment.

At Bithemoth, we would like to address this issue by streamlining the signup process and providing world class support for investors. This will not only make it easier to sign up but will also reduce the verification time significantly. We leverage on our understanding of time management to mitigate this issue. Investors are guaranteed of a seamless and fast platform to trade on

2.2 Poorly Designed U.I's

Another issue that investors normally have to battle with is the issue of poor design U.Is and archaic platforms. Most crypto-trading platforms are usually bogged down with excessive numbers and charts with little to no explanations. This can overwhelm even the most seasoned investors. With this challenge, how will amateur investors learn the ropes to become a professional investor? This question has amicably taken care of with the introduction of our platform.

In order to solve this issue, we are consulting with industry experts from various trading backgrounds to create the most efficient and robust UI that is available on the market. In addition, to completely explain our UI, we will be releasing a series of videos to make sure that everyone using Bithemoth will be able to make full use of all of our unique features.

These videos will go a long way to explain how our features operate, so that amateur investors will learn everything they need to know even without going through a mentorship class.

2.3 Platform Speeds

Another germane issue we would like to look into is the speed of current exchanges. Several investors have been complaining about the snail speed the currency exchanges are fraught with, causing them huge losses in terms of investments.

In view of the above, we are future proofing our exchange to ensure scalability and speed. We will achieve these through setting up of a strong foundation for the platform to grow. This will ensure that

the exchange will be able to maintain efficiency even as there would be a surge in the database of our users. In addition to that, we will also assign a support team that would be charged with the responsibility of resolving users' queries and complaints within the shortest possible time.

Bithemoth's support would be different from her competitors due to the fact that, they would be working round the clock to attend to users' feedback.

2.4 Customer Service

The greatest challenge faced by investors in the crypto-market is the issue of customer service and support. The challenge ranges from unresponsive support teams to rude staff members. From our visibility studies, we discovered that there has never existed an exchange with a world class support team.

At Bithemoth, we place value on the trading experience of investors, which is why we are maintaining a pleasant trading environment. We realized that having a world class support team cannot be overemphasized.

To confront this challenge, we will hire top-notch customer service experts to work in our customer service unit. These experts will be properly trained and certified to handle customers' complaints and queries. We will make a point of duty to train and retain our customer service team, and the fees will be borne by Bithemoth. This training will align the superior standards of our exchange with the interpersonal skills of our staff members. That's not all; we will only select the best candidates for the job to reduce the waiting time that users will get a response from us. Once users complain, our customer care will respond to the complaint within the shortest possible time. The trading experience is a priority of the Bithemoth team and we are motivated to assemble the best support team possible.

2.5 International & Multilingual Support:

Another major pitfall of current trading platforms is that they lack adequate international support. This centralized some exchanges to certain regions and inhibits them from developing into a global platform. In order to truly make our exchange available world-wide, we are going to utilize the diversity of our team and ensure that the exchange will have support for all major languages. This will earn Bithemoth as one of the most globally accessible exchanges on the market and reduce some of the market variation experienced between different regions.

2.6 Security

As an investor one of the most heightened concerns is the security of an exchange. This is because even though every investor would like to store their funds remotely it is inevitable that a portion of one's investments will be located at the exchange due to active trading. While some of the other exchanges seem to overlook the security of their platforms, at Bithemoth, we believe that transparency is the key to the success of any business. In the light of this, our platform will run transparently. To ensure the security of our platform, we have deployed high level state-of-the-art security architectures to protect investors' funds. Investors are guaranteed of the safety of the funds.

2.7 Registration, Licensing, and Regulations (Multiple Jurisdictions)

According to Hileman and Rauchs, the greatest challenges facing current cryptocurrency exchanges is to maintain cordial relationship with traditional financial institutions, payment gateways, and banks. Furthermore, analysis conducted in over 150 companies reveal that small exchanges have difficulties maintaining relationship with financial institutions.

In view of the above, Bithemoth intends to operate as an electronic money institution. For us to run a multi-faceted fintech platform, we will obtain multiple licenses from different jurisdictions with a view

to remaining compliant with laws and regulations. Whenever we plan to expand our services to other jurisdictions, we will apply for licenses as required by law to cover our planned services.

2.8 Summary

In a bid to operate as a link between traditional finance and the digital asset economy, Bithemoth platform has come up with a simple and conventionally adoptive system. Three major aspects of the digital economy will be simplified by Bithemoth's diverse ecosystem thus presenting (i) an exchange, (ii) a trading platform, and (iii) a complete ICO Incubator.

