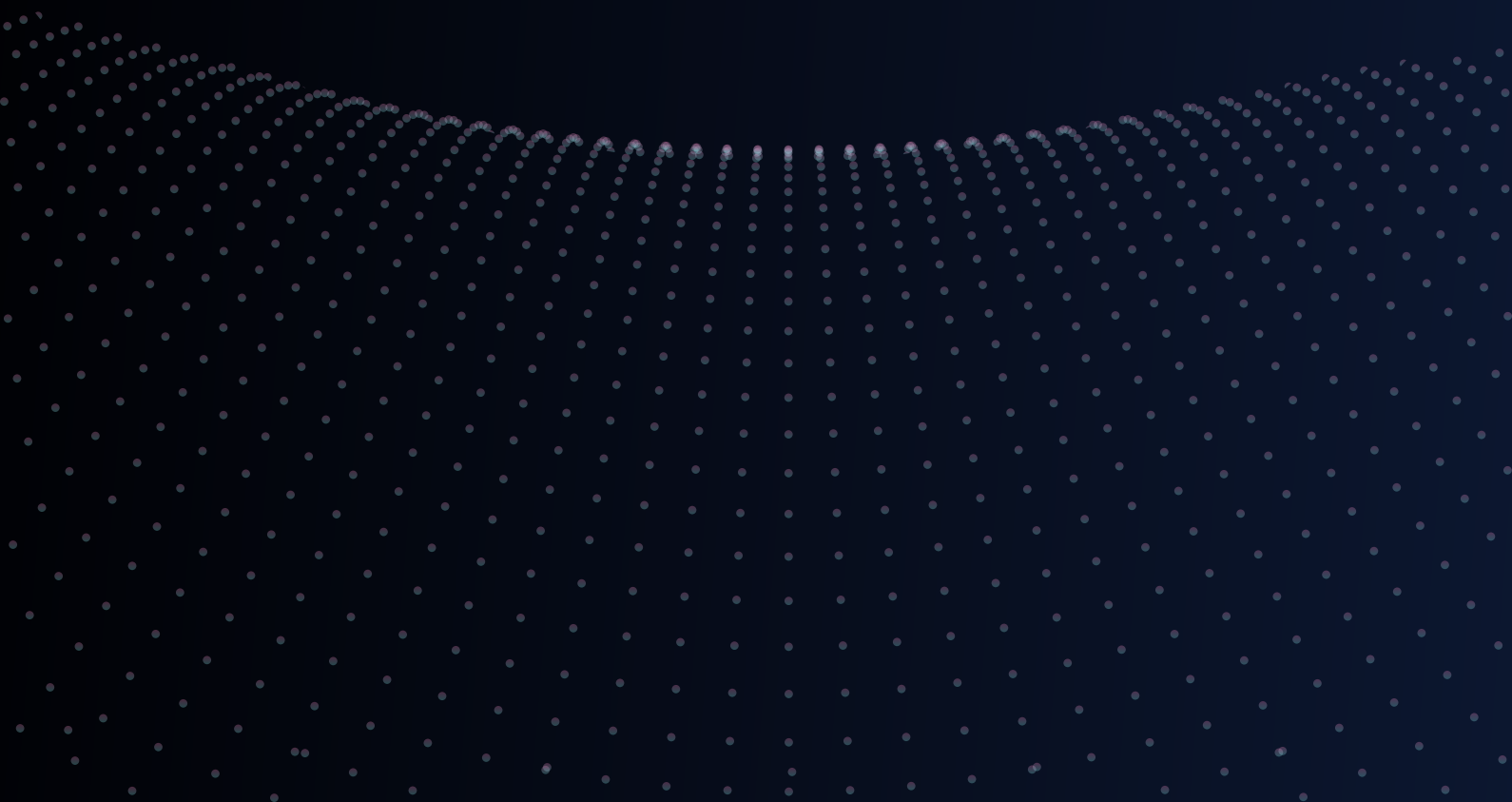# Aztlan Market

Whitepaper

Introduction

We want to create a platform that allows content creators such as artists, musicians, photographers, etc., to exhibit, sell and add authenticity and uniqueness to their artwork. On the other hand, we want to help buyers to be certain about their acquisitions, giving them the tools to certify their property as well as the provenance of it. This is why we created **Aztlan Market.**

The emergence of Blockchain technology has brought about the possibility of tokenizing interchangeable digital assets such as money, and furthermore, single digital assets (Non Fungible Tokens NFT).

Aztlan Market intends to be the first NFT Marketplace entirely developed in Mexican territory, by Mexicans, for Mexicans. As a result of being pioneers in Latin America and knowing the market's needs, we want to make an incursion into the use of Blockchain technology, making it accessible and viable for everybody.

