VEGA COIN

Table of Contents

ABSTRACT

Blockchain technology & cryptocurrencies

The advent of the blockchain technology

The need to store information is increasing as society develops, hindering people to do it manually. This is why database exist, as a collection of information that is stored electronically on a computer system. Thanks to database, users can access to a large amount of information and manipulate it quickly and easily.

Today, blockchain is a high-end version of database. Launched just over 10 years ago, it has been growing rapidly then turning into a forefront in the media information and cyber security. Until now, blockchain is probably the best transaction protocol to provide data integrity and protect people's financial holdings.

Blockchain technology was first outlined in 1991 by Stuart Haber and W. Scott Stornetta, two researchers who wanted to implement a system where document timestamps could not be tampered with. Blockchain works as an excellent security tool with three component technologies: Private key cryptography, a distributed network that includes a shared ledger, means of accounting for the transactions and records related to the network.

From the beginning, each user has his/her own digital signature, which is formed by a private key and a public key. Blockchain technology acts as a large network of individuals who can act as validators to reach a consensus about various things, including transactions. This process is certified by a mathematical verification and is used to secure the network.

Furthermore, blockchain technology has its own way to confirm and validate its transaction, so the information such as timestamp and other related is shown, but not the identity of the individuals involved.

For example, two individuals wish to conduct a transaction online, each with a private and a public key, blockchain allows the first person to use their private key to attach information regarding the transaction to the public key of the second person. This information together forms a block, which contains a digital signature as well as a timestamp and other relevant information. Meanwhile, the identity of both individuals is not revealed.

That block is transmitted across the blockchain network to all of the nodes, or other component parts of the network, which will then act as validators for the transaction. In consequence, this transaction turns into a private and anonymous transaction, so the safety of users is ensured.

Businesses have been gradually realizing the great usage of blockchain in all sectors. Utilization of blockchain allows enterprises to achieve great transparency, efficiency, security and traceability improvement.

More specifically, during and after the transaction, ledger transactions are disclosed to customers and all members of the company, then an audit trail is present to trace where the goods came from, thereby keeping the transparency, traceability and commitment to trust and cooperation lasting between companies and customers.

By using blockchain, this process is shortened and effective without the use of middlemen and digital currency transactions, and all information of both sides of transactions is automatically stored through a kind of specialized smart contract. Blockchain is far more secure than other record keeping systems since each transaction belonging to a specific company unit is encrypted and linked to the previous transaction. The immutable nature of blockchain's complex mathematical formation keeps it safe from fake information and attacks.

In certain ways, blockchain has the potential to be applied in many industries from economics to politics, culture...