A wide range of services that were absent in a single system will be made available as Bithemoth works alongside her partners. New traders can invest in cryptocurrencies with a few clicks on the exchange using our adjustable and user-free environment while, professional investors will conveniently use our trading platform that has been designed with a vigorous tool-set. Bithemoth ecosystem envisions her ability to provide companies with an ICO Incubator that is ready to use and that which supports project development thus, enhancing growth and collaboration.

Bithemoth hopes to offer payment processes for both cryptocurrencies and fiat that are fast and secure by establishing banking relationships that are stable. Bithemoth also plans on implementing and adding to the already existing features, a unique system of rewards for COIN purchasers, and carefully designed custom trading solutions to meet the needs of the digital asset economy.

2.9 Direct Payment Process - Cryptocurrency and Fiat Support

Through the securement of specific licenses, eMoney status, and stable banking relationships, we are setting up the infrastructure for direct payment processes that will allow the conversion of fiat to cryptocurrency. Both direct Bithemoth Exchange clients and third-party clients such as external companies will have access to this feature and can utilize it as a means of entering the crypto-market.

2.9.1 Trading GUI

Clients can use the matching engine to send for both standard and non-standard order types like Limits, Stops, Markets, Limit Stop Orders and OCO (One Cancels Others). These are on the same ticket a combination of Stop and Limit orders. Using this system, one can also have access to different TIF (Time in Force) options like IOC (Immediate or Cancel), GTC (Good till Cancelled) and FOK (Fill or Kill). A professional grade HTML5 library will enable charting, such that users can customize their layout with a few clicks, also they can with ease add multiple time and indicators or price studies. Based on pre-calculated risk to reward settings, clients can use a simple drag and drop interface to place stop and limit orders. From the chart, one click trading will be available to simplify the order enter process and to reduce latency for higher frequency traders. Also, a client will be able to see a graphical representation of their account activity as historical trades, both filled and pending orders can be plotted on the chart. The design of this platform is such that both a web browser and our own Bithemoth-branded iOS and android Apps can have access.

2.9.2 Leverage

The fostering of liquidity provider relationships with partners will allow us offer clients 1:50 leverage when trading non-deliverable OTC digital assets, either by using our browser-based platform or using a FIX or API connectivity. Our give and take lending platform will allow leverage on our matching engine to be capped at 1:10 when trading initially, using borrowed margin. Clients with a proven track record of consistent low risk operations will enjoy higher leverage. Bithemoth intends offering API or FIX access to our exchange through partnership with merchant by way of a Prime model such that the merchant is the margin/credit provider. This will allow individual and institutional traders' access to spreads, exchange grade liquidity, and execution quality combined with CFD like available leverage.

2.9.3 Risk Limitation

When trading using borrowed margin on our give and take lending platform, Bithemoth's underlying risk management strategy will use designated margin wallets to reduce damages and prevent losses. Funds in a trader's margin wallet which serve solely as collateral will cover for position damages. A trader's account position will be forced into liquidation if its net value falls below the required maintenance margin. We propose that if a trader is to open a position, such a person is initially required, based on the desired position size to allocate 30% margin. The account will be liquidated if the net value falls below 15% of the value of the margin position.

2.9.4 Exchange Fee Structure

We plan that any client or taker on the exchange who places orders will pay a commission on all executed orders beginning with a MAXIMUM of 0.10%.

We are also offering free trades for a limited time to users that hold over 100 units of KOIN. After this period expires holders of KOIN can use it to pay for trading fees at a discount of 50%.

There will be no fee for deposits into our exchange. Minimal to zero fees will be charged for withdrawals depending on the factors involved, such as network fees and other cost inducing processes.

2.9.5 Ecosystem Growth

At Bithemoth, we believe that client enthusiasm, participation and retention can be increased by engaging them on the platform through added opportunities to earn. This will allow for more liquidity within the engine thereby keeping spread low and generating higher overall volumes. We plan on rewarding users for participation in KOIN and as the platform develops, the scope of reward activities should change and grow. Upon the release of the Bithemoth platform, users will be rewarded for simply signing up on the platform and creating a wallet, referring friends to the platform, using the exchange

for the first time, and completing user feeder forms which will help the team to continuously improve on the platform.