Even though there are similar solutions in the Blockchain field, we find ourselves in a virgin territory regarding Latin America, because of this, we invite you to keep reading the innovative proposals that we have and will continue developing.

Aztlan Market

Aztlan Market is a hybrid multi chain and multi wallet DApp, that makes it possible to create, sell and certify digital artworks by tokenizing and registering them using Blockchain technology.

DApps or decentralized applications are a kind of application whose operation is based on a decentralized network of nodes that interact with each other.

When interacting with this type of applications, users do not have a traditional username and password in order to authenticate themselves, instead, they use "wallets" that allow them to connect to the platform. This wallet will provide users with a public key that will allow them to identify themselves, and a private key with which they will sign the transactions in the name of the public key.

Since Blockchain technology is still in an early stage, there are some limitations that hinder user experience (UX), this is the reason why in Aztlan Market we use some centralized tools that allow us to avoid these limitations and give users a more free-flowing experience.

Every digital artwork displayed on Aztlan Market is property of its owner, who will be able to decide whether to sell them or not. The copyright belongs to the creator. The owner will have the property of a token (NFT) that represents the artwork inside the Blockchain technology, but he will not be able to restrict other people to download a copy of this digital asset. Similarly to a physical artwork, a Monet will always have been created by Monet, while its owner is free to sell it, auction it, etc.

Architecture

Aztlan Market makes use of the following infrastructure in order to operate:

- User Interface
- Web3 Client (Wallet)
- Blockchain Networks (Mainnets: Ethereum, Binance Smart Chain, Polygon. Testnets: Rinkeby, BSC Testnet, Mumbai)
- IPFS (Protocol designed to interconnect systems through P2P. It is a network to distribute content, completely free).
- Backend

Artwork creation diagram
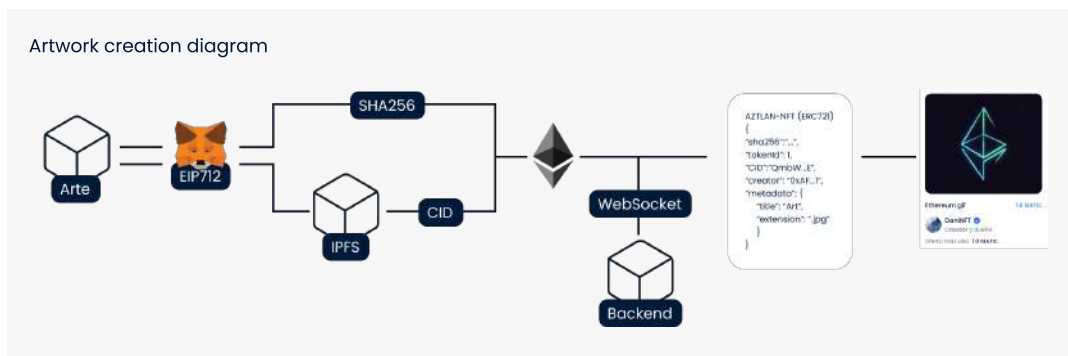
Multiwallet

In Aztlan Market users have the possibility to choose the Wallet provider of their choice. At this moment, it is possible to choose from Metamask, BSC or Torus.
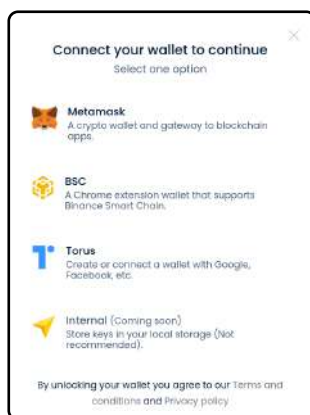
* Representative image of the platform

Metamask

It is a browser extension that allows users to interact with DApps and carry out the functions of a wallet. It is so far the most popular and tested way to accomplish this interaction. It allows connection to several networks, being automatically connected to the Ethereum network.

BSC

Similarly to Metamask, BSC client is a browser extension that implements the same functionality, however, the initial connection is made to the Binance network (BSC) and it has a friendlier interface.

Torus

Torus allows you to generate a wallet with a Google, Facebook or some other social networks accounts. Besides, it is not necessary to install an extra browser extension, since the client is "installed" inside the application as an extra script. This is the best option for an inexperienced user that interacts with decentralized applications.

MULTICHAIN

Users are free to choose the network they want to use according to their needs, so we offer them the possibility to choose from the main network of Ethereum (Mainnet), Binance Smart Chain (Sidechain) or Polygon (Sidechain).

* Representative image of the platform

Each network has its own pros and cons; this is why it will be the sole user responsibility to understand the differences between them before operating the platform.

