

# Blockchain based pet life platform



XOOX PLATFORM is a blockchain-based pet life total service platform. Pets are now part of our lives and we can only provide special services to them. Through XOOX PLATFORM, you can give your pets joy and new value to be with for a lifetime.

A colorful, cartoon-style illustration serves as the background for the lower half of the page. It depicts a young boy with orange hair and glasses, wearing a blue shirt and grey pants, flying through the air with a rocket-powered backpack. Below him, a cityscape is visible with various pets, including dogs and cats, some of which are also flying or running. The scene is set against a backdrop of stylized buildings and greenery.

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# 1.0

## EXECUTIVE SUMMARY

# EXECUTIVE SUMMARY

### Opportunity

Tokenization is a process of turning sensitive data into non-sensitive data, and it is called tokens. Tokenization can be used to replace original data with an unrelated value of the same length of format, and it is used to make the data more secure. The technology field is emerging, and with it, new technologies are invested in creating the world a more secure place with the use of real-time tokenization payment if data security can be done via phones, laptops, tablets, and other devices. With the help of this technology, sensitive data can be replaced by a token that is isolated and secured. Covid-19 had a positive impact on the global tokenization market, and the global tokenization market size is expected to grow from USD 2.3 billion in 2021 to USD 5.6 billion by 2026 post-covid, at a Compound Annual Growth Rate (CAGR) of 19.0% during the forecast period.

Need to stay compliant and meet regulatory reporting standards, growing need to ensure continuous customer experience and maintain fraud prevention levels due to increasing financial frauds, and need to reduce risk from data breaches are expected to be the major factors driving the growth of the Tokenization Market.



Cloud-based tokenization is the method of exchanging sensitive data for an irreversible, non-sensitive placeholder called a token and securely storing the original, sensitive data outside of the organization's internal systems. It can be more affordable and easier to integrate than traditional on-premises tokenization. It also further reduces an organization's risk and compliance scope by removing sensitive data from its data environments. Additionally, businesses can protect that data without sacrificing its utility or the agility of current business processes by using format- and/or length-preserving tokens as placeholders for the original, sensitive data.

# EXECUTIVE SUMMARY

## Products and Services

At the initial launch, the Company will offer the following services to our clients utilizing the Company's blockchain technology platform and XOOX Tokens. This will allow cross-application interoperability between the below service lines.

### XOOX Music



### XOOX NFT



### XOOX DNA and Matchmaking



### XOOX Metaverse



### XOOX Foundation



### XOOX E-Commerce



### XOOX Care Services



### XOOX Games



### Cat Game



### XOOX Insurance



# Definition of terms

## Companion animal

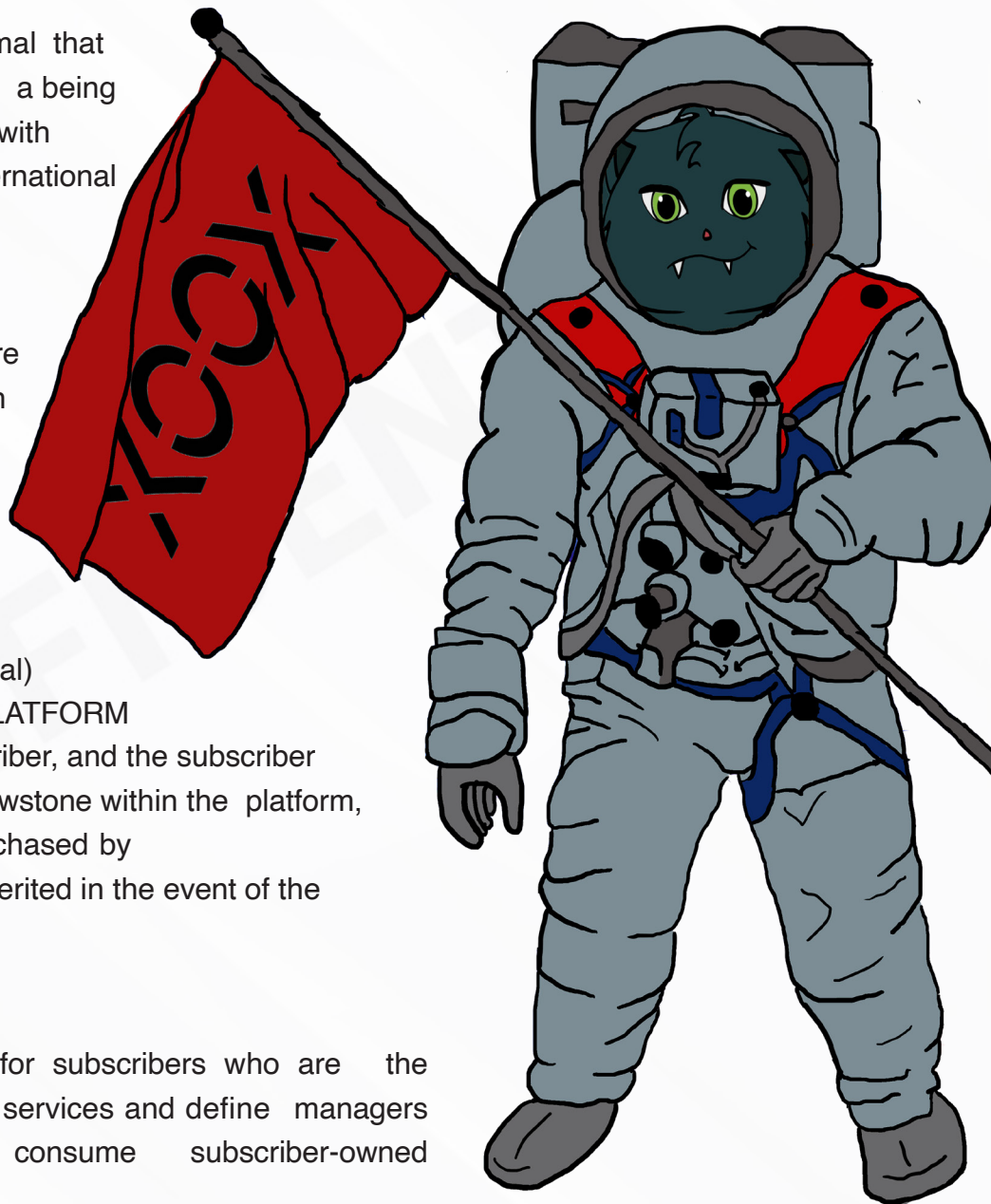
A companion animal is an animal that lives with a person and means a being that gives comfort to people with natural purity. At the 1983 International Symposium in Vienna, Austria, a proposal was made to rename pets to pets in the sense that “pets are not human toys, but living with people,” and people have since recognized them as pets living with people.

### Subscribers (Companion animal)

Pet, the user of the XOOX PLATFORM service, is defined as a subscriber, and the subscriber becomes the subject of the bowstone within the platform, has ownership of the NFT purchased by the subscriber, and can be inherited in the event of the subscriber's death.

### The manager (person)

Managers act as an agent for subscribers who are the subject of XOOX PLATFORM services and define managers who manage, execute, and consume subscriber-owned digital assets.





## DEFINITION OF TERMS

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### **XOOX PLATFORM**

Pet service platforms define service platforms such as chatting, inheritance, insurance, hospitals, online transactions and music transmission, and virtual space for pets.



### **XOOX TOKEN**

As a medium of digital assets used on the XOOX platform, it is issued as a digital asset based on the Polygon 2.0 platform and is an asset medium used as the main payment method.



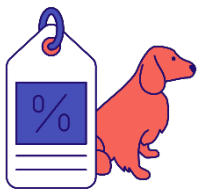
### **XOOX NFT**

It is an irreplaceable digital asset and certification medium that can index pet identification digital authentication licenses, pet-related items, and sound source streaming products.



### **XOOX W (METAVERS WORLDMAP SERVICE)**

Interworking information of subscribers who joined the platform with virtual space. It is a space that allows subscribers to work in their own space and to create and share content with managers based on virtual space metabuses to create closer online and offline ties.



### **XOOX MARKET PLACE**

Managers can purchase subscribers' products through XOOX MARKET PLACE and use XOOX TOKEN to make payments within XOOX MARKET PLACE on behalf of subscribers.



### Irreplaceable token (NFT, Non-Fungible Token)

It refers to a unique and interchangeable token in units of data stored in the blockchain. NFT can be used to represent photos, videos, audio, and other types of digital files. Copies are not recognized, and copies of these digital items can be obtained by anyone, but NFTs must be tracked on the blockchain to prove copyright and ownership to the owner. The use of NFT is increasing in 2021, and virtual currencies such as Polygon and Flow have their own standards, but each is striving to ensure that the digital items displayed are truly unique. NFT is used to commercialize digital assets in popular entertainment. Most NFTs are part of the Polygon blockchain. However, other blockchains can implement their own version of NFT. The value of the NFT market tripled in 2020, reaching more than \$250 million.

### Metaverse



Metaverse is a compound word of Meta, which means processing and abstraction, and Universe, which means the real world, and means living a new life like reality in a virtual space. Users can continue their real activities in the three-dimensional virtual world online, allowing individuals to communicate with each other, earn or consume money, enjoy play, and do productive tasks. Currently, games, entertainment, and business-to-business work environments are widely used as if copying daily activities in virtual space.

### Gamecoin

XOOX game will be play-to-earn platform and have the ability to earn XOOX game coins. XOOX games will reward players with tokens or NFTs that can be used in the game or sold for real-world currency.



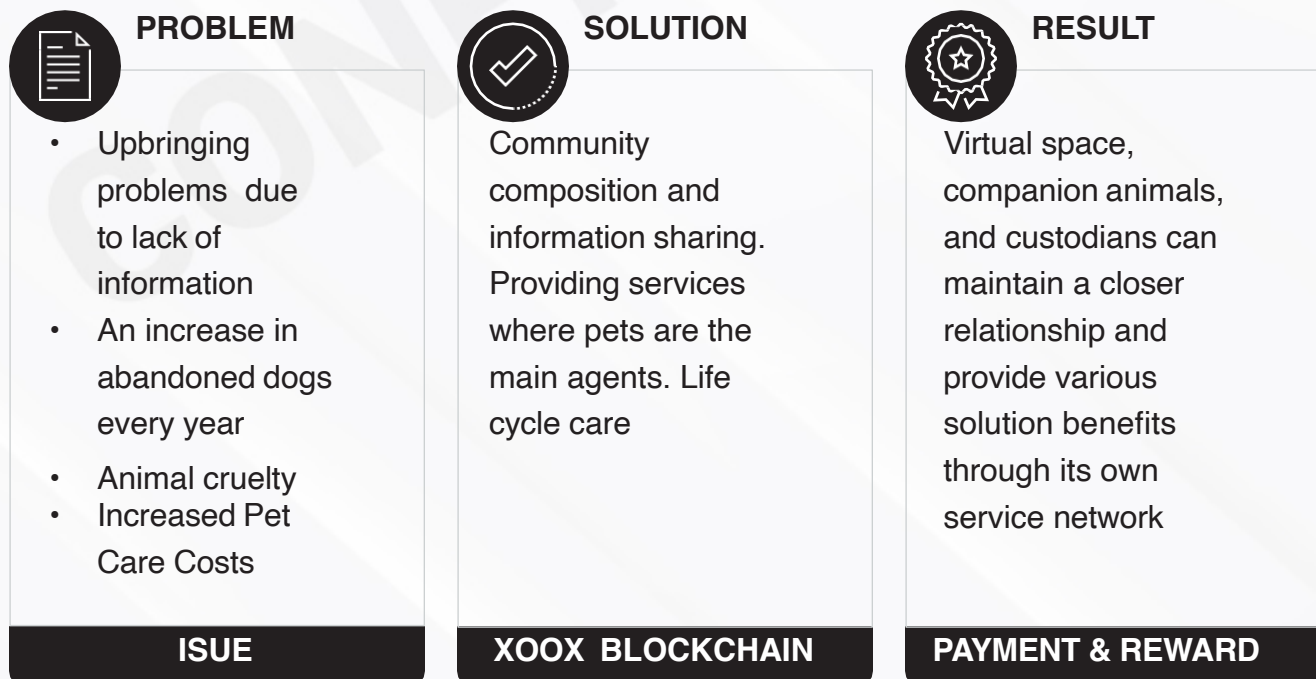
# **2.0**

## **BUSINESS AND PRODUCTS/ SERVICES OVERVIEW**



## XOOX Mission

Until now, companion animal services have been operated by the customer, human as the main agent. However, the current era has changed to an era in which companion animals become a family, and certain companion animals have become celebrities can earn money through media. However, social issues related to companion animals such as abandoned dogs, animal abuse are still occurring frequently. XOOX service looks at these issues related to companion animals from the point of view of animals, and aims to provide a management and protection service for establish a closer relationship with people. We provide a block-chain- based solution so that the manager and companion animals, who are agents of companion animals, can have a higher level of trust and form a social environment where they can be positively influenced by each other. Since the XOOX service is a platform operated mainly by subscribers (pets), an automated computer system is implemented when a subscriber's gift, inheritance, or an administrator generates revenue from various contents such as the subscriber's portrait right or sound source (subscriber's singing right). An accounting solution that calculates taxes and allows administrators to pay taxes is built into the platform system itself.





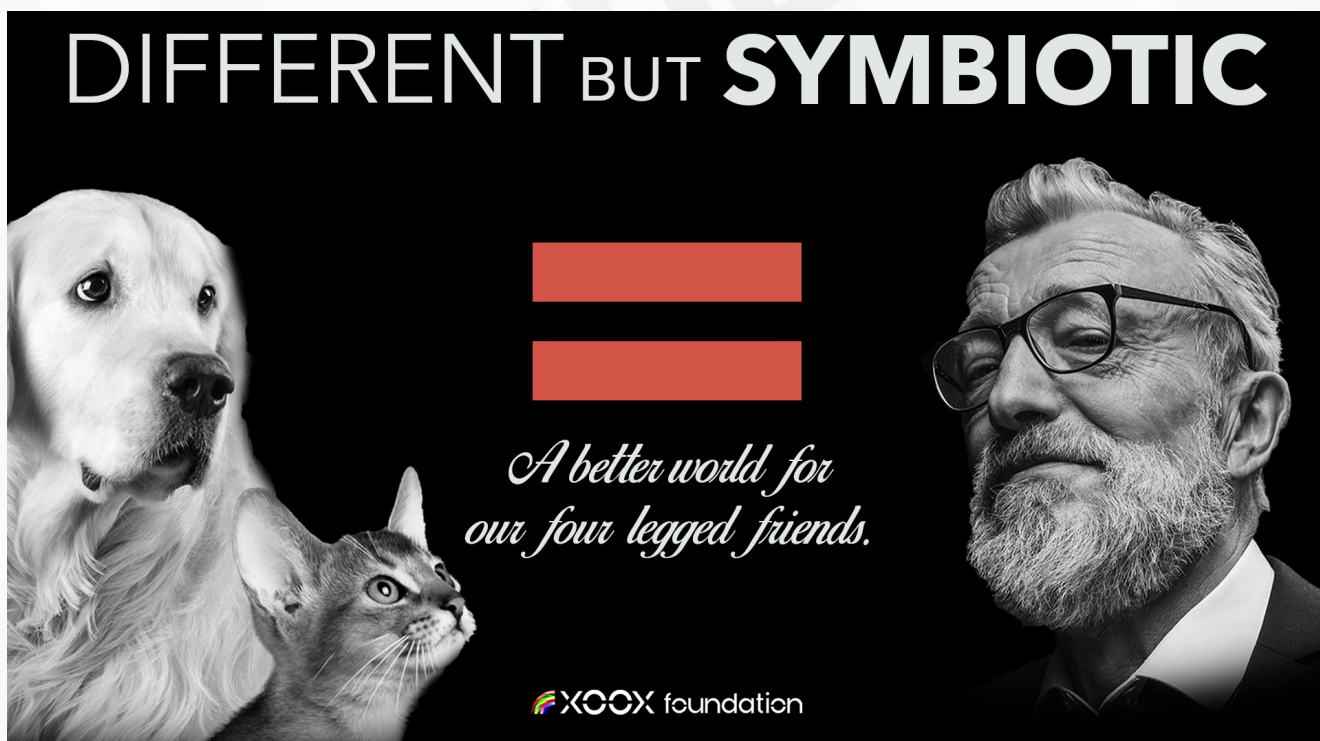
## XOOX Foundation

The basic mission of the XOOX Foundation is to foster a bond between humans and companion animals.

The goal of the XOOX Foundation is to fight to amend laws for companion animals and pass new laws; sharing the institutional situation and legal environment of each country. XOOX Foundation will be fighting to secure the legal status of companion animals around the world without discrimination and to improve laws related to the rights and welfare of and related companion animals.

We want our pets and our world to be connected. Our pets want to be protected, and they want an environment where they can love each other freely. We propose to create a better world by gathering aspirations to be a part of positive change in the world.

Being a part of someone's survival, empowering someone, and making someone's dream a reality is of innumerable value.



## XOOX Business Info.

# Blockchain ON DEMAND PET SERVICE, XOOX

Since 2019, we started market research and planning preparations to develop a platform for companion animals (dogs and cats) . We started development in 2020 and launched XOOX, an application dedicated to companion animals. The XOOX application is a blockchain-based ODPS (ON DEMAND PET SERVICE) platform. Chat service for companion animals such as dogs and cats, food & shopping mall for pets, music service, mutual aid service, insurance service, hospital matching service, virtual It is a companion animal-only application that supports space (metaverse), etc., and is the world's first specialized portal service developed exclusively for companion animals.

## A. XOOX

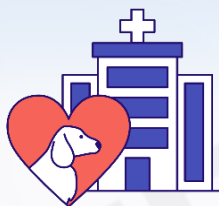
The XO in XOOX is an acronym for “hugs and kisses” in a widely known English expression, meaning the close familial relationship with humans and companion animals

## B. XOOX black color

The meaning of “Black” used in the XOOX project logo expresses the comfort and protection that black symbolizes, and it is a color that symbolizes human consideration for companion animals.



## XOOX Products and Services



Veterinary  
Hospital



Beauty



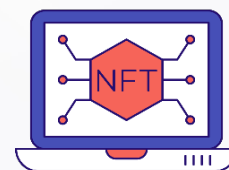
Grooming



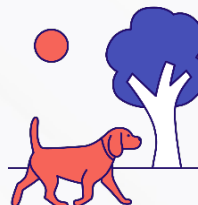
Market



Insurance



NFT



Virtual

## XOOX Business Segments, Products, and Services

At the initial launch, we will offer the following services to our clients. This will allow cross-application interoperability between the below service lines.



**Xoox B (Bidding and Buying)** — Trade services related to pet goods, merchandise, and foods between consumers and suppliers (Amazon of pets).



**Xoox C (Care)** — A platform for connecting and providing pet-related care services such as veterinary hospitals, pet pharmacies, grooming, dog walking, and other pet-related services.



**Xoox G (Gaming)** — Providing gaming content to the users and their pet avatars in the metaverse space. The pets are able to play games, interact, and earn NFTs and other rewards in the Metaverse universe. Blockchain-based gaming platforms can provide users with ultimate control over their digital assets. Players can buy and sell items freely without concern that a platform will close down or unilaterally change the value of in-game items.



Blockchain allows gamers to own their digital items even when a game is shut down. On the blockchain, every game item becomes a permanent asset, allowing gamers to decide how they want to trade, sell, or gift their items—thereby introducing real property rights for game items and, consequently, real economic value.



**Xoox I (Insurance)** — Pet insurance exchange services. The platform will connect users and insurance providers with various options to insure their pets.



## XOOX Business Segments, Products, and Services

The Company's business segments and services also include the following services:



**Xoox M (Music)** — Xoox musical library will provide unique products in collaboration with influencers and musicians, as well as collaborations with creators and regular users. Music library will be primarily geared toward dogs and cats. The music has been studied to match the frequencies and tones that pets enjoy. Users are able to create music content, license it, and have it uploaded to and downloaded from the library. Xoox M will also increase IP ownership in the music space.



**Xoox N (NFT)** - A service that allows NFT transactions using photos, videos, and XOOX music content via the company's websites and apps including [www.xooxnft.io](http://www.xooxnft.io)



**Xoox S (DNA Matching Service)** — This platform will maintain and include a detailed database related to pets' sex, heritage, location, DNA, and other specific information that will be used for match-making services. Users can select the type of breed, color, size, location, etc. based on their requirements and the platform will provide matching services.



**Xoox W (Wallet)** — A payment platform that supports remittance/transfer/payment service between the users through XOOX WALLET linked with e-commerce.

## XOOX Business Segments, Products, and Services

The Company's business segment also includes XOOX Technology ("XOOX Tech")

**Xoox T (Technology)** [www.xoox.technology](http://www.xoox.technology) — XOOX Technology is an in-house Research and Development (R&D) unit that provides Ai-based software development, mobile app development, website design & development, digital photo graphic design, e-commerce solutions, and other technology support for the Company.

The Company develops AI-based composition solution including deep learning technology and copyright filtering technology. XOOX T also develops Harmonics, sampling and all the elements needed for music are converted into data which automates the entire process of sound source post-processing, mixing, and mastering systems to realize natural and magnificent AI sound.

The Company's XOOX T provides latest block chain technology. Our highly qualified team of researchers develops and meets complex and detail Blockchain technology requirements.

The XOOX T's AI program "XOOX Avatar" is a program that generates images, such as faces and landscapes, through deep learning that collects various data of pets using AI algorithms. It is based on 'generative confrontational neural network' or GAN technology, that automatically generates images and voices in a similar way to reality while comparing various data such as images and voices.

The technology works as an artificial intelligence-based photography service, providing the development of pet personality and psychological test software, and pet knowledge information content service.



**XOOX Tech**

XOOX T also develops mobile app development that works with:

- iOS (Swift, Objective-C)
- Android (Kotlin/Java)
- React Native
- Unreal Engine 5.0
- AMP
- PWA
- NativeScript
- Flutter
- Ionic Framework

## XOOX Business Structure

Developed through blockchain technology, XOOX PLATFORM is a marketplace-type structure that can interconnect P2P-type services without a separate intermediary. As the online digital market is becoming a daily routine, the existing online and offline companion animal content market is also changing rapidly by offering a variety of services. XOOX project is an integrated companion animal platform based on ODPS (ON DEMAND PET SERVICE). It provides a new concept of integrated pet service connected through distributed network technology of blockchain such as virtual space, online shopping mall, music download and NFT purchase, and insurance business.

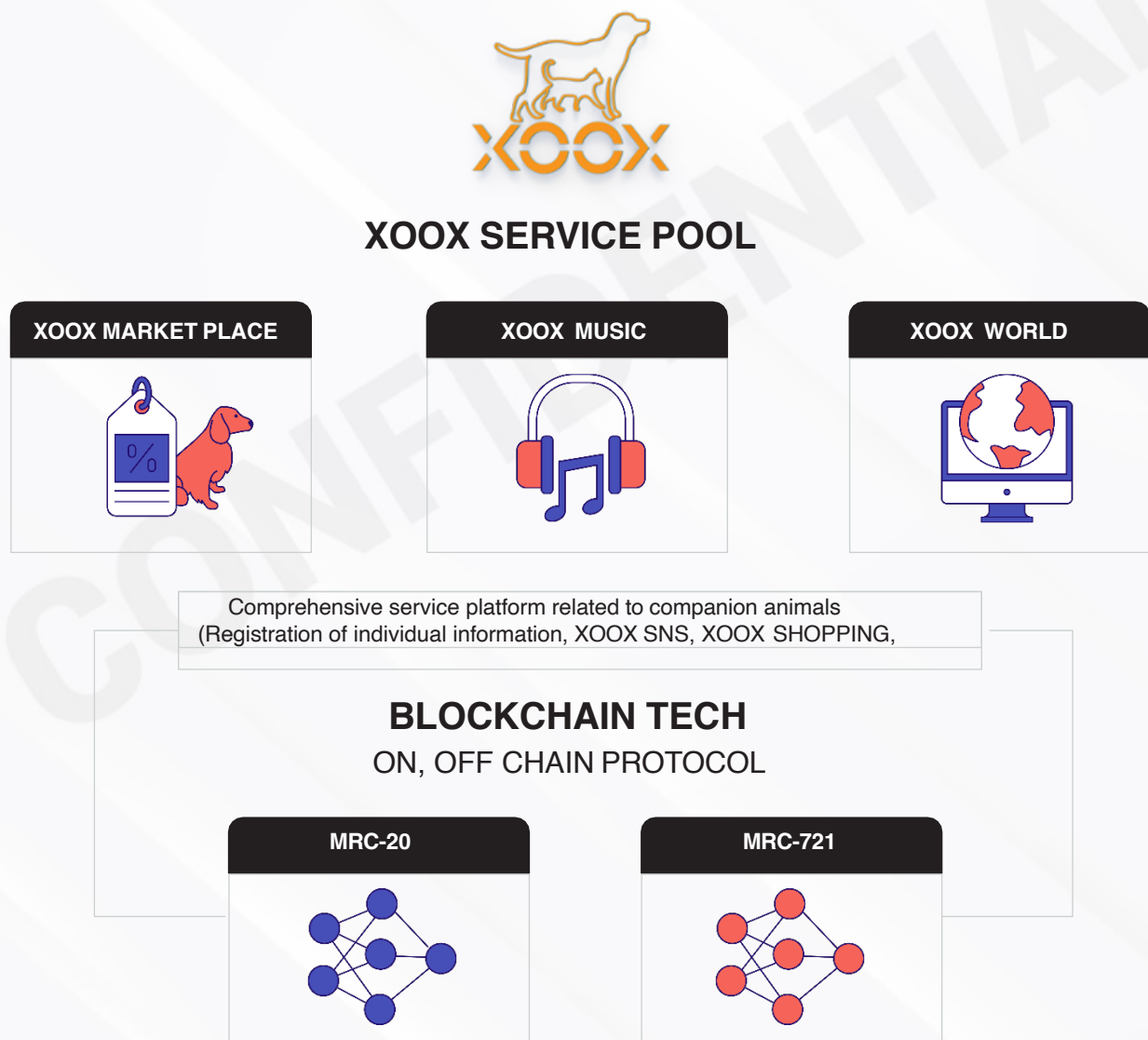


FIGURE 1. XOOX BUSINESS INFO

## About XOOX Token

### Definition of XOOX TOKEN

XOOX TOKEN is an MRC-20 based token issued XOOX Token M and serves as a key currency in XOOX PLATFORM. XOOX TOKEN is used as a variety of payment methods on the XOOX platform, such as payment of platform usage fees, content purchase, NFT generation, sales fee payment, and music sales.