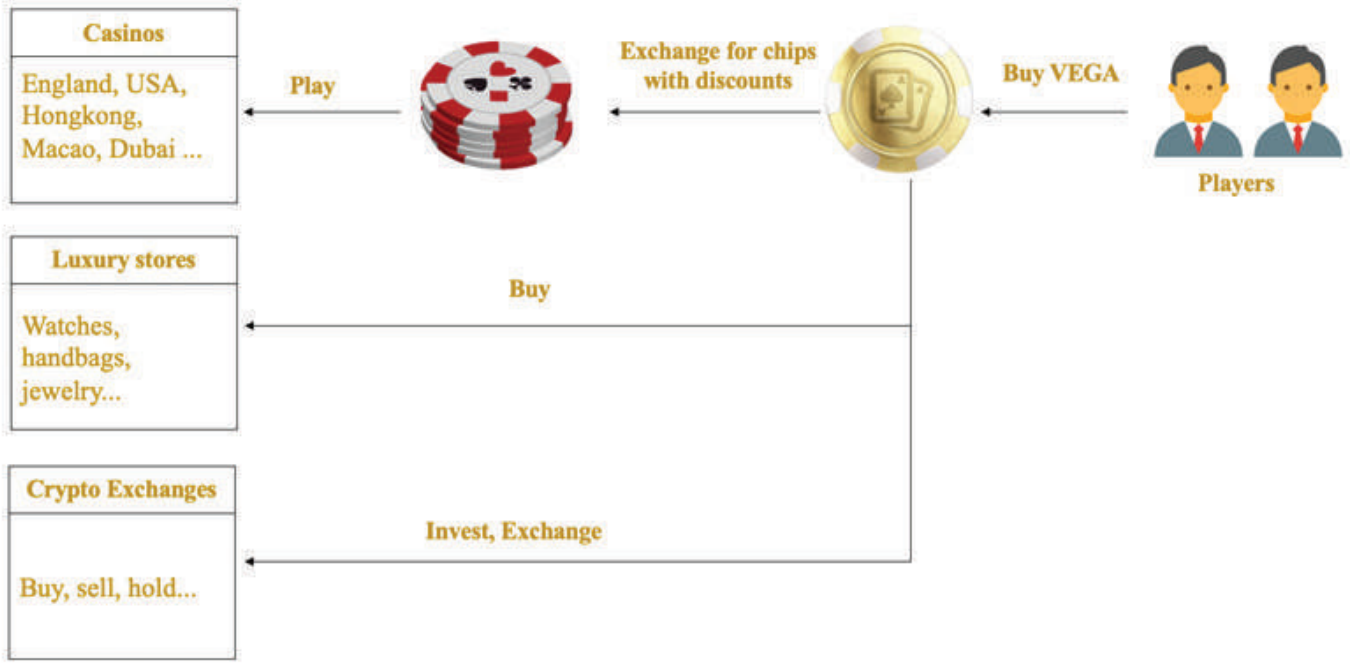
Innovation of cryptocurrencies

In recent years, political situation in many countries become unstable, which leads to a huge economic fluctuation, particularly about the value of money. Currencies are losing their position in the trade market.

The creation of cryptocurrencies is the solution to the major problem of the traditional financial system such as distribution, lack of transparency and risk in trading. In several years, blockchain technology and cryptocurrency have been growing rapidly. Digital currency has superior advantages against traditional money such as anonymity, constant access, lower fees, access to everyone and there hardly never has fraud on this platform.

From the beginning, each user can perfectly cover their personal information during the transactions. Besides, individual cryptocurrencies are digital and cannot be counterfeited or reversed arbitrarily by anybody. Furthermore, people can log in the system wherever and whenever they want and follow the fluctuations of digital market, with digital currency being exchanged over the internet, there are usually little or no transaction fees.

VEGA project



VEGA project was launched to expand the world's digital currency system. VEGA starts by connecting to big casinos around the world, from physical ones in England, USA, Hong Kong, Macao, Dubai... to online ones. When the system becomes stable, our coin will expand its impact to luxurious commodities market such as watches, handbags, jewelry... The final goal is to build an ecosystem allow VEGA owners use in various fields, particularly philanthropy projects.

VEGA coin is now recognized by international casino organizations as an official cryptocurrency in the world. Our ecosystem has millions of users, with hundreds to thousands from each casino. When buying VEGA, owners will be able to enjoy discounts.

Already participated international cryptocurrency exchanges and combined with ETH ecosystem, VEGA has high liquidity.

VEGA ECOSYSTEM

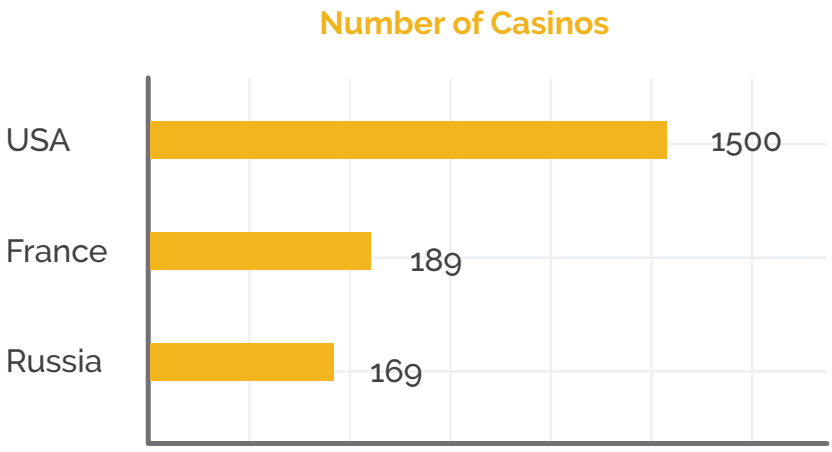
Casino industry overview

Nowadays, sports betting and casinos are gradually turning into an important contribution to revenue of tourism industry in particular and economy in general over the world. Due to its sudden and rapid growth, many businesses entered this new form of commerce, leading to a fierce competition in this field.