Even though, we can point out that the speed and costs of using the Sidechains make them a more attractive option.

ACTORS

Inside Aztlan Market structure, we can find the following actors, which can interchange its role at any time:

Creator

It is the user responsible for the creation of the NFT. This actor will have the following responsibilities:

He must be sure that he has the authorship and property of the content (artwork) that he uploads to the platform, and that it meets the Terms and Conditions.

He will provide all the possible information regarding its artwork.

* Representative image of the platform
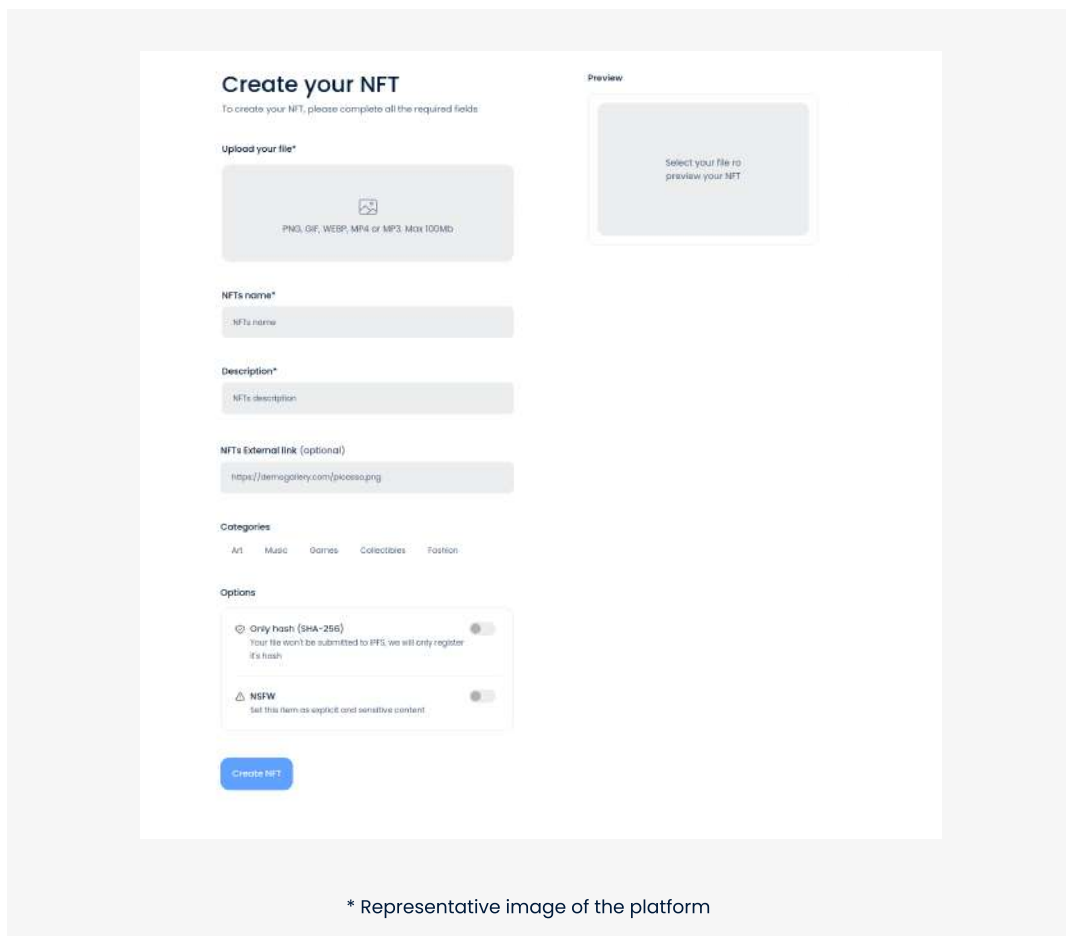
He will decide if the artwork will be uploaded to the IPFS platform (see IPFS) or if he will just register its fingerprint (SHA256) (see Hashing Process).

When creating the artwork inside the platform, only a relationship between the creator and the artwork is being created. The following step consists of creating a relationship between the artwork and blockchain. In order to accomplish that, it is necessary to understand another concept, the "Smart Contracts".

The "Smart Contracts" are a group of instructions that define the rules about the storage of the information in the blockchain. These, in turn, are stored inside the network, in order to guarantee that these rules will never change.

Regarding Smart Contracts, some standards have been created in order to satisfy the needs of the blockchain ecosystem and the decentralized finances. The ERC20, which is widely used to create Fungible Tokens and the ERC721, used to create Non Fungible Tokens No Fungibles (NFT), are among the most well-known standards.