### XOOX TOKEN Economy

The current cryptocurrency is not easy to be used as an alternative to legal currency due to its price volatility based on the key currency when purchasing goods and using them for payment purposes. Therefore, in order to solve the unstable price fluctuations of exchanges and operate cryptocurrencies effectively, the need for tokens with stable value is increasing.

XOOX TOKEN is a utility token that maintains value stabilization within XOOX PLATFORM, and the value of XOOX TOKEN can be maintained stably through the token economy provided XOOX Token PLATFORM. XOOX TOKEN is used to purchase pet supplies, content, and NFT within the platform, and is used as a settlement currency for content providers. It is consumed by various token holder reward programs too.



## XOOX Token Holder Benefit

1

### Digital Asset Incentives

Subscribers and administrators can buy or consume XOOX TOKEN, create content in their own space, sell it, and make a profit. In addition, if you hold XOOX TOKEN in the platform service and maintain daily attendance and community activities in the virtual space, you can receive TOKEN according to the time and condition policy. These paid assets become public trust assets that can maintain the XOOX system and increase TOKEN VALUE.

2

### Payment method incentives

XOOX TOKEN is issued according to payment, reward, and point scenarios. The subject of XOOX use is companion animals. A subscription agent is called a customer who keeps a companion animal, purchases a token from the XOOX DAPP and becomes the subject of use, that is, a token owned by the companion animal. You will be able to use it for XOOX shopping malls, music purchases, and goods products. Through unification of payment methods, users can use TOKEN at affiliated companies.

3

### NFT Incentives

XOOX service can register subscriber's unique information as NFT and link it with virtual space. Asset management for companion animals is possible, and profit activities are also possible in the system.

4

### Discount incentives

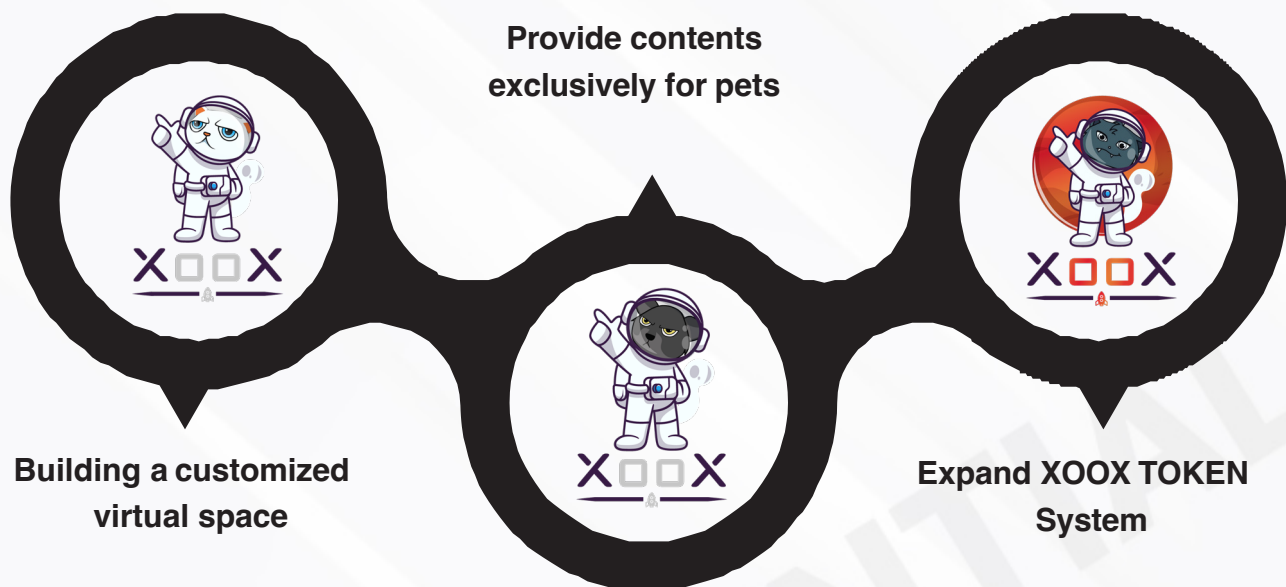
When subscribers paying for service, they can receive a discount according to the set discount rate policy of XOOX PLATFORM. The discount rate is determined by the amount of XOOX TOKEN purchased and consumed, and it is possible to participate in specific events for XOOX TOKEN HOLDERS.

5

### Reward Incentives

The XOOX platform composes XOOX WORLD, the space of the virtual space to revitalize the system and provides it to be used as a variety of marketing and promotions. Subscribers can register their companion animals in the virtual environment and receive a reward XOOX TOKEN through various events. In addition, subscribers who are active on the platform can create content by interacting with other pets and receive rewards.

## XOOX Project Business Description



To realize the above three things, XOOX PROJECT proposes a system that platform participants can receive extra rewards from the platform by fulfilling their roles. Accordingly, participants in the virtual reality metaverse of XOOX PLATFORM can build a more efficient virtual world network and receive rewards through content production, provision, and experience.

To achieve this goal, XOOX will expand partnerships with companies that provide virtual reality and metaverse services. XOOX will actively provide various content infrastructure and metaverse implementation technologies also.

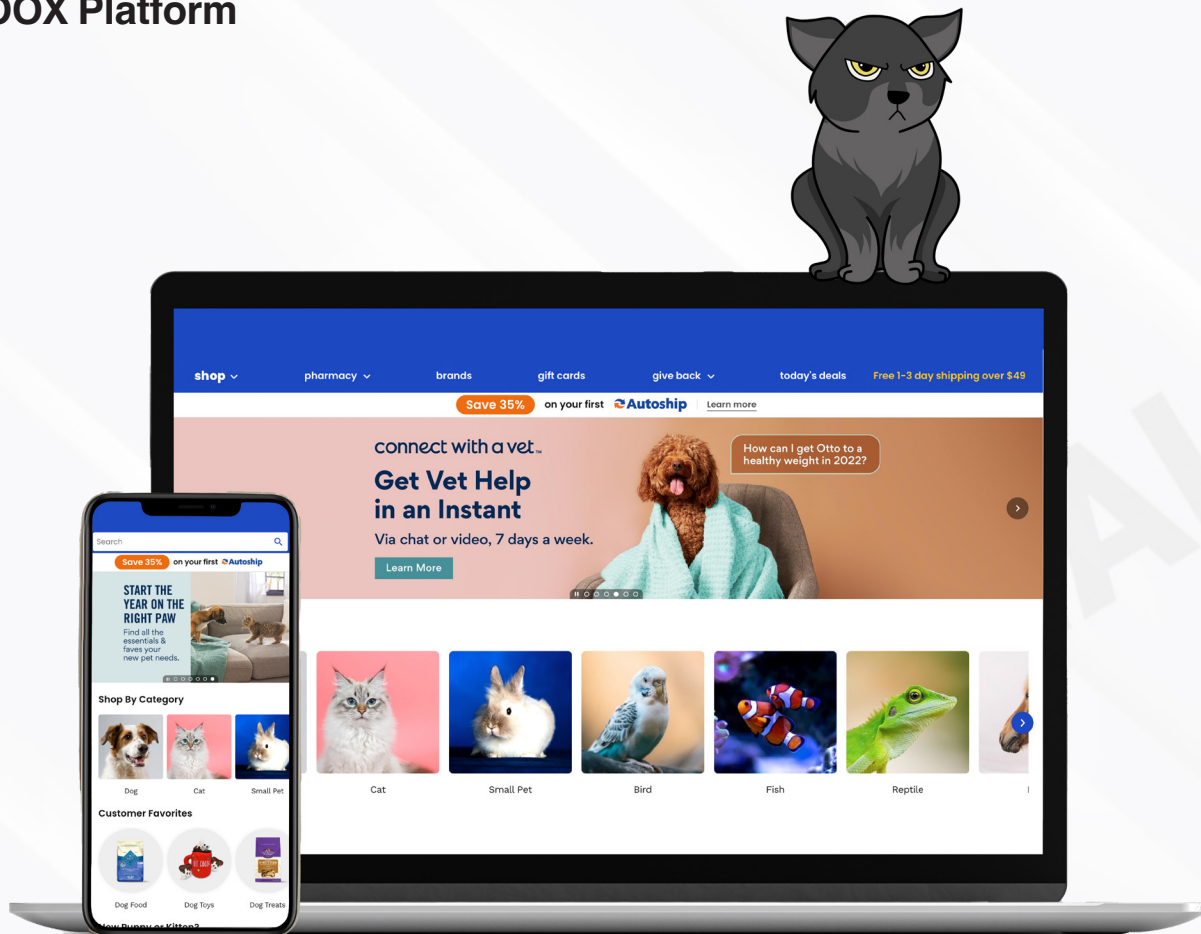
The XOOX Platform will encourage the participation of the existing metaverse, activate the system based on metaverse assets, and expand services by inviting additional partners to participate. In addition, we expect that many participants will become partners of XOOX PLATFORM by creating a virtual reality system in which rewards are fairly distributed according to the contribution of platform participants. The ultimate goal of XOOX PROJECT is to realize a highly reliable metaverse system based on NFT assets using blockchain technology. By doing so, we will implement high-value-added services that contribute to the development of the Metaverse industry based on the system activities of all participants, including partners.

# 3.0

## PLATFORM



## XOOX Platform



XOOX PLATFORM is available on all devices, including PCs, tablets, and mobile devices.

In XOOX PLATFORM, anyone in the world can become a supplier and directly register and sell their products, medical services, pet insurance, and music content. Product providers can create their own stores and sell products through XOOX PLATFORM membership, and also upload music contents to the platform to publish and sell as NFTs.

NFT issued XOOX Token PLATFORM can be purchased by anyone in the world to register their pet information and secure sole ownership. It is the only music platform dedicated to companion animals in the world that allows companion animals to inherit music even if the subscription agent dies in the future.

You can check sales information or sales history for products and contents sold through XOOX PLATFORM's block chain system, and receive settlement of the contracted sales price in a transparent structure through XOOX TOKEN

## Platform Main Function

XOOX PLATFORM adds NFT technology for active supply of affiliates and distributors and creative copyright protection, and contents issued with NFT have a function and special value as a digital certificate and can be transacted

### XOOX PLATFORM MAIN FUNCTION

#### 01.

XOOX PLATFORM is a place where affiliates from all over the world participate to sell various services such as purchasing products for companion animals, paying insurance premiums, making medical service reservations, and purchasing music content. Content copyright holders are objectively valued, guaranteed legitimate rights, and can trade digital assets (NFTs) they own.

#### 02.

Affiliates and distributors contracted with the XOOX platform can promote and sell their products or services through the XOOX platform manager, and provide a marketplace where they can purchase high-quality online and offline products for companion animals.

#### 03.

XOOX Marketplace (platform) plans to create a hybrid e-commerce marketplace where companion animal managers, vendors, and service providers can freely buy and sell companion animal products and services through XOOX DAPP. All products and services sold on the XOOX Marketplace are verified by the user-provided quality assurance on the platform.

#### 04.

XOOX PLATFORM has a self-developed blockchain protection system that can protect digital contents to protect the rights of companion animals, who are NFT rights owners. If the contents are downloaded abnormally or the file is executed illegally, forgery and falsification are identified by the specially applied protection device, and the illegal file is detected XOOX Token PLATFORM's own technology.

#### 05.

XOOX PLATFORM supports payment through XOOX TOKEN, allowing users to transact immediately, safely, easily and safely. In addition, it helps to increase sales by identifying consumption patterns of subscribers and sharing them with affiliates to analyze consumption patterns.



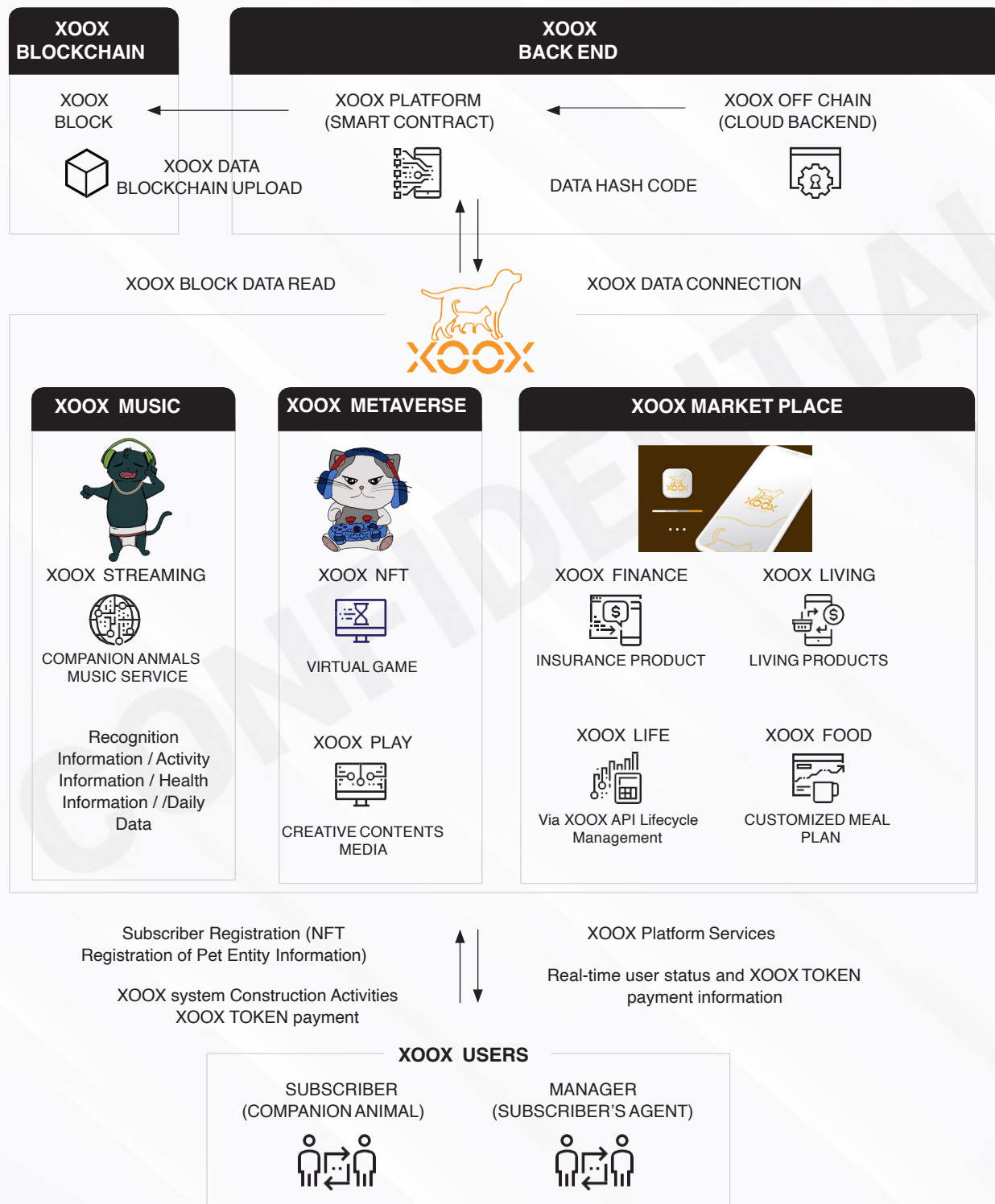
## Platform Service

XOOX PLATFORM will link various Dapps for companion animals (shopping mall, music streaming, healthcare, avatar, real-time broadcasting, metaverse world, etc.) In case of death, we develop and provide inheritance and accounting services for intellectual property rights and assets owned by companion animals.



## Flow Chart

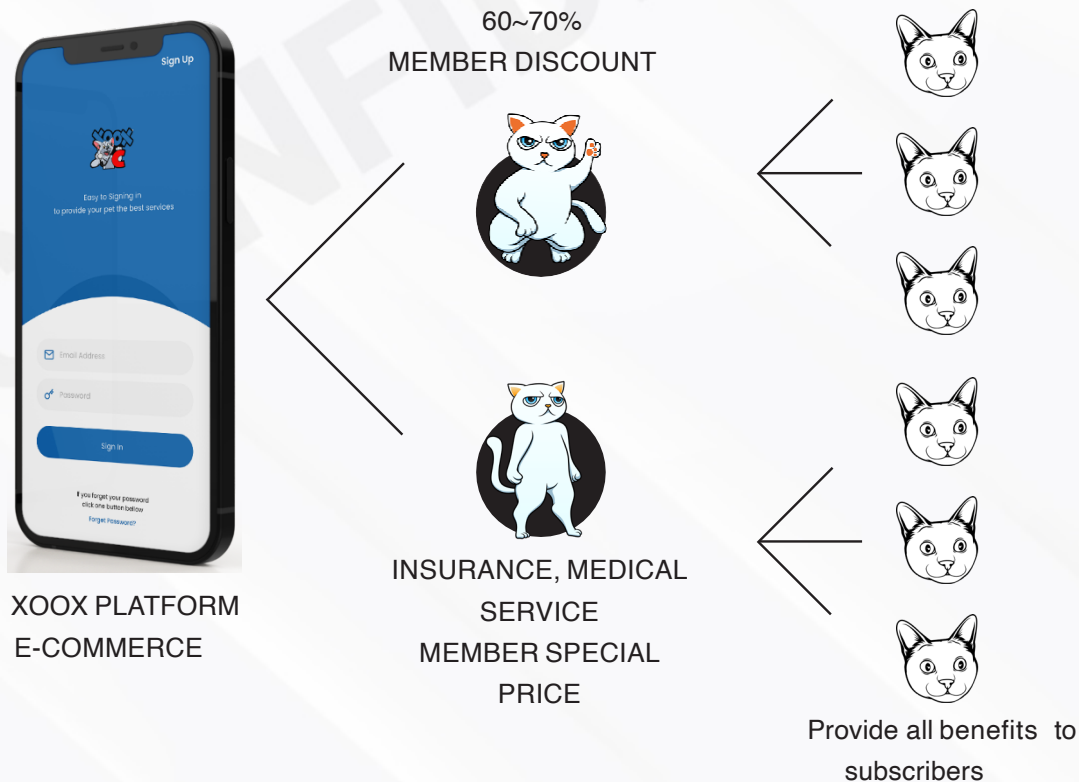
### Subscriber Registration (NFT Registration of Pet Entity Information)



## XOOX Service

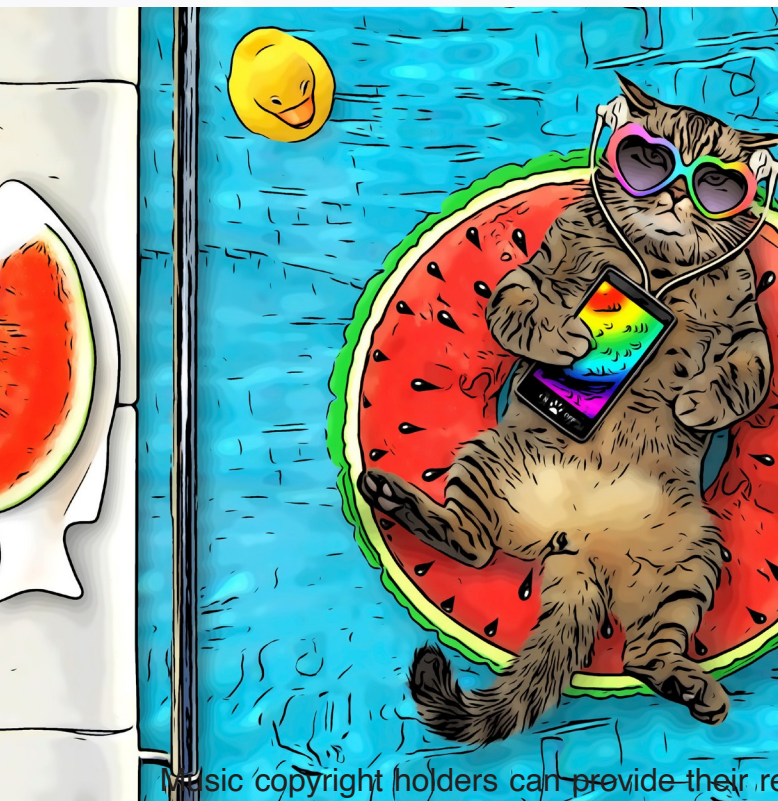
### XOOX E-COMMERCE

- Membership based e-commerce provided to subscribers (pets) through XOOX TOKEN HOLDER (AGENT)
- Providing a variety of companion animal products, insurance & medical services, etc. at the lowest global price (member special price)
- Online shopping mall smart payment possible using XOOX TOKEN
- Supports remittance/transfer/payment service between individuals through XOOX WALLET linked with shopping mall
- Provision of supplier sales status and settlement management function (dashboard provided)



## XOOX Music Service 1/2

The music industry is a business that connects an unspecified number of creators and consumers through a music platform. There are many music platforms in the world, but there is still no dedicated music platform for companion animals, who are companion animals as consumers. XOOX PLATFORM is the world's first Metaverse-based Blockchain Music Service for companion animals.



The subject of XOOX subscription is a companion animal, which is called a subscriber, and can be joined through a subscription agent (person), and the subscription agent is called a manager. In other words, the manager becomes the agent and purchases the NFT sound source to be owned by his/her companion animal, and the ownership of the NFT sound source is a 'pet-only music platform'. The NFT owned by the subscriber has its own ownership until the custodian changes it, and when the custodian dies, the NFT token can be inherited to the subscriber, or a third party or XOOX designated in advance will manage it.

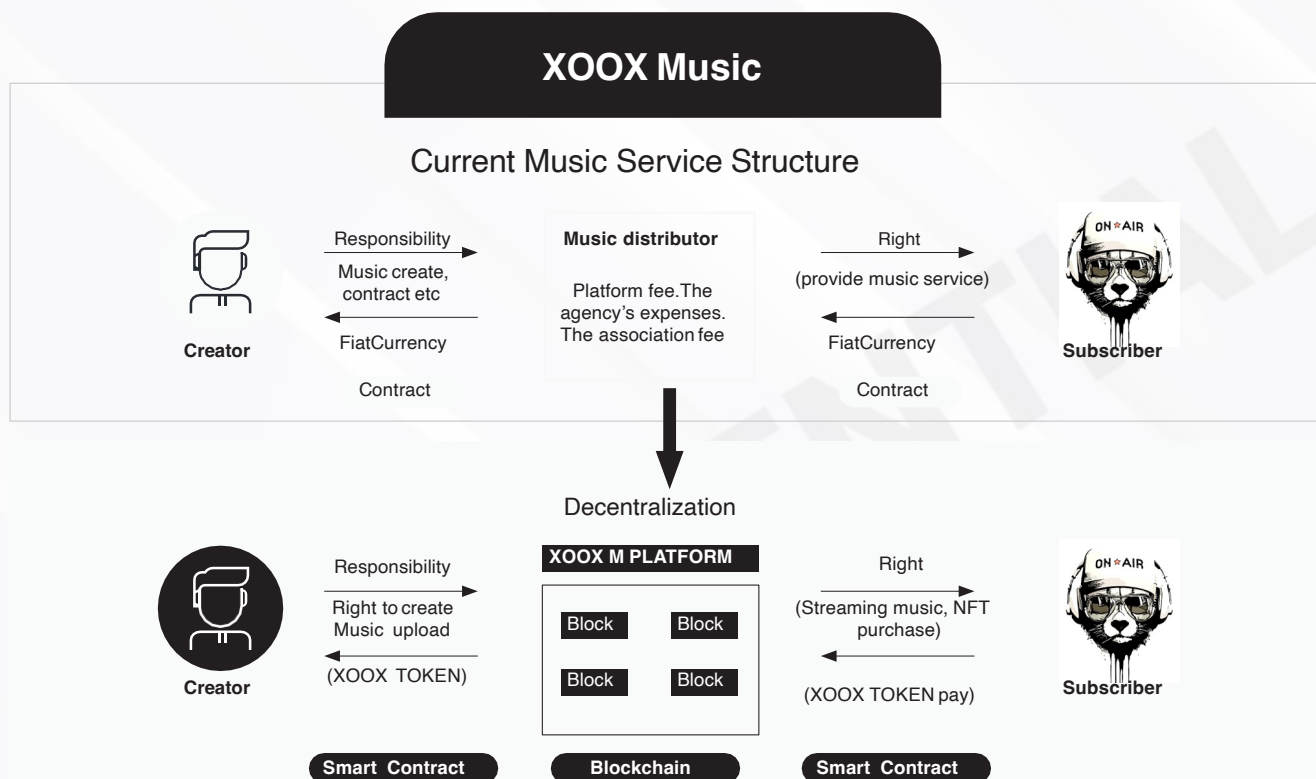
Music copyright holders can provide their registered music on XOOX PLATFORM to XOOX members by streaming, downloading, and monthly payment. It can be cashed out. In addition, XOOX World, a metaverse space, will provide music services through virtual play spaces for animal avatars and human avatars, and it is possible to mine XOOX TOKEN through related games on Roblox.

