



**HORSECHAIN**

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Whitepaper

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# Introduction



## 1. INTRODUCTION

### 1.1. Background

The equine industry is one of the major industries that are hidden in plain sight. The market of the equine industry is greatly higher than we think. In 2018, the market of the global equine industry value has reached 300 billion dollars and created 1.6 million full-time jobs. However, these days the Equine industry is facing lots of challenges such as frauds, untrained personals and many more. The challenges that the equine industry is faced with may be too many to be counted, but there is a single solution that can crack all of these challenges – the decentralized blockchain.

With blockchain technology, we, at HorseChain Foundation, can implement smart contracts, produce unbiased data, enhanced detestability and validation of extortion verification in the equine industry and make it increasingly proficient, straightforward, secure and comprehensive.

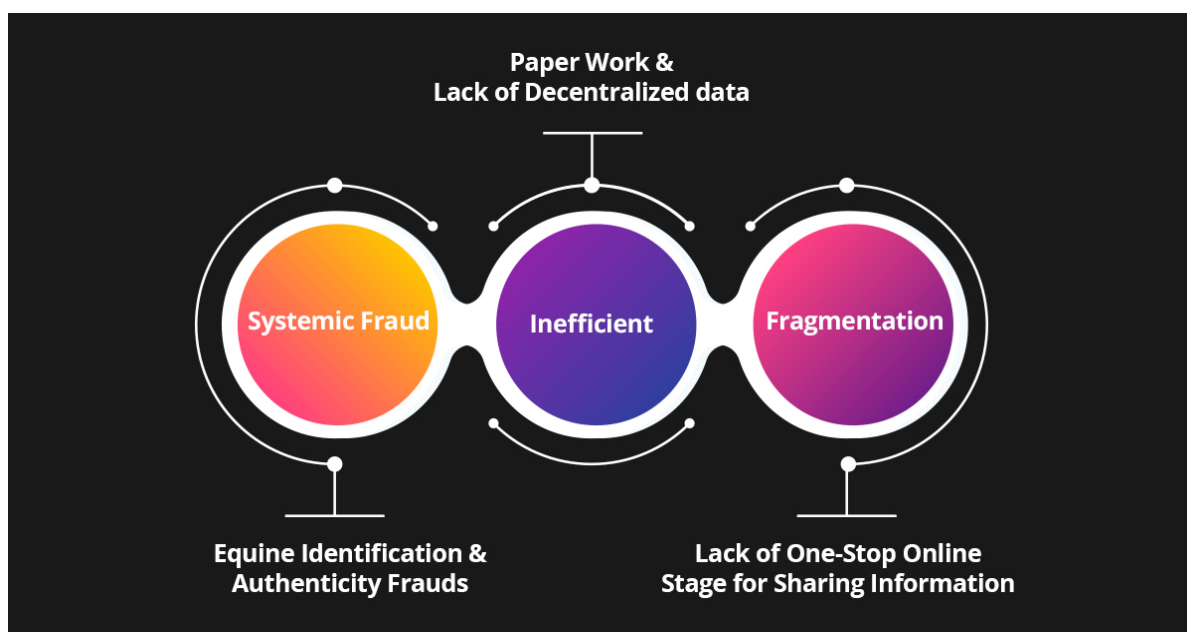
HorseChain Foundation is basically a group of people committed to building a new equine world. Our software solutions are the best platform to build peer to peer trust on the network, making the value-transmission process transparent and private without interference from intermediaries.

The team at HorseChain Foundation believes that horses are assets like gold but the current system has many disadvantages. We work to solve these issues. The platform we are building can be implemented for other pets too in the future.

### 1.2. Key Issues

Since the horse industry is a rapidly growing industry, there are lots of problems that are the major concerns in this growing industry. It is considered that horse community members are conscious of horse industry problems that impact them and the horse industry. The following are a few of the major issues:

- **Systemic fraud** – Insufficient policies and regulations to validate and check equine passports, origin identification, and supplemental data.
- **Inefficient** – Legacy paper systems put off quick accessibility to essential equine data that has enough negative impact on business between researchers, buyers, sellers, and other stakeholders in the network.
- **Fragmentation Limits Growth** – The equine industry is conducting business offline or through local websites. Lack of a one-stop online stage for the equine industry isolates significant stakeholders into local niches, impedes growth and localization of the equine industry, and hinders precious information exchange on training, handling, and breeding horses.



### 1.3. Solution

As we've seen that the equine industry is currently facing lots of issues and problems that are restricting the potential of growth. However, these issues can be resolved with the following solutions:

- **Sealed Verification System** – HorseChain will implement the Sealed Verification System to make certain the consistent and fast authentication of equine passports and recognition of horses, thereby efficiently preventing the fraud and supporting the swift globalization of the equine industry.
- **Decentralized Equine Ecosystem** – HorseChain will combine the global equine community using a common digital currency built on blockchain technology. This decentralized platform creates an environment of trust for stakeholders to work together and manage equine merchandise, data, services, and expertise.

### 1.4. Potential

In the equine industry, the potential for growing its market is huge. And the digitization of the industry will increase this potential ten times. The customers from China report problems with fake transactions whereby they were incorrectly informed about the horse to be bought. Removing fraud and establishing reliance for global trade is estimated to trigger exponential enlargement in the equine industry.

According to the reports the large part of this \$300 billion industry, approximately \$133 billion, is generated in Europe. Yearly expenditure on equine imports and tools in the Middle East is estimated at roughly \$1.7 billion and \$326 million, respectively. The

equestrian industry in China includes \$1.58 billion in expenses and maintains a 40% growth every year. From 2010 to 2017 there was a staggering 1500% growth in the number of horse clubs in China. Chinese import between 2,000 and 5,000 top quality horses per year and fraud is the main issue in these transactions. In China, 43% of the horses in equestrian clubs are purchased from overseas and China spent more than \$70 million on importing horses in 2015. Thus the potential of the equine industry is increasing incredibly and this needs a safe and reliable decentralized application solution to increase more of its potential.

## **1.5. Business Cases**

### **1.5.1. Executive Summary**

HorseChain is a project designed to solve equine issues. The core idea behind the project horseChain arose when the founder Khalid Al Marzooqi, who came from both horse and tech field, outlined many issues in the current equine system. HorseChain foundation found many possible solutions that can be implemented in the industry with the help of blockchain technology.

HorseChain is revolutionizing the equine world from fractional horse ownership on the blockchain to a marketplace, enabling equine community members to share their expertise and validated services through a community - administered social proofing system.

### **1.5.2. Business Description**

HorseChain leaderships and team members come from both industries - the tech and the equine industry. As the company was established in 2018, the team at HorseChain foundation has decided to build the largest ecosystem in the world for the equine.

### **1.5.3. Products**

- **Dapps** – HorseChain develops Decentralized application that uses a distributed peer-to-peer network where there is no central authority to control and restrict the traffic and the anonymity of the user is in their hand. The team of developers at HorseChain provides many decentralized applications to control different equine operations such as Streaming Dapp, HorseBNB Dapp, Auction Dapp, X-RAY Dapp, & Information Analytics Dapp.
- **New ecosystem, specialize, designed for equine services** – HorseChain provides a new ecosystem to adjust and join the equine network through shared availability, money and innovation of information.

### **1.5.4. Marketing Strategy**

- **Partnerships** - HorseChain sets up partnerships with studbooks, breeders, dealers, federations, veterinarians, or other stakeholders that support the HorseChain foundation.



- **Rewarding schemes mechanisms** - HorseChain marketing strategy includes several kinds of rewarding schemes to encourage users. For example, the user who burns the token coins will get a reward.
- **Referral links** - A referral link is a link that is given out to every user who joins the ecosystem. The user can invite other users to join HorseChain ecosystem using that link. And if the invited person joins the ecosystem then the inviter will get some incentive.
- **Horse programs** – The HorseChain horse programs include mobile games, horse tours, completions, etc. The marketing strategy of HorseChain foundation includes such kind of horse program to engage more and more people and encourage them to join HorseChain ecosystem.