A Smart Contract that inherits the traditional ERC721 methods, has been created in order to operate the marketplace. Some of its capacities have been extended in order to perform the selling operations inside the marketplace. Within this group of extended instructions, the following stand out:

- An artwork is unique, this is, there are not two artworks exactly equal. This is achieved by registering a Hash of the artwork (see Process of Hashing).
- An artwork can remain in exhibition without the need of being sold.
- An artwork has only one creator that will not change through time.
- An artwork has only one owner.
- It is possible for an artwork to change its owner, when the owner himself decides to perform any of the following actions:

Direct sale

In a direct sale, the creator or the owner, will have the possibility to choose the amount of tokens (native cryptocurrency or any ERC20 token of the applicable network) of his choice, that he wants to receive in exchange of transferring the property of his NFT to the buyer.

Auction

In an auction, the creator or the owner, will be able to choose, in the same way that in a direct sell, the initial amount of tokens (in native cryptocurrency or any ERC20 token of the network to which the user is connected), and a limited amount of time, during which the buyers will be able to offer a higher amount of the same token. When the period of time has passed, the last bidder will have the right to claim the property of the artwork.
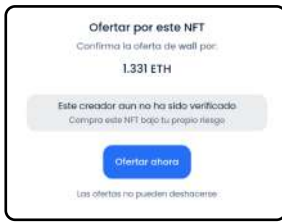
*Imagen representativa de la plataforma

It should be noted that the amount offered will remain blocked inside the Smart Contract until the auction time period is finished. At that moment, the highest bidder will be able to claim the property of the NFT and the remaining bidders will be able to recover the tokens they have offered.
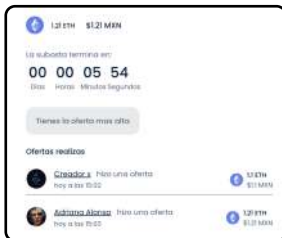
*Imagen representativa de la plataforma

- Every artwork will have a complete registry of its transactions in Blockchain.
- The creator can mine any number of NFTs.
- The buyer can be the owner of any number of NFTs.
- An artwork can be mined by the creator or the creator can use the Lazy Minting functionality in order to avoid the need of paying a gas fee for the minting of the artwork.

Lazy minting

Aztlan Market makes use of Offchain operations; this means that, using the cryptographic algorithms that govern Ethereum network, transactions can be signed without being executed at the same time by the network, reducing in this way the gas fees of the network. The most prominent example of this type of operations in Aztlan Market is the possibility of performing a Lazy Minting.

The Lazy Minting allows a creator to generate a digital voucher that can be executed in the blockchain network by any buyer that meets the conditions stipulated in it.

All offchain operations are created based on the Ethereum Improvement Proposal 721 (EIP712).

Verified creators

In Aztlan Market, content creators have the possibility to verify their account, which generates greater confidence between buyers.

Verified creators are identified with a little blue badge in every place where a reference to the user is made in the platform.

*Imagen representativa de la plataforma

In order to verify an account, it is necessary that the creator meets the following requirements:

- The creator must have 50 Aztlan in the account that he is intending to verify.
- Such an amount will be blocked during the verification process, in which confirmation of his social networks will be required.
- He must have the private key of the account that he is intending to verify, since he will be required to sign a data message (EIP712) in order to confirm the property of the account.

A verified account allows the creator to have a higher exposure inside the platform, as well as, a higher possibility of reselling other artworks.

Hashing Process

One of the main differences of Aztlan Market is the uniqueness of each artwork generated in the platform. This is achieved using a cryptographic operation that generates a unique and non duplicate identifier from the same entry of information.

Among these cryptographic operations, the SHA256 function is one of the most used in technology because of its balance between security and computational cost.
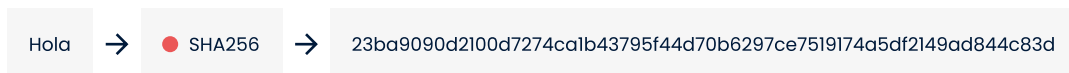
*Imagen representativa

When creating an artwork in Aztlan Market, we generate the SHA256 of the artwork, similarly to taking the fingerprint of a person for future identification.

Verification

Thanks to the record of this fingerprint, it is possible to search and validate an artwork in a reverse way (reverse search) in the platform. That is, providing only the SHA256 of the artwork that you want to find, or proving the artwork itself, it is possible to find if the artwork was registered or not in the platform, its current owner and all its information!

* Representative image of the platform

IPFS

All digital representations of artworks will be uploaded into the IPFS platform, unless the creator has indicated the opposite during the creation of the artwork, choosing the "Only Hash" option.