\* XOOX TOKEN will be paid through game forms such as walking and feeding the animal avatar in the XOOX Virtual World universe



## XOOX Music Service 2/2

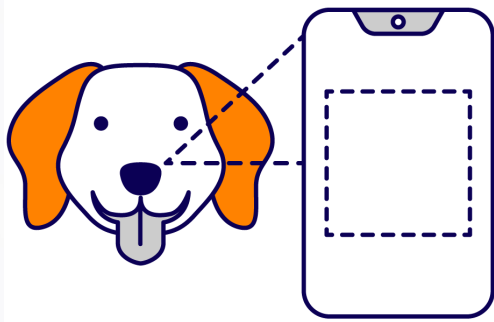
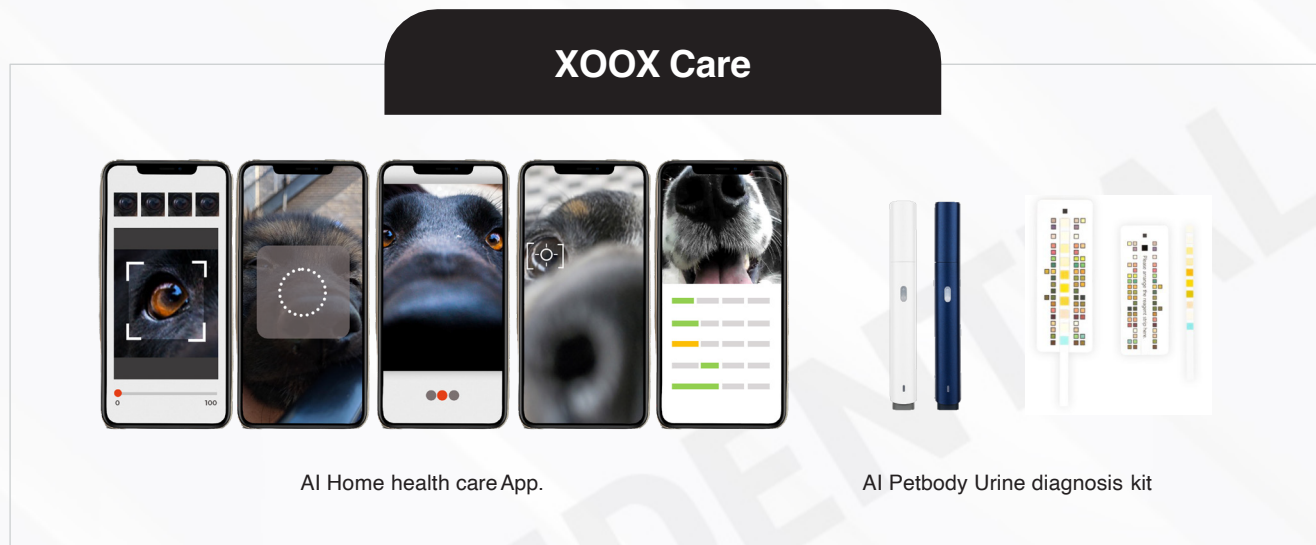
The purpose of XOOX Music PLATFORM is to provide a transparent platform service based on block chain, away from the business for maximizing the profit of the platform in the existing music market and entertainment industry structure.



- In XOOX PLATFORM, creators who sell their own content can get a fair price, and subscription agents (people) pay a reasonable fee. For this, we designed the XOOX TOKEN payment interface for all subscription agents to use it conveniently and established a virtuous cycle structure of XOOX TOKEN.
- XOOX TOKEN is an entertainment utility token based on blockchain technology that applies a multi-chain network layer among its own cryptocurrency technologies. The decentralization method developed with MRC-20 aims for global service and is designed to ensure fair and transparent profit distribution using user nodes around the world.
- Agency, production company, and artists can upload various sound sources and contents within XOOX PLATFORM, and can freely stream, download, or purchase NFT sound sources through XOOX TOKEN. In addition, the music sold in this way is settled in XOOX TOKEN, and NFT trading is possible freely between subscription agents.

## XOOX Care Service

XOOX Care service is an AI home health care service for companion animals, which provides self-diagnosis service through pet body & urine diagnosis kit, and provides total medical service for companion animals through partnerships with veterinary hospitals and stores.



XOOX Care is a service provided by linking AI home healthcare within the XOOX Platform with Dapp.

The AI pet body can easily scan dark ears and teeth with an endoscope camera and send it to the AI home health care app to check the health of your pet in real time.

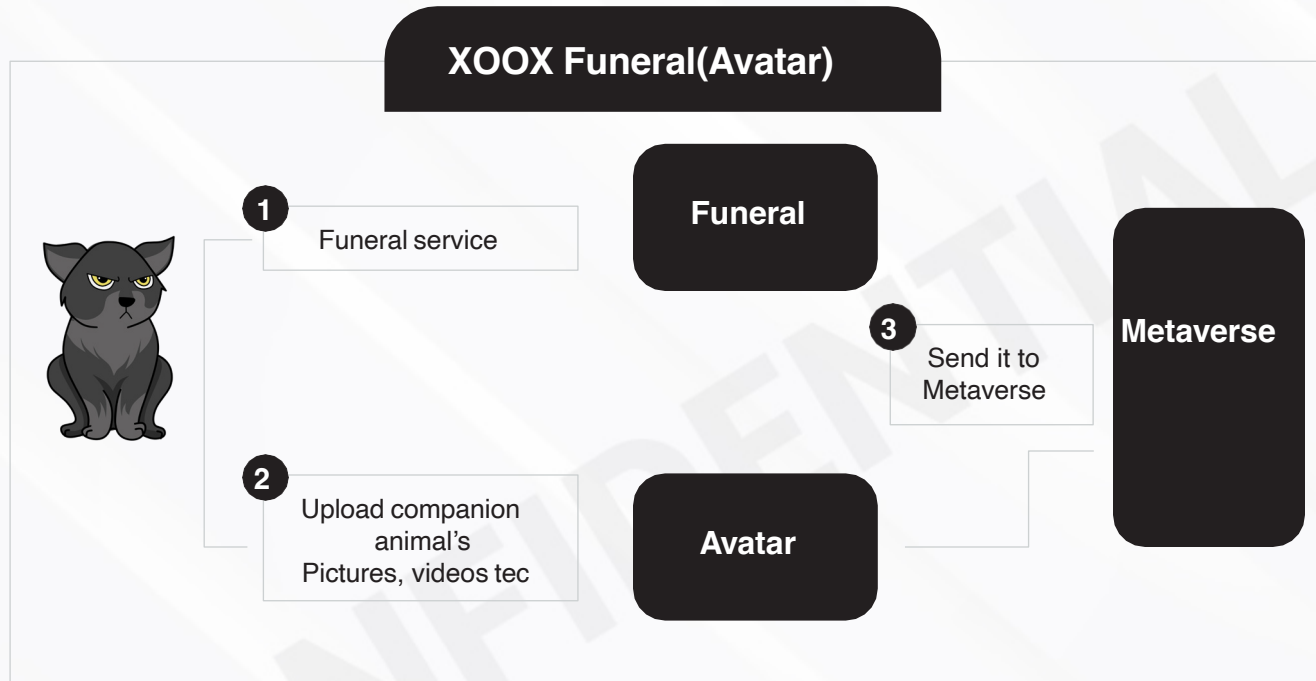
You can check your dog's health in real time by capturing and the data displayed by the dog's urine diagnosis kit with an AI home health care camera.

Through the AI system and accumulated data, it is possible to analyze symptoms for each part more accurately.

The analyzed symptoms are transmitted to the partnered animal hospital to receive a more accurate doctor's opinion, and the hospital's treatment can also be scheduled in real time.

## XOOX Funeral service

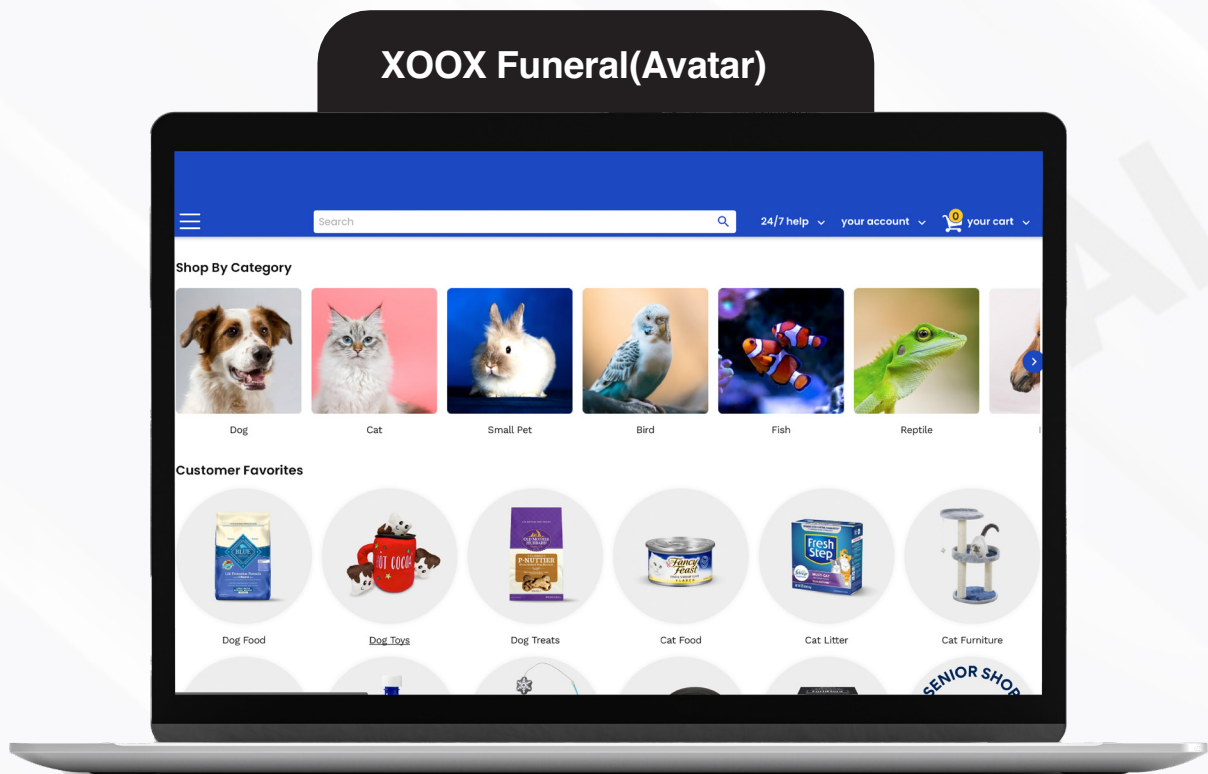
XOOX Funeral Service is a service that when a companion animal dies. It provides all the services necessary for a funeral of a companion animal, and even after death, it is reborn as an avatar in a virtual space in the form of an AI Pet to make memories with companion animals.



- The Funeral service provides services through partner companies which related the funeral industry
- We create avatars by registering photos, videos, and voices of pets uploaded by members. At this time, when you register as much data as possible, an avatar that is closer to reality is created.
- We are processing technology to analyze companion animal videos, and perform basic work through behavior analysis of companion animals and AI learning data.

## XOOX Real Time Live Broadcasting Service

The XOOX real-time live broadcasting is a service that streams videos of companion animals in real time through YouTube. If your pet is at home alone, you can relieve depression by watching other animals' videos.



- Real-time live broadcasting is progressed by the YouTube channel.
- It is possible to attract future customers
- Link live broadcasting and shopping malls to induce shopping mall sales according to product sales.
- Live broadcasts can be used as data for future avatar creation.



## XOOX World(Metaverse) Service 1/2

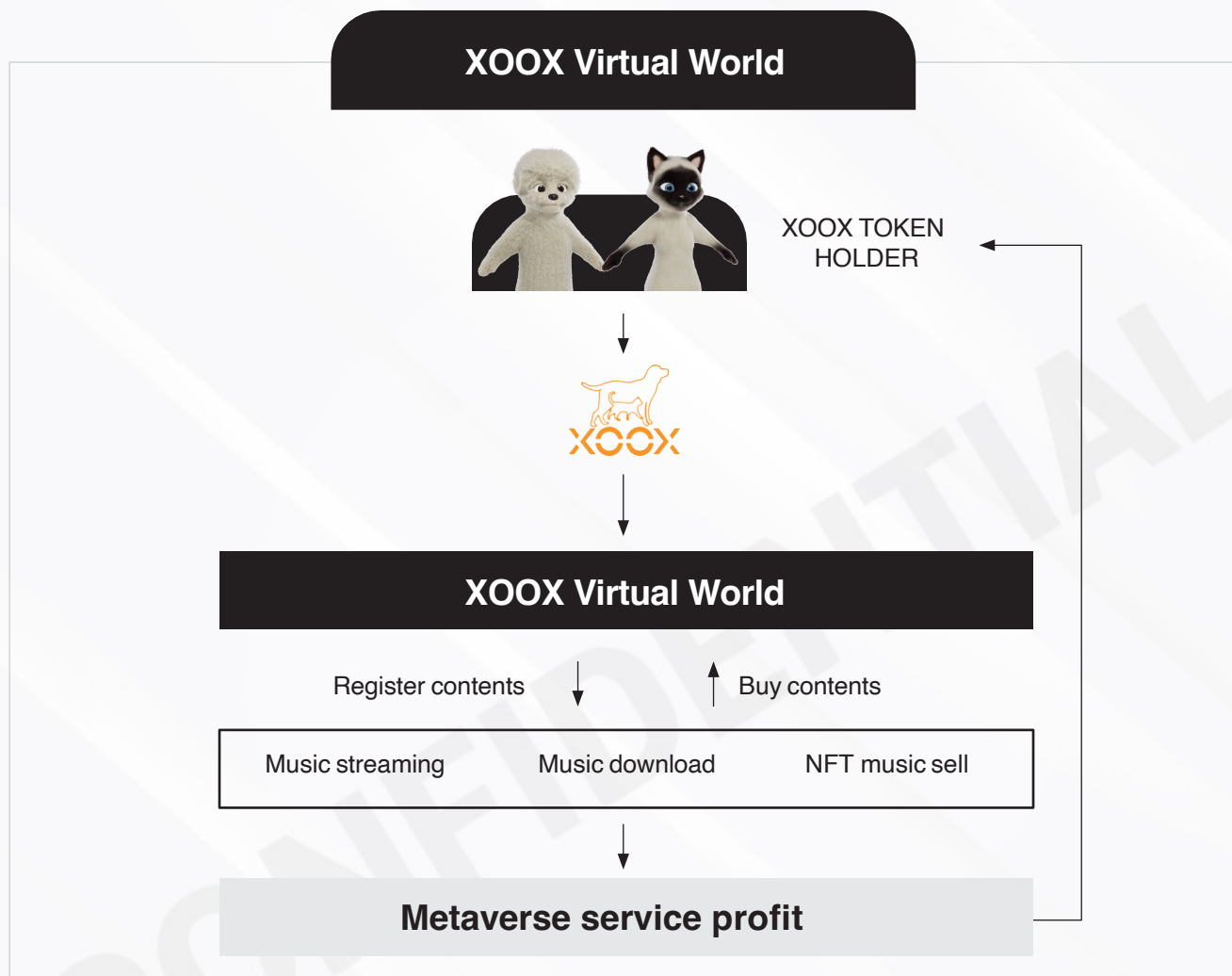
The virtual reality (AR) avatar platform 'XOOX Virtual World' is so popular in just 2 years and it is called a playground for teenagers. It has surpassed 200 million global subscribers as of December 2020. XOOX Virtual World is a mobile platform where you can enjoy games and activities by creating your own unique avatar, and the industry considers XOOX Virtual World as one of the representative examples of the rapidly growing contemporary Metaverse.



Recently, the distribution platform industry is paying attention to 'Metaverse', which is called the playground of Z Generation. This is because the metaverse is expected to be a technology that will replace the Internet, and it is the best marketing place to target the future potential customer.

The unique feature of the XOOX Virtual World service is that it adds socializing and creative elements. In XOOX Virtual World, you can create high-quality photos, music contents, and video contents using the photo booth and video booth without any special skills or equipment. Through their avatars, users can take photos or videos to meet their friends in a 3D world of various concepts, and set their own special background music.

## XOOX World(Metaverse) Service 2/2



XOOX Virtual World users can create their own virtual space called world. A virtual space, XOOX Virtual World users can freely play with their pets through their avatars in the the Company's metaverse and through the XOOX PLATFORM music box, they will be able to listen to or download music for companion animals and purchase NFT sound sources.

There are more than 15,000 maps in XOOX Virtual World, and users can use their imagination to create or design a new space that has never existed before.

XOOX Virtual World and Characters will be powered by Unreal Engine 5.0 with partnership with Epic Games. We plan to developed 1,000 different breeds of dogs and cats using the latest graphic powered platforms.

## XOOX NFT Issuance

The provider registers copyright information for content and sound source on XOOX PLATFORM and generates NFT tokens. Afterwards, the seller and the purchasing agent (person) are connected on the XOOX PLATFORM (marketplace), enabling peer-to-peer ('P2P') transactions and NFT transactions between companies and individuals ('Business to Consumer', B2C).

### 01.

#### XOOX PLATFORM Account create

Users sign up for XOOXPLATFORM membership and create a new account.

### 02.

#### Register content info(Music)

Creators click Register content (sound source) information and add name, description, profile and banner image.

### 03.

#### NFT Token Issuance

Creators upload content and issue NFTs. (Supports various files such as MP3, FLAC, MP4, etc.)

### 04.

#### Register XOOX PLATFORM

When the creator selects an NFT sales method such as fixed price or auction and registers the sales price, registration in the XOOX NFT marketplace is completed

### 05.

#### NFT (B2C, B2B)

Subscription agents (humans) can freely purchase NFT products using XOOX TOKEN as a payment method on XOOX PLATFORM on behalf of companion animals

### 06.

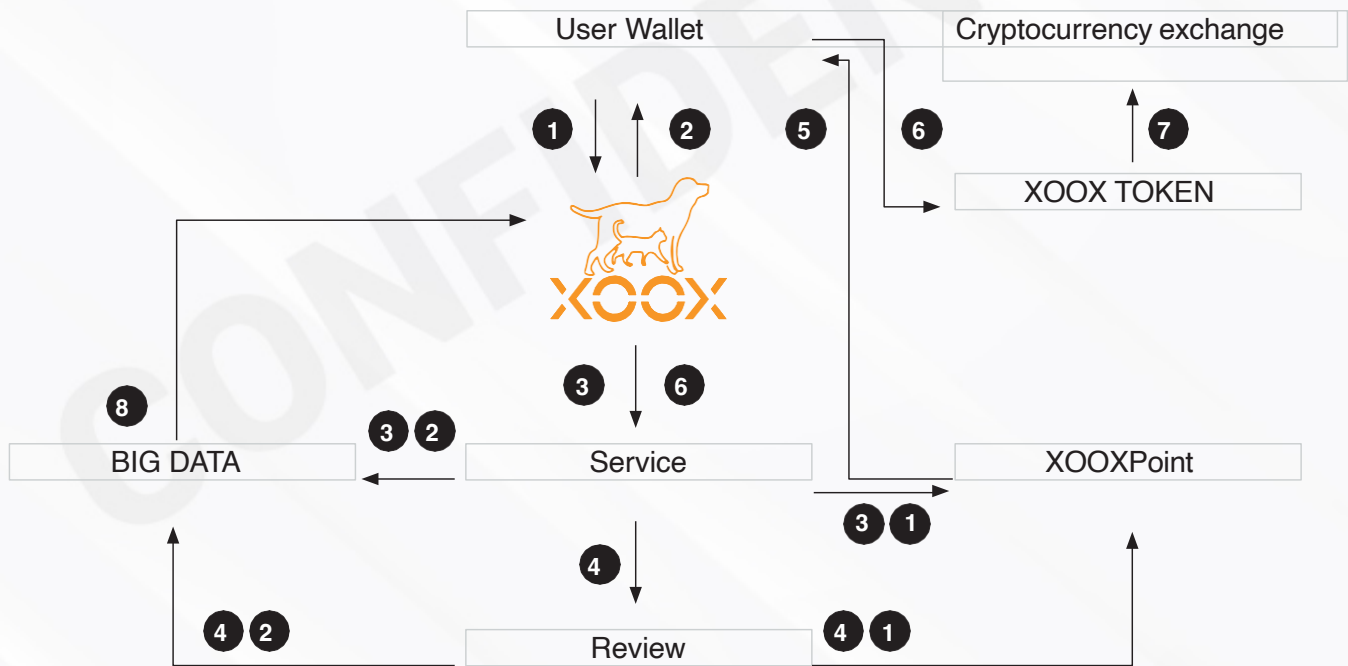
#### Pet NFT Code register

Companion Animal NFT Code Registration: Record and prove ownership of NFT by recording registration information such as 15-digit companion animal registration number (15 digits common to global) and animal name in the NFT token owned by the companion animal.

\* Those who joined XOOX Token can link member information and companion animal information

## XOOX TOKEN Reward plan

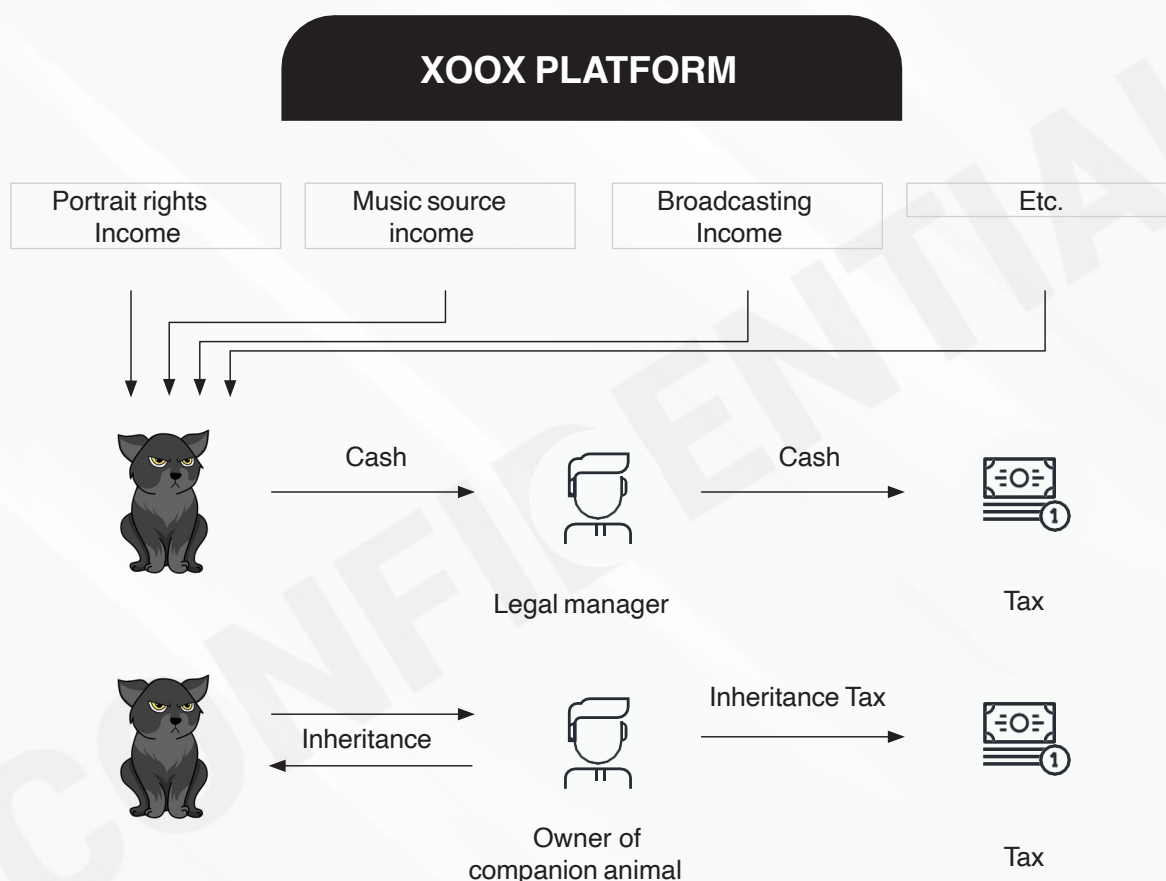
1. Users join XOOX PLATFORM.
2. Users are given XOOX Wallet accounts.
3. Users earn XOOX points by purchasing or streaming companion animal products, medical & insurance services, online content, NFT music, etc. through XOOX TOKEN.
4. Users earn XOOX points by writing products or reviews.
5. The XOOX points earned by the user are sent to the user's wallet.
6. Users can use XOOX points to purchase goods or content, or to stream music, and can also SWAP with XOOX TOKEN.
7. Users can SWAP XOOX TOKEN to CASH on cryptocurrency exchanges.
8. The user's purchase information and reviews are big data and the XOOX PLATFORM is further developed.