In 2019, sports betting market was valued at 85.047 billion USD by Statista. Meanwhile, according to The Business Research Company, global gambling market is expected to reach a value of around 565.4 billion USD, with an annual growth rate of 5.9% until 2022.

On account of the inclination of numerous governments towards the legalization of sports betting, it is projected to continue witnessing considerable growth in the upcoming years.

Casinos now open in many places worldwide with diverse sizes. In the United States, there are more than 1,500 casinos, including Win Star World Casino & Resort, the largest casino in the world.



USA is considered to own the largest number of casinos, followed by France with 189 ones and Russia with 169 ones. In Asia, casinos concentrate in such areas well-known for tourism as Singapore, Macao and Malaysia.

It is noticeable that around the world, casinos are only built in certain regions which have strong economic growth or thriving tourism system. They are often placed near hotels, restaurants, luxury malls or luxury yachts to be associated with a luxurious impression. Furthermore, the rising penetration of various legal online platforms in some countries is also further supplementing this potential.

Each year, global casino industry generates billions USD of revenue and continues to grow steadily over time. Casino companies are currently competing fiercely for market share, doing their best to survive and maintain their business.

Las Vegas Sands, one of the world's top casino companies, was worth 43.77 billion USD on December 11, 2020. MGM Resorts International's market capitalization was 14.907 billion USD on December 8, 2020. The third largest company is Caesars, which owns more than 50 casinos and 7 golf courses, has annual revenue of more than 10 billion USD. Crowd Resorts, known as the most important entertainment group in Australia with 2 giant casinos (Crown Perth and Crown Melbourne) was calculated more than 8.7 billion USD.

Nevertheless, the gambling capital of the world nowadays is Macau, after surpassing the throne of Las Vegas. However, regarding popularity, Las Vegas currently ranks first.

VEGA's role in the casino industry

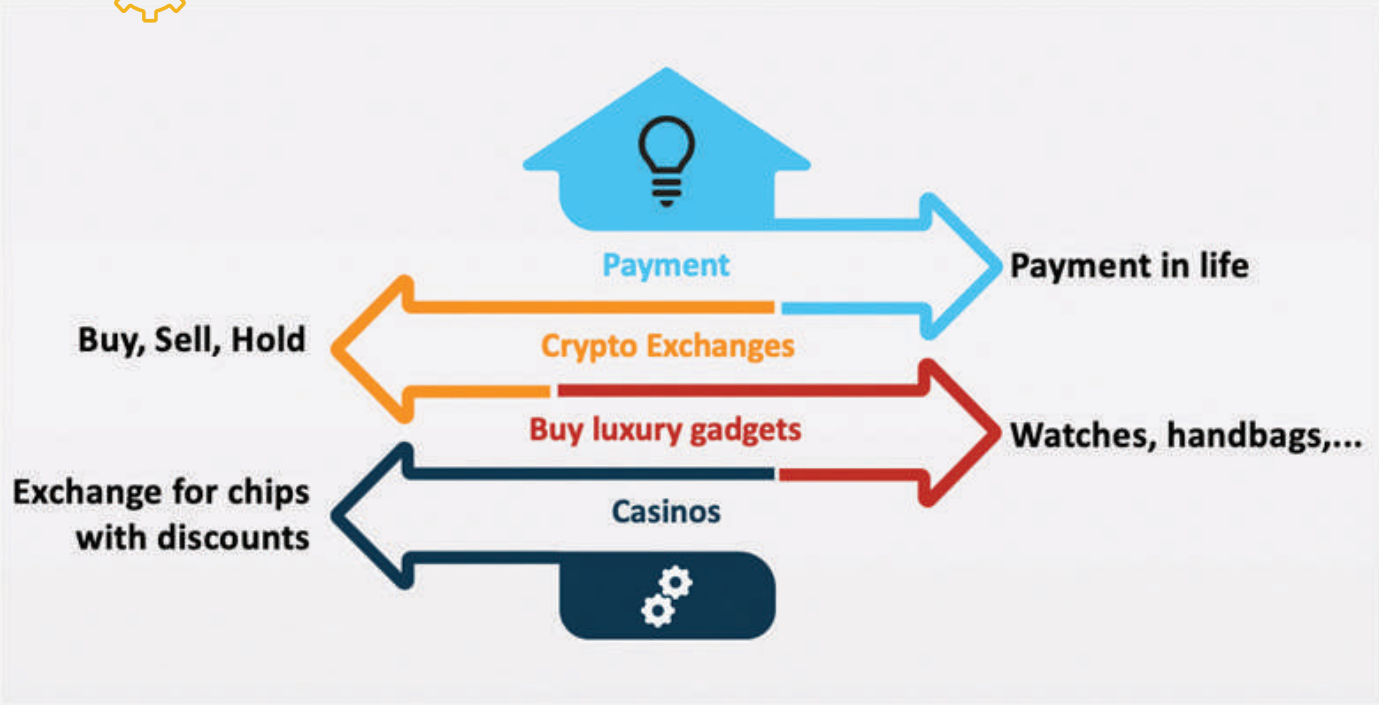
The entry of VEGA helps diversify the cryptocurrency system, expand the casino market and contribute to the international economic system.