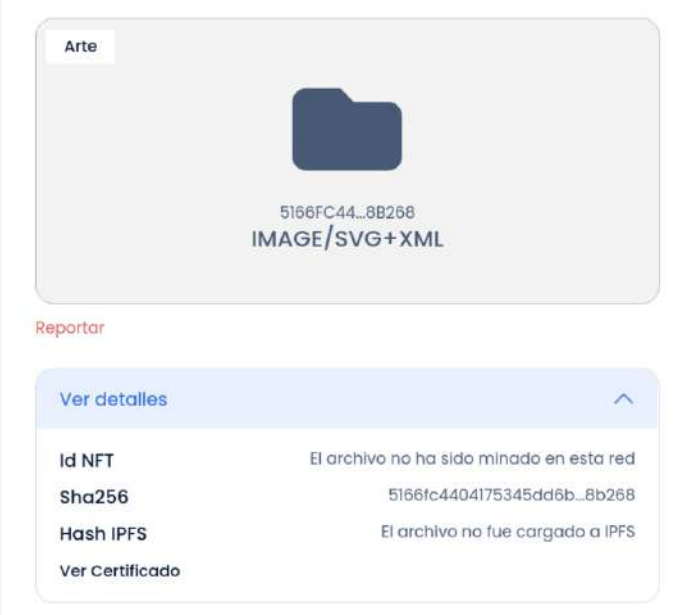* Representative image of the platform

It is important to understand that IPFS distributes the content inside all the nodes that are connected to its network, therefore, the content will always remain available, leaving the ability to delete a file once loaded outside Aztlan Market jurisdiction.
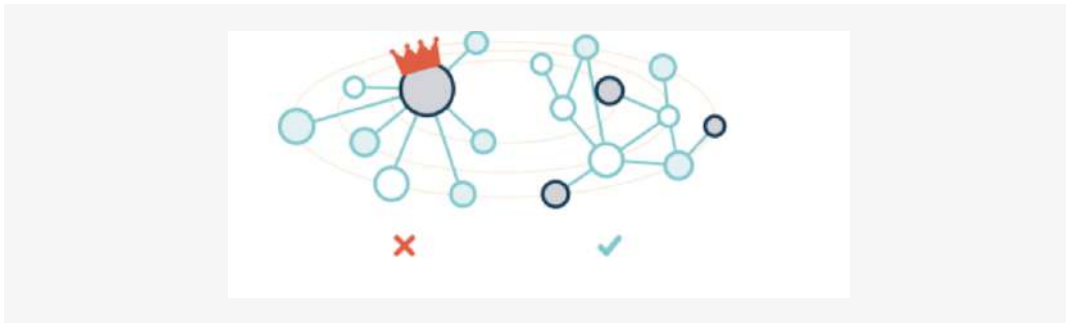
In order to better understand IPFS, we advise you to examine the official documentation, which link can be found in the references at the end of this document.

Only Hash

In the event that the user has chosen the option of loading the Hash only, he will be able to denote the artwork property and sell it without loading its content to the network. This artwork will be represented in the platform by its Hash and its original file type. It will be seen in the following way:
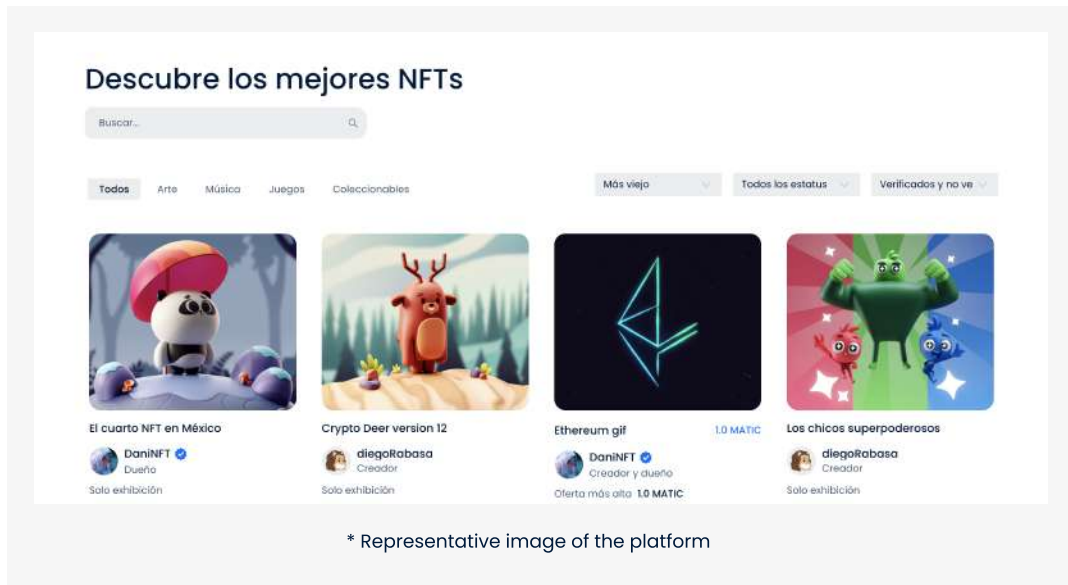

* Representative image of the platform

GALLERY

The gallery will allow users to explore the NFTs that have been created in the platform, getting a quick view of the articles for sale, prices, authors, etc.