## Accounting System (tax and inheritance)

In XOOX PLATFORM, companion animals are members, users, and registered as parties to revenue. Taxes on all income generated through XOOX PLATFORM will be paid through the legal manager. XOOX PLATFORM prepares in advance to avoid systemic and legal disputes related to tax and inheritance.

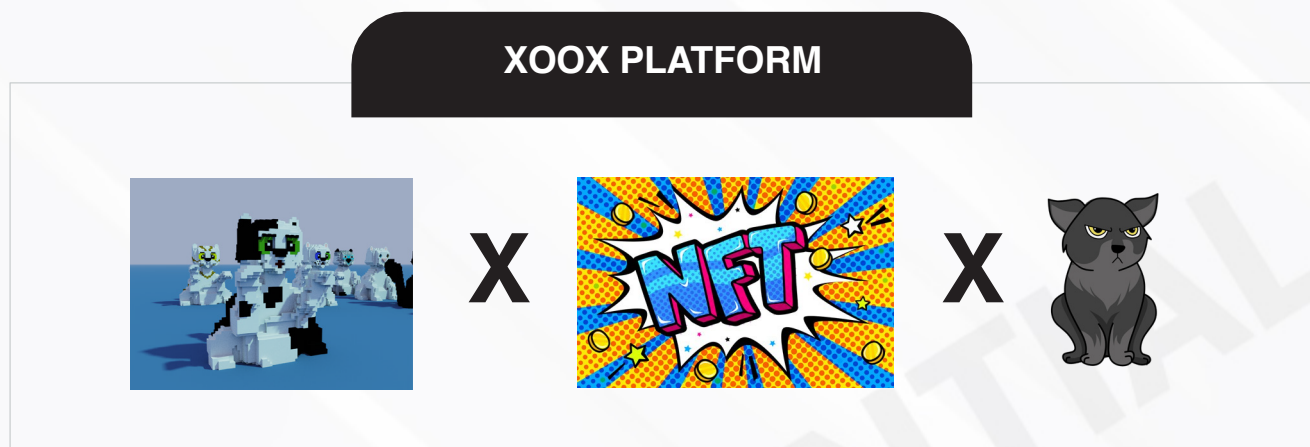


If a companion animal dies, the primary heir becomes a direct blood relative, and if there is no direct blood relative, the primary heir can become the owner of the companion animal. However, if the owner of the inheritance is dead, all assets belong to XOOX PLATFORM and the assets are used as a fund for companion animals.

If the owner of the companion animal dies and the owner wants to inherit the property to the companion animal, the owner can appoint a legal manager, who takes charge of the property until the pet dies.

## XOOX PLATFORM Business Goal

We will protect the rights of companion animals by making companion animals more valuable through XOOX PLATFORM and forming a close friendly relationship with humans and companion animals.



The business goals of XOOX PLATFORM can be summarized into 5 points

1

We will develop and provide a platform for our pets to live in co-existence with humans. A platform only for the companion pets.

2

Anyone in the world can become a provider, register and sell their products or content on the XOOX platform, and create music as NFT tokens to trade through the XOOX marketplace (platform).

3

To protect the ownership of companion animals, we will apply MRC-721 Blockchain System, an NFT security technology, to fundamentally block illegal activities such as NFT content leakage and illegal download.

4

XOOX PLATFORM is developed as a Blockchain Base to perfectly protect the rights of the owner (pets) through smart contracts, and guarantees the owner's profits as much as possible through direct transactions with suppliers and buyers.

5

We safely pay profits to suppliers with a transparent settlement structure through an automated block chain settlement system.

4.0  
TECH



## WHY, Blockchain

XOOX's on-chain information originates from the blockchain, and it refers to the linkage of network data that continues to depend on the state of the blockchain for its validity. On-chain transactions are considered valid transactions only if the blockchain has been updated to reflect them in the public ledger. The XOOX blockchain has the following characteristics.

1. XOOX BLOCKCHAIN transactions provide security and transparency as they are immutable once verified and recorded on the network.
2. Transactions occurring on the blockchain reflected in each distributed node
3. Transactions are verified or authenticated transactions that lead to updates to the entire blockchain network.
4. Transactions generated by the blockchain are verified by a number of network participants called miners Transactions are verified by the participants
5. Effective only when agreement on the validity of the transaction is reached
6. Share information by recording transaction details in blocks and distributing them to network participants

### XOOX Blockchain Platform

Blockchain has a hash function, digital signature and public key encryption method, and proof-of-work (mining) as core elements.

Data obtained from the platform is shared in blocks that cannot be forged or altered. The basic data of sound sources and pets (user ID/data category information/vent information/sound source level, etc.) is HASH and distributed information and is recorded in XOOX ON DEMEND SERVER, DBMS, and blockchain. In this case, it can be managed as digital information that cannot be used illegally. Because it is a distributed ledger-based structure and design, it does not require a third-party intermediary, so it can be used at a minimum cost by using XOOX TOKEN as a payment method for payment and XOOX services. XOOX BLOCKCHAIN PLATOFRM's content purchase, receipt, discount, reward, feedback, etc. are recorded in the distributed ledger to provide a service as information that can be interacted with in the XOOX system.

## XOOX Blockchain Platform

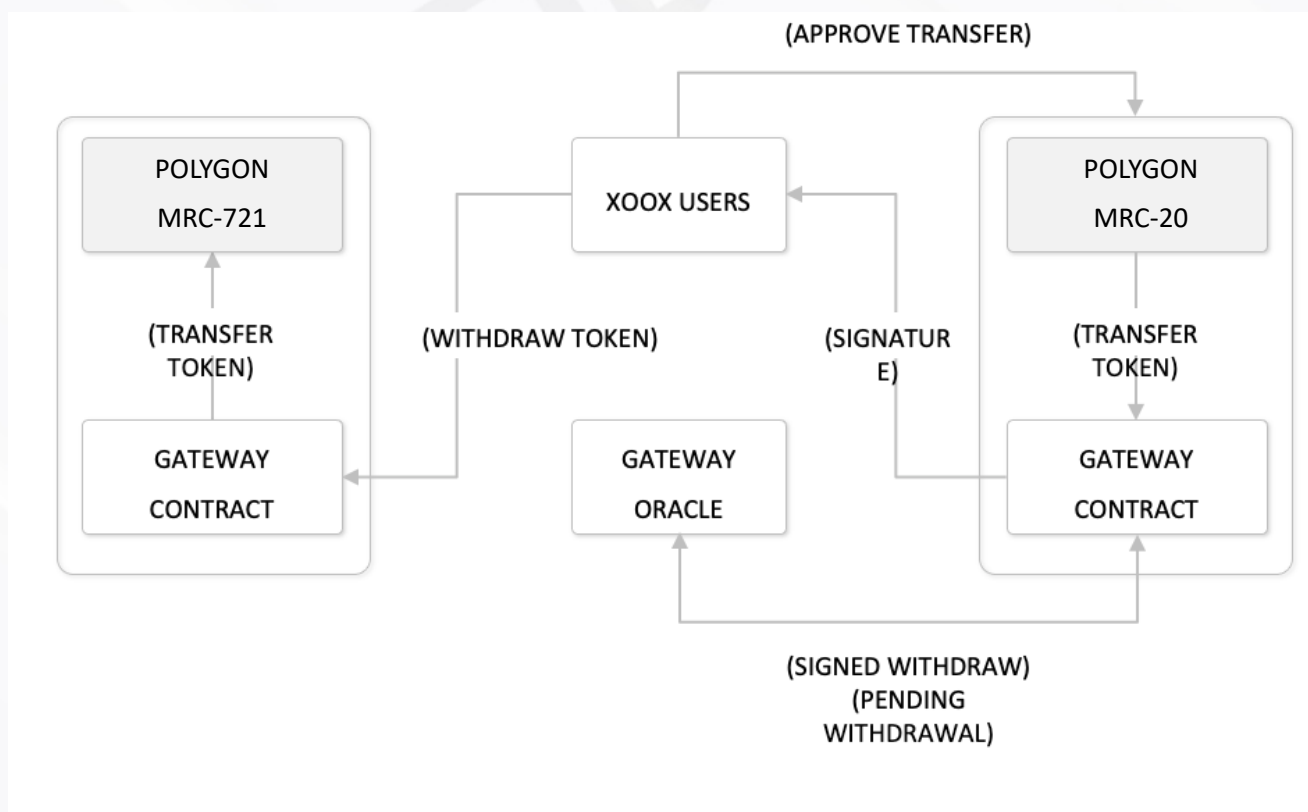
The XOOX blockchain platform is based on Polygon. Polygon, launched in 2017, is a protocol that implements innovative features of smart contracts and decentralized apps in the Turing language. Block generation of each node is possible, and can be built and run without node control or interference. As an open-source decentralized software platform, the Polygon protocol features support for facilitating the distribution of data to distributed computer nodes in the network and allowing Matic to be exchanged as a way to settle contracts with other users. Polygon 2.0 is expanding in the following order.

Phase 0: Clean up for phase 1 and create a beacon chain

phase 1: Test possible to solve transaction problems by applying 64 shards, staking ETH to convert to PoS

Phase 2: Consolidate 1.0 and 2.0 by making Polygon 1.0 into one shard chain and secure scalability

## XOOX BLOCKCHAIN FLOW





## XOOX NFT Blockchain

XOOX NFT TOKEN is also designed based on Polygon. The XOOX NFT is implemented as MRC-721, which defines a standard interface for non-certainty tokens, following the standard API implementation of smart contracts. These standard APIs provide basic functionality for tracking and sending NFTs. The standard interface also supports working with various NFTs on Polygon in the application layer of wallets and various DAPPs. In tracking identifiable assets, the NFT identifier is identified by an ID inside the UNIT 256 MRC-721 smart contract, and a pair of CONTRACT ADDRESS and UNIT 256 TOKEN

IDs become globally unique and complete entitlement identifiers. XOOX NFT will standardize secure transmission capabilities and will enable stronger digital licenses to be authenticated by the NFT owner, the NFT's authorized address, and the current NFT owner's authorized operator.

XOOX NFT is a protocol that defines licensing standards for CONTENTS. NFT means the only token that cannot be replaced with a NON FUNGIBLE TOKEN and can be provided with various interfaces as follows.

XOOX NFT can share ownership of tokens.

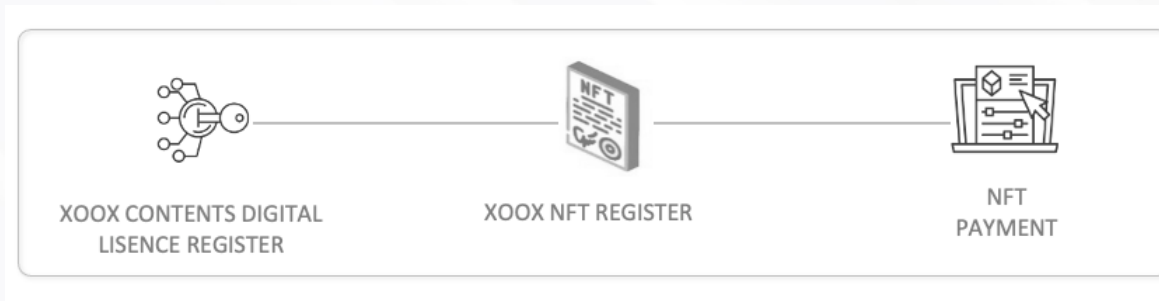
For example, you can share the content of a specific XOOX creator with a cloud license and take a share of the revenue for it as well.

Not only can the exercise of rights of specific centralized holders be decentralized, but it can also have a structure that distributes more diverse benefits to users of the XOOX PLATFORM ecosystem.



XOOX NFT is not controlled by anyone using blockchain technology and has a uniqueness that cannot be duplicated, so its scarcity can be fully recognized.

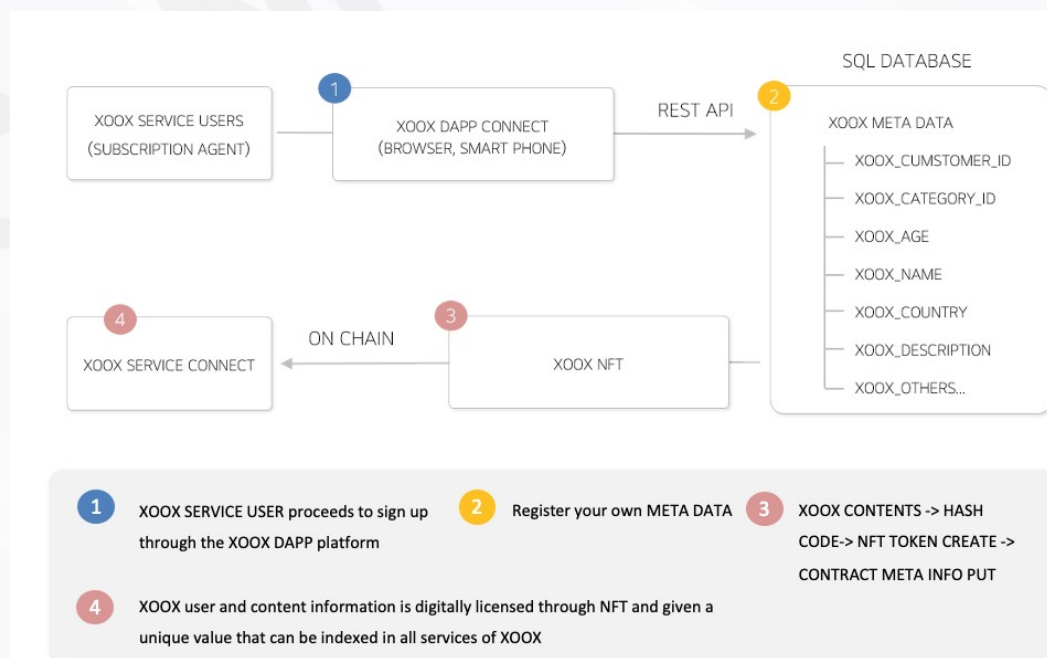
It provides a marketplace where various digital assets including XOOX content creators can be produced and traded with NFT.



XOOX M PLATFORM guarantees creators ownership of digital licenses and provides a core content provider role and system. If NFT is issued on XOOX M PLATOFORM, all kinds of digital assets will be stored on the blockchain and will be able to operate more safely in terms of security and asset exercise. XOOX NFT TOKEN will be provided so that they can manage their digital assets and utilize them quickly and easily.

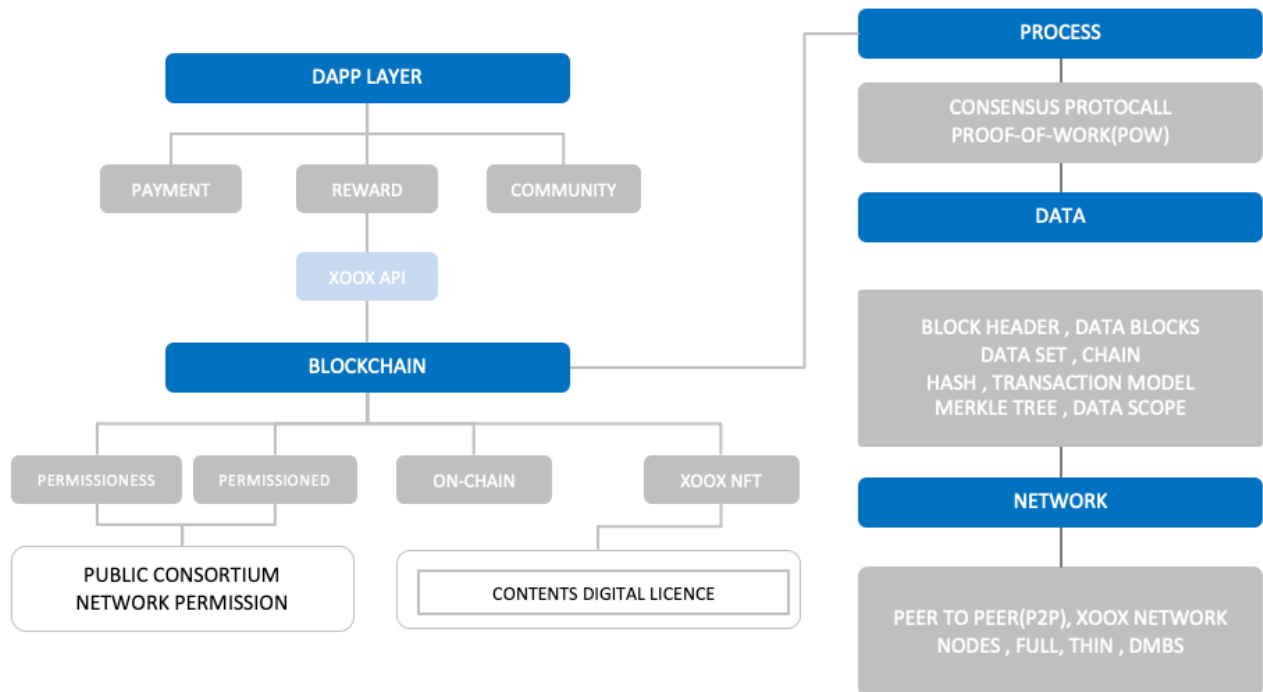
## XOOX NFT BLOCKCHAIN

### XOOX NFT FLOW



## XOOX Architecture

### XOOX System Architecture



## 01.

### DAPP LAYER

This is the user hierarchy information that accesses the XOOX MALL. The DAPP SERVICE layer is an application front layer that links XOOX MARKET PLACE, XOOX PET, XOOX WORLD, and XOOX MUSIC services. The service and network lead the relationship between XOOX subscribers, administrators and their surroundings into an organic network relationship. It is an efficiency layer that generates appropriate reward events according to the action timeline of XOOX members.

**02.****XOOX API**

The configuration diagram of API is a layer in which API as a platform is configured for linkage with affiliates that provide XOOX services. Various services can be linked by accessing important information such as XOOX platform users, video information, tokens, and cut history information. As a security measure for payment security issues, we provide a double security solution so that affiliates and users can use it more safely and conveniently through the multi-signal authentication process

**03.****XOOX SMART CONTRACT LAYER**

XOOX SMART CONTRACT is a layer that points to a distributed code structure built on the basis of PLATFORM assets, smart contracts, protocols, and contract codes. A layer that manages the lines of code that automatically execute functions when consensus/sets of events are triggered by predefined event logic via smart contracts.

**04.****BLOCKCHAIN (ON CHAIN)**

It is a layer that links XOOX service data with blockchain. XOOX Service It is a hierarchical space that stores important information in BLOCK HEADER and stores product meta information, payment, and point rewards in the block chain. It is the main network layer on the Polygon platform, and stores the block containing the Merck tree, authenticated digital signature information, hash, event (payment) transaction, and META DATA delivered from the DAPP in the block.

**05.****XOOX OFF-CHAIN DMBS**

The XOOX DMBS server layer is a layer that transmits and receives data directly to and from the DAPP. The on-chain blockchain processing speed is about 30 TPS based on Polygon. Since the block contains only about 200 payment information, even if the user pays at the shopping mall, the result information cannot be immediately replied. As a solution to this, it is a hierarchical structure that stores DBMS data through a cloud server and contains core HASH data in the on-chain network layer..

## XOOX Smart Contract

### 01.

#### **Copyright contract code**

Copyright contract code is a code that is executed only for beneficiaries who have completed the KYC verification process. The process for identity verification will be approved by the XOOX M administrator, and offline appropriate qualification screening will be conducted for the beneficiary. Copyright SMART CONTRACT's primary purpose is to provide a fully digitally licensed solution for remittance services and also means payment as an easy payment platform for all users..

### 02.

#### **The identity verification contract code.**

Copyright registrant KYC (KNOW YOUR CUSTOMER) will be registered when signing up for the first XOOX platform. Registered information is generated by SMART CONTRACT, and management of this information is managed by a separate certification authority in XOOX PLATFORM. Through the registered information, it will be utilized in XOOX PLATFORM and P2P service.

### 03.

#### **Reward contract code**

Users who purchase and act on live streaming content on the XOOX platform can receive XOOX TOKEN as a reward for their activity. XOOX TOKEN received as a reward can be transferred to other users and can be used as a payment method for other purchases.

### 04

**Secure transactions and prevent fraudulent payments** XOOX platform adopts various security solutions to protect system configuration, protect server, client, network and data, and plan to introduce AML for stable operation of service and change of government policy. To enhance user security, trust-based transparency, and prevent transactions and fraudulent payments, all transaction information is disclosed and notified to users through SMART CONTRACT.



## XOOX Governance Economy

### XOOX Inflation

Inflation can be operated by changes in price

$$(P_{t+1} - P_t) / P_t = P_{t+1} / P_t - 1$$

Inflation supply

$$(M_{t+1}^s / M_{t+1}^d) \times (M_t^d / M_t^s) - 1 = (M_{t+1}^s / M_t^s) \times (M_t^d / M_{t+1}^d) - 1$$

$$\text{즉, } (M_{t+1}^s / M_t^s) = (1 + \text{Inflation rate}) \times (M_{t+1}^d / M_t^d)$$

Money supply

$$M_{t+1}^s = (1 + \text{Inflation rate}) \times (M_{t+1}^d / M_t^d) \times M_t^s$$

$M_{t+1}^d / M_t^d$  can be defined as the rate of increase in demand for real money. Therefore, if the inflation target is fixed at a constant rate, the money supply ( $M_{t+1}^s$ ) in the next period can be determined by the current period's XOOX money supply ( $M_t^s$ ) and the rate of increase in real money demand.

XOOX Demand analysis for tokens

The demand for XOOX tokens is most affected by the number of transactions between content producers and consumers and the price level of the token. Additionally, sponsors and investors also have demand for tokens.

Therefore, the demand for the entire token is affected by the demand for the transaction (T), the price level (P), the token circulation rate (V) and the investor demand (S),  $M_d = P \times (T/V + S)$   $M_d$  :

Demand for tokens,



## XOOX Governance Economy

### XOOX Asset Supply and Demand

In order to increase the stability of the XOOX token economy, it is necessary to clearly define the XOOX token supply mechanism. In a typical economy, the money market is balanced when the real money supply (M/P) equals the demand for money, which is affected by production (Y) and the interest rate (i).

$$M/P = M_d(Y, i)$$



In the XOOX token economy, where there is no effect of interest rates, the money supply can be directly managed in consideration of production. If adequate inflation is generated through additional issuance of XOOX tokens, it can be an incentive for economic entities holding XOOX TOKEN to promote trade, which is economic activity, and can prevent deflation that destabilizes the economy. Issuance System for Supply of Money The issuance system for supplying new

currency aims to grow demand and supply at an appropriate level. In other words, it is to increase the coin supply to a level that can meet the demand for XOOX Token that arises in the future. The issuance system for this goal is as follows. At a specific time  $t$ , the demand for money from the price level ( $P_t$ ), transaction demand ( $T_t$ ), money circulation velocity ( $V_t$ ), and investment demand ( $S_t$ ) is as follows.

$$M_{td} = P_t \times (T_t / V_t + S_t)$$

The real money demand without taking into account the value of money is  $M_{trd} = T_t / V_t + S_t$ . In order to be balanced, the money supply at each point must be in equilibrium with the money demand.