2.9.6 Decentralization and Atomic Pair

Since assets are often held by the exchange on behalf of its client base, cryptocurrency exchanges are generally "semi-centralized." The move to completely decentralize the exchange mechanism has begun and Bithemoth is directing a proactive approach towards this technology. The team behind Bithemoth sees technology as Cosmos, Polkadot and Aion approaching and understands that going forward, cross chain communication and atomic swaps will be extremely significant. Bithemoth hopes to use time locked smart contracts without third party involvement to complete the transaction to offer atomic swaps like "peer-2-peer secure exchanges." The smart contract will serve as a timed escrow so that in the event that one party defaults in the transaction, both parties would be protected. This exchange mechanism is designed such that it will carry nearly zero fees from our side as this will be for clients who are trading smaller volumes and those that do not require immediate execution.

3.0 Key Distinguishing Features

3.1. Portfolio Management

It is important for any investor to be able to evaluate their holdings in a simple and timely manner. The problem with crypto-currency exchange platforms today is that it is very difficult and tedious to do this. Many exchanges do not provide enough information to the users and makes it tough for them to keep track of their holdings and their performance against real-time market values. It is because of this reason that external apps have been created to solve what most exchanges have failed to deliver on. In view of the above, we will strive to resolve this issue by incorporating features in our exchange with a view to providing users with the portfolio management tools needed to properly evaluate their holdings

and investments. With the tools accessible on our platform, investors can monitor their and track their investments at the comfort of their houses

3.1.1 Quick view - Portfolio Distribution Tool

The quick view portfolio distribution tool that we are integrating into our exchange will provide our users a quick means of evaluating their current holdings. This feature is important because it provides a means of assessing how assets are distributed in one's portfolio, in a visually appealing and simplistic manner.

3.1.2 In House Portfolio Manager

Having a user-friendly portfolio manager is what most exchanges are missing. We hope to change that trend through integrating a simple, yet in-depth portfolio manager's tool that would be accessible by all users. Our in-house portfolio manager will provide an overview of one's investments and their performance based in real-time. Examples of features include the average buy cost (Btc/monetary), current value, daily percent change, overall percent change, and cumulative portfolio performance. When we integrate the portfolio manager into our exchange, users will have access to real-time information at their fingertips that will empower them to have full control over their investments.

3.1.3 Special Trading Features

We are also working on integrating specialized trading features into our platform. This will allow our users to set up specialized smart buy/sell orders and other unique trading features. Several exchanges do not offer this feature, but we are setting the pace in the crypto world.

3.2 Ease of Entry into the Crypto-currency Market

Since the advent of cryptocurrency, a lot of things have changed in the way businesses are conducted. In the light of this, investing in the crypto space is becoming more popular and a lot of people are looking for an easy platform to penetrate the crypto-market.

In view of the above, we will integrate easy payment options into our exchange, where users can buy crypto-currency using fiat-based currency

3.2.1. Buying Made Simple

As part of our effort to make crypto-currency accessible by members of the public, we will be creating various channels to enable investors to purchase cryptocurrency without the rigorous process of other exchanges. As part of this, we hope to include the purchasing of crypto-currency via money transfer, credit card, and even commonly used existing payment solutions into our exchange.

3.3. Crypto on-the-go

Our plan was not to create a platform that would rely solely on computer, but to develop a platform that would cater for all systems. In the light of this, we are creating a user-friendly interface that would support full functionality of our exchange on a wide range of devices and platforms without any hitches.

3.3.1. Development of a Mobile App

To fulfill our goal of creating a user-friendly exchange for a wide range of devices, we are working on developing a safe and efficient mobile app that would be linked directly to our exchange. This mobile app will be developed for both Android and iOS devices. This will result into a boost in the overall functionality of our exchange. This is just one step that we are taking towards creating a more efficient platform and excellent users' experience

3.4. Dedicated Crypto-Marketplace

Once the foundation of our exchange is built, we want to progress and develop our business by adding additional streams. One of our visions is to create a crypto-marketplace linked to our exchange where vendors can trade products directly for crypto-currency through a seamless and secure means.

3.5. Enhanced Security

Security is one of the main pillars of our exchange. We place value on the security of investors' fund. Investors are the reason why we are in business. We will leave no stone unturned to ensure active measures are taken with a view to tackling security issues that other platforms cannot surmount. We guarantee users that our platform is safe and risk free. They can invest and sleep with both eyes close, knowing fully well that their funds are intact.