We have also added filters that allow the users to find what fulfill their needs.

* Representative image of the platform

Aztlan Utility Token

Tokenomics

Ticker	Aztlan
Tipo	BEP20
Blockchain	Binance Smart Chain
Suministro	100,000,000
Decimales	18
Direcciones	0x92bD46E88931cbcfCFe1a4b7cCE1847D6fA74FAD
Explorar	https://bscscan.com/token/0x92bD46E88931cbcfCFe1a4b7cCE1847D6fA74FAD
Características	Suministro limitado, capacidades de quemado (burnable)

Aztlan Utility Token has been created according to the rules of an ERC20, with a limited supply of 100,000,000 units, in the Binance Smart Chain, in the following contract:

0x92bD46E88931cbcfCFe1a4b7cCE1847D6fA74FAD

The source code of this contract has been validated and can be subject to audit by any network member:

* Representative image of the platform
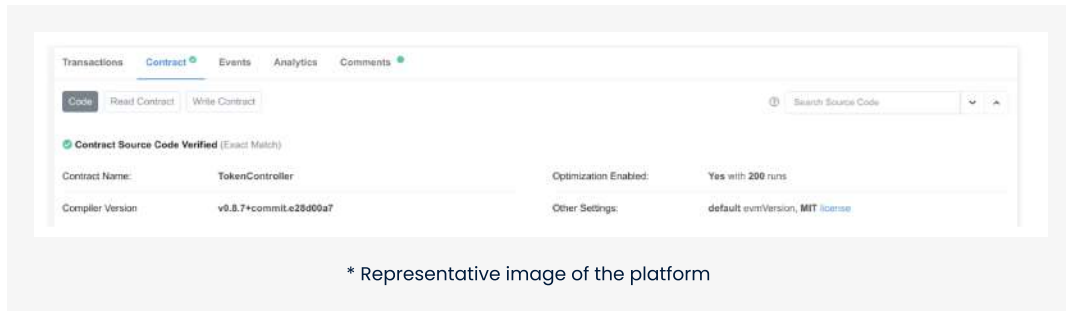
Aztlan Token can be burned (burnable) in order to control inflation and to maintain price stability.

Token distribution

Aztlan Token will be distributed as follows:

* Representative image of the platform
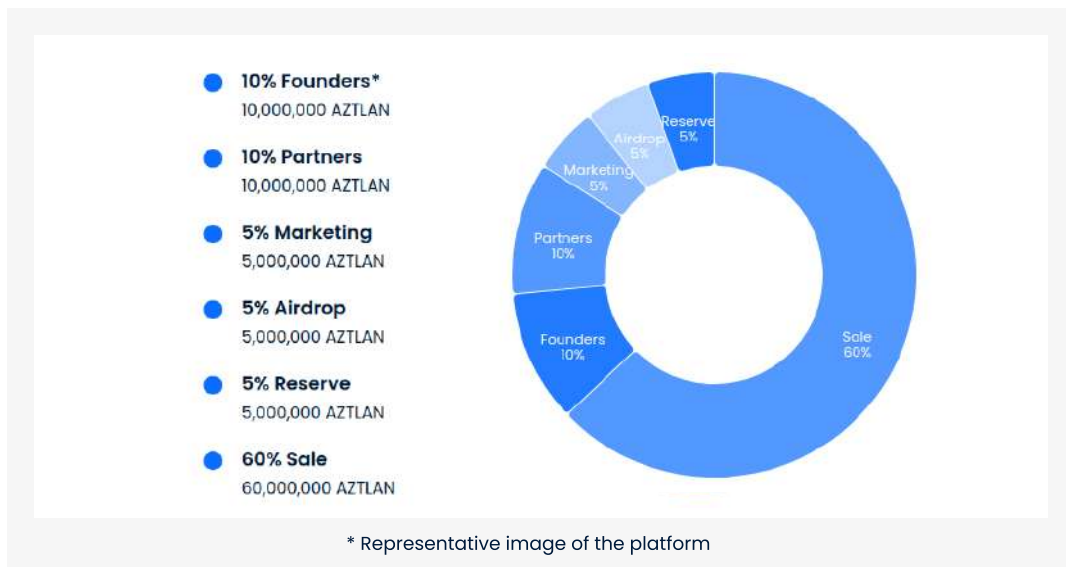
*Founders will have access to their tokens 6 months after the sale takes place.