# 5.0

## TOKEN DISTRIBUTION



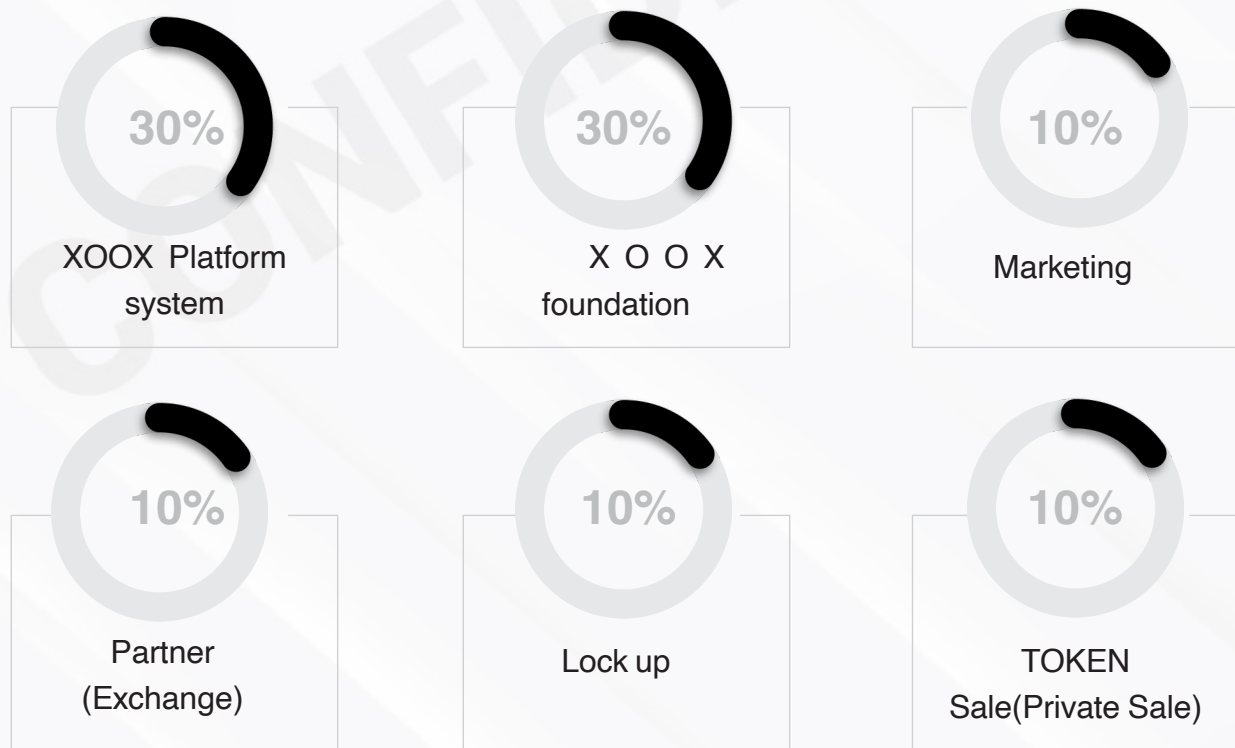
## TOKEN Matrix

XOOX TOKEN is issued as the MRC-20 standard on the Polygon blockchain network and is used as a key currency within the XOOX PLATFORM as a utility token with a total issuance of 100 billion.

## TOKEN Distribution

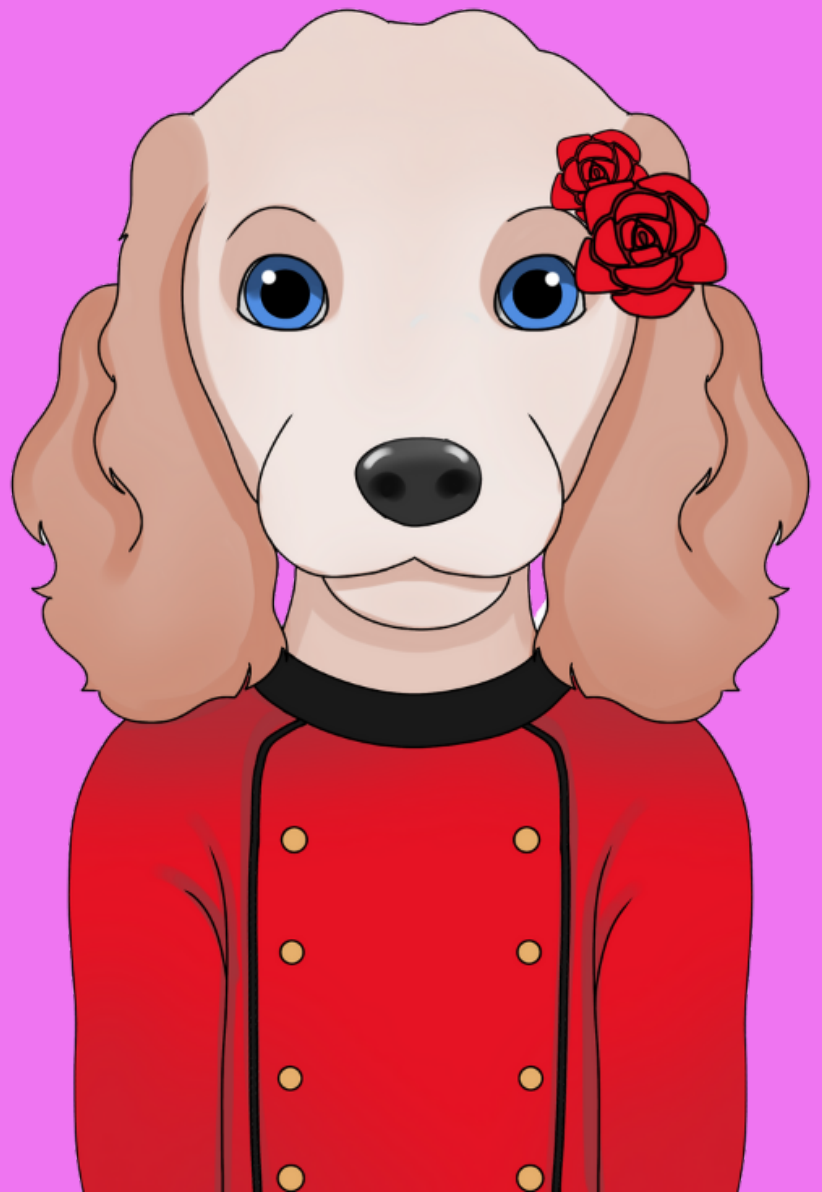
Role of TOKEN	Utility
TOKEN supply	100,000,000,000
Symbol/ Ticker	XOOX
Decimals	18
Initial value	\$0.10 per Token

## Token Allocation



# 6.0

## Marketing Strategy





### Competitive Advantage

XOOX believes the most important competitive factors for our core offerings are ease of use, product features, value proposition, cost, reliability, security, and product and support quality. Access to distribution channels is also important for our products. XOOX believes the most important competitive factors are functionality, ease of use, high availability, security, the integration of these products with related software, brand name recognition, effective distribution, quality of support, and cost.



- We have no direct competitor in the global market as our platform is unique.
- First mover advantage in the Pet specific metaverse and technology platform.
- XOOX will build an exciting and successful business by catering to the needs and wants of pets and their owners as well as those who are interested in NFTs. XOOX Token's key target market are those who are interested in pet rights protection.
- The company will build a durable competitive advantage by using the power of artificial intelligence (A.I.) and other advanced technologies to deliver innovative solutions via their trusted open platform that builds connections between customers, partners and products.

**Competitive Advantage (Cont'd)**

- XOOX develops, hosts, and markets the XOOX Token Website and the mobile app. The website and app facilitate company staff and customer communication as well as increases customer satisfaction.
- XOOX will create a full life planning ecosystem for pets and pet owners that will provide long-term competitive advantage and low user attrition rate.
- XOOX will continue to build an exciting and successful business by catering to the needs and wants of existing customers while increasing its market and service exposure to the growing pet and pet owner market.
- We plan to build a strong pet network. Therefore, gathering core users on our social platform will be the first feature to be promoted.
- Our app is followed by 24/7 veterinary consultation services, pet loss, animal communication, and other services.
- We also have a pet community feature, where users can put up their queries related to pets or discuss any topics involving questions, queries, thoughts, suggestions, and anything related to pets.
- We will implement subscriber growth through various social platforms Facebook and Instagram profiles. We will also have wide word-of-mouth marketing.



### Target Market Segment Strategy

Our target market is pet owners and their pets globally. We are also targeting gamers and social media users in the world. There are several groups within the “pet owners” group. The detail market is presented below:

- **Social Media Users:** we are also targeting social media users who love to play games online. This segment has a huge potential and we will generate 50% of our revenue from it.
- **Baby Boomers** - Senior citizens Baby boomers are launching their real kids into the wild and replacing them with pets – and they are pampering them. In almost all spending categories, spending declines once a person reaches 55 years of age – but pet spending is peaking between the ages of 55 and 64.
- **Millennials** - Millennials are the people born between 1985 and 2010 and are probably the first generation to grow up thinking of pets more like humans than animals. They are finding their independence and have disposable income – and they are buying pets and spoiling them. Great for the industry – these folks will be loyal customers for decades. Hence, we can generate our 20% revenue from this segment.
- **High-End Customers** - In addition, we will introduce our app services to high-end customers and other ethnic groups such as celebrities, sports men and women, corporate executives and other important personalities in the USA. Thus, we can generate 10% of our revenue from this group.

## Marketing Plan

### Business Website

A business website serves as the most important tool for marketing. It will bring our clients in contact with us and serve as advertising board for our offerings. Very cost-effectively, it will reach millions and billions of clients nationally and internationally. Its content will reflect business image and identity. Our marketing strategy will lead the contents displayed here.

### SEO (Search Engine Optimization)

Search engine optimization (SEO) has to be employed as it will bring our website at the top positions in natural search queries on widely used search engines like Google, Yahoo and MSN. It will enhance the visibility of our website. It will make our website not only easy to locate but also easy for customers. It is most popular form of targeted marketing as it brings people who look for what we are offering. Our web pages shall be optimized both 'On' and 'Off' page.



### Social Media Channels

The Company will execute the marketing strategy utilizing the various major social platforms including Facebook, Instagram, Twitter, Youtube, Tiktok, etc.



### News and Media

The Company will also increase brand recognition and awareness utilizing various news and media platforms and channels.

## Marketing Plan

The future of a business lies in the number of loyal customers that they have the capacity and competence of the employees, their investment strategy, and the business structure. We know that one of the ways of gaining approval and winning customers over is to offer our professional services a little bit cheaper than what is obtainable in the market. We are reinvesting everything to our business model to dominate the industry and create new trend worldwide similar to what Amazon did back in the day. XOOX Token. will make sure that the right foundation, structures, and processes are put in place to ensure that our staff welfare is well taken of.



The company's strategies shall utilize the following elements:

- Leverage - Gained overtime through professionalism and impact on users' expectation.
- Communication – Develop mechanisms to address the customer's feedback.
- Efficiency – Design the best of operational structure for mutually beneficial relationships with customers.
- Risk Management – Identify potential risk to prevent service disruption and provide solutions to minimize interruptions.
- Continuous Improvement – Engage in constant review of operations while striving to assist customers most professionally.
- Collaboration - Develop a business relationship with key players in the industry and maximize opportunities to drive growth.



### Marketing Plan

#### Online Campaigns

Online campaigns (also known by the name of online activism, digital campaigning, cyber activism and e-campaigning) employ blogs, social networks, mobile tools, emails, marketing databases, podcasts and websites to name a few. Blogs are never dead. They heavily occupy the World Wide Web. We shall ensure that our website is secured and backed up regularly. We'll test run every path and link before launching it. With the help of social media, we'll go where our customers are. By applying Google analytics, our campaign manager will be well informed that who is accessing our website and when and from where. Customization and personalization are exceptionally made easy using digital channels. We'll gain the edge by resorting to well written personalized content.

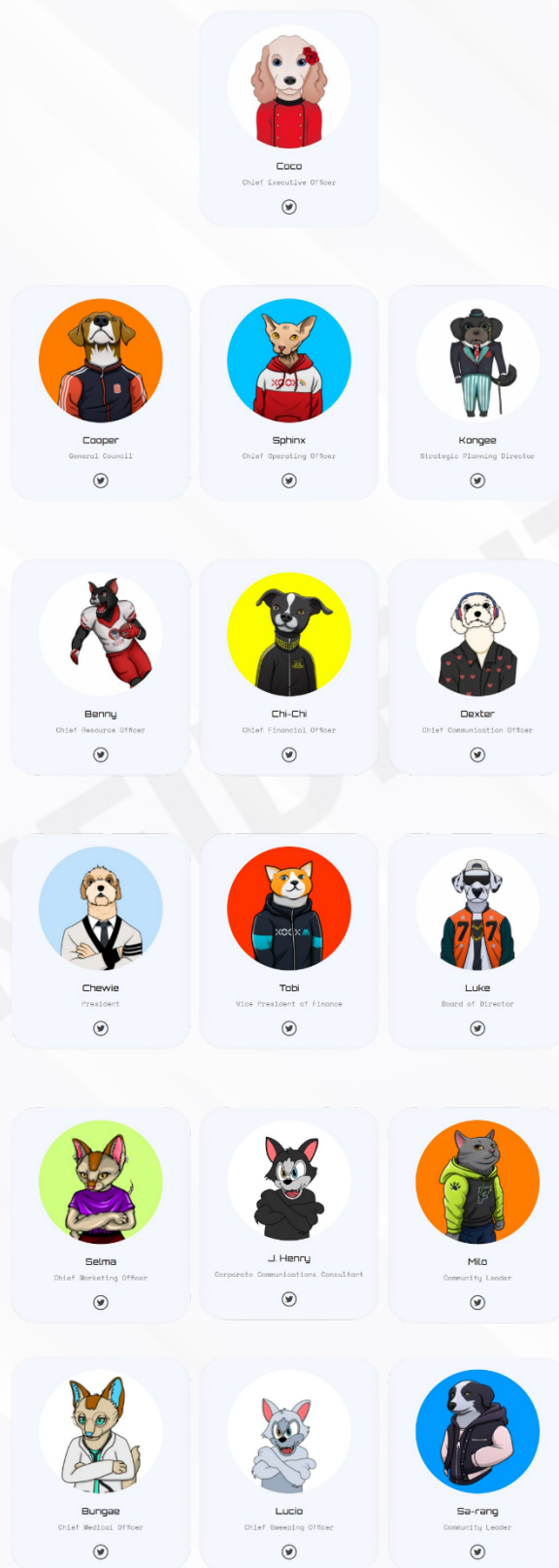
#### Sponsorships

A sponsorship is regarded by marketers as a fast growing marketing strategy which increases visibility and helps build a firm reputation and brand image. It will erect for us what is needed the most and what is the credibility in our business. It will generate a goodwill that cannot be easily copied by our competitors. We will try to use events for sponsorships to defray surging costs. For this, we will sponsor local events, exhibitions and seminars specially targeting millennials who have high interest in pet ownership.

#### Public Relations

Create an extensive list of media contacts to email press releases about NODE STAR DAO offerings and the benefits in patronizing the company's platform.

## XOOX Team Profile



**7.0**  
**MARKET**  
**Opportunity**



# I. Industrial Analysis

## Global Pet Care Market

- Globally, there are approximately 1.6 billion dogs and cats with half of them being pets.
- The global pet care market is expected to grow from USD 225 billion in 2022 and to reach USD 358.62 billion by 2027, growing at a CAGR of 6% during the forecast period 2022-2027.
- In May 2019, there were 16,530 animal trainers employed with a mean annual wage of \$36,240.
- Animal breeders numbered 2,160 in May 2018, and they had an annual wage of \$43,080.
- Veterinary assistants and laboratory animal caretakers' numbered 97,030. They earned around \$29,690 annually.
- There were 212,450 animal caretakers employed as of the last count. They had a mean annual wage of \$27,060.
- The US had around 74,450 veterinarians employed in May 2019, who earned \$104,820 per year.
- The pet care market is witnessing significant growth from the past years. This growth is attributed to advanced technologies like GPS pet tracker, smart feeder, pet tread-wheel and treadmill, pet camera and feeder, and other associated technological advancements that help maintain location tracks and achieve daily pet chores conveniently. The introduction of various advanced products in the market, such as sureflap, litter robot, go pro fetch, and various others, will propel the pet care market. The growing adoption of high-tech collar products that helps in keeping the record of the pet's heart rate, GPS location, and body temperature will influence the market.

### Global Pet Care Market (Cont'd)

- Dogs are highly popular as pets, as they are friendly and loyal. Increase in the number of dog rescue centers and healthcare for protecting stray and sick dogs is fueling the dog care market across the globe. Dog care majorly comprises dog food, accessories, and dog health care services. Presently, dog owners use pet food products to ensure their dog stays healthy by providing essential nutrition according to the dog's size, physical activity, and age. Dogs share a strong bond with their owners and are considered part of the family. Owners are concerned about their dogs and invest heavily on smart GPS devices and health trackers in order to monitor their dog's health, location, and daily physical activities. These factors are anticipated to offer significant opportunities to the dog care market during the forecast period. The global dog care market can be segmented based on dog food, dog accessories, dog cosmetic & grooming, and dog health care. Demand for dog care has been increasing in the last few years, owing to the increase in adoption of dogs and rise in the number of dog shelters, clinics, and rescue centers.

### U.S. Online Pet Care Market - Statistics & Facts

- It only takes a quick search on any social media platform to see that people in the United States love to pamper their dogs, cats, and other pet animals. The sheer variety of pet products available on the U.S. market is astonishing, from orthopedic pet beds to nail polish for dogs. Much of this variety can be found when browsing online marketplaces. Pet care products were not always commonly purchased on the web, however, e-commerce sales of household and pet care goods have experienced a continuous upward trend over the years.



## Current status of pet households & pets in the U.S.

- The world's No. 1 pet market is the United States, and more than 84.9 million households, or 67% of all U.S. households, raise pets. Among them, 63.4 million households had dogs, the largest number of "dogs" among pets, followed by cats and fish
- In the U.S., there are approximately 63.4 million pet dogs and 42.7 million pet cats.
- "In the United States, baby boomers tend to grow up to become independent and raise pets instead of their children," said the Dallas Trade Center in the U.S. and believes that they prefer pets in the age range between 55 and 64.



- In addition, the United States has traditionally preferred large dogs such as Labrador Retriever, but recently, as the population living in densely populated and urban areas increases, the proportion of raising small dogs is increasing. The increase in the aging population has also driven the popularity of small dogs, which are relatively easy to take care of and go out, and the Chicago Trade Center predicts that "the continued reduction of residential space due to urbanization will continue to demand small dogs."

## Favorite Online Platforms and Retailers

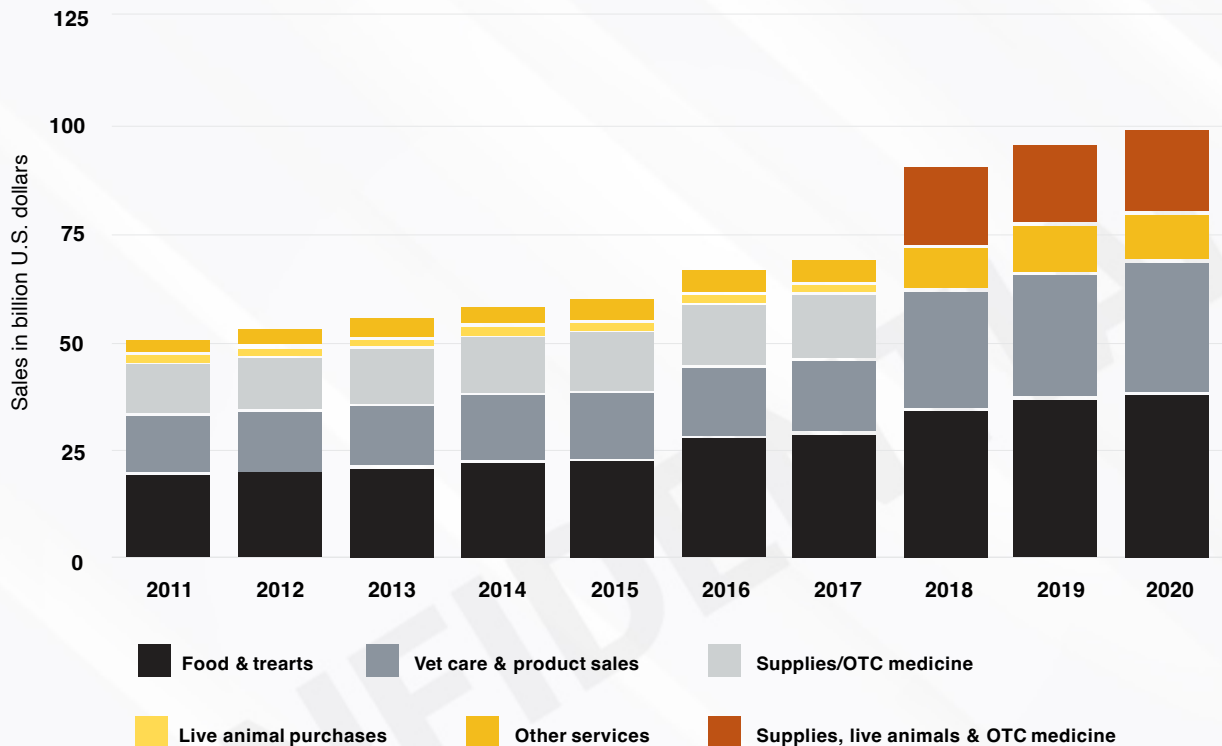
- When looking for pet products and supplies on online platforms, nearly half of American pet owners would visit Amazon, making this major e-commerce website the most popular option. Other favorites among consumers included the e-commerce platforms of Target, Walmart, and Costco. In terms of actual online pet shops, Chewy was in the lead: when surveyed, about 30 percent of pet-owning shoppers stated they had visited and purchased from their website in the past 12 months.

## Animal lovers' shopping behavior

- Although the future of online pet care seems increasingly bright, most Americans still rely on physical stores to buy pet products, especially when it comes to pet food. The most popular shopping locations for pet products are big-box stores, followed by grocery stores and chain pet stores. Those that do prefer online channels, favor them for a number of reasons. Some of the most notable advantages are the competitive prices, the larger product range, and of course, the convenience. Adding to this, the coronavirus (COVID-19) pandemic has had a global impact on retail, causing overall e-commerce use and sales to grow. Due to the spread of the virus, more people in the U.S. have been buying pet food and supplies online than ever before.

## Status of consumption expenditure for pets in the US

The trend of consumption expenditure in the US pet industry]



(Source : APPA)

The annual consumption expenditure related to pets in the United States exceeded \$99 billion as of 2020. In addition, COVID-19, which hit the world, appears to be driving the growth of the U.S. pet market more strongly.

The Detroit Office of Trade in the United States assessed that the pet food market has changed first as the Pet Humanization phenomenon, in which companion animals are treated as human beings, has expanded in the United States. Just as parents want to feed their children good food, they want to feed their pets good food, so the pet food market is becoming more advanced.

According to an interview conducted by the Detroit Trade Commission with the American Association of Pet Industry, the change in perception toward companion animals is increasing spending on companion animals, especially medical services, medical devices, and health supplements that improve the health and quality of life of companion animals. He said that we need to look carefully at the food market, etc. The Detroit Trade Office advised, “As the pet humanization trend spreads in the United States, it is necessary to develop various sectors such as pet food, supplies, medical services, and healing programs that reflect the love and care for companion animals like family.

### **Pet Business & Major Trends**

A culture called ‘Pet humanization’ has been formed in the sense that companion animals are treated like humans, meaning they resemble humans, and various services related to companion animals are being launched on the market.

#### **Pet food**

Humanization of pets is deepened with the appearance of feeds that are subdivided like human products and made from the same raw materials as human products.

#### **Pet tech**

In order to support the happy life of pets and pet’s owners enhance convenience, pet tech is evolving, in which cutting-edge ICT technologies such as Internet of Things (IoT) and artificial intelligence (AI) are grafted into pet products.

#### **Pet finance**

In the financial sector, pet finance such as pet installment savings, pet trust, pet card, and pet insurance are emerging by combining pet business and financial products.

**Pet play**

In addition to items that pets need, such as pet food and medical services, a number of services to support their overall lifestyle, such as leisure life and travel, have emerged, forming a “pet play.”