3.5.1. Development of Specialized Hardware Wallets

As part of our initiative to create one of the most secure platforms on the market, we are in the process of developing hardware wallets that will be available to our users. These wallets are being developed as part of another initiative (see section 3.5.2.) and will offer larger memory capacities and specialized security features that are not available in the current market. More details on this development will be released during future stages of development, to ensure that proper patents and rights can be secured for our devices.

3.5.2. Innovating the Future of Security on Cryptocurrency Exchanges

As of today, one of the main security concerns is that when users send assets to an exchange, they have no control over the storage and security of those holding. This culminates into many security concerns

since it places all the user's assets in a centralized location. This vulnerability is what many exchanges and platforms are battling with, and in the past, it was one of the reasons why large amounts of cryptocurrency could be stolen during a single hack.

We have identified that this is a serious issue and we are working on taking precautionary measures to ensure that our users are safe and can feel confident when using our exchange. One of the main developments that we are working to incorporate into our exchange is the integration of hardware wallets. Our goal is to have individuals store their assets on their own personal hardware wallets and sync it to our exchange when trying to carryout trades. This is an innovation that no other exchange currently has and would be a major development in decentralizing the crypto-trading process and ensuring user confidence in the security of assets.

3.6 Were Here to Support You

One of the pitfalls of many exchanges today is the lack of cheer support. It is unbelievable what a lot of exchanges and trading platforms do these days. At Bithemoth, we strive to change this trend by ensuring that our customer comes first. Not only are we creating our exchange to ensure that it is simple, easy, and user friendly, but we are also creating proper support infrastructure to help our users work through any issues or technical difficulties.

3.6.1. Dedicated Call Center and other Support System

As part of our initiative to develop a support system for our users, we will be setting up call centers, and other support avenues to ensure user concerns and issues are addressed swiftly.

3.7 Utilization of Your Cryptocurrency

Although cryptocurrency is becoming more available, it is pretty difficult for the average user to utilize it for basic spending or purchases. This is an issue that the whole crypto market faces, but developments are being made in the field to overcome this challenge. As cryptocurrency becomes more available its real-world use would become more prevalent.

3.7.1. Access to Your Crypto When You Need It

To address this issue, our development team will integrate spending cards into our exchange. Our goal is to allow users to directly spend their crypto via the use of our Bithemoth card. The transaction will work similar to that of a debit card purchase and will draw directly from cryptocurrency stores linked to the card holder's account. This will allow users to access and utilize their virtual currencies whenever they need it.

With this development in place, users will be able to access their virtual currencies 24/7 irrespective of their location.

3.8 Development of Brick and Mortar Locations

This is yet another means in which Bithemoth is setting the pace in the cryptocurrency industry. Through the creation of brick and mortar locations, visitation of our physical locations will allow users to conduct their trading and utilize our platform. This is an important step in driving cryptocurrency to become main stream and available to all members of the public. These stores are our means of progressing further than just a crypto-currency trading platform and becoming a long-term player in the market.

3.8.1. Teaching the Public

As part of our brick and mortar initiative, we want to make our physical locations public teaching centers. These locations shall be used to educate the general public about crypto-currency, while mentoring them up with the basic tools needed to get into the crypto-sphere.

3.9 User Interface

The radical transformation of the business landscape across many major industries is possible using Blockchain as an underlying protocol. A lack of usability is widely observed as a major barrier to entry into the already possible features on the blockchain space while a developer focused community is working on advancing the technology. An article from Coin Telegraph in 2017 explained the important role of user experience in the blockchain space to build sustainable businesses: "creating user interfaces that can enable the easy application of Blockchain solutions without any special coding skills or extra computer language specialization appears to be an important aspect of industry development if Blockchain is to go main stream." In Bithemoth, user experience is core. Our aim is to provide a feature-rich platform that combines a highly intuitive front-end interface with a secure back end infrastructure.

3.9.1 Security

Many of the security features and stringent protocols that have proven successful so far will be used for Bithemoth. We want to maintain a firm commitment to customer security since our inception. We are taking all necessary steps to ensure that we have a secure foundation to base our platform off and ensure that our users are protecting under all circumstances.