Initial distribution

During the initial token distribution, Airdrop activities will be carried out in order to increase the social network community, as well as to draw Latin American talent for the creation of content.

In addition, 50% of the tokens that are set aside for interchange (30,000,000) will be available to be acquired through crowdfunding in DODOEX decentralized platform, during a period of 3 weeks.

Afterwards, when reaching the established target, the resources that were raised in that platform will be used to generate a Liquidity Pool in PancakeSwap decentralized platform, with the remaining 50% of the tokens set aside for interchange (30,000,000).

Mexican legal framework

Within the Mexican Legal Framework, we can find the Law that Regulates the Financial Technology Institutions (Fintech Law), which in one of its articles refers the following:
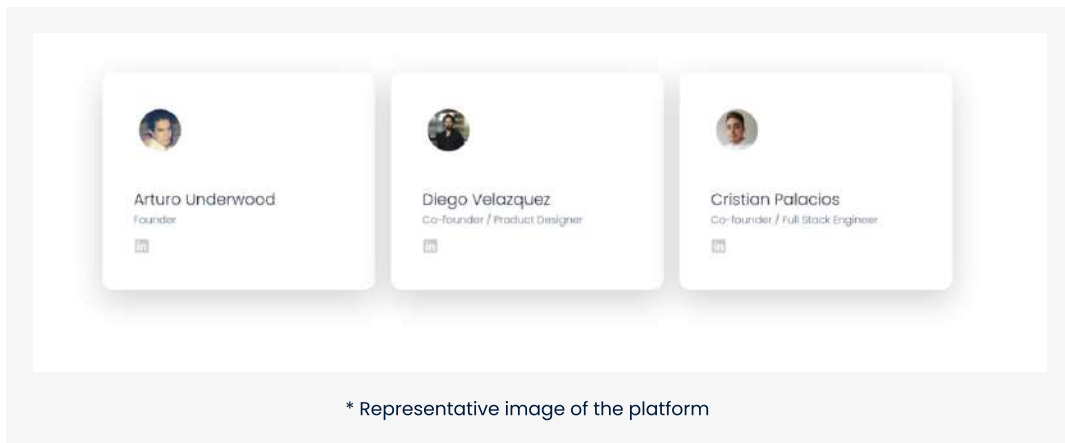
"A virtual asset is considered as the value representation, electronically registered, and used among the public as a means of payment for any kind of legal act, and which transfer can only be accomplished through electronic means."
(Fintech Law, 2018, Artícle 30)

Considering the previous article, Utility Tokens as Aztlan, are not under the regulatory framework that the Fintech Law comprises, since they only provide to their holders the possibility to be verified inside Aztlan Market, obtain benefits in this same platform, as well as access to the services that are offered there. Considering that its acquisition cannot be accomplished with legal tender, and since there is no fundraising, they cannot be considered as an investment instrument, because the holders of the Utility Token will not have any participation in corporative rights, nor have any kind of rights over Aztlan Market. The purpose of the token is only and exclusively defined for its utility in the platform.

Team

Aztlan Market team is made up of a group of Mexican entrepreneur engineers, with previous experience working in projects in the Legal, Insurance, Financial, Design and IT sectors, using Blockchain technology and always achieving the highest standards within their field of knowledge.

* Representative image of the platform

Roadmap

https://beta.aztlan.market/road-map

Contact

contacto@aztlan.market

Legals

https://beta.aztlan.market/privacidad

https://beta.aztlan.market/terminos-y-condiciones

References

EIP712: https://eips.ethereum.org/EIPS/eip-712

ERC20: https://eips.ethereum.org/EIPS/eip-20

ERC721: https://eips.ethereum.org/EIPS/eip-721

IPFS: https://docs.ipfs.io/

DODOEX: https://dodoex.io/

PancakeSwap: https://pancakeswap.finance/info/pools

Glosario

AIRDROP: Free distribution of tokens made to numerous wallets of community members as a reward or compensation for achieving certain tasks. Airdrops are distributed to attract new followers and build a larger community.

BINANCE: The main cryptocurrency exchange worldwide. Its ecosystem consists of being a learning center, a space for trading and a platform for launching tokens.

BLOCK CHAIN: The blockchain is, as its name implies, a data structure that is arranged in the form of interlocking blocks that create an infinite chain. When a new block joins the chain the hash of the previous block is included, so changing the information of a single block creates a break in the chain. All blocks need to be recorded.