- **Tradable currency (HorseChain Token)** - HRS Horse Chain-Token is a crypto-currency of the official HorseChain app. These tokens allow for an exchange of assets of value and can be purchased, sent and received like any other crypto-currency such as Bitcoin. In the HorseChain Solutions Dapps, all service providers are paying a small fee for listing on the platform with HorseChain tokens.

#### 1.5.5. Competitors' Analysis

Our competitors are few at the moment, but we do believe that we are the fast-growing people in this field and we are the more active people to understand the needs and the issues, this industry is facing.

#### 1.5.6. Operations

- HorseChain will keep developing DApps and will keep providing solutions for the current equine system.
- Generating sales based on supply and demand, creating a new version of the equine market - this can help other industries such as cats, dogs, and birds to join our ecosystem in the future.

**1.5.7. Financial Plan**

- We are expecting rapid growth in our ecosystem and in the usage of our token, which is going to bring value to the token.
- We are able to deliver the best services in the future as we are experienced in this industry that will help to cut the losses and failure chances are less.

**1.6. Mission**

- Drive the equine business to the next level through the improvement and usage of inventive approaches to improve the present equine administrations.
- Worldwide integration of real authentication and guarantees quick access to equine data.
- Optimize the industry by aligning the community of equines through a shared ecosystem, currency, and technology.

**1.7. Vision**

- Setting up a properly regulated worldwide standard for validating, authenticating and managing equine identity, historical data, and transactions through the HorseChain Platform.
- Multifunctional center where all partners can effectively join, associate and execute equine stock, management, information, and ability.

# The Need For Decentralized Equine Industry

## 2. THE NEED FOR DECENTRALIZED EQUINE INDUSTRY

### 2.1. Market Assessment

The thirty-nine billion dollars equestrian market is an integral part of the economy of the United States. Globally, the equine industry is presently known as the \$300 billion markets worldwide, offering jobs to more than 896,000 people. The Middle East and Europe have booming equine industries and horses are regularly sold worldwide. When it comes to the Chinese equine industry, it includes \$1.58 billion in expenses and is regularly increasing 40% every year. Horse racing exists in the majority of countries around the world and is nearly tied to resorts and casinos. The enlargement of worldwide horse show competitions is spurring increased movement of horse sales internationally because of the visibility and prestige of global competitions, for example, the World Equestrian Games and Olympics.

### 2.2. Global Trade

Internationally, equine business represents a multibillion-dollar industry. A large part of that value, approximately \$133 billion is generated in Europe, where more than 7 million horses are housed. Additionally, Europe is the epicenter for horse breeding, with the triangle Brussels - Eindhoven - Aachen being the global hub for breeding many horses. Northern America (Canada and US) houses over 9 million horses and the equine industry generated approximately \$107 billion of revenue for their financial system. Moreover, equestrian sport contributes \$846.5 million every year to the Australian economy.

Chinese equine industry includes \$1.58 billion in expenses and is regularly increasing 40% every year. The equestrian community of China shows a staggering 1500% enlargement in the number of horse clubs from 2010 to 2017, with its memberships rising 30% each year. More than 43% of the horses in Chinese equestrian clubs are purchased from overseas costing approximately \$70 million in 2015. Moreover, in the Middle East, yearly expenditure on import of horses is expected to be more than \$1.7 billion, and spending on equine equipment is approximately \$326 million. Therefore the market of the equine industry is very large and growing every year with very fast speed.

### 2.3. Challenges

The market and global trade of the equine industry is continuously increasing. However, because of the lack of a global stage, the industry resides in fragmented parts made up of regional or local sectors. The Equine industry has shared objectives, and it needs to be connected so that the trade opportunities could be improved. These days, the equine industry is facing many challenges. The major issues and challenges faced are:

- **Lack of Clarity and Fraud-Proof Equine Authentication**

Because of the lack of oversight and transparency, the industry is presently overwhelmed by general fraud. Based on global field research with more than 170 stakeholders, it is concluded that more than 40% of all horse transactions involve fraud.

- **Lack of Quick Accessibility to High Integrity Equine Data**

The industry has a huge challenge in the field of processing, capturing, and releasing information from horses. Nearly all the information exchange is generally done offline

that has provides a faster and more capable way of conducting business or gathering data, mainly between continents, receiving important trading information on a horse, its medical history!

- **Lack of a Worldwide Community Stage for Information Exchange**

The size of the horse industry has grown at an unbelievable rate over the past 10 years. In light of this growth, there is an increasing demand for a global rostrum to assist trade, knowledge exchange, and globalization of the equine industry. The globalization of future countries and areas in the equestrian industry like China, Middle East, and Russia may be really accelerated by creating an easy-to-use global stage where everything can be communicated capably and all parties can believe that the received information is consistent and of high data integrity. The current lack of a global communal stage results in a mismatch between demand and supply on the one hand and expertise and capital on the other hand. Emerging economies with incompetent capital markets lack access to the capability required to further advance the equine industry.

## **2.4. Digitization Of Industry**

As we've seen that the equine industry is rife with transparency problems, depending greatly on non-digitized approaches to the business, operating with no worldwide market platform in place for its lots of stakeholders. These problems will just be increased in the future unless a solution is discovered. And the only solution to all these problems is the digitization of the industry.

The industry needs a sealed digital verification system to make certain the reliable and fast authentication of passports and recognition of horses, thus efficiently reducing fraud and supporting the fast digitization and globalization of the industry.

HorseChain is taking steps to digitize this industry by developing the decentralized software solutions that will unite the worldwide equine community using a united digital currency built on blockchain technology. This platform develops an atmosphere of reliance for stakeholders to work together and manage equine services, expertise, merchandise, and data.

## **2.5. Need For Digitization**

As seen with any industry in the earlier period, establishing extra transparency is the main medium for growth. As the equine sport is developing and growing at a speedy pace, there is a rising need for platforms and systems that can make certain consistency, transparency, and quality control. If the equestrian sport wants to develop outside of the present narrow place and develop into a worldwide network where more and more people have access to these gorgeous sports, it is necessary to create a fraud-proof and consistent decentralized digital system where stakeholders can collect essential equine data efficiently and fast. This all can be achieved by digitizing the industry. The decentralized apps can make use of blockchain technology, which can provide main benefits through the automation of data storage and sharing/exchange of data in a scattered and immutable ledger.

## **2.6. Need Of Blockchain**

Most people these days are familiar with Blockchain technology. It is an honorable digital ledger of financial transactions that can be automated to record not only financial transactions but almost anything of value. It offers time-stamped and encrypted records that are shared within a decentralized, publicly accessible network.

In the equine industry, to prevent fraud and provide unified currency, blockchain technology is used to create tokens that can be purchased online. By tokenizing the global platform's assets—the horses—and moving them to blockchain records of ownership, the functionality of the platform can be further enhanced with the following features:

- Small fractional ownership.
- Better transparency, with all recorded communications available.
- Improved security with certain record keeping.
- A 24/7 marketplace.
- Reduction in direct costs and friction to trade – cutting out the middlemen.
- Rapid, risk-free and low-cost settlement.
- Increased liquidity and market coverage.
- Automated compliance.

We are presently on the verge of the digital industrial revolution, with new and upcoming blockchain solutions. These blockchain solutions will help bring a new way of sharing economy whereby unified communities, rather than centralized business institutions, will determine the enlargement trajectory of the industries.



# The Problem

### 3. THE PROBLEM

#### 3.1. Problems In Global Trade

The global trade of multi-billion Equine industry is widespread with simplicity issues, relying too much on non-digitized approaches to business retail, operating with no digital market platform in place for its several stakeholders.

The current trade of equine market lack of policies and regulations to validate and authenticate equine passports, supplemental data, and origin identification. This leads to systematic fraud. Daily, the industry is facing lots of fraud, and this problem has become the major issue of the equine industry.