**Pet living**

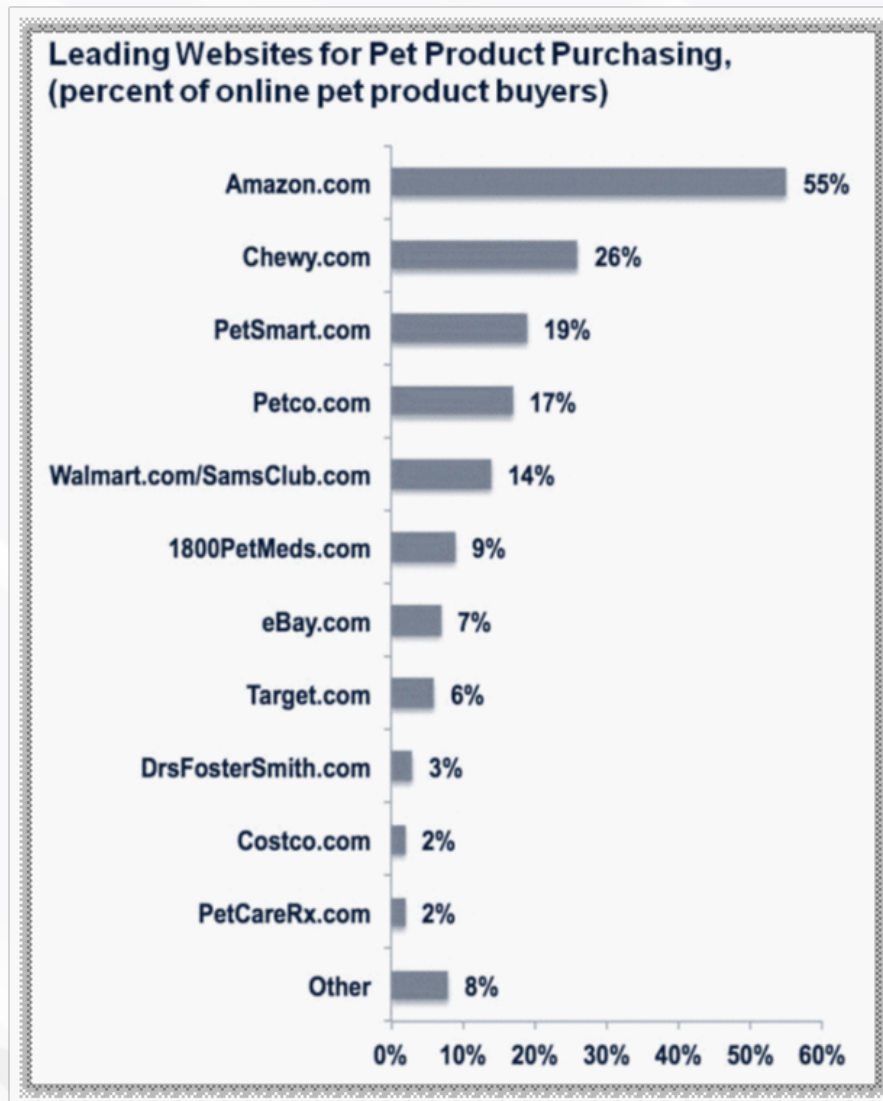
As more and more consumers want to live with their pets, from birth to death, housing types and funeral arrangements are changing. Accordingly, products and services related to ‘Pet Living’ have appeared.

**Pet culture**

When the owner goes to work or goes out, the pet is left alone at home. When the owner is not there, the pet feels lonely, stressed, and in severe cases shows separation anxiety and abnormal behavior. Healing for dogs through TV broadcasting for dogs and entertainment programs that induce interest







In 2021, the online shop pet owners in the United States visited the most to buy pet supplies was Chewy: in the past 12 months, roughly three in ten pet supply purchasing consumers in the country had visited Chewy's online platform. PetSmart and Petco, which were more commonly visited offline, respectively ranked second and third, in terms of online store purchases. Approximately a third of respondents had not bought any pet supplies on the web in the past 12 months.

During 2020's COVID-19 pandemic, many pet owners in the United States purchased items for their pets online: approximately three in five pet product buyers bought such products from Amazon.com, making it the most picked e-commerce website. Just over half of pet owners in the country had opted for Chewy.com, making this e-tailer the runner-up.

- According to American Pet Products Associations, nearly 67% of the US household own dogs, cats, or other pets such as rabbits, ferrets, guinea pigs, and birds. The owners consider pets as a part of their family and offer premium care.
- Cat and dog owners in the US spend approximately USD 700 – USD 1200 a year on their pets. The premium care offered includes food, veterinary care, grooming services, and other pet grooming supplies.
- Around 42% of the pet care service market share comprises of pet grooming services.
- According to the US Bureau of Labor Statistics, around 103,996 pet grooming businesses that are presently operating in the US have an average growth rate of over 8%.
- The pet owners on an average spend USD 73 and USD 43 on dog and cat grooming services annually
- Despite the impact of COVID-19 pandemic, the pet industry in the US expanded its revenue from USD 95 billion in 2019 to about USD 99 billion in 2020.
- The pet grooming service market is expected to grow 1.4 times during the forecast period posing an absolute growth of around 38%.
- The dog segment is expected to grow at a CAGR of over 5% and generate around USD 3 billion in revenue during the forecast period.

### Implications and direction of project

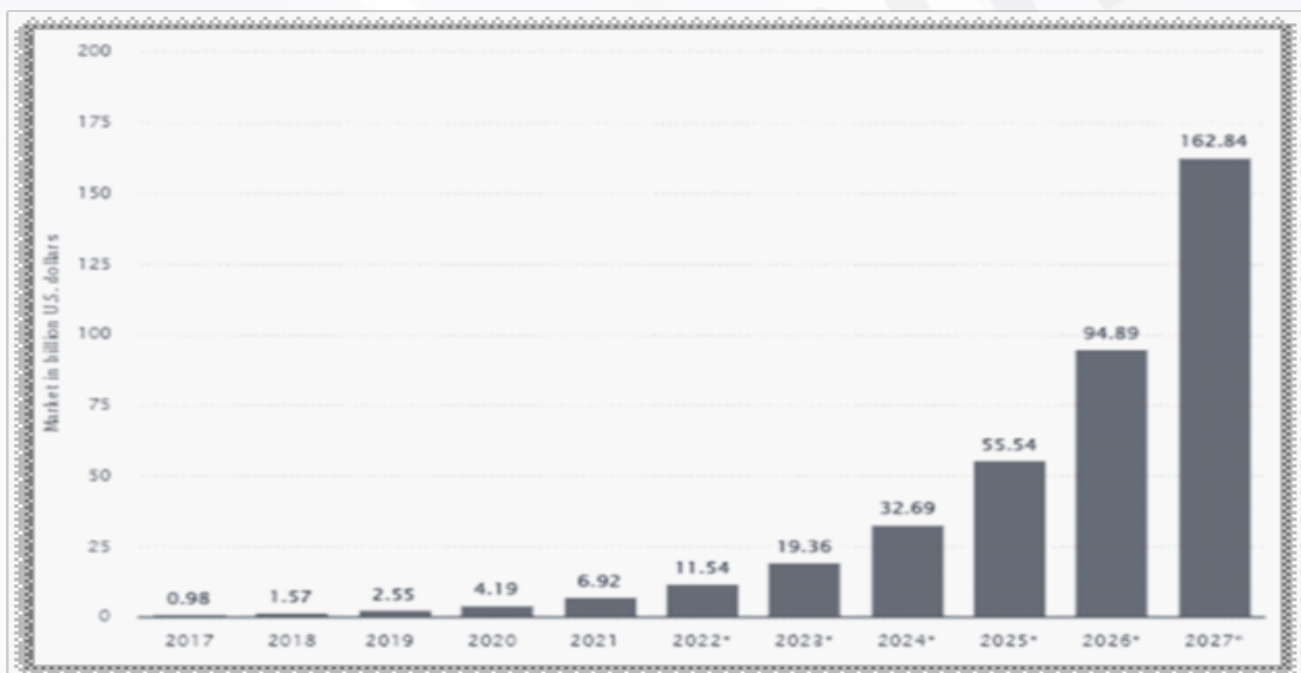
- 1 Implications of pet's market
- 2 Pet economy growth is expected to be continued.
- 3 Need to preoccupy the market as a differentiation strategy.
- 4 Recognizing pets as a new consumer group and developing business
- 5 Need to provide services based on safety, security, and transparency.

### The direction of pet business

- 1 Developing a service that fits the market trend.
- 2 Providing a technology that can protect pet information like human
- 3 Provide an environment that pets can receive services stably.
- 4 Establishing a service that pets can be legally guaranteed.
- 5 Develop the services based on blockchain and Metabus technology.

## Global Block Chain Market

The Blockchain market size is projected to grow from USD 6.92 billion in 2021 and forecast to grow more than hundred times to 163 billion U.S. dollars by 2027 at a Compound Annual Growth Rate (CAGR) of 68.4% during the forecast period. The major driving factors contributing to the high growth rate of blockchain market include increasing venture capital funding and investment in blockchain technology; extensive use of blockchain solutions in banking and cybersecurity; high adoption of blockchain solutions for payment, smart contracts, and digital identities; and rising government initiatives.



### cryptocurrency

Between 2012 and November 2021, Bitcoin has gained 311,914%. When first launched on Coinbase in 2012 for a price of \$22 per USD for \$1 million worth of the token, the currency quickly jumped over 311,000% in under a decade (at its all-time high of \$68,543).

## Crypto Currency Market

The total cryptocurrency market cap is \$2.79 trillion, or equivalent to the 8th largest economy globally. Given the major swings of cryptocurrencies and their dramatic rise in recent years, this statistic might become inaccurate in a day's time. As of November 2021, the total global market capitalization of all cryptocurrencies totals \$2.79 trillion, making it enough to be the world's 8th largest economy by gross domestic product.

In November 2021, Bitcoin's market capitalization rested above \$1.2 trillion. Earlier in the year, it exceeded \$1 trillion for the first time. Meaning, if people wanted to buy every Bitcoin in existence, people would need at least \$1.2 trillion to purchase them all. The average daily cryptocurrency trade volume has risen dramatically to \$130 billion per day.

When looking at the size of the overall cryptocurrency market alone, people have to recognize the asset's rise to prominence. Marked by continuous headline activity, cryptocurrencies trade in high volumes each and every day as their market capitalizations continue to rise. Most recently, as of November 2021, the 24 hour average trading volume of all cryptocurrencies globally is \$130 billion.

As of February 2021, there were nearly 15,000 Bitcoin ATMs globally

Rising rapidly since 2015, the number of Bitcoin ATMs available globally is nearly 15,000. Bitcoin remains the most popular cryptocurrency, with dominance hitting almost 43%. According to cryptocurrency exchanges, the most popular cryptocurrency remains as Bitcoin. Bitcoin dominance is currently 43%.

There are 430 global cryptocurrency spot exchanges globally



## Crypto Currency Market

Globally, 430 cryptocurrency spot exchanges exist, with a total 24 hour trading volume of \$130 billion. The Top 10 Global Crypto Exchanges Account for 79% of

The top 10 global cryptocurrency exchanges account for 79% of daily average trade volume. The exchanges, Venus, HitBTC, Bitcoin.com, Changelly, Binance, Upbit, Huobi Global, HBTC, OKEEx, and VCC Exchange represent \$250.8 billion of trade volume per day. The Top 4 Global Crypto Exchanges Account for 63% of Global Daily Trade Volume. Further demonstrating the top-heavy nature of these global virtual currency exchanges, the top 4 global crypto exchanges account for 63.4% of global crypto trade volume.

Global stablecoin volume per 24 hours is \$77.86 billion. Globally, the total value of all stablecoins, or tokens tied to a specific stable asset or basket of assets like a fiat currency (e.g., USD, EUR), traded on average each day is \$77.86 billion.

Global mining income is \$20,180,061,869 per year. This includes rewards and fees earned from mining Bitcoin. \$20 billion per year in income will only continue to grow as more cryptocurrencies launch through initial coin offerings (ICOs) and the value of cryptocurrencies continue to climb.

In 2020, the total number of digital payments crossed 700 billion, representing 14% growth over the previous year. Global DeFi global volume per 24 hours is \$9.24 billion, or 8.52% of the total daily crypto market volume.

The total global volume of DeFi, or decentralized finance, is \$9.24 billion, amounting to 8.52% of the global daily average of all crypto volume.

## Crypto Currency Market

Bitcoin blockchain is estimated to be over 320 GB in size as of February 2021

Growing exponentially over the last decade as transactions get recorded, the blockchain for Bitcoin now amounts to over 320 GB in size as of February 2021.

Global market size of Bitcoin transactions surpassed 120 million.

In 2020, the total number of Bitcoin payments surpassed 120 million, representing a small but growing percentage of total digital payments. The average number of digital payments amount to almost 100 digital transactions per year per person. The global average of annual digital transactions per person is almost 100. This includes cryptocurrency, contactless payments, digital orders and online payments.

As of March 2021, Tesla is the only company to announce the acquisition of Bitcoins. As the cryptocurrency becomes more popular and widely-accepted, many other S&P 500 constituents will likely follow.

Between 2019 and 2020, the overall frequency of cryptocurrency theft increased, but the value stolen in 2019 is 160% higher than that in 2020. This could indicate a maturing market. Over \$281m of cryptocurrency had been stolen in 2020 through the KuCoin hack, but roughly 80% of this has since been recovered.

Industry with highest accepted rate of BitPay payments was prepaid/gift cards at 26.3%, lowest is Consumer Electronics at 1.74%. Industries vary by acceptance rate of Bitcoin for payment of goods and services, but the highest rate of acceptance came from the prepaid debit card /gift card industry and lowest from Consumer Electronics. Tesla became the first auto company, and first in overall S&P 500 to acquire Bitcoin in anticipation as a form of payment.

**By component, the services segment to register the highest growth rate**

Based on component, the global blockchain market is segmented into platform and services. Platform refers to the standalone platform that cannot be further segmented. Blockchain platform in the market enables customers to set up private, public, and consortium-based blockchain environments and provide them with capabilities to develop their own blockchain applications and solutions. These platforms enable people, products, applications, and services to interoperate across the blockchain network, cloud providers, and organizations. The services segment includes various services required to deploy, execute, and maintain blockchain platform in an organization, including technology advisory and consulting, development and integration, and support and maintenance.

The platform segment is expected to witness high adoption during the forecast period as the enterprises are expected to realize the various benefits offered by the technology, including reduced value chain cost, increased security, and faster operations enabling them to gain a leading edge over competitors. The services segment is expected to grow at a higher CAGR during the forecast period. The growth of the services segment would be dependent on the adoption of blockchain platform in the market during the forecast period. Services including technology advisory and consulting, development and integration, and support and maintenance form a critical component of the blockchain solution deployment enabling organizations to effectively utilize blockchain tools and support their core business operations effectively.

### **By Organization size, the SME's to register the highest growth rate**

The blockchain market has been segmented by organization size into SMEs and large enterprises. These organizations are categorized based on the number of employees working with them and on global standards. Enterprises of all sizes across the globe are focusing on the blockchain technology to revolutionize the traditional systems in their infrastructure and enhance the customer experience. With the growing need to improve business efficiencies and maintain transparency in the business process, SMEs and large enterprises are focusing on leveraging advanced blockchain solutions for various applications, such as smart contracts, payments, compliance management, supply chain management, and loyalty and rewards management. Organizations with less than 1,000 employees are categorized as SMEs.

SMEs face several disadvantages, including high barriers to entry and lower protection from market conditions. The cost of operation is high due to the requirement of several intermediaries for trading across regions, which limits the growth of SMEs with limited resources. The blockchain technology can prove to be an asset in such scenarios, enabling an enterprise to reduce its cost by eliminating these intermediaries. Another area where SMEs can take advantage of the blockchain technology in their basic day-to-day operations is manual or semi-automatic processes, including invoicing, inventory, and payroll. For instance, smart contracts, a critical capability offered by the blockchain solution can prove to be more economical, helping SMEs streamline their operations cost-effectively and at a faster rate

## **Blockchain technology market share forecast worldwide in 2022, by use case**

In 2022, cross-border payments and settlements were considered the largest individual blockchain technology use case, accounting for close to 16 percent of the global blockchain technology market. Lot lineage and provenance also accounted for a larger portion of the market share, with 10.7 percent.

### **Cross-border payments and settlements**

Cross-border payments and settlements have become a popular use case for blockchain technologies as it allows for money transfers, or in another word, remittances, between countries. Throughout the world, consumers and businesses transmit large quantities of money internationally and in the past this process has remained relatively expensive with bank transfers and currency conversion. However, more recently, the banking industry has become the dominant worldwide sector for blockchain technologies, allowing consumers and businesses to transmit money internationally and improve remittances, decrease costs, and minimize exposure to cryptocurrencies. With the banks using blockchain technology themselves, they eliminate the “middleman”, which in this case is cryptocurrency. This increased popularity in the process is leading to the anticipated increase in the worldwide blockchain technology market size in coming years.

### **Lot lineage and provenance**

The other popular use case that holds a significant portion of the market for blockchain technologies is lot lineage and provenance, which has impacted the business operations of organizations specializing in B2B software, IT, and computer services. This use case very simply allows for the verification of the origin and authenticity of product components as it progresses throughout the value chain. In other words, it acts as a product genealogy.



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### **Bitcoin BTC/USD price history up until January 7, 2022**

Bitcoin (BTC) price again reached an all-time high in 2021, as values exceeded over 65,000 USD in February 2021, April 2021 and November 2021. The first two were due to events involving Tesla and Coinbase, respectively, whilst the latter. Tesla's announcement that it had acquired 1.5 billion U.S. dollars' worth of the digital coin as well as the IPO of the U.S.' biggest crypto exchange fueled mass interest. The world's most well-known cryptocurrency, however, suffered a notable correction in April after speculation on government regulation. Another reason, according to experts, was an electricity blackout in the Xinjiang region in China. This unexpected development led to a decline in the Bitcoin hashrate - how many Bitcoins are being mined – and potentially spooked investors into selling their assets. According to a 2020 research based off IP addresses from so-called hashers that used certain Bitcoin mining pools, more than half of all the Bitcoin mining occurred in China. The third price hike was connected to the launch of a Bitcoin ETF in the United States.

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### **Number of Blockchain wallet users worldwide from November 2011 to November 22, 2021 (in millions)**

Crypto trader Binance ranked among the largest cryptocurrency exchangers in the world in 2021, with trading volume that was several times as high as ZG.com. Binance.KR - an exchange specifically for Korean users - saw a big surge in trading volume at the end of December 2020. It is unclear why this happened, although Binance announced to the closure of the Korean service on December 24, 2020: new registrations were allowed up until that day, trading would stop on January 10th and the hard shutdown would occur on January 29th.

### **Investment in cryptocurrencies**

Many investors see this volatility as an opportunity. The fluctuation in price of Bitcoin and other expensive virtual currencies attracts speculators. Others might be more drawn to blockchain, the distributed ledger technology that makes cryptocurrencies like bitcoin more secure. This may be the reason why number of Blockchain wallet users globally is increasing from year to year. In November 2021, the virtual currencies of Wrapped Bitcoin and Bitcoin both reached a price that was over 60,000 U.S. dollars. Bitcoin had the most expensive cryptocurrency for a while but Polygon was significantly cheaper, though, with a price that was roughly 30 times less than that of the most well-known digital currency.

### **Mining profitability of Polygon per day from July 2015 to November 8, 2021(in U.S. dollar per day for one Megahash/s)**

Mining Polygon made increasingly more money over the course of 2020 and early 2021, with profits effectively doubling within a single month. During the mining of cryptocurrencies, a computer is trying to solve complicated logic puzzles to verify transactions in the blockchain. When this process is completed, the miner receives cryptocurrency as a block reward.

## **Unique cryptocurrency wallets created on Blockchain.com as of November 22, 2021**

Blockchain.com wallets, something that makes purchasing Bitcoin possible, reached over 70 million wallet users at the end of March 2021. User figures for multiple cryptocurrency apps worldwide grew significantly in 2021, as is revealed when comparing download figures from the Coinbase, Blockchain Wallet, Crypto.com, BRD, Trust, Luno, Binance, Bitcoin Wallet, Bitcoin Wallet by Bitcoin.com, and Coinbase Wallet apps.

### **How many people own Bitcoin?**

Exact user figures for Bitcoin are not available, but it is estimated that the global user base of all cryptocurrencies increased by nearly 190 percent between 2018 and 2020. The increase in demographics might have been caused by both a rise in the number of accounts as well as improvements in identification. More accounts in exchanges or wallets became systematically linked to an individual's identity, which made it easier to estimate the minimum user numbers associated with accounts on each service provider.

The figures provided cover Blockchain.com - a wallet available across several countries worldwide. However, the preferred app in each country varies significantly per individual region or country. Take, for instance, the United States: Coinbase reached a number of daily active users (DAU) in the United States that was over 10 times that of Blockchain Wallet. This was different from Nigeria, where Coinbase had little DAU compared to an app called Luno - which already was the biggest cryptocurrency app in the African country before 2021.

## **Blockchain Decentralization: the next big step for the World Wide Web**

In blockchain, decentralization refers to the transfer of control and decision-making from a centralized entity (individual, organization, or group thereof) to a distributed network. Decentralized networks strive to reduce the level of trust that participants must place in one another, and deter their ability to exert authority or control over one another in ways that degrade the functionality of the network.

Internet blackouts are becoming quite common in today's world, be it a function of censorship, cyberattacks, technical and natural problems, or human error. While the internet has become a modern-day necessity, the increasing hegemony of centralized operators raises serious doubts about the very foundation of the technology. From hacked Twitter and Facebook accounts to big-time crashes and the occasional "503 Service Not Available," the current situation underscores how centralized the internet has become. Ironically, centralized online services quickly took over despite the internet's design to decentralize communication and sharing of information.

The core vision of decentralization started to blur and was eventually sidelined as big players entered, leading to a market condition where profitability thrived on centralization and competition was quashed via consolidation. For instance, Facebook started as a social media platform. Yet, after acquiring Instagram and WhatsApp, it now controls the lion's share of the online messaging market in almost every country outside of China.



## Blockchain Decentralization: the next big step for the World Wide Web

As such, the Facebook-Instagram-WhatsApp-Messenger outage of Oct. 4, 2021, serves as a glaring reminder that most of the internet's second-level goals are not being met and that decentralization is the need of the hour. Gavin Wood, an Polygon co-founder and the creator of the blockchain Polkadot, took to Twitter to further underline the importance of decentralization to prevent these problems in the first place, saying, tongue in cheek, "Kudos to @facebook for giving us a very real demonstration of why the move to a decentralised Web 3 is necessary and, indeed, inevitable."

Wood's comments reflect how the dawn of Web 3.0, a fully decentralized internet, where each user will be fairly compensated for their time and data, can capably overcome the very issues that centralization pose. Unlike centralized networks prone to cyberattacks and outages, decentralized networks ensure a balanced internet, where millions of devices are linked together in an open network. For instance, since its inception on Jan. 3, 2009, the Bitcoin network has been functional for 99.98 percent of the time.

In 2021, cryptocurrencies gained mainstream popularity as global leaders like Elon Musk, Jack Dorsey, Mark Cuban, and others began endorsing crypto on public forums. With crypto garnering more attention, it emerged as one of the hottest investment options in recent times. In keeping with this momentum, Bitcoin (BTC), Polygon (ETH) and several other cryptocurrencies posted their All-Time-Highs (ATH) this year. In fact, a recent report by blockchain data platform Chainalysis revealed that global crypto adoption has risen by over 880 percent in the last year. Further, the total crypto market capitalisation also touched \$3 trillion for the first time.

## Interoperability of Web 3.0 and the Metaverse

In recent launches, we saw how blockchain technology, particularly NFTs, can enable users to participate in virtual reality such as the metaverse. Metaverses are digital 3D universes that operate on the blockchain and offer anyone the freedom to create assets, socialize, game, invest and more. Thanks to blockchain, these digital environments are interoperable and scalable.

Similarly, Web 3.0 can provide the foundation for people to create, buy and sell goods such as NFTs. Because Web 3.0 is a collection of apps and user interactions on a decentralized platform, it is likely to be highly interoperable and facilitate trade and communication. In fact, Web 3.0 aims to host more open, interconnected websites for greater user utility. One such example of a Web 3.0 app is Axie Infinity, a complex gaming metaverse that bridges gaming and decentralized finance (DeFi). This NFT-based online game requires users to first purchase an Axie avatar in the form of NFT to start playing and uses virtual currencies Axie Infinity Shards (AXS) and Smooth Love Potion (SLP). The play-to-earn game mechanics, self-regulating supply and ownership incentives are several features that increase community interaction, and we are likely to see more of these types of engaging DeFi metaverses and Web 3.0 tokens in the era of Web 3.0.

## Popular Web 3 Coins

Web 3 coins have been gaining considerable traction since their launch, and the most popular Web 3.0 coins can be found on the Binance exchange:

- Chainlink (LINK), at a price of \$19.75 and \$9,214.38 million market cap
- Filecoin (FIL) at a price of \$37.62 and \$5,224.11 million market cap
- THETA (THETA) at a price of \$4.36 and \$4,376.29 million market cap
- Helium (HNT) at a price of \$31.84 and \$3,343.03 million market cap
- The Graph (GRT) at a price of \$0.6464 and \$3,048.36 million market cap
- BitTorrent (BTT) at a price of \$0.002805 and \$2,782.02 million market cap
- Basic Attention Token (BAT) at a price of \$1.17 and \$1,754.92 million market cap
- Arweave (AR) at a price of \$43.39 and \$1,456.26 million market cap
- Siacoin (SC) at a price of \$0.01602 and \$794.66 million market cap
- Livepeer (LPT) at a price of \$37.40 and \$789.82 million market cap

Web 3.0 tokens offer immense potential to shape the future of the internet. Get involved in this exciting shift to Web 3.0 by simply purchasing or staking Web 3.0 cryptocurrencies.