3.9.2 Two-factor Authentication

An additional security layer is added to user accounts through two-factor authentication ("2FA"). Both a password and a unique multi-digit code sent to a physical device already registered, like a phone, is required for login and account access. Simple login+password access type will not be allowed on Bithemeth. Bithemeth will enforce secure 2FA protection with FIDO U2F1 support or client certificates². By default, weak 2FA like OTP/Google Authenticator/Authy/SMS won't be authorized or will be only temporarily tolerated, since these methods are vulnerable to phishing attacks³. Active storage and cold storage: These are guaranteed by different certified HSM (Hardware Security Module), thanks to our partnership with Ledger⁴. Software multisig wallets will only be used temporarily as needed.

3.9.3. DDOS Protection

Although DoS attacks are not a recent phenomenon, the methods and resources available to conduct and mask such attacks have dramatically evolved to include distributed (DDoS) and, more recently, distributed reflector (DRDoS) attacks—attacks that simply cannot be addressed by traditional on-premise solutions. CloudFlare's advanced DDoS protection, provisioned as a service at the network edge, matches the sophistication and scale of such threats, and can be used to mitigate DDoS attacks of all forms and sizes including those that target the UDP and ICMP protocols, as well as SYN/ACK, DNS amplification and Layer 7 attacks

3.9.4 Cold Storage

Bithemoth will generate temporary "receive wallet" addresses to handle cryptocurrency deposits. Assets from these temporary wallets will move to "cold storage wallets" constantly, behind the scene. Cold storage wallets are located on physically secure and completely air-gapped device thus representing the most secure assets storage in the whole ecosystem. If there be any compromise of the platform by a bad actor any given time, they would only have access to the small amount of coins stored in the temporary receive wallets.

4.0 Tech Stack

4.1 Web Application

ReactJS will be used to build Biometh's core user interface. React is flexible and scalable which makes it perfect for designing interactive UIs. In a bid to build a fully functional and dynamic application, ReactJS will be supplemented with Gulp to automate tasks and manage template and content changes.

Combining the two offers a powerful alternative to existing task-runners thereby allowing us to organize our development workflow and optimize existing code.

4.1.1 Rest API

Bithemoth's Rest API will be developed using TypeScript, NodeJS and Express. Paying attention to best practices, Bithemoth's REST architecture will emphasize security, performance and scalability while remaining simple, stable and flexible. The intention of this layer is to provide a reliable and secure connection between the Bithemoth database and the frontend interface. Essential input validation wide is utilized by the API to prevent cross-site request forgery and cross-site scription (XSS) or SQL breaches. We intend to perform main authorization using tokens in request headers as all the resource collections will whenever possible be processed in standalone units. We envisage that the API's internal functionalities will be complex however; we plan that the external layer will be kept open and remain

simple to work with. End users will only have access to specific portions of the full API workflow as access to permissions will be restricted and closely monitored. To ensure that the API is constantly evolving based on risk analysis of real world production level; frequent onsite security audits will be organized. The Bithemoth API will be available to our partners and enable them to build third-party services and applications that clearly communicate with our core database.

4.1.2 Database and Database Security

Amazon RDS database running MySQL

Isolated from the world and hosted within the secure AWS ecosystem.

MySQL Transparent Data Encryption (TDE)

MySQL Enterprise Transparent Data Encryption (TDE) enables data-at-rest encryption by encrypting the physical files of the database. Data is encrypted automatically, in real time, prior to writing to storage and decrypted when read from storage. As a result, hackers and malicious users are unable to read sensitive data from tablespace files, database backups or disks. MySQL TDE uses a two-tier encryption key architecture, consisting of a master encryption key and tablespace keys, which provides easy key management and rotation.

MySQL Enterprise Encryption

To protect sensitive data throughout its lifecycle, MySQL Encryption provides industry standard functionality for asymmetric encryption (Public Key Cryptography). MySQL Encryption provides encryption, key generation, digital signatures and other cryptographic features to help organizations protect confidential data and comply with regulatory requirements such as HIPAA, Sarbanes-Oxley, and the PCI Data Security Standard.

4.1.3 Order Management System

Bithemoth's Order Management System will be a basic, low-level component that serves the ETCF, TAM & Exchange platforms. It will be based on an in-memory database called Redis that supports a high speed of write/read operations. Upon submission through a TCP/IP socket, order queues will through our engine's Redis implementation be optimized for high-speed matching. The integration of NodeJS/TypeScript with Redis will provide cache, lock and path-optional backends with a placeholder module that will enable easier integration of other contributed modules.