Moreover, legacy paper systems avoid quick accessibility to essential equine data, which has a major negative impact on business between buyers, sellers, researchers, and other stakeholders in the ecosystem.

The equine industry is conducting business either offline or through local websites. Lack of a global online platform for the equine industry isolates many stakeholders into local niches, impedes growth and globalization of the industry, and delays important knowledge exchange on training, handling, and breeding horses.

#### 3.2. Lack Of Transparency

One of the major problems in the equine industry is the lack of transparency. Because of the lack of transparency and oversight, the equine industry is presently plagued by lots of systemic frauds. Generally, according to the global field research with over 170 stakeholders, a report concluded that more than 40% of all horse transactions involve fraud. Examples of fraud include the following:

- Ship Different Horse After Selling: A main complaint of buyers, who have a complaint that they bought a different horse than received.
- Horse Drugging: show dressage and jumping horses that are actually drugged heavily for demonstration purposes. After the horse is sold to its new buyer it becomes clear that the horse is unmanageable, troubled, or has low strength.
- Wrong Medical Records: Sometimes the sellers completely falsify the medical records or exclude essential data to show that the horse in good condition.
- Wrong Passports: In a research carried out by the University of Amsterdam it was confirmed that equine passports are effortlessly falsified and that there is presently no consistent way to test the passport for its accuracy.

#### 3.3. Authenticity Of Equine

The authenticity of equine has become the major challenge in the equine industry. These days, lots of frauds are committed daily that are related to the authenticity of equine. The buyers want to get the complete and true information about the horses, but generally, they are getting either wrong information or incomplete information. There is also a huge problem with the authenticity of equine passports. Because of these issues, sometimes buyers have to bear a big loss.

### **3.4. Frauds In Auctions**

The auction is one of the major e-commerce activities of the equine industry. But this activity is full of fraud. Most of the auction programs are required third-party intermediaries that play an important role between the buyers and the sellers & it could never be guaranteed whether the third-party can be trusted or not. If this third party is not reliable, it leads to fraud.

Moreover, it is a normal complaint of many buyers that they bought a different horse than received. Another aspect related to auction frauds is bait and switch. An extremely attractive equine is advertised however it doesn't really exist. When the potential buyers reach, they are told that the horse has just been sold, and they are forced to look at other horses that just happen to be for sale.

These kinds of frauds reduce the interest of potential buyers to the auctions. Unfortunately, these auction problems are continually increasing.

### **3.5. The Problem In Gathering Analytics**

The equine industry has a huge challenge in the field of processing, capturing, releasing and analyzing information from horses. The majority of information exchange is mainly carried out offline, which has hindered a faster and more capable way of conducting business or gathering data, mainly between continents. Getting crucial trading information on a horse, its medical history, for example, can take some days. Also, since the majority of information remains offline, the best possible advancement of knowledge is not possible. Scientists, trainers, breeders, and other interested parties can scarcely access data, which is a missed opportunity for accelerated knowledge development in the equine industry. Thus, due to the lack of a global system, information analysis is not possible.

### **3.6. Frauds In Equine Sales**

Frauds in the equine sale are the biggest barrier in the growth of the equine industry. Some fraud is a matter of the seller trying to create a fake impression by presenting the horse in a dishonest manner. These methods of deception include - standing a horse on a grade to give the appearance of being well balanced, hiding hood and ankle defects obscured by tall grass in pictures, tacking up a bridle-shy-horse ahead of time, or warming up a chronically sore horse before the prospective buyer arrives.

Another kind of fraud related to equine sales is Friesian Scam. This is a horse scam that is currently circulating internet classified websites. The seller is providing a very costly breed of horses well below market price. They exclusively target further costly breeds to make the buyer think they are buying the best. After payment, the seller simply disappears. To prevent such kind of fraud, the digitization of industry is necessary.

### **3.7. Problems With Exchange Of Medical Information**

Currently, most of the information exchange is mainly carried out offline. Therefore, getting crucial trading information on a horse, its medical history, for example, can take some days. This increases many threats such as leakage of information, modified information, and Delayed information. Sometimes the sellers outright falsify the medical

records or leave out important data to show that the horse is in great condition. Thus the exchange of medical information securely and swiftly is the biggest challenge in the equine industry.

### **3.8. Towards A Global And Future-Proof Solution**

Since the problems in the equine industry are continually increasing, a solid solution is extremely essential. HorseChain's major goal is to advance the multi-billion-dollar equine industry and prevent all the issues and problems by generating unbiased data, implementing smart technologies, optimizing fraud-proof authentication and traceability, and removing global boundaries.

The aim of HorseChain is to set a global standard to counter fraud in the equine industry by introducing tamper-proof equine identification, passport authentication, and a quickly accessible and decentralized data platform, thus establishing trust among all participants within the ecosystem. The emergence of big data will be available for analysis and advancement of scientific and industrial endeavors.

HorseChain initiated implementation of systems and protocols that let for accessible and fraud-proof data on horses will enable the equine society to develop decentralized applications on the HorseChain platform, for example, equine marketplaces and auction houses. Decentralized applications that are all set for mass adoption will more increase the use of HorseChain as a one-stop platform for all equine services and merchandise.

# The Solution

## 4. THE SOLUTION

### 4.1. Global Digitization Of The Equine Industry

Due to the lack of a global platform, the \$300 billion equine industry resides in a fragmented state made up of regional or local sectors. Part of the normal evolution of the equine industry must come from technical advancements that will connect the dots along a fragmented business. The equine business industry has common goals and needs to connect but it has been limited because of a lack of technological services. Business opportunities would be increased through an accessible global podium. All these issues can be resolved by digitizing the industry.

The global digitization of the equine business will drive it to the next level through the worldwide integration of the industry and quick access to equine data. This will optimize the industry by aligning the community of equines through a shared currency, ecosystem, and technology.

HorseChain foundation provides the soil for the development of the equine industry. It provides digital and decentralized solutions to all these problems. HorseChain assists the global equine business and bolsters revenue generated by providing fraud immutable passport verification, proof systems, and a global platform for business and trade.

### 4.2. Decentralized Information Platform

The most reliable solution to all the issues in the equine industry is the decentralized information platform. Decentralized information platform uses a distributed peer-to-peer network where is no middle authority to restrict and control the traffic, and the anonymity of the users is in their own hand, unlike centralized platforms where the all user data is collected and stored by central authorities or companies at a centralized data store which leads to a potential risks to the user privacy. Furthermore, many companies these days make use of this user data against them by targeting ads and also by influencing the decision-making and behavioral capabilities of the users. Decentralized information platforms are the solution to all these problems and provide a reliable way of sharing information.

HorseChain Foundation makes use of blockchain technology to provide a user-friendly decentralized application platform to interact with the betting smart contract that handles all operations in a secure way, including collecting bets, monitoring prices, calculating winners, and rewarding. It also provides a decentralized worldwide auction hall to work together for steed dealers. Dealers and coaches on the stage selling steeds can pay for adding postings to the stage in HorseChain tokens.

HRS Horse Chain-Token is a crypto-currency of the official HorseChain app, which makes transactions secured. These tokens allow for an exchange of assets of value and can be purchased, sent and received like any other cryptocurrency such as Bitcoin or ether through the generation of addresses and wallets which facilitate these transactions.



### **4.3. Immutable and Verifiable Records**

The blockchain is a very reliable technology as it has the ability to keep immutable and verifiable records. Immutability is the capability of a blockchain to maintain an indelible, permanent, and unalterable history of transactions.

As HorseChain DApps makes use of blockchain, it allows you to create immutable & verifiable records of the transaction which are not possible in traditional technologies, thus increasing the security of data. Within a few minutes or even seconds, all the transactions conducted are cleared, verified and stored in a block that is linked to the preceding block, thereby creating a chain. Each block must refer to the preceding block to be valid. This structure permanently timestamps and stores exchanges of value, preventing anyone from altering the records.