First, VEGA offers many attractive discounts when customers buy tokens and participate in the platform. According to the predetermined plan, the appearance of VEGAplus plays an essential role in online casinos, followed by a means of exchanging goods and ultimately, transformed and contributed to the unique ecosystem which is created with the aim of social philanthropy.

Second, VEGA system has high liquidity. It has been listed on the international cryptocurrency exchange, so it is easy for owners to trade it with other coins or take money back. Created based on Ethereum, with the standard ERC-20 implementation, the development of VEGA will also become easier.

Instead of cash, VEGA owners enjoy better experience when all personal information is encrypted during transaction process. No one can access such information without permission, except for the owner of that account. Therefore, customers can be completely assured when using VEGA and participating in the VEGA ecosystem with the exceptionally reliable and secure performance.

VEGA ecosystem



VEGA is built based on Ethereum with a specific orientation program from the beginning. We plan to spend a fixed amount of time to stabilize the mainstream casino system across the country and their own economic background, while also looking for other suitable partners.

In essence, VEGA's primary use is for playing in casinos. VEGA coin is now recognized by international casino organizations. Our ecosystem has millions of users, with hundreds to thousands from each casino. When buying VEGA, owners will be able to enjoy discounts.

At the same time, our team focus on maximizing VEGA's market value. The internal trading floor was established, making individual purchases easier, while still ensuring VEGA's full transparency, secure and anonymous characteristics.

Furthermore, we plan to include VEGA on popular and large-volume international exchanges, such as Binance, Coinbase Pro, Kraken, Bitfinex, Gate.io, Crypto.com, Binance US, Gemini, Houbi Global, OKEx...

Ultimately, VEGA will not only be such a simple gambling system but will be diversified, expanded and developed in many ways. We will cooperate with the world's top luxury brands to create a premium shopping ecosystem for all users. With VEGA, users can buy luxurious clothes, watches, jewelleries... In other words, VEGA turns into an official means of payment at major luxury chains in some potential countries such as China, Hong Kong, Taiwan...

The important is, in the future, the VEGA application that integrates digital wallet will soon be available to users, providing convenient payment gateway and fast transaction support. It enables a wide variety of activities under no fees and a wide range of frequent offers. VEGA app also helps checking and controlling accounts more convenient and faster at anytime, anywhere.

After the VEGA ecosystem operates smoothly, we aim for philanthropy. VEGA can support the poor or those need help. It will take a long time for this plan to be completed, but once the work is completed, the VEGA system will make a great contribution to help solve persistent society problems.

VEGA Staking

VEGA partners can stake VEGA tokens and earn up to 5% annually. This revenue is sharing of profits from the shareholders participating in the VEGA ecosystem.