## The Future is a Decentralized Internet

To date, bitcoin companies have received more than \$1 billion in venture funding — the entire industry was built on the shoulders of VCs. Yet Polygon, a blockchain protocol that allows arbitrarily complex financial transactions to be encoded by anyone and executed in a provably accurate manner by a distributed network, has seen a de minimis amount of VC investment. Rather, open participation crowdsales run through financial contracts built on Polygon have raised more than \$250 million from backers all around the world.

## The Future is a Decentralized Internet (Cont'd)

Using this new model, entrepreneurs create blockchain-based tokens that represent ownership in the network they are building, and also act as fuel for their network. For an investor, there are not shares of a company available, only the blockchain-based token. As the blockchain space expands, disproportionate returns will go to holders of the actual tokens, not traditional venture investors betting on a shares of a company.

These tokens are application specific — they are not meant to be general-purpose units of value like bitcoin. For example, tokens built on Polygon like REP and GNT power a decentralized prediction market and a peer-to-peer market for renting computation, respectively. These application-specific tokens, or app-tokens, are built on top of existing general-purpose blockchains like Bitcoin and Polygon. For the first time, open-source project creators can directly monetize their open-source network. Historically, successful open-source projects like the torrent protocol or the Tor network were not directly monetized at the protocol level. Now, the founder of a decentralized file storage network can issue blockchain-based tokens that represent ownership in the network. However, these tokens are not like stock certificates, which represent ownership but have no real use.

App-tokens are actually used in the network to participate. In the file-storage market example, they are used to prove file ownership and buy and sell storage space. The founder of the network keeps roughly 10 percent of the tokens for themselves and their founding team, and if their network becomes popular, the demand for tokens rises, and because the supply of the token is fixed, the price increases. This means that founders can monetize their networks directly by simply holding their tokens and making the network useful. If they need liquidity to continue funding the project, they can simply sell the tokens on the open market.

## The Future is a Decentralized Internet (Cont'd)

In addition to rewarding founders, these app-tokens allow participants in networks to actually own a piece of the network. This network equity ownership is unprecedented. Consider how many networks the modern western internet user is a part of — Facebook, LinkedIn, Twitter, Uber, Airbnb, eBay, Etsy, Tumblr — the list goes on. In each of these cases, the network's value is created by the users, but the value each individual user generates goes to the owners of the network. In this new blockchain-based model, that value is actually given back to the users of the network, proportional to their contribution. The entire market capitalization of blockchain-based assets is \$13 billion today, a rounding error when compared to the current value of the systems which blockchain technology could potentially unseat. When decentralized blockchain protocols start displacing the centralized web services that dominate the current internet, we'll start to see real internet-based sovereignty. The future internet will be decentralized.

## Global NFT Market

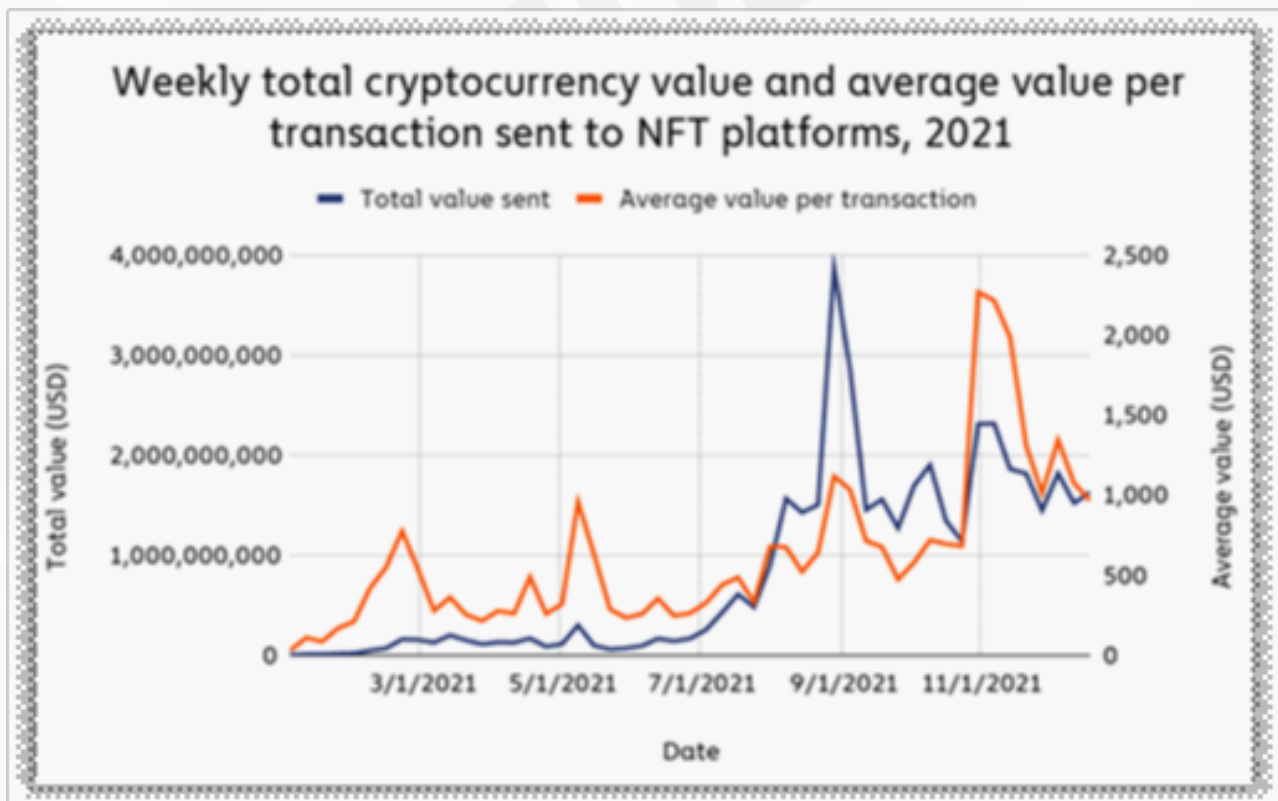
The global Non-Fungible Token (NFT) market size reached USD 340.0 Million in 2020 and is expected to register a rapid revenue CAGR during the forecast period, according to latest analysis by Emergen Research. Increasing use of NFTs in gaming is one of the major factors expected to continue to drive global market revenue growth. Nearly \$41 billion worth of cryptocurrency was sent to two types of Polygon smart contracts associated with NFT marketplaces and collections from the beginning of 2021 through mid-December, according to a new estimate from blockchain analytics firm Chainalysis Inc.



## Global NFT Market (Cont'd)

Non-fungible tokens (NFTs) have skyrocketed in popularity over the last year. NFTs are blockchain-based digital items whose units are designed to be unique, unlike traditional cryptocurrencies whose units are meant to be interchangeable. NFTs can store data on blockchains — with most NFT projects built on the Polygon blockchain — and that data can be associated with files containing media such as images, videos, and audio, or even in some cases physical objects. NFTs typically give the holder ownership over the data, media, or object the token is associated with, and are commonly bought and sold on specialized marketplaces.

In 2021, users have sent at least \$44.2 billion worth of cryptocurrency to MRC-721 and MRC-1155 contracts, the two types of Polygon smart contracts associated with NFT marketplaces and collections.



## Global NFT Market (Cont'd)

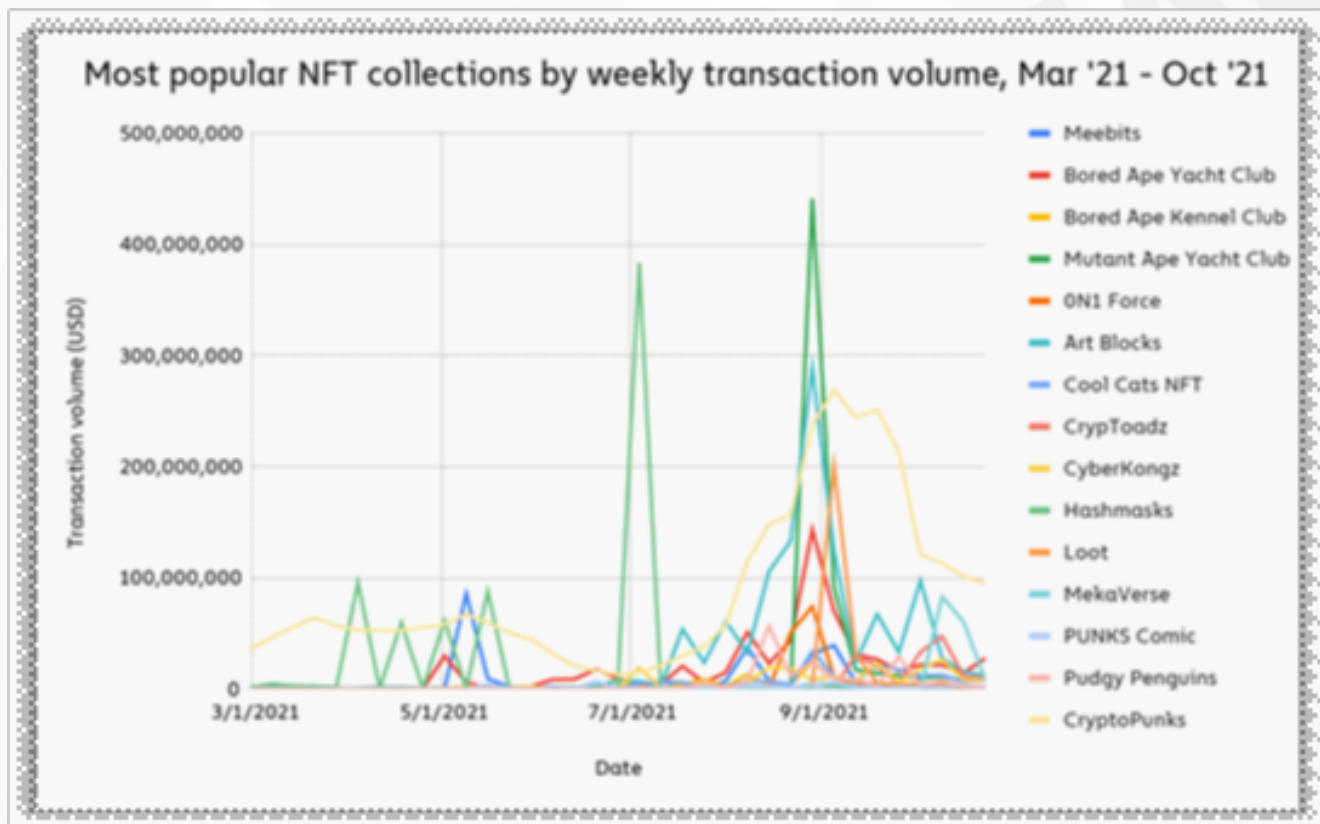
Total sales involving a non-fungible token (NFT) in gaming, art, sports and other segments from 2018 to 2021 (in million U.S. dollars).

Characteristic	2018	2019	2020	2021
All	36.77	24.02	66.78	13,981.9
Collectible	13.86	2.71	16.45	7,130.05
Game	5.19	11.59	15.26	2,153.82
Art	0.05	0.45	17.11	2,107.57
Metaverse	16.35	5.38	15.97	630.99
Utility	1.29	4.11	2.41	75.5
DeFi	0	0	0	19.75
Undefined	0.03	0	0	1,864.22

NFT projects in both art and gaming were both worth several millions of U.S. dollars in 2020, but were much smaller compared to figures in 2021. Non-fungible tokens, or NFTs are unique, non-transferable digital assets stored in blockchain. When purchasing one of these using a cryptocurrency like Polygon, people get a digital, blockchain-backed certificate of authenticity. For this reason, they are often used to prove the ownership of digital files, including GIF, JPEG, or MP3 formats. Once digital files are uploaded as non-fungible tokens on blockchains, they can be offered for sale, since it would be always possible to distinguish the original file from its copies shared online

## NFT Users

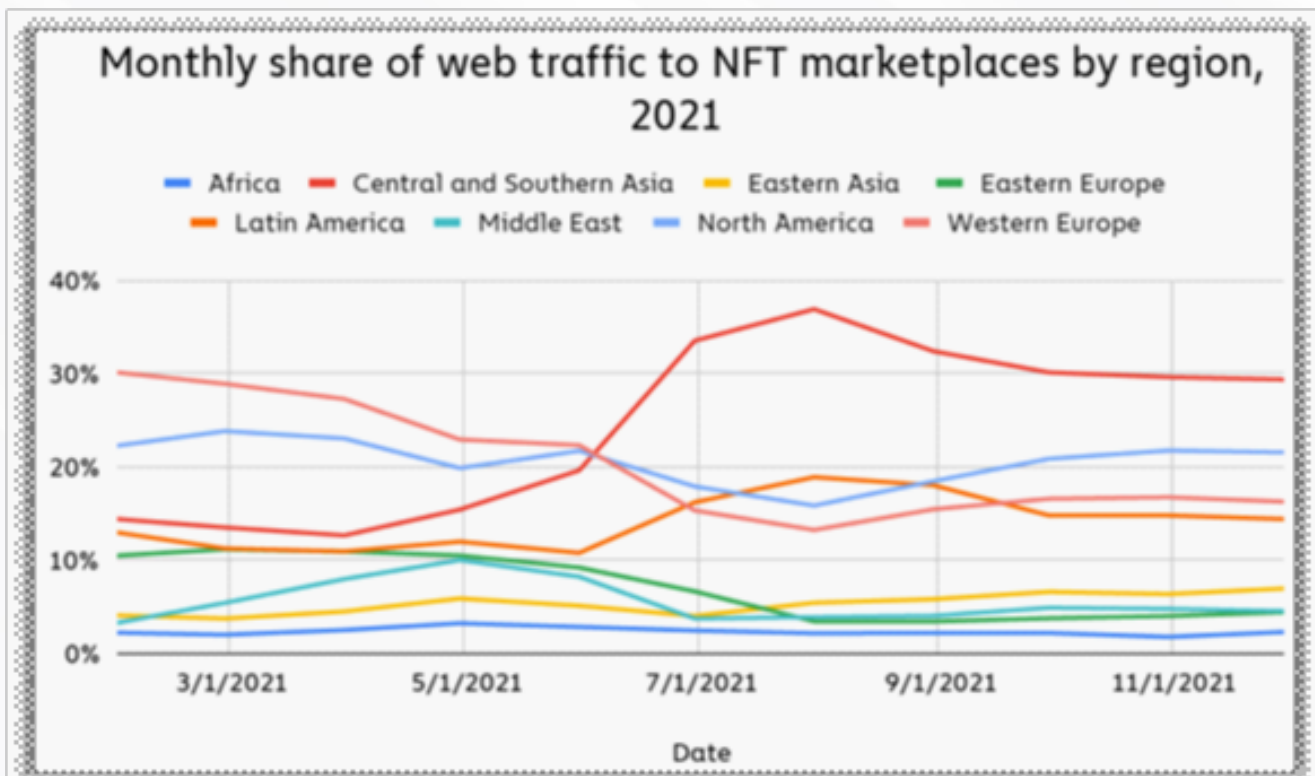
Most users buy NFTs on dedicated marketplaces, similarly to how they might buy conventional cryptocurrencies on an exchange. Many NFT marketplaces, such as OpenSea, don't custody users' NFTs for them, instead allowing users to transfer NFTs directly between their own wallets — in this way, those marketplaces are similar to decentralized exchanges or P2P exchanges. Others, however, like Dapper Labs, handle custody on behalf of users. . The chart below shows the most popular NFT collections being traded on these marketplaces over time.



the most popular NFT collection during the time period studied, with more than \$3 billion in transaction volume since March 2021. Interestingly, we see some collections that experienced brief but large spikes in transaction activity without ever gaining consistent popularity.

## NFT Users (Cont'd)

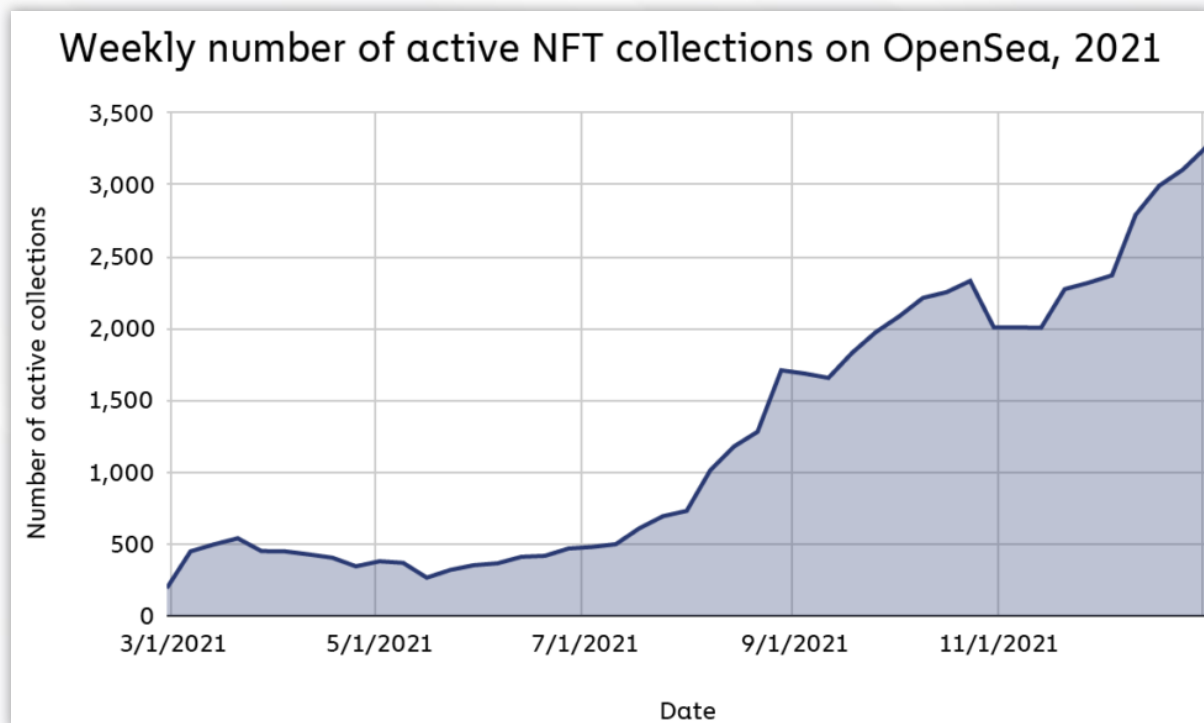
For instance, Hashmasks saw more than \$380 million in transaction value during the week of July 4, 2021. In no other week during the time period studied did the collection see more than \$95.7 million, and its average weekly transaction volume for the entire time period studied was just under \$21 million. We see a similar pattern with Mutant Ape Yacht Club.



...tell us a great deal about NFT growth overall. Over 8,000 NFT collections on OpenSea have undergone at least one transaction, including buying, selling, or minting. This activity is trending upwards, as the number of active NFT collections — which we define as those that have undergone at least one transaction in any given week — has risen significantly since March 2021.

## NFT Users (Cont'd)

The data shows that growth began to increase quickly in July 2021, rising steadily through October. After a slight decrease in early November, growth picked up again and continued through the end of the year. The number of active NFT collections sits at 3,264 at the end of 2021, its highest figure yet, up from just 193 at the beginning of March 2021.



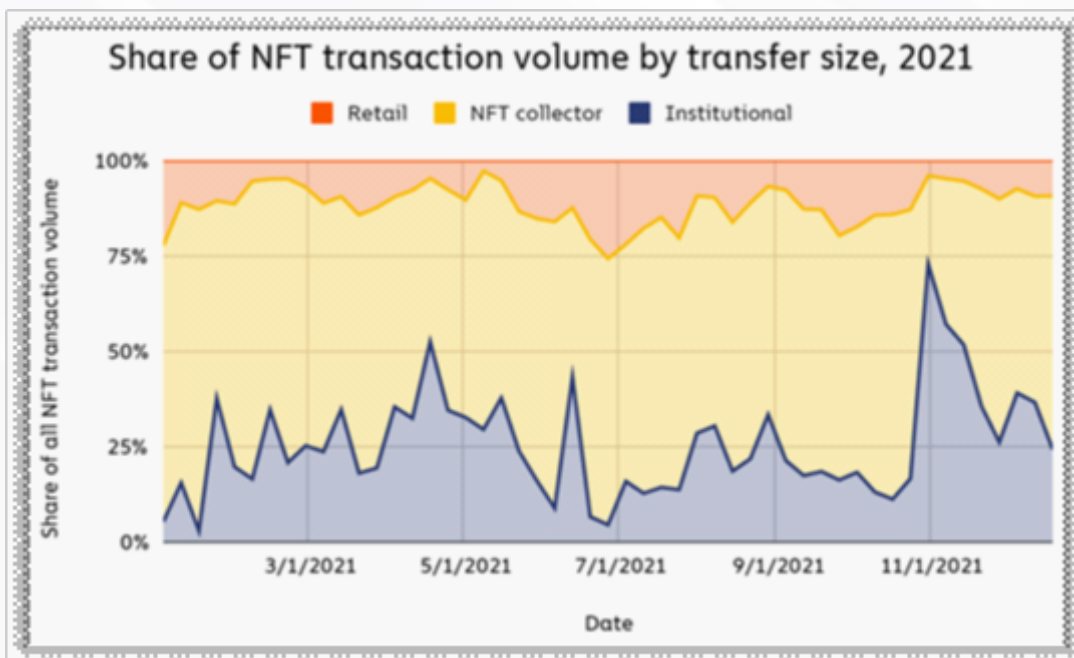
## NFT trading is more retail-driven than cryptocurrency trading overall

The vast majority of NFT transactions are at the retail level, meaning below \$10,000 worth of cryptocurrency. However, as we see above, larger NFT transactions are becoming more and more common. As of the week of December 26, 2021, NFT collector-sized transactions, meaning those between \$10,000 and \$100,000 worth of cryptocurrency, have risen to account for 10% of all NFT transactions, compared to under 1% in early January.



## NFT trading is more retail-driven than cryptocurrency trading overall (Cont'd)

With an average number of around 580 per week, institutional-sized transactions account for 0.6% of all transfers. Specifically, NFT-collector-sized transactions account for the majority of NFT transaction volume in 2021 at 60%. Institutional transactions (above \$100,000) make up 30% of activity, while retail-sized transactions make up 10%.



NFTs purchased during minting and then sold on the platform result in a profit. Buying NFTs on the secondary market from other users and flipping them, however, leads to profit 65.1% of the time. OpenSea data shows that users who make the whitelist and later sell their newly-minted NFT gain a profit 75.7% of the time, versus just 20.8% for users who do so without being whitelisted. Not only that, but the data suggests it's nearly impossible to achieve outsized returns on minting purchases without being whitelisted.

## **NFT trading is more retail-driven than cryptocurrency trading overall (Cont'd)**

The chart in the preceding page breaks down sales of newly-minted NFTs into buckets based on the ROI the collector achieved, expressed in multiples of the original investment, with whitelisted collectors who bought during minting compared to those who did so without being whitelisted. Overall, 78% of sales by un-whitelisted buyers later result in a loss on resale, with 59% resulting in a loss equal to or below 0.5x their initial investment. 78% of sales by whitelisted buyers, on the other hand, result in a profit, with 51% resulting in a profit of 2x or more the initial investment.

Beeple's First 5000 Days digital artwork was by far the most expensive non-fungible token (NFT) sold in 2021 at the time of publication, with most other projects stemming from gaming and collectibles. Mike Winkelmann's piece was also significantly more expensive than other art pieces, with Hairy's #1/1 being sold for roughly 550 ETH (or 1,000 U.S. dollars) on March 14, 2021. Note the significant price difference between this piece and the collectible CryptoPunk 6487 on February 22: Both sold for around 550 ETH, but their value in USD varied significantly due to both the Polygon price as the transactions cost for the cryptocurrency - something referred to as the Polygon gas price. It is this price difference that increasingly led people in 2021 to see NFT, or non-fungible tokens, as a viable tool for investment. Indeed, the NFT market cap grew nearly ten-fold between 2018 and 2020.

The main connection between the metaverse and NFTs is related to digital assets and how they are given value. The metaverse will allow people to showcase digital forms of art and property, and NFTs will allow them to put a price on that content with proof of ownership.

## **NFT trading is more retail-driven than cryptocurrency trading overall (Cont'd)**

While NFTs use the same blockchain technology that cryptocurrencies use, they're not a type of currency themselves. Each NFT is attached to a specific item. That item could be a painting, video game content, music or anything else that can be attached to that specific token. This is ideal for digital assets, and NFTs have turned into a great way for artists and creators in general to monetize their work. There are many NFT marketplaces that allow people to buy and sell NFTs, and this is quickly becoming a phenomenon that is taking many industries by storm. There are many people who are wondering what is going to happen to Facebook now that the company's new name will be Meta. (To be clear, the social media platform itself will still be called Facebook; just the company's name is changing.) While there will probably be some enhancements to Facebook, the metaverse is going to be something much broader in which Facebook exists and not something exclusive to Facebook.