### **4.4. Decentralized Platform For Auction and Sales**

E-auction and sales are one of the popular e-commerce activities that allow bidders to directly bid the products over the Internet. As for sealed bid, the extra transaction cost is needed for the intermediaries since the third-party plays an important role between the buyers and the sellers help to trade both during the auction. Moreover, it never guarantees whether the third-party can be trusted. To resolve the problems, the blockchain technology with low transaction cost is used to develop the smart contract for the public and sealed bid of equines.

#### **4.4.1. Blockchain-Based On Ethereum Platform**

Ethereum Blockchain is the next generation of Blockchain technology. It allows for the maintenance and distribution of huge amounts of data on the network. It also lets for direct peer-to-peer transactions either crypto-currencies or data.

This technology allows for the creation of decentralized applications, known as “DApps.” A DApp works with a self-executing “smart contracts”. A smart contract is a programmed transaction protocol that performs the terms of a contract.

HorseChain Auction DApp is developed using this technology, which acts as a decentralized worldwide auction hall to work together for steed dealers. The common objectives of this Dapp are to gratify general contractual conditions such as payment terms, liens, confidentiality, and even enforcement, minimize exceptions both accidental and malicious, and decrease the need for trusted intermediaries. Related economic objectives include lowering fraud loss, arbitrations and enforcement costs, and other transaction costs.

#### **4.4.2. ERC-20 Token**

ERC20 stands for Ethereum Request for Comments and 20 is a unique ID number to distinguish this standard from others. It is a protocol standard that defines some rules and standards for issuing tokens on Ethereum’s blockchain network. It can also be called as a universal language that all tokens on the Ethereum network use and thus facilitate the trading of a different token with one another. ERC20 doesn't have their personal dedicated blockchain network like other cryptocurrencies rather it uses Ethereum infrastructure and pays for it in the form of Gas.

ERC20 is significant for various reasons, mainly because of the new use cases it enables as well as its capability to be effortlessly integrated into ecosystem infrastructure. Having a common interface for exchange and wallet operators to simply implement makes tokens that much more important. Assimilation into the ecosystem makes them further liquid, increases price discovery, and lets everybody in the world own Non-Fungible assets.

The HorseChain token is based on the ERC-20 standard so that it can be exchanged on the Ethereum decentralized network. It also well integrates with other ERC standards and tokens based on Ethereum. It provides the most secure way for the transactions. In the HorseChain Dapps, the dealers and coaches on the stage selling steeds will pay for adding postings to the stage in HorseChain tokens. These tokens allow for an exchange of assets of value and can be purchased, sent and received like any other cryptocurrency such as Bitcoin or ether through the generation of addresses and wallets which facilitate these transactions. Users or players can purchase HRS tokens through various secured ways such as Bitcoin (BTC), Ethereum (ETH), fiat payments. In the upcoming years, HorseChain tokens will thoroughly change the Equine Industry.

#### **4.5. Equine X-Ray For Authenticity**

When it comes down to the equine trade business there is one major aspect that causes more disputes than any other, and that is the interpretation/analysis of a horse's X-ray Results. More frequent than not, the X-ray findings are open to interpretation that can then result in disagreements between the different veterinarians on whether a certain area signals an injury or not.

Equine X-rays could be uploaded into a particular Dapp for second opinion purposes. Veterinarians will be incentivized to provide their anonymous, independent, and unbiased judgment via registering to the Dapp. By utilizing independent veterinarians to the judgment of equine X-rays, HorseChain will prevent drawn out and unnecessary arguments between the buyer and seller, and settle such disputes directly via an independent board.

#### **4.6. Information Analytics Platform**

The analysis of data to get information or knowledge is becoming increasingly essential. Therefore, a system is required in the equine industry that would be able to identify shared information and provide actionable intelligence. The information analytics platform will just serve this purpose. It could be used by the researchers for finding data-driven decisions and alarming situations. The analytics platform will extract knowledge into several informational indexes based on all of the equine data. The platform will be able to use machine learning and do a prognostic analysis of equine data for action-driven business intelligence.

The HorseChain analytics Dapp will provide insight into different big data sets centered around the different equine variables recorded on the HorseChain platform. For instance,

making big data obtainable will enable more informed breeding practices by providing the capability to a couple of independent horse characteristics to pedigree and heritage.

#### **4.7. Use Of AI And Machine Learning**

Machine Learning involves a computer to recognize patterns by examples, rather than programming it with specific rules. These patterns are found within Data. Artificial Intelligence (AI) is supposed to be the imitation of human consciousness and thinking process by the means of the computer code.

In the HorseChain Dapp solutions, AI and machine learning features will make it more valuable. This feature will analyze data to automatically discover new patterns that will provide more information from the same amount of data.

#### **4.8. Benefits**

The only solution to all the equine industry issues is the digitization of the industry using HorseChain Dapps based on blockchain technology. Here are some of the benefits of this solution:

- Small fractional ownership.
- Reduced fraud and risks.
- Globalization of the industry.
- Increased business potentials.
- Greater transparency, with all recorded communications available.
- Better security with undisputable record keeping.
- A 24/7 marketplace.
- Reduction in direct costs and friction to trade – cutting out the middlemen.
- Rapid, low-cost and risk-free settlement.
- Tokenization – Secure transactions.
- Easy Information Analytics
- Increased liquidity and market coverage.
- Automated compliance.

#### **4.9. Future Enhancement Possibilities**

The solution of all the equine industry problems is digitizing the industry with the decentralized application solutions based on blockchain technology. As the solution is based on blockchain technology, it is expected to be perfect more in the future. The team of developers at Horsechain is continually working on the Dapp solutions to make them better.

HorseChain Foundation believes that horses are assets like gold but the current system has many disadvantages. We are working to solve these issues and provide better and improved solutions. The platform we are building can be implemented for other pets too in the future.

The present time is the time-of-change for the equine industry. And this change will improve the industry and grow its market.

# Stakeholders

## 5. STAKEHOLDERS

HorseChain's major objective is to build a global platform to bring value to all stakeholders in the equine industry. To avoid a purported 'Slow start', HorseChain partners with many stakeholders and the major registries to digitize equine passports and display the benefits of making it an enduring record through blockchain technology. To make that certain this objective is attained; HorseChain has intended the technology and eco-system according to the requirements of the following stakeholders.

### 5.1. Horse Breeders

Horse breeders are the backbone of the industry and sport. Horse breeders are previously using offline solutions such as paper passports to transfer ownership and record data. The quick availability of equine data on the HorseChain platform will support horse breeders, trainers, and merchants in their businesses. This will encourage the motivation for breeders to join the platform, thus seeding the platform with sufficient valuable members. Through these various plans, HorseChain aims to promote the mass adoption of the platform.

### 5.2. Steed Dealers

Steed dealers are the main stakeholders in the Equine Industry. Due to the lack of the global platform, most steed dealers are making their deals locally, and the deals that take place on the bigger lever had a hazard of fraud. The HorseChain platform will provide platform solutions to make bigger deals on the global level securely and efficiently. HorseChain ecosystem will make use of the blockchain Tokens to make an exchange of assets of value for the deals. Thus it will reduce fraud and will provide promote steed deals globally.

### 5.3. Coaches

Horse coaching is an essential part of the equine industry. It is expected that the number of horses under training with professional trainers and coaches in a region is well more than 300 at any one time. Add to this various riding schools and horses under training and the estimated horse number increases to well over 500. Therefore, the industry is full of trainers and coaches. But the major problem is to find experienced coaches and trainers. Since HorseChain platform provides the decentralized global solution, where coaches can add their profiles, it makes it possible for the horse owners to find the best coaches for their horses. HorseChain aims to make the availability of the coaches easy for the owners and thus, provide job opportunities to the trainers and coaches.