DECENTRALIZED VALIDATION SYSTEM

Overview

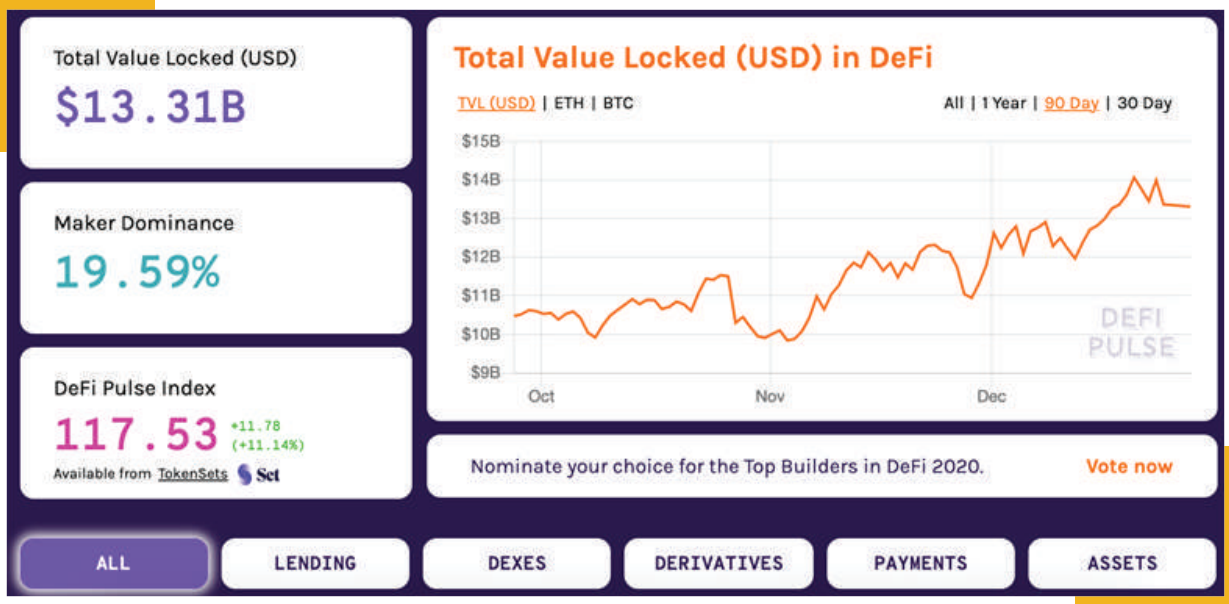
VEGA is created based on Ethereum with the standard ERC-20 implementation. A decentralized validation system, or decentralized applications (DApps) are an open-source software platform implemented on decentralized blockchains and fueled with tokens created using a protocol or algorithm. DApps are the operator of blockchain and the thorough application of their solutions can help develop many industries in the future, especially the cryptocurrency industry. Dapps do not belong to anyone, cannot be shut down and do not have a downtime. They are not hosted on a centralized server, but instead, on a peer-to-peer decentralized network.

On the Ethereum platform, DApps are divided into 3 main categories. The first one is financial applications. These applications provide users with a method of financial management, for both traditional and cryptocurrencies, including savings, inheritance and even some kind of comprehensive employment contract. The second category is financial sale application.

It is money-related apps, but finance is not the focus of how this app works. The final one is non-financial applications which do not involve money, such as identity verification processes, voting systems, administrative tools, or even decentralized file storage systems.

While there are various ways of defining a DApp, they are usually described as applications that have several characteristics, such as: Open source, decentralized and cryptographically secure. That means the source code is intentionally made available to the public, so anyone is able to verify, use, copy, and modify the code. Second, since DApps run on blockchain networks, they are not controlled by a single entity or authority. Instead, they are maintained by multiple users (or nodes). Finally, the application is protected by cryptography, meaning that all the data is recorded and maintained in a public blockchain, therefore there is no single point of failure.

DApps are applicable to a variety of scenarios, including games, social media platforms, crypto wallets, and financial applications (DeFi). DeFi stands for "Decentralized Finance" and refers to the ecosystem comprised of financial applications that are being developed on top of blockchain systems. DeFi may be defined as the movement that promotes the use of decentralized networks and open-source software to create multiple types of financial services and products. The idea is to develop and operate financial DApps on top of a transparent and trustless framework, such as permissionless blockchains and other peer-to-peer (P2P) protocols.



DeFi is a hot trend of blockchain nowadays. Source: https://defipulse.com/

Currently, the three largest functions of DeFi are: Creating monetary banking services (e.g., issuance of stable coins), providing P2P or pooled lending and borrowing platforms, enabling advanced financial instruments such as DEX, tokenization platforms, derivatives and predictions markets. DeFi is just a subset of DApps, but it plays a crucial role in the financial management of the VEGA cryptocurrency system.

VEGA token standard

ICO is an indispensable tool in exchange of a certain cryptocurrency system for users. Between two basic cryptocurrencies in the world, Bitcoin has a few problems operating the system that prevent the ICO program from running quickly and conveniently for both sides: the producer and users. Ethereum was created later but was able to fix the systemic flaws Bitcoin made. So, the Ethereum blockchain becomes the better choice for ICOs.