BNB: The native cryptocurrency of the Binance platform.

CRYPTOART: Artistic category that gathers the encrypted digital files in some chain of blocks.

CRYPTOCURRENCY: Currency or digital currency that works with the blockchain system. Among the most famous are Bitcoin, Binance Coin, Ethereum, Litecoin, Dogecoin, and Ripple. Each currency has different values and its value depends on speculation.

CRYPTOGRAPHY: Set of techniques that allow altering and modifying messages or files so that they cannot be read by unauthorized users.

CROWDFUNDING: A form of financing a project or business venture by raising small amounts of money from a collective of individuals, especially from the online community.

DECENTRALIZED APPLICATION (DApp): Application that works without the need for intermediaries, with a decentralized network, where users have total control of its operation.

DECENTRALIZED FINANCE (De-Fi): Decentralized finance is a digital ecosystem that develops financial actions with the freedom and security of the Web. Where exchanges of value or information are made between users, in the form of transactions.

DIGITAL ASSET MANAGEMENT (DAM): Software in charge of storage, organization and dissemination of digital assets within a central network. A digital asset expands to videos, music, photos, documents, and other types of digital media.

DIGITAL RIGHTS MANAGEMENT (DRM): General term for any platform that controls all copyrighted digital materials. It is responsible for protecting the content disseminated by its creator, preventing a third party from modifying, distributing or deleting its content in an unsolicited manner.

DISTRIBUTED LEDGER TECHNOLOGY (DLT): Database that records information that is dispersed between different servers. Blockchain technologies are a type of DLT that stores your transactions in the form of blocks.

ERC-20: Standard term to refer to a fungible token in Ethereum.

ERC-721: Standard term to refer to a non-fungible Ethereum token.

ETHER: Ethereum's native cryptocurrency is the second most successful cryptocurrency on the market.

ETHEREUM: Public blockchain platform created in 2015 by Vitalik Buterin that stores decentralized and collaborative applications. The platform is supported by an open decentralized network of nodes and is supported by a community of developers.

EXCHANGE: Platform or exchange market that allows transactions with crypto currencies and FIAT money. In these exchange houses, the market price of each cryptocurrency is generated from supply and demand.

GAS FEE: The computational energy unit that is used to perform actions with the block chain: encrypt information or any transaction. So the moment someone creates a token, the gas fee is also charged in cryptocurrency.

HASH: A hash function is an output code (unique and alphanumeric) that we obtain from an input string. It is produced from an algorithm, ensures that the input is encrypted and allows us to know if the original string has been altered.

MAINNET: The main blockchain network for a project to run on after rounds of testing on the testnet. It is deemed as the final product of a project.

MINING: Transaction validation is known in this way. As it is a decentralized system, there must be groups of people who are known as miners and perform this work, receiving crypto units as a reward.

NFT (Non Fungible Token): A digital element managed by blockchain. This is the crypto art token. They were launched in 2017 through the Ethereum currency blockchain network. Everything or almost everything can be converted into NFT, from digital art, internet domains, playing cards, event tickets, songs, videos, among many more.

NODE: Component within the Blockchain network that validates the connection between transactions and blocks.

PEER TO PEER (P2P): The connection of two or more computers working without the help of a centralized network.

PROOF OF STAKE (PoS): Action of blocking your coins. The more locked coins you have in your wallet, the greater the probability of being chosen to mine the next block.

PROOF OF WORK (Pow): Mechanism that allows grouping transactions in blocks that are chained to create the blockchain. A lot of arbitrary computation is required to solve hash challenges.

REVERSE SEARCH: Search engine technology that takes an image file as input query and returns results related to the image. Practical uses for reverse image search include: locating the source information for an image, searching for duplicated content and ensuring compliance with copyright regulations.

TESTNET: Sandbox environment for developers to experiment and test-run the functionality of a project, in a safe, separate network without risking breaking the main blockchain.

TOKEN: A unit of value, it is a type of cryptocurrency that represents "something" that is not a monetary transaction. There are fungible (which can be divisible) and non-fungible or NFT (which are not divisible) tokens.

TRADING: The speculation and sale of listed digital assets, based on Technical Analysis (TA) with the aim of obtaining economic benefits.

WALLETS: A kind of digital wallet that provides the necessary tools to interact with the blockchain through public and private keys, including a public location of your token on the chain.

WEB3: The third generation of Internet technology. Web3 applications either run on blockchains, decentralized networks of many peer to peer nodes (servers), or a combination of the two, instead of running on a single server and storing data in a single database. This technology possesses immense potential in terms of efficiency, transparency, connectivity, and productivity.