### 5.4. Veterinarians

Veterinarians are the most trusted advisers and essential partners in the equine industry with a reputation to protect. Their treatments, continuous research, and advice drive the business and the sport. HorseChain aims to make simpler the workload and workflow of veterinarians and to improve their reputation by securing integrity in their certifications, thus increasing business generating potentials. Veterinarians will be allowed to make improved informed decisions based on the historical medical visibility of a horse. Moreover, HorseChain will enable veterinarians to interrelate more closely with institutions or research groups that are examining new treatment methods. This way,

their research may assist advance the equine industry by providing more effectual treatment solutions.

### **5.5. Merchants**

As everyone knows that the equine industry is \$300 billion industry and the merchants hold the biggest part of this industry. Daily lots of horses are purchased and sold out by the merchants. HorseChain aims to provide hassle-free, quick, and win-win solutions catered towards the unique requirements of sellers as well as investors seeking opportunities to provide significant equity to their portfolio for both short term and long term gain. Swift accessibility of equine data on the HorseChain platform will support merchants in their businesses. This will bolster the incentive for the merchants to join the platform, thus seeding the platform with adequate valuable members.

### **5.6. Governments**

Providing transparency through the HorseChain platform will allow governments to better perform their function as an arbiter and regulator of the equine industry. This will also enhance the government's capability to base policy and decision making on high integrity data. HorseChain is in talks with governmental agencies on national and regional levels to inspect potential partnerships to advance the industry together.

### **5.7. Equine Trade Organizations**

Equine trade organizations that are connected to HorseChain will regularly benefit from high integrity data. This will make coupled studbooks further attractive and will, therefore, improve their current business model and expand business opportunities. In addition, the HorseChain solution will secure and simplify its current administrative processes.



# Horsechain Platform From An End-User Perspective

## 6. HORSECHAIN PLATFORM FROM AN END-USER PERSPECTIVE

### 6.1. Characteristics Of The Final Product

The final product is a combination of multiple DApps and HorseChain token. It includes x-ray DApp for the authenticity, auction DApp for the global auction of equine, analytics DApp for research and business intelligence, streaming DApp for video streaming of championships and HorseBNB DApp for the rental marketplace of equine. The HorseChain token will work as a medium of exchange in the whole platform. The following section will describe the functions of each module of the platform, including their technical details and correlation between them.

### 6.2. Technological Overview

#### 6.2.1. Blockchain

The blockchain is a distributed and decentralized system so all the transactions happen in this network are stored globally on each node. The records which are stored in this are secure as no one can alter the record and it is not accessible by a single person or community. HorseChain platform needs to track things like horse breed, owner of the horse and medical report of the horse. It also aims to eliminate the middleman from the system. Blockchain serves all three goals in the HorseChain platform: immutability, decentralization and peer-to-peer network.

#### 6.2.2. Ethereum

Ethereum is a distributed peer-to-peer network that tends to be a world computer. It is based on Blockchain technology and its cryptocurrency is called Ether. The fuel that propels the Ethereum network is called as Gas. Gas is used for the execution of the smart contract by the Ethereum Virtual Machine(EVM), it is charged for the execution of the smart contract on Ethereum network in order to restrict the wastage of computational power and incentivize the miners that validate the transaction and keeps the network up and running. Ethereum is a suitable choice for the HorseChain platform as it includes multiple DApps and smart contracts for different functionalities. Also, HorseChain token is an ERC-20 token which can be exchanged on the Ethereum network.

#### 6.2.3. Decentralized Apps (DApps)

DApps uses distributed peer-to-peer network where there is no central authority to control and restrict the traffic and the anonymity of the user is in their hand, unlike centralized apps where the user data are collected and stored by companies at a centralized data store which leads to a potential risk of user privacy. Moreover companies these days use user data against them by targeting ads and also by influencing the behavioral and decision-making capabilities of the users. DApps are the solution to these problems and provide a trusted way of sharing information.

#### 6.2.4. Smart Contracts

Smart Contract in layman's word is similar to the contract in the real world. It acts as an agreement between two or more people on the blockchain. Smart Contract transactions are processed on blockchain and so do not require any human interaction. Thus, they remove the requirement of the third party in an agreement

to act as a trusted authority. Ethereum smart contracts are written in solidity and are executed by Ethereum Virtual Machine (EVM). These smart contracts represent the actual business logic in the digital world.

### **6.2.5. ERC-20 HorseChain Token**

ERC20 stands for Ethereum Request For Comments and 20 is a unique ID number to distinguish this standard from others. It is a protocol standard that defines certain rules and standards for issuing tokens on Ethereum's blockchain network. It can also be called as a universal language that all tokens on the Ethereum network use and thus facilitate the trading of a different token with one another. ERC20 doesn't have its own dedicated blockchain network like other cryptocurrencies rather it uses Ethereum infrastructure and pays for it in the form of Gas. The HorseChain token is based on the ERC-20 standard so that it can be exchanged on the Ethereum decentralized network. It also well integrates with other ERC standards and tokens based on Ethereum.

### **6.2.6. Proof Of Burn (PoB) Consensus Algorithm**

The Proof of Burn (PoB) algorithm utilizes miners who send their coins to an unspendable address, effectively “burning” the coin forever.

The miners of the PoB coins will send coins to an unspendable address—otherwise known as an “eater address”—thus taking them forever out of circulation or burning them. These transactions are recorded on the blockchain, ensuring that there's a necessary proof that the coins cannot be spent again, and the user who burned the coins is issued a reward.

The entire idea behind proof-of-burn consensus is that the user burning the cryptocurrency is showing a long-term commitment to the coin by burning it. This is because they are taking a short-term loss in exchange for a long-term gain. Additionally, burning coins is also viewed as less resource intensive by some since the main resource being used is the person's willingness to delay their profits.

HorseChain uses PoB consensus as it encourages a long-term commitment and time horizon for a project. This theoretically creates greater price stability for the coin as long-term investors are less likely to sell or spend their coins.

## **6.3. X-Ray DApp**

The authenticity of the equine and frauds related to it are a major concern for the whole equine industry. As authenticity becomes increasingly important in global trade, the need for having decentralized and immutable storage of equine identification becomes equally important.

The HorseChain team has developed DApp which can be used by veterinarians to scan X-Ray of an equine. The X-Ray data can be securely transferred and stored on the HorseChain blockchain. The DApp also provides an interface where industry specialists can review the equine. It benefits the buyer and dealer in two ways: 1. Both can verify the

authenticity of equine as data stored on HorseChain blockchain is immutable. 2. Both can get verified reviews of equines from veterinarians and industry specialists.

#### **6.4. Auction DApp**

The E-auction, one of the popular e-commerce activities, allows bidders to directly bid the products over the Internet. As for sealed bid, the extra transaction cost is required for the intermediaries because the third-party is the important role between the buyers and the sellers help to trade both during the auction. In addition, it never guarantees whether the third-party can be trusted. To resolve the problems, the blockchain technology with low transaction cost is used to develop the smart contract for the public and sealed bid of equines.

Our Auction DApp acts as a decentralized worldwide auction hall to work together for steed dealers. Dealers and coaches on the stage selling steeds will pay for adding postings to the stage in HorseChain tokens. Moreover, the equine authenticity can be verified as there is a loosely coupled integration between X-Ray DApp and the Auction DApp.

#### **6.5. Information Analytics DApp**

The conversation of data to knowledge is becoming increasingly important. There is a need for a system in the equine industry that would be able to identify collective information and provide actionable intelligence. Information analytics DApp just serves this purpose. It can be used by researchers and academia for finding data-driven decisions and alarming situations. The DApp will extract knowledge into different informational indexes based on all of HorseChain's assorted equine data. The DApp can also make use of machine learning and do predictive analysis of equine data for action-driven business intelligence.