ICO is essentially a program that collects cryptocurrency from contributors and, after reaching a target amount, distributes newly created tokens to the ICO's contributors. In order to do so, the ICO needs a system that can be programmed to distribute the tokens without outside input. An ICO relies on common programming commands like conditional statements and loops to analyze, verify, and respond to incoming transactions. These pieces of code need to integrate with the blockchain on which the ICO is built. And luckily, the Ethereum blockchain is itself the right piece for an ICO.

First, Ethereum uses a complex data structure called a Merkle Patricia Trie (MPT) to store a tree of program states, allowing for quick modification and verification of the various states required to execute an ICO. Trie is an ordered tree data structure that is used to store a dynamic set or associative array where the keys are usually strings, and a node's position in the tree defines the key with which it is associated. Patricia stands for Practical Algorithm To Retrieve Information Coded In Alphanumeric. A Patricia Trie in Ethereum is a binary radix trie - binary choice at each node when traversing the trie. And the term Merkle implies that the root node becomes a cryptographic fingerprint of the entire data structure. MPT is a form of storage of codes that is especially important in operation of the Ethereum system.

Plus, instead of only containing a transaction ledger, the Ethereum blockchain's multiple program states allows for the execution of smart contracts that automatically calculate the amount of funds raised, verify and confirm transactions, and distribute new tokens upon the completion of the crowdsale.

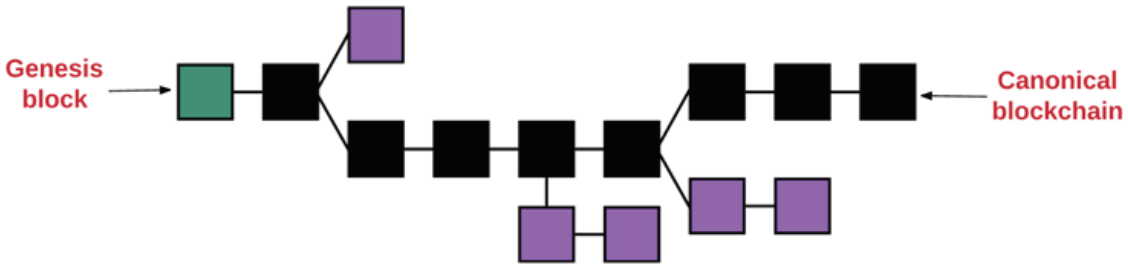
Smart contract is not a new idea. It was presented by Nick Szabo in 1994, the birth and development of Bitcoin allow this plan to start but just until the advent of Ethereum that made this scheme common for everyone. Smart contracts utilize all the strengths of Blockchain technology, including confidentiality, economic efficiency and fast standardization. When a person participates in the network, in case of a transaction, each node is encrypted and distributed, thus ensuring it will not be lost or modified without permission.

Second, Ethereum is Turing-complete, but it uses something known as "gas" payment to process the instructions in a program code. Gas provides incentives for people to supply their own CPU power to execute the programs on the Ethereum blockchain. If a program runs out of gas, it will be absorbed. This prevents infinite loops and DOS attacks against ICOs, as every execution is eventually terminated. As a result, ICOs are more secure on Ethereum, and an attacker cannot deny service to your crowdsale based on a denial-of-service attack.