5.0. Bithemoth Fundamentals Overview

5.1 ICO Incubator

Giving vetted ICO's access to transparent and secure funding rounds is Bithemoth's aim in creating a powerful turnkey ICO Incubator. The team of senior engineers at Bithemoth will formally examine all aspects of token sale proposals including idea novelty, project feasibility, legal compliance and financial justification. The approved projects will have access to Bithemoth's complete ICO Incubator system and a dedicated support team. This will provide a base for blockchain and tech start-ups to grow off of and launch their business. This will also provide our users with special opportunities to have early access to invest in promising new projects.

Companies in our incubator will be able to issue tokens and ICO contracts using input parameters through our proposed system. Any token issued through Bithemoth will be liquid and tradable on the Bithemoth exchange using the token sale. Automatic smart contract mechanisms that's capable of creating smart contracts and deploying them on the NEO, NEM and Ethereum blockchains will also be offered on the ICO Incubator.

5.1.2 Easy DAO Registration

Bithemoth's ecosystem aims to allow projects to register and use their business as a specialized smart contract or Mosaic on the NEO, NEM or Ethereum blockchain. This will allow users to without the explicit need of a "paper corporation" formalize their business transactions.

5.1.3 Fiat and Cryptocurrency Deposits

We are expectant that Bithemoth's planned infrastructure and banking relationships will enable cryptocurrency and fiat deposit on one platform. We intend that users will be able to make deposits using a wide range of channels like local bank deposit, e-wallet, credit card, SWIFT transfer, SEPA transfer and multiple crypto currencies.

Bithemoth Exchange's clients will be able to deposit and withdraw both currencies and cryptocurrencies.

Bithemoth will create a reliable, scalable and secure deposit and withdrawal system. The option to convert fiat currencies into cryptocurrencies, and reciprocally, in large quantities will be a game changer for the community and a gateway to reaching new highs.

5.1.4 Smart Contracts

On the NEO, NEM and ETH blockchains, smart contracts and digital tokens is be easily issuable through Bithemoth's planned system interface. Upon the evolution of new blockchain innovations, there is potential to integrate new platforms and features into Bithemoth's ecosphere. Users of smart contracts are provided with automated, low-free transactions which provide a higher level of security than relying on standard localized databases. All smart contracts related to live trading will be created or written post-trade to reduce latency. Subsequently, we will explore writing all trade data in real time inside a distributed ledger as blockchain technology becomes faster. With smart contracts, the management of approval workflows between counterparties and the calculation of trading settlement accounts with higher accuracy as opposed to standard database technology becomes achievable.

5.1.5 Quick to Market

The Bithemoth ecosystem hopes to foster innovations through her vetting process and token interface by providing the needed infrastructure and tools for projects to get support, gather funds and launch a stable platform. Following the token sale, tokens issued through Bithemoth will be liquid and tradable immediately on the exchange.

5.1.6 White Labeling Opportunities

Through our token sale platform, Bithemoth looks forward to creating for enterprise clients' unique white labeling opportunities. Clients will be able to offer crypto and fiat payments to their own user-base and token sale participants by white labeling our digital wallet and portal set up. Token users

on Bithemoth will be able to create and customize their own branded and backend while taking advantage of tools such as easy token issuance made available by our larger ecosystem architecture. Tokens will be tradable immediately on the main exchange when initial token sales ends with the provision of adding the token to one or more of our curated ETCF baskets for more liquidity.

5.2. Bithemoth Coin (KOIN)

Bithemoth Coin (KOIN) will be the token coin that we will issue. There will be a maximum amount of 200 000 000(two hundred million) coins that will be created. We do not intend to increase it further. KOIN is modeled and will run using the Ethereum blockchain with ERC 20. This will ensure the safety and security of the token in the long-term.

5.2.1 Allocation

Percentage (%)	Amount (KOIN)	Participant
45%	90 000 000	ICO
7.5%	15 000 000	Pre-Sale
7.5%	15 000 000	Fire Sale
2.5%	5 000 000	Community Rewards
6.25%	12 500 000	Angel Investors
10%	20 000 000	Development Team
5%	10 000 000	Marketing
1.25%	2 500 000	Advisors
6.25%	12 500 000	Founders

5%	10 000 000	Platform Liquidity
3.75%	7 500 000	Human Resources

5.2.2. Presale Schedule

KOIN	Amount Sold	Price (€)	Total raised (€)
1M	1000000	0.22	220000
2-5M	4000000	0.27	1080000
6-10M	5000000	0.33	1650000
10-15M	5000000	0.41	2050000

5.2.3 ICO Schedule

Once our ICO commences, investors shall be invited to purchase KOIN tokens until the 90,000,000 tokens that we have set aside have been sold. The purchasing schedule will work on an incremental basis that will reward buyers that purchase KOIN token during the early stages of our ICO.