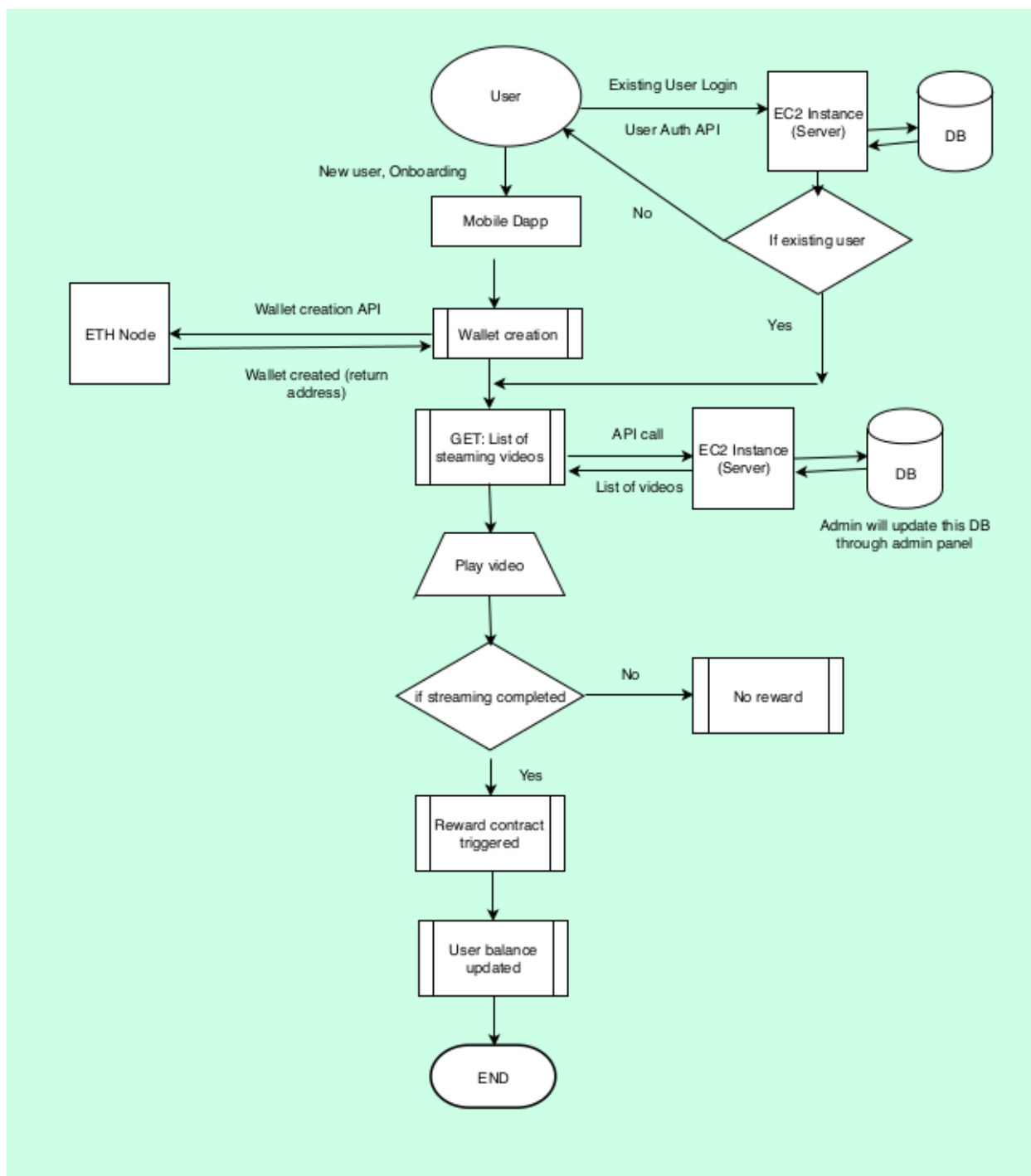
#### **6.6. HorsesBNB DApp**

Equine rent and marketplace industry have changed over a period of time. However, the issues related to the risk of fraud and overpricing are still there. Blockchain technology can help to enforce verifiable smart contracts between two parties without having trusted third party service and regulations.

HorseBNB DApp is a rental marketplace designed to rent a horse or any pets. It can be also used to rent any horse care service, land or stable. Using HorseBNB, owners can rent their pets or property globally and collect rent without paying middlemen commissions. It also integrates with X-Ray DApp for identification of equines to avoid the risk of fraud.

#### **6.7. Streaming DApp**

Streaming DApp integrates video streaming services with HorseChain blockchain and analytics platform. Using streaming DApp, the championship of horses can be live streamed to any mobile device. Viewers can watch events and also vote which horses will win the championship. Viewers will also receive HorseChain tokens in return of watching live stream events. Hence, streaming DApp serves the purpose of entertainment and combines it with the equine rating and analytics. Below is the flow diagram for streaming DApp:



### 6.8. MVP Dapp

In the offline system due to the lack of transparency and oversight, the equine industry is presently plagued by systemic fraud. Sometimes the sellers outright falsify the medical records or leave out significant data to illustrate that the horse is in great condition. Moreover, in a study, it was confirmed that equine passports are effortlessly falsified and that there is presently no reliable way to test the passport for its authenticity. The HorseChain MVP dapp just serves to solve these kinds of problems.

MVP Dapp is a passport id dapp that servers to keep records of any horse or any other animals. Also with this dapp, the horses will be able to trade as livestock assets. This will solve lots of ownership problems. Moreover, it will assist to make horses more tradable.

### **6.9. Correlation Between DApps And HorseChain Token**

The X-Ray DApp will be accessible by all other DApps wherever the identification of equine is needed. The DApps will make use of data provided by X-Ray DApp to check the authenticity of equines. The information analytics DApp will also make use of information provided by streaming, auction, and HorseBNB DApps. The HorseChain tokens serve the purpose of currency in the system. Thus, users will be able to exchange HorseChain tokens for some value. Users will also receive the tokens from the system for using services like referrals and streaming. All DApps will accept HorseChain token for the exchange of value. This makes every module in HorseChain platform connected and at the same time loosely coupled with each other. The platform is fully scalable to add new features and modules.



# Horsechain Ecosystem

## 7. HORSECHAIN ECOSYSTEM

HorseChain aims to be a complete ecosystem serving the requirements of all professionals, stakeholders, and amateurs within the equine industry. By creating a global community around general interests and providing the technical platform to improve transparency, strengthening the match between supply and demand, and unlocking new markets, several Dapps can be created. Taking the first step, we will release the Official HorseChain app that will be developed for different existing operating systems, for example, Android, iOS and will function as the HorseChain platform. This will be the key app on which all other Dapps may be accessed and installed.

In the HorseChain ecosystem, SRH tokens will serve as the medium of exchange. HRS Horse Chain-Token is a crypto-currency of the official HorseChain app, which will make transactions secured. These tokens allow for an exchange of assets of value and can be purchased, sent and received like any other cryptocurrency.

In the HorseChain Solutions Dapp, logistics providers, breeders, trainers, and event organizations can also advertise their services. For all kinds of services, users just need to pay a small fee with HorseChain tokens.

### 7.1. Services

HorseChain strives to serve the equine industry. We provide solutions that help in digitizing the industry. Every HorseChain dapp is developed for a specific purpose. But the main feature of the HorseChain app is the verification and authentication screen. Using this, the users can access the data records of several equines, and verify and authenticate their identity. In the official HorseChain app, other dapp solution will be installed that will provide the following services:

- **Auction Hall**

With true digital and blockchain based passports, stakeholders will be capable to believe the information provided to them on the platform. The HorseChain Auction Hall Dapp will provide a decentralized global auction hall for horse traders to carry out their business. Trainers and traders selling horses on the platform can make use of SRH Horse Chain tokens to add listings on the platform.

- **Judgment Of Equine X-Rays**

When it comes to the equine trade business there is one aspect that causes extra disputes than any other, and that is the analysis or interpretation of a horse's X-ray Results. More frequently than not, the X-ray findings are open to analysis, which can then result in disagreements between the different veterinarians on whether a certain area signals an injury or not. By utilizing independent veterinarians to the judgment of equine X-rays, HorseChain will prevent drawn out and needless arguments between the seller and buyer and settle such disputes directly via an independent board.