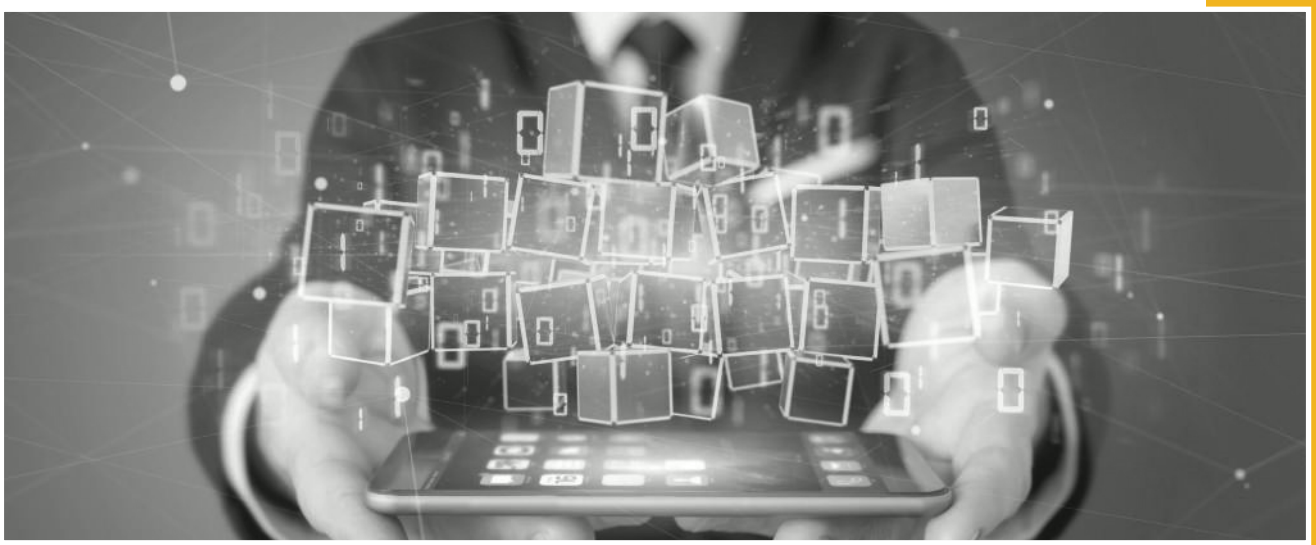
Turing-complete's name derives from the implementation a Turing machine of a computer or a programming language. A Turing machine is a mathematical model of computation that can, in principle, perform any calculation that any other programmable computer can. Nevertheless, processors and programming languages are often called Turing complete if they have the maximum algorithmic computing power that the minimum set of operations gives.

Gas is the name for the execution fee that senders of transactions need to pay for every operation made on an Ethereum blockchain. The name gas is inspired by the view that this fee acts as cryptofuel, driving the motion of smart contracts. Gas is a means of transaction alongside either used in contracts or transactions to prevent intentional attacks and abuse on the Ethereum network.

Finally, Ethereum's Greedy Heaviest Observed Subtree (GHOST) protocol allows for faster block creation times without compromising blockchain security, meaning ICO transactions get processed faster. When you are dealing with a crowdsale of new tokens, this means transactions can be verified and added to the crowdsale total quickly. Later, distributing the new tokens also occurs quickly without sacrificing the integrity and security of the blockchain.



The Ghost protocol in Ethereum was introduced in 2013 as a way of combating the way that fast block time blockchains suffer from a high number of stale blocks - i.e., blocks that were propagated to the network and verified by some nodes as being correct but eventually being cast off as a longer chain achieved dominance or Forking. An orphan, or stale block, is created when two nodes find a block at the same time. This process may last for several minutes, for example, in Bitcoin, the probability of finding a block at the same time is relatively low when the block time is ten minutes and propagating a block to 50% of the network takes roughly twelve seconds. During that time, thanks to GHOST, Ethereum was drawn to the maximum of waste time to dig the mine. With seven specific levels, the miners would be able to shorten the amount of mining time, so both sides had benefits.



On cryptocurrency system, ICO plays an important role of distributing tokens. A token is an object which presents the rights to perform some operation. Especially, on a cryptocurrency market, a token is highly necessary. There are three different types of tokens.

In networking, a token is a series of bits that circulate on a token-ring network. The rights to own a token of a user permit him/her to send information to the owner of another computer.

In programming, a token is a single element of a programming language. There are five categories of tokens which are constants, identifiers, operators, separators and reserved words.

In security systems, a hard token is small card that displays an identification code used to log into a network. When the card user enters the correct password, the card will display the current ID needed to log into the network. This adds an extra level of protection to the network because the IDs change every few minutes. This step helps ensure the safety of the digital money system. As the token circulates, computers attached to the network can capture it. The token acts like a ticket, enabling its owner to send a message across the network.

Full list of ERC-20 tokens added

BNT	QNT	cDAI	Multi-collateral DAI
CVC	RCN	cSAI	KCS
EURS	REP	ENJ	LEND
GNT	RLC	OXT	LOOM
GYEN	SAI	CEL	LRC
KNC	SNT	CELR	NEXO
MANA	STORJ	cUSDC	NPXS
MATIC	sUSD	ELF	PAY
MTL	WBTC	ENG	POWR
NMR	WTC	FET	REN
OKB	ZUSD	HOT	VGX

Ethereum offers a standardized way to create new tokens on its blockchain called the ERC-20 protocol. ERC-20 is not a piece of code, software, or technology. Rather, it is the guideline that facilitates the integration of various currencies. Before ERC-20, each new cryptocurrency token created its own system for verifying account balances and initiating transfers. These systems included different functions and arguments that were not necessarily compatible with other tokens. Setting up a system to interchange between token types required carefully studying both sets of code to create a bridge so that the two systems could talk to one another.