Investors that purchase KOIN via our ICO will receive their tokens within and no later than 7 working days

5.2.4 KOIN Value

You will be able to utilize your KOIN coins to pay for any fees on our exchange platform. This will include Exchange fees, withdrawal fees, listing fees etc.

There will be a 50% discount incentive that we will introduce for the initial promotion of KOIN coin usage on our exchange; this will be effective but limited to a period of 5-years.

5.2.5 Repurchasing Plan

Quarterly, our KOIN team will use the profit to exercise a buy back on KOIN coins that will be destroyed.

This will continue until 50% of the entire KOIN coin amount has been destroyed, leaving (100,000,000) coins in circulation.

5.2.6 Long Term Stability of KOIN

Several ERC20 tokens spend a lot of time emphasizing on speculation instead of dwelling on utility. Bithemoth will not encourage this practice. For many ERC20 token, the prices depend on demand and supply. In order for users to obtain coin, Bithemoth will help reduce volatility by creating a three step approach as detailed below;

- The creation of a token buyback reserve which will be funded by 20% of Bithemoth's profit. We intend to use this reserve to stabilize the coin our Bithemoth exchange as needed. Depending on the underlying demand, coin bought back by Bithemoth will be sold with a view to facilitating liquidity on both sides of buying and selling. It is pertinent to mention here that the net profit is not the sum collected through the Pre-token or token sale, rather it is the net operating profit when we fully launch our platform. The use of the net profit is at our discretion, users do not have the right to decide how the token buyback will be reserve. It is also subject to financial regulations and legal requirements. It is pretty difficult for us to determine the size of this reserve before launching the initial token sale. Our projections are based on capitalization, market size, and speculation as a result of data from competitors as well as general market research. In view of the above, we will focus the first year to establish the brand as well as fostering growth. Then, proceed from there to develop the company and all if its tech associated branches and platforms. • We plan that all fees accruable to Bithemoth through our investment vehicle, ICO related services, on our exchange, and through the ICO Incubator gateway shall be paid in coin.

- Due to Bithemoth's services, the demand of KOIN will definitely rise. The rise in demand will cause the value of coin to increase. Whenever a service is paid for on our platform, whether it is BTC, USD, ETH, or other currencies, an equivalent amount coin shall be paid via our exchange to take care of the fees. Hence, our exchange platform will always be active. Whenever there is no sell orders to support conversions, our liquidity reserve's resting KOIN will be deployed at a price equivalent to the market value.

- For us to create a value proposition that will stand the test of time, our plan is to burn 1%, 5%, 10%, and 33% of each fee payment. As the platform grows, the KOIN availability will decrease, resulting in a reduction in supply and thereby helping the KOIN to be competitive.
- We plan that token holders will be offered discount subject to their total KOIN holdings. What this means is that, the more coin they hold, the more discount they will enjoy. This incentive will spur users to buy and hold more KOIN. Note- the discount mentioned above is part and partial to the discount offered during KOIN pre-sale and main sale.

5.2.7. Bonus Structure for Pre-Token Sale and Token Sale Participants

Pre-sale token participants will receive tiered discounts on the price of KOIN depending on entry time. The discount will reduce as more tokens are sold. The practice with other exchanges is that they offer larger discount to private investors even before the ICO pre-sale and main sale goes live. Bithemoth is applying a paradigm shift in this regard by offering the discount to everybody on its platform rather than to some select private investors.

- We strive to create a token buyback reserve that would be funded with 20% of the net revenues accruable to us with a view to adding liquidity to bolster the market.
- It is our intention that investors will have the opportunity to receive invitations and enjoy exclusive opportunity during our future token sales.

5.2.8. Risk Disclaimer

For us to move our platform into its operational stage, 5 million EUR, which is our minimum sale target, must be achieved.

Cryptocurrency investors should be aware that there are inherent risks associated with any developing industry. At Bithemoth, we strived to minimize these risks through proactive measures and utilizing key channels of support.