- **Data Analytics**

HorseChain will make sure data recorded on the platform accessible for analysis. The Data Analytics Dapp will provide insight into several big data sets centered around the several equine variables recorded on the HorseChain platform. For example, making big data available will enable more informed breeding practices by providing the facility to a couple of independent horse characteristics to heritage and pedigree.

- **Video Streaming**

Video streaming is one of the services provided by HorseChain. Streaming DApp integrates video streaming services with HorseChain blockchain and analytics platform. Using streaming DApp, the contest of horses can be live streamed to any mobile device. The audience can watch events and also vote which horses will win the contest. Viewers will also get HorseChain tokens in return of watching live stream events. Therefore, streaming DApp serves the purpose of entertainment and combines it with the equine rating and analytics.

- **Rental Marketplace**

HorseChain provides the rental marketplace with HorseBNB DApp that is designed to rent a horse. It can be also used to rent any horse care service, stable or land. Using HorseBNB, owners can rent their property or pets internationally and collect rent without paying middlemen commissions. It also integrates with X-Ray DApp for identification of equines to avoid the hazard of fraud.

- **Other Equine Services**

Service providers will be able to add their offerings on the platform such as:

Sales agents and Stallion owners that can ship and sell legal horse semen directly.

Logistics providers, for example, air freight or transport companies and specialized in horses that can also take care of customs clearance.

Sales of tickets to equine events.

## **7.2. Marketplace**

The marketplace of HorseChain is very large. Here, we provide services and solutions for the breeders, trainers, and merchants. Therefore our service solutions are for the all equine industry. Every person in the field of equine industry can join our ecosystem and take benefits of our services. In the HorseChain Solutions Dapp, logistics providers, trainers, breeders and event organizations can advertise their services. All service providers are paying a small fee for listing on the platform with HorseChain tokens.

## **7.3. Community**

HorseChain is connecting the whole equine industry and lifestyle in one place. Every kind of peoples in the equine industry such as Horse Riders, Breeders, Steed Dealers, Coaches, Trainers, Veterinarians, Merchants, Governments And Some Trade Organizations are joining the HorseChain community. Our community is continually growing. Therefore, we are also developing dapp solution where the equine community can create or respond to the content such as blogs, news, and articles, and where the users may reward the content creators. This could operate in a similar fashion to the way steam functions at the moment.

## **7.4. Referral System**

The ecosystem of HorseChain also includes a referral system. A referral system is a rewarding system for the people who help to enroll more people to our ecosystem. HorseChain rewards the users with HorseChain coins if they invite others.

For this purpose, a referral link is given to every user who joins HorseChain ecosystem. A user can invite other people to join HorseChain ecosystem using that link. And if the invited person joins the ecosystem then the inviter will get some SRH tokens.

# Horsechain Token

## 8. HORSECHAIN TOKEN

HorseChain token is an ERC20 token deployed on the Ethereum Virtual Machine. ERC stands for Ethereum Request for Comments and is the official protocol for proposing improvements on the Ethereum network. Standard rules apply to all ERC20 tokens which let it interrelate with each other on the Ethereum network.

These tokens permit for an exchange of assets of value and can be received, sent and purchased like any other crypto-currency such as Bitcoin or ether through the generation of addresses and wallets which assist these transactions.

### 8.1. Horse Sale Tokenization

Since all the HorseChain Dapps will be running on the official HorseChain app within the ecosystem, the HorseChain economy will use the SRH HorseChain token. We see the SRH HorseChain Token as the means with which global animal professionals and enthusiasts will align themselves with. Through the borderless, international, and decentralized platform, important functions such as trade, knowledge exchange, and verification of data will be enabled. All of these transactions, and therefore exchanges of value, will in the long run being transacted through the SRH token. Similar to a toll gives access to use a freeway, the token enables access to use services and products on the blockchain.

### 8.2. Token Sale Model

The HorseChain Token follows the baseline principle of non-minable, Ethereum based token distribution, in that all SRH tokens are generated and distributed as part of the public equine sale process. In which the cost of 1 SRH Token will be 0.0001 BTC and tokens can be purchased through several ways such as, Bitcoin (BTC), Ethereum (ETH), fiat payments.

### 8.3. Token Distribution

How tokens are distributed can have an important impact on the general functioning of the HorseChain and general system safety. Therefore we ensure that SRH tokens are efficiently distributed to key stakeholders on the network and that all required roles are effectively filled, at the right time. HorseChain tokens are distributed in the following way: 65% of SRH Tokens are issued for Crowdsale, 10% to the team, 15% to founders' team members, 5% to the Advisors and Partners, 5% to the Beauty, Airdrop, and Referrals and 15% are reserved for Agate Ecosystem.

### 8.4. Token Sale Objectives

The Objectives of the SRH Token Sale is to kick-start the HorseChain venture and bring it into full production mode as rapidly as possible. As written in the white paper, we have a plan to construct a worldwide business. The SRH Token Sale proceeds will be used to construct out the platform and its applications, to set up operations and to roll-out the business internationally across the identified target markets.

We want to provide a secure way to make the transactions for the users of the HorseChain. Thus the major objective of the Token sale is to provide the opportunities to the stakeholders to kick-start the business through our platform. This will grow up the trade in the equine industry through HorseChain platform.



### 8.5. Risks to Participating in the Token Sale

Token sale participants should know the risk of purchasing tokens and read this full whitepaper carefully before participating. The HorseChain Token sale may contain the following risks:

- **Technical Risk on the ERC20 standard:** All efforts will be made to make certain the platform is free from technological bugs; however there could be some technological risks. Participants must be intimate with blockchain and Ethereum technology to recognize these risks. Participants should know the risks around private key transmission and storage.
- **Risk of criminal intervention and hackers:** HorseChain implements all possible practice security measures to reduce potential attacks. Participants should make all sensible efforts and follow all instructions from HorseChain to make certain they are dealing with the right person.
- **Regulatory risk:** The token purchases should conduct their individual due diligence to make certain that they comply with all local laws regarding crypto-currency, tax, securities, and other regulations in their jurisdiction.

### 8.6. ICO

ICO, Initial Coin Offering, can be thought of as a form of crowdfunding that offers startup companies with the capital required to successfully launch the project. It is done through cryptocurrency. The main thought in buying the company's token is that the worth of the token should be increasing over time if the company develops appropriately.

The demand for HorseChain platforms based on blockchain technologies is quickly increasing. More individuals are selecting crypto-currencies as their medium for contributing to startups and raising their money, and the fact that they are becoming easier to exchange for several other currencies (including other cryptocurrencies) makes them much more attractive. Therefore, HorseChain has decided to be at the forefront of this financial revolution.

Using normal means of funding can be extremely time-consuming, unnecessarily stressful, and rather tough. To reduce the time needed for development of HorseChain platform, HorseChain has used an ICO. In doing so, we can provide a somewhat shorter and much less complicated sale period and start building our platform much faster.



# Risk Assessment

## 9. RISK ASSESSMENT

The HorseChain platform is committed to providing organizations and individuals worldwide in the equine industry with easy and decentralized solutions for task management, and the SRH Horse Chain Tokens are designed to be utility tokens to serve several purposes facilitating the HorseChain Platform as described in this White Paper. Users may have dissimilar purposes when joining the HorseChain ecosystem or purchasing the tokens. Each purpose contains risks that are disclosed in this part. The users should admit that the key risks explained here are not planned to comprise a comprehensive list of all the risks that may apply to a buyer or a holder of SRH Tokens.

### 9.1. Technological Risks

Smart contract and Blockchain technology are yet in a preliminary development stage and their application of experimental character carries important technological and operational risks. It is probable that the HorseChain smart contract system or the early contribution smart contract system, or elements of the HorseChain Platform, could contain vulnerabilities, weaknesses or bugs that could cause, inter alia, the complete loss of the holder's utility and/or the value of the SRH Tokens by impacting the functionality and operation of the HorseChain Platform. Outside actors may utilize such vulnerabilities or errors for individual gain or the HorseChain Platform may be affected in any event without such action.