Ethereum's ERC-20 protocol changes all. Now all ERC-20 tokens can easily be interchanged with other ERC-20 tokens. ERC-20 tokens have the same functions, with the same names and take the same arguments. They use a common set of rules and guidelines which ensure the two currency systems will be able to talk with one another. As a result, creating an ERC-20 compliant ICO on Ethereum means the new token has immediate interoperability with all other tokens on the Ethereum blockchain.

In brief, when VEGA token standard was created based on the ERC-20 token, it can completely inherit ERC-20's features and benefits, including interacting with other currencies, smart contract, used on compatible platforms, projects, exchanges, ensuring operation with DApps, secure and easy transaction and making assets interchangeable.

VEGA token distribution

A total supply of 100,000,000 VEGA tokens will be distributed according to the following distribution model.

Available for token sale: 10%

Stage 1: Private Sale: 20th January 2021

Percentage of Tokens sale will be only available for Strategy partners: 5%

Number of VEGA to be released: 5,000,000

Stage 2: Quarter II 2021

Listing on top exchange platforms

Percentage of Tokens sale will be issued: 2%

Number of VEGA to be released: 2,000,000

1 Private Sale

2 Publish Exchange Platforms

3 Expand the Ecosystem

ROADMAP

Stage 1: Private Sale

First, a private sale is proceeded for strategy partners, allowing buyers not to be involved in overspending on the number of tokens intended. Besides, VEGA can be invested with high speed, flexibility, privacy by genuine buyers.

After the private sale, a public sale is organized, supplying buyers the opportunity to buy a large number of tokens with market prices.

Stage 2: Listed on Cryptocurrency Exchanges Platform

We plan to list VEGA on popular and large-volume international exchanges, such as Kraken, Bitfinex, Gemini, Houbi Global, OKEx. After that, we will list VEGA in Binance, the largest cryptocurrency exchange.

Stage 3: Expand the ecosystem

When the fundraising phase is completed and the economic foundation of VEGA is stable, the ecosystem has a fixed number of strategic partners, the number of transactions increases each day and so does the reputation of VEGA. At this time, we will expand our operation and application to other casinos, then increase economic resources so that the plan can continue to develop at a later time.

Besides, when VEGA had a solid foundation to ensure long-term development and harmonious integration into the economy and also reached out to dominate the international cryptocurrency market, we will expand the diversity of our online casino and cryptocurrency businesses with the sale of real-world items. These are luxury commodities such as watches, bags, jewelry, gems... Customers are allowed to buy anything in the VEGA system and are fully assured of quality by VEGA's cooperation with many major luxury brands around the world. The convenience comes from the fact that customers can stay at home and transact through smart contracts, and products will be delivered to their houses instead of their traveling to physical stores in foreign countries but still cannot guarantee absolute purchase rate.

This program is highly regarded and has a high chance of becoming popular with members of the VEGA ecosystem. The original purpose is to create a VEGA ecosystem in which users can legally gamble, buy goods, exchange cryptocurrencies and even use them for philanthropic activities. Philanthropy consists of private initiatives for the public good, focusing on quality of life, for example focusing on provision of public services. In consequences, the development of VEGA system not only serves economic activities, but also contributes to solving social problems.

CONCLUSION

In conclusion, although the cryptocurrency market has been the investment trend of many large enterprises, the entry of VEGA marks a positive change.

In short, VEGA is created with many outstanding functions. It was originally used for trading in the casino industry. It was later developed into a currency that can be used to pay through its own application and from there, it contributes to the creation of a consumer and entertainment system with VEGA, making it extremely convenient and comfortable for customers. But, the ultimate and foremost purpose of VEGA is for philanthropy, which is to help the poor and people in similar situations.

VEGA is projected to be a popular new currency commonly thanks to its popularity in many fields, high liquidity, tight security, reliability and humanitarian purpose from the beginning.

With a team of enthusiastic and highly skilled people, and the invention based on the most advanced technology in the planet, we will continue to develop the project further to serve the needs and benefits of customers, making all their experience on the VEGA platform not considered to be wasted.