### 9.2. Security Risks

The nature of SRH Tokens and the Ethereum network may lead to an enlarged risk of cyber-attack or fraud and may mean that technical difficulties experienced by the users and developers of the HorseChain Platform ecosystem could prevent access to or use of your SRH Tokens. For instance, it is probable that an illegal third party could use a coding weakness in the HorseChain Platform code and interrupt, damage or otherwise attack it. If you hold SRH Tokens on a cryptocurrency exchange, the private keys to those SRH Tokens are held by that exchange. Should that exchange be hacked or otherwise compromised, your Horse Chain Tokens may be stolen or otherwise become unreachable. We strongly suggest that you store your SRH Tokens privately and use cold storage techniques to better secure your SRH Tokens.

### 9.3. Compliance Risks

HorseChain's reputation and the brand image would be harmfully impacted by non-compliance with several local regulations and data protection. Because of HorseChain global presence to local and regional regulatory rules, changes to which may affect the realization of business opportunities in the countries in which HorseChain operates. Also, the increasing significance of data privacy laws may impact the way HorseChain can conduct business.

### 9.4. Confidentiality Risks

In the HorseChain ecosystem, breaches in security could result in the destruction, misappropriation or unauthorized discovery of confidential information including intellectual property or personal data belonging to HorseChain or our stakeholders. A breach in security of, or an important disruption in, our information technology systems or breach of data privacy laws could harmfully affect HorseChain's reputation and brand.

HorseChain will set strengthened security governance, thus increasing the ability to detect, respond to, and close incidents.

#### **9.5. Internal Risks**

While the HorseChain Entities are making all effort to procure the development of the HorseChain Platform, there is no guarantee that the HorseChain Platform will work on every device in the manner as described in this White Paper and if HorseChain Platform is working on a device, there is no guarantee as to the continued functioning or operation of the HorseChain Platform. The HorseChain Platform is subject to change in any feature. No representation is given that any function or aspect of the horsechain Platform will continue to be provided or made accessible at any time.

# Roadmap

## 10. ROADMAP

The primary mission of Horsechain is to record as numerous equines on the platform as feasible so that the industry is protected against fraud and faith is established across all stakeholders. But, the overarching objective is to grow the equine industry as a whole and construct a global community where all horse enthusiasts can meet to trade, connect, exchange, examine, or learn. To attain its determined objectives, Horsechain will require being proactive in the global marketplace. A winning global rollout can however just be executed by construction a modular, phased strategy, with concrete and clear milestones. Horsechain has set some priorities that will let it understand its mission as soon as possible. Described below are the milestones which have already been achieved or recognized for the near and long term.

- **Q1 2018**
  1. Concept Development.
  2. Market research and competitive analysis.
  3. Investigation of current problems in the equine industry and review of technical feasibility.
- **Q2 2018**
  1. The core team identified and reviewed primary industry difficulties.
  2. The HorseChain team is made up of developers, equine experts and professionals, government policy consultants, equestrian federation liaisons, marketing and sales experts, lawyers, auditors, and governance agents.
  3. Start of HorseChain Project
- **Q3 2018**
  1. Successful HorseChain blockchain platform testing.
  2. Q4 2018
  3. Marketing project complete.
  4. Incorporation of new members to HorseChain team.
- **Q1 2019**
  1. Pre-ICO start
  2. Social Network integration
  3. Key strategic Partnerships
- **Q2 2019**
  1. Pre-ICO finish - A token sale event that Horsechain run before the ICO campaign goes live.
  2. Planning for the marketing strategy with the marketing team
- **Q3 2019**
  1. Horsechain will start sale for initial coin offering.
  2. Horsechain announced the Whitepaper first public draft that contains all the information regarding the project such as planning, issues, solutions and Horsechain products.
- **Q4 2019**
  1. Listing and trading HRS coins on most of the big exchanges – Horsechain will list the SRH Horse Chain token on numerous reputable exchanges. The more investors will have access to a token, the more people will buy it.
  2. Horsechain will start the sale of ICO. All kind of people and stockholders from the will be able to can buy SRH tokens.
- **Q1 2020**

1. HorseChain foundation will release the official horsechain app and other dapps to the public.
2. Vertical and horizontal scaling – expanding the whole Horsechain platform by adding more resources and upgrading the hardware and software.
3. HorseChain Token will be listed on Decentralized and Centralized Exchanges.



# Team

## 11. TEAM

The HorseChain Core team hails from extremely strong backgrounds in cryptocurrency (past experience), Finance, Marketing, Economics, and Development. HorseChain combines strong practices from all relevant realms to build out a truly world class and top-level cryptocurrency platform. Team members are going to be added regularly. Visit our website to get updated information about HorseChain team.

- **The Founder – Khalid Al Marzouqi**

Khalid Al Marzouqi is the Founder and Chief Executive Officer of HorseChain Foundation, an experienced and registered horse breeder at Emirates Arabian Horse Society based in the United Arab Emirates. Under his leadership, HorseChain has grown to be one of the world-class digitized equine solution provider companies, as well as providing decentralized applications to the equine industry. He is a 9 years Arabian horse breeder, so, he thoroughly understands the equine industry.

He has over 17 years of experience in the Tech field with a very strong background in IT and a proven track record in IT solutions. He holds the degree of Information Technologies Security and Forensics. Currently, he is the managing director of HorseChain Foundation and working hard to provide the solutions to the equine industry problems.

- **Vinakshi Angural - Social Networking Support**

Vinakshi Angural is working with HorseChain Foundation to provide social networking support. She is an experienced content writer and social media expert. She obtained her Bachelor's Degree in computer science from Guru Nanak Dev University, Amritsar.

Vinakshi has 8+ years of experience in content writing, SEO, SMM, and Wordpress. She has a good understanding of online reputation management. Her objective is to provide good internet marketing services (SEO, SMO, Online Reputation Management, etc) to build a good reputation.

At HorseChain Foundation, Vinakshi is a content provider and managing the online reputation of the foundation.

# Legal Compliance

## 12. LEGAL COMPLIANCE

HorseChain foundation addresses and understands all external regulatory requirements and organizational policies. The managing director of the company is responsible for creating policies; ensuring employees have access to these policies and communicating the risk of non-obedience. He also has the responsibility for the effectiveness and efficiency of the management process, making sure the foundation has visibility into the latest versions of terms and they meet compliance standards.

However, HorseChain's reputation and the brand image would be adversely impacted by non-compliance with various local regulations and data protection. Because of HorseChain global presence to local and regional regulatory rules, changes to which may affect the understanding of business opportunities in the countries in which HorseChain operates. Also, the increasing significance of data privacy laws may impact the way HorseChain can conduct business.

There is little or no precedent on how existing law might treat the fungibility, issuance, settlement finality, collateralization, transfer, sequestration, hypothecation, loan, redemption or other disposition of SRH Tokens. It is also little or no precedent on how existing law might treat the obligations and rights between and among the issuer and the SRH Token holders or purchasers. The occurrence of any relevant issue or dispute could have a material adverse effect on the HorseChain Platform, the HorseChain Entities and/or the PLAN Tokens. New developments in the law and regulations may also adversely affect the regulatory or legal treatment of the SRH Tokens or the HorseChain Platform and/or the Issuer's or the HorseChain Entities' businesses.

However, the HorseChain foundation will try the best to avoid any regulatory issues and we will work on compile with regulations.

# Disclaimer



### 13. DISCLAIMER

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Blockchain technology allows new kinds of communication and it is probable that certain jurisdictions will apply existing regulations on, or introduce new regulations addressing, blockchain technology-based applications, which may be opposing to the smart contract of SRH token and which may, among others, result in considerable modifications to our smart contract and/or the SRH token, including its extinction and the loss of access to the available SRH token.

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