The social media giant also announced it would hire 10,000 in the European Union over the next five years to help build the metaverse. Facebook has also recently rebranded itself as Meta. "We will effectively transition from people seeing us as primarily being a social media company to being a metaverse company," Mark Zuckerberg said at its Connect 2021 event.

Apart from Facebook, several other tech giants such as Microsoft, NVIDIA and Epic Games have also announced their plans of exploring the metaverse. VISA entered the metaverse after it purchased its first NFT — a digital artwork — for \$150,000. Popular brands such as Italian fashion house Gucci are also into the metaverse. The consumer brand in June collaborated with Roblox, an online game platform and game creation system, to sell a collection of digital-only accessories in the form of NFTs.

## Top Popular NFT Marketplaces for Creators to Sell NFT

### 1. OpenSea – First Ever NFT Marketplace

OpenSea takes pride in being the first marketplace to be launched on the Polygon blockchain. OpenSea was founded in 2017 by Devin Finzer and Alex Atallah. It is the world's largest NFT marketplace for a variety of digital assets. OpenSea is estimated to have nearly 4 million assets, and it supports both ERC-721 and ERC-1155 standards to meet the needs of NFT enthusiasts. Artworks, music, photos, videos, sports, domain names, digital collectibles, in-game assets, and more are among the categories. It is regarded as a significant shift in how audiences used to interact with the digital world.

### 2. Rarible – Top popular NFT Marketplace

It is a decentralized, peer-to-peer popular NFT marketplace in the world that allows users to trade NFTs in a frictionless and seamless manner. The interface of Rarible has been meticulously designed to encourage users to interact with the platform. For NFT fans, the pleasant atmosphere provides a fast, busy, and easy-going view. The marketplace focuses on art assets in particular. Everyone who visits Rarible can see a preview of the designer's product, but only the purchaser will have access to the entire project. This NFT marketplace also displays the top sellers of the day, as well as other paid NFT prospects, at the top of the page, making it easy for buyers to find and purchase their desired NFTs. The Rarible platform makes it simple to create NFTs, but there is a minting fee, and because it is an Polygon-based NFT marketplace, the gas fee on a busy day may be high. It is, on the other hand, the best-in-class platform for earning high royalties, up to 30%.

## Top Popular NFT Marketplaces for Creators to Sell NFT

### 3. Foundation – NFT Marketplace for Images

Foundation is a fantastic peer-to-peer marketplace that caters solely to artists and digital art creators. Artists must create a profile and use it to apply it to their Community Upvote. The application will be verified based on the community's votes. It has the goal of putting power in the hands of creators. The platform's user base is rapidly growing, and it has a healthy monetary volume.

### 4. Nifty Gateway – This NFT marketplace has highest sales volume

It was a historic auction when Beeple sold CROSSROAD for a then-record \$6.6 million at Nifty Gateway. This platform now has the highest sales volume, and many of the celebrity drops that people hear about on Twitter take place here. Nifty uses "open editions," which are limited-edition books produced for a specific period of time and sold at a set price. When the window closes, there will be no more NFTs issued. It enables collectors to purchase NFTs using a credit card, which is particularly useful for onboarding new users who have never used cryptocurrency before.

### 5. SuperRare – Most popular NFT Marketplace

SuperRare is an NFT marketplace where people can buy and sell one-of-a-kind, limited-edition digital artworks. In a tile of windows similar to an Instagram profile, art, list prices, sale prices, and timed auctions are displayed. A network artist creates each piece of art, which is then tokenized as a crypto-collectible digital commodity people can own and trade. Polygon MRC-20 is the currency that is used in all transactions. SuperRare has created a social network for its users in addition to the marketplace. Digital collectibles are suitable for a social environment because they have a transparent ownership history.



## Top Popular NFT Marketplaces for Creators to Sell NFT

### 6. AtomicMarket - The second-largest NFT marketplace in the World

The second-largest NFT marketplace is hosted by the NFT-powered video game Axie Infinity, which has a total trading volume of more than \$2.1 billion on Dappradar. It only deals in Axies, which are adorable Pokémon-style digital pets that players can buy and trade on the Axie Marketplace. People can also use the game's built-in breeding mechanics to create new Axies, which they can then sell on the Marketplace. Unlike art NFTs, which are collected for the sake of collecting, Axie Infinity's NFTs have a purpose: they can be used in-game to fight monsters and other players, earning.

### 7. Async Art – Blockchain Based NFT Marketplace

Async Art is an artistic movement based on the blockchain. This platform is known for its “programmable art.” It is possible to create, collect, and trade programmable art. “Masters” and “Layers” can be purchased separately. A Master is a one-of-a-kind art piece, whereas layers are the individual components that make up the Master image. Each layer's specific abilities are determined by the artist.

### 8. Axie Marketplace – Second-largest NFT marketplace worldwide

The second-largest NFT marketplace is hosted by the NFT-powered video game Axie Infinity, which has a total trading volume of more than \$2.1 billion on Dappradar. It only deals in Axies, which are adorable Pokémon-style digital pets that players can buy and trade on the Axie Marketplace. Unlike art NFTs, which are collected for the sake of collecting, Axie Infinity's NFTs have a purpose: they can be used in-game to fight monsters and other players, earning tokens that can be used to breed new creatures. Axie Infinity's NFTs have proven to be so profitable that some players in the Philippines and Indonesia make a living breeding and trading them.

## Top Popular NFT Marketplaces for Creators to Sell NFT

### 9. Mintable – 2-sided Marketplace for Buying and Selling NFTs

Mintable is a two-sided marketplace for buying and selling NFTs that works similarly to eBay. The site is linked to MetaMask, which allows buyers to create cryptocurrency wallets and is built on the Polygon and Zilliqa blockchains. The creation of profiles and the loading of wallets are both required. Buyers can buy featured items or participate in auctions. Content creators can convert artwork, audio, PDFs, pictures, and other media into blockchain items and create smart contracts without having to write any code.

### 10. MakersPlace – Marketplace Dedicated to digital art creation

MakersPlace is a website dedicated to digital art creation. A digital art gallery is divided into collections and creator profiles. In March, MakersPlace set a new sales record when it sold Beeple's classic Everyday: The Very First 5000 Days for \$70 million. Each piece is signed and issued by the artist, and it is then stored and authenticated on the blockchain indefinitely. The site is comprehensive and easy to navigate thanks to complete artist profiles, freely accessible ownership data, and searchable tags.

### 11. KnownOrigin – Polygon Blockchain based NFT Marketplace

KnownOrigin, an NFT Art Marketplace, is run by artists. Digital producers can easily authenticate, showcase, and sell their work using the Polygon Blockchain. Every digital collectible on KnownOrigin is genuine and one-of-a-kind. This approach is now possible thanks to blockchain technology. KnownOrigin, like SuperRare, aims to provide a more curated, gallery-like experience for the discerning NFT connoisseur. Its all-time trading volume is only \$6.9 million. All of its artwork files are stored on IPFS, which gives the underlying assets some protection. With a strong focus on digital art, this is a marketplace that avoids the wackier aspects of the NFT world, so no wacky avatars or cute monsters will be found here.

## Commissions Fees by Top Popular NFTs Marketplace in 2022 Market

According to CryptoSlam, the top popular NFT marketplaces or platforms have sold nearly \$500 million in digital assets in the last month alone. Mike Winkelmann, better known as Beeple, shattered online sale records on Thursday, becoming the third most valuable living artist after selling a piece for nearly \$70 million. There are levels of commission fees are attached with it. Selling crypto art can come with huge hidden fees, leading some people to lose hundreds of dollars.

## How NFT and MetaVerse Will Boom the Future Market

Just like we watch 3D pictures, listen to 5D sound, observe virtual world with VR Glasses, play virtual games it is going to be many times higher than that. Many big companies have also started making products for the METAVERSE world and stepping into the direction of virtual reality. Huh. Don't forget, the crypto marketplace will play the most important role in all of this Metaverse.

Tech giant like Mark Zuckerberg's Facebook, Google and Microsoft envisage the metaverse the virtual world at which virtual reality can entirely duplicate social interactions. This would allow two people from different parts of the world to meet in a virtual arcade, explore the environment, and play games together. Since the last week in October Facebook announced the METAverse, many NFT and CRYPTO marketplaces have also added a feature called METAVERSE. And Some NFT projects are already pushing more and more into the realm of the metaverse

## II. Market Trends and Challenges – NFT

Global non-fungible token market revenue growth is expected to be driven by rising use of NFT in supply chain and logistics. NFTs prevent counterfeiting, assist in tracing the movement of products across the supply chain, and ensure originality. This can apply to supply chains for high-end fashion businesses. NFTs could also provide information about each material and component in a specific product for industries such as automotive. This could also aid in cost-cutting. NFTs could also be beneficial to enterprises concerned about tracking the usage of reusable and sustainable materials.

Pet marketplace apps are very much in trend at the moment. Not just the pet blog & pet shopping platforms, but they also tend to be the go-to online destination where all the pet-related needs are met. The market of pet shopping and pet caring apps is in great demand and if figures are anything to go by, then by 2025 it is expected to surpass \$202.6 billion on the global level. COVID accelerated technology adoption for many businesses. Smart use of technology helps pet professionals run their businesses more efficiently. Customers also expect online convenience. Younger consumers prioritize convenience, ease, and a seamless experience when it comes to shopping. These digital natives are well-informed about brands, and they expect rapid and personalized communication online. They also expect to make appointments, ask questions, and shop, all from the convenience of their smartphones.

### III. Target Market Description

Our target market is pet owners or pet parents who want their concept of keeping pets is no longer traditional. This may include Households, Corporate Executives, Business people, Celebrities and important personalities, Sports men and women or any other people who own a pet. We are also targeting gamers and social platform users globally. Detail market in discuss below:

#### Pet ownership in the U.S. according to the 2021-2022 APPA National Pet Owners Survey

Number of U.S. Households that Own a Pet (millions)

● Bird	9.9
● Cat	45.3
● Dog	69.0
● Horse	3.5
● Freshwater Fish	11.8
● Saltwater Fish	2.9
● Reptile	5.7
● Small Animal	6.2

Pet Ownership by Generation (% of Current Pet Owners)

● Gen Z	14%
● Millennial	32%
● Gen X	24%
● Baby Boomer	27%
● Builder	3%



## Pet ownership in the U.S. according to the 2021-2022 APPA National Pet Owners Survey (Cont'd)

The incredible variety of pet care categories makes it difficult to compare amounts spent across different pet species. The list below is included to give the reader an idea of the types of categories included in the Survey but is not exhaustive of all the expenses captured in the individual pet species report sections. It reports an approximate dollar amount based on consumer recollection of their spending in the prior 12 months. As such, the dollar amounts should not be added to report total spending in the prior 12 months.

According to the 2021-2022 APPA National Pet Owners Survey, some of the basic annual expenses for dog and cat owners in dollars include:

	<b>Dogs</b>	<b>Cats</b>
Surgical Vet Visits	\$458	\$201
Routine Vet	\$242	\$178
Food	\$287	\$254
Food Treats	\$81	\$72
Kennel Boarding	\$228	\$78
Vitamins	\$81	\$47
Grooming aids/brushes	\$47	\$31
Toys	\$56	\$41

## **Pet ownership in the U.S. according to the 2021-2022 APPA National Pet Owners Survey (Cont'd)**

Millennials are the most numerous pet owners, but Baby Boomers aren't much behind. They're right behind with 29%, while Gen Xers follow with 26%. As Millennials become increasingly important as pet owners and small dogs grow in popularity, pet humanization trends continue to accelerate. As owners look to pamper their dogs and cats, they are investing more than ever in pet care products that can contribute to the health, wellbeing and happiness of their companions. For this reason, provisional estimates indicate that pet products will register current retail value growth of 4% in 2016 despite relatively flat growth in the total US pet population.

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## **Pet ownership in the U.S. according to the 2021-2022 APPA National Pet Owners Survey (Cont'd)**

Against the backdrop of stagnant pet population growth, pet humanization is vital in driving up value sales and average unit prices in other pet products. Demographic trends favor this continued growth, as Millennials – the next major generation of pet owners – have embraced the idea of pet humanization and already show per capital spending levels that are high despite relatively limited income at this stage of life. Small dogs will also serve as a driver of growth, as the single biggest beneficiaries of pet humanization trends. The population of small dogs is expected to grow as urbanization, a growing Latino population and shifting consumer preferences continue to favor smaller breeds, and the pampering of these “fur babies” will help pet products register a retail value CAGR of 1% (constant 2016 prices) over the forecast period to reach US\$16.0 billion in 2021.

21% of pet owners have spent more money on their pets during the Covid-19 pandemic than pre-pandemic. The pet care services industry statistics reveal that the pandemic wasn't that rough on the pet service industry. 70% of pet owners spent more time with their pets during the lockdown and social distancing. Statistics reveal that 64% of them spent the same amount of money as before the pandemic. However, 21% of pet owners splurged even more on their pets than pre-pandemic. Pet owners spend the least on pet insurance, grooming, boarding, training, pet sitting, and walking — some \$10.7 billion in 2020 alone. The various highly profitable options range from providing daycare to making pet food.

## **Pet ownership in the U.S. according to the 2021-2022 APPA National Pet Owners Survey (Cont'd)**

The most profitable ones include:

- Pooper scooping business — \$40/hour
- Animal blog — the revenue depends on the topic people choose
- Dog clothing — Americans spend about \$52 billion on pet accessories
- Pet grooming — \$50–\$300/hour
- Dog owners spend \$73 a year on grooming
- The average time for a full groom takes about 2 to 3 hours, while larger or very thick-coated breeds typically take longer
- The average price for dog grooming ranges from \$40 to \$100 nationally, depending on the location
- In the U.S., a complete grooming (bath, style, ears, nails, not matted) can average \$36.25
- The average start-up cost of putting up a commercial grooming shop would be around \$50,000 to \$60,000.

## Demographics of Social Sites (Globally)

Since its inception in 1996, social media has managed to infiltrate half of the 7.7 billion people in the world. Social network platforms almost tripled their total user base in the last decade, from 970 million in 2010 to the number passing 3.81 billion users in 2020. The spectacular year-on-year adoption of new users on the platforms is, however, slowing down. It now relies on the continuous growth in the number of people with internet access and smartphones, particularly in developing regions.

- 3.82 billion people use social media worldwide in 2021, up almost double from 2.07 billion in 2015
- The average person has 8.6 social media accounts in 2021 up from 4.8 in 2014
- The social media growth rate since 2015 is an average of 12.5% year-on-year. However, growth is on the decline with 2019-2021 returning a slightly lower 9.2% increase
- By region, social media growth in 2019-2021 is led by Asia: +16.98%, Africa +13.92%, South America +8.00%, North America +6.96%, Europe +4.32%, and Australasia +4.9%
- 49.03% of the 7.77 billion people in the world use social media, of eligible audiences aged 13+, there is 63% are active users
- 83.36% of internet users are on social media; however, a titanic 90.71% of mobile internet users are active on networks
- Out of 3.81 billion social media users, 98.68% access the websites or apps through a mobile device, with only 1.32% access platforms exclusively via desktop
- Facebook is the leading social network at 2.6 billion monthly active users, followed by YouTube (2 billion), WhatsApp (1.6 billion), FB Messenger (1.3 billion), and WeChat / Weixin (1.1 billion)



## How many people use social media?

In 2021, the number of people using social media is over 3.81 billion worldwide, with the average user having 8.6 accounts on different networking sites. Popular platforms like Facebook have over 66.39% of their monthly users logging in to use social media daily. All social networks report growth data on the number of monthly active users or MAU's rather than the number of accounts, as this data is more accurate for measuring actual use and territory penetration.

## What percentage of people use social media?

The current percentage of people using social media is 49.03% of the world's total population. However, when we look into platform penetration rates from people in eligible audiences, 83.36% of 4.57 billion global internet users and 90.71% of 4.20 billion mobile internet users are on social media.

## How many social media accounts does the average person have?

According to the Global Web Index, the average number of social media accounts a person has is 8.6 worldwide, up 79.16% from 4.8 accounts in 2014. The study of 46 countries with internet users aged 16 to 64 shows Japan had the lowest average number of social network accounts at 3.4, comparably the U.A.E., had the highest with 10.5 per person.

- The average number of social media accounts is 8.6 per person in 2021
- The growth in the number of accounts per person is up 79.16% from 4.8 accounts per person in 2014 to 8.6 in 2021
- Firstly, the growth of multi-networking relates to the widening of platform choice. Secondly, it's also down to specialization of individual platforms.

## Social media usage by gender

The current global average gender split of social media users is 55% men versus 45% women. However, in the US, women are the leading user base; 76% of all female internet users have social network accounts compared with 72% of all men.

Which gender uses social media more by region?

- North America: 51% female vs. 49% male users
- South America: 52% female vs. 48% male users
- Europe: 51.25% female vs. 48.75% male users
- Africa: 40.2% female vs. 59.8% male users
- Asia: 40.4% female vs. 59.6% male users
- Australasia: 48% female vs. 52% male users

Social media growth by region 2019-2021:

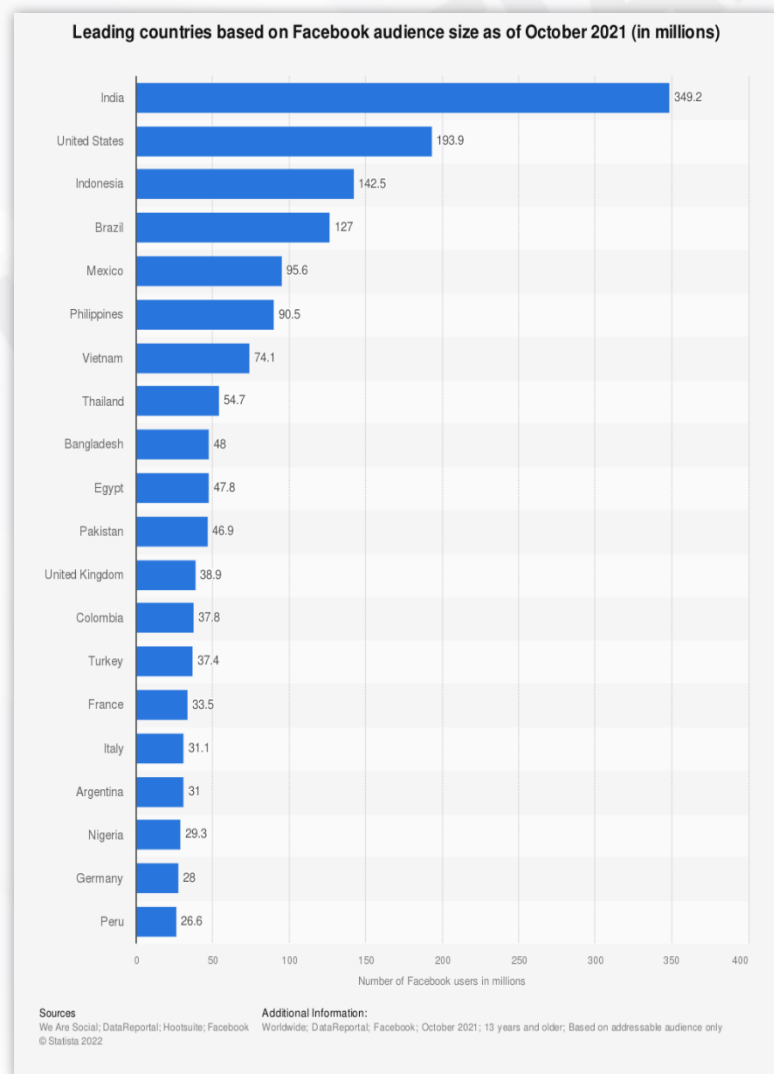
- North America: +6.96%
- South America: +8.00%
- Europe: +4.32%
- Africa: +13.92%
- Asia: +16.98%
- Australasia: +4.9%

## Demographics of Facebook Users (Globally)

As of October 2021, it was found that 9.3 percent of total active Facebook users worldwide were women between the ages of 18 and 24 years, while male users between the ages of 25 and 34 years constituted the biggest demographic group on the social media platform. Founded in 2004 and going public in 2012, Facebook is one of the biggest internet companies in the world with influence that goes beyond social media. It is widely considered as one of the Big Four tech companies, along with Google, Apple, and Amazon (all together known under the acronym GAFA).

Facebook is the most popular social network worldwide and the company also owns three other billion-user properties: mobile messaging apps WhatsApp and Facebook Messenger, as well as photo-sharing app Instagram. The vast majority of Facebook users connect to the social network via mobile devices.

This is unsurprising, as Facebook has many users in mobile-first online markets. Currently, India ranks first in terms of Facebook audience size with 340 million users.



## Demographics of Tiktokers (Globally)

TikTok is available in over 150 countries, has over 1 billion users, and has been downloaded over 200 million times in the United States alone.

- **Monthly Active Users** – TikTok has about 1 billion monthly active users. In November of 2018, TikTok reported that the number was 680 million monthly active users. We estimate that it's increased to over 1.1 billion as of now (February 2021).
- **Total App Downloads** – The TikTok app has been downloaded over 2.6 billion times worldwide, as reported by Sensor Tower in December, 2020. In January 2021, TikTok had 62 million downloads. In Q1 of 2020, the app had 315 million downloads, which is the best quarter by any app, ever. 500 million of those come from India, 180 million from China, and 130 million from the U.S. In June of 2020 TikTok was downloaded 87 million times worldwide (with 7.5 million of those coming from the U.S.).
- **Monthly Active Users in the United States** – TikTok now has over 130 million active users in the U.S.
- **Among U.S. over 18**, TikTok brought in 22.2 million mobile unique visitors in January, 23.2 million in February and 28.8 million in March. In April, that number jumped to 39.2 million—three times the 12.6 million who used the app last April, according to the most recent Comscore data provided to Adweek (note – Comscore only tracks users over 18).
- **U.S. Audience** – As we mentioned, we estimate that TikTok has about 80 million monthly active users in the United States. 60% are female, 40% are male. 60% are between the ages of 16-24. 26% are between the ages 25-44. 80% are between the ages 16-34. This data comes straight from TikTok.
- **Revenue** – TikTok is estimated to pull in \$500 Million in revenue from the U.S. alone in 2020 (source).
- **Countries** – TikTok is now available in 154 countries worldwide (and 75 different languages).

## Demographics of Instagram Users (Globally)

As of April 2021, it was found that 15.6 percent of global active Instagram users were women between the ages of 25 and 34 years. More than half of the global Instagram population worldwide is aged 34 years or younger.

<b>Total Number of Monthly Active Instagram Users:</b> 1.074 billion+ (source) Last updated: 28/06/21
<b>Total Number of Daily Active Instagram Users:</b> 500 million + (source) Last updated: 28/06/21
<b>Instagram Stories Daily Active Users:</b> 500 million+ (source) Last updated: 28/06/21
<b>Number of Businesses on Instagram</b> 200 million+ (source) Last updated: 28/06/21



## Demographics of Twitter Users (Globally)

Active monthly users: Twitter has 330 million monthly active users

### Age

- 38% of people ages 18-29 use Twitter
- 26% of people ages 30-49 use Twitter
- 17% of people ages 50-64 use Twitter
- 7% of people that are 65+ years old use Twitter

### Income

- 23% of households with an annual income of less than \$30,000 use Twitter
- 36% of households with an annual income between \$30k-\$74,999 use Twitter
- 41% of households with an annual income above \$75,000 use Twitter

### Most followed accounts

- Barack Obama: 128 million followers
- Justin Bieber: 114 million followers
- Katy Perry: 109 million followers
- Business and Shopping
- 67% of B2B businesses are using Twitter as a digital marketing tool
- 77% of Twitter users have a better impression of a brand when they respond to a tweet
- In Q3 2021, Ad engagement on Twitter was up 23%

### Demographics of Youtube Users (Globally)

Active monthly users: YouTube has 2 billion monthly active users

#### Age

- 81% of people ages 15-25 use YouTube
- 71% of people ages 26-35 use YouTube
- 67% of people ages 36-45 use YouTube
- 66% of people ages 46-55 use YouTube
- 58% of people that are 56+ years old use YouTube

#### Most Followed Channels

- Series: 168 million subscribers
- PewDiePie: 108 million
- Cocomelon - Nursery Rhymes: 102 million

## Demographics of Youtube Users (Globally)

Active monthly users: YouTube has 2 billion monthly active users

### Age

- 81% of people ages 15-25 use YouTube
- 71% of people ages 26-35 use YouTube
- 67% of people ages 36-45 use YouTube
- 66% of people ages 46-55 use YouTube
- 58% of people that are 56+ years old use YouTube

### Time

On average, YouTube users spend 11 minutes and 43 seconds per day on the platform

### Devices

Over 70% of YouTube views are on mobile devices

### Most Followed Channels

- Series: 168 million subscribers
- PewDiePie: 108 million
- Cocomelon - Nursery Rhymes: 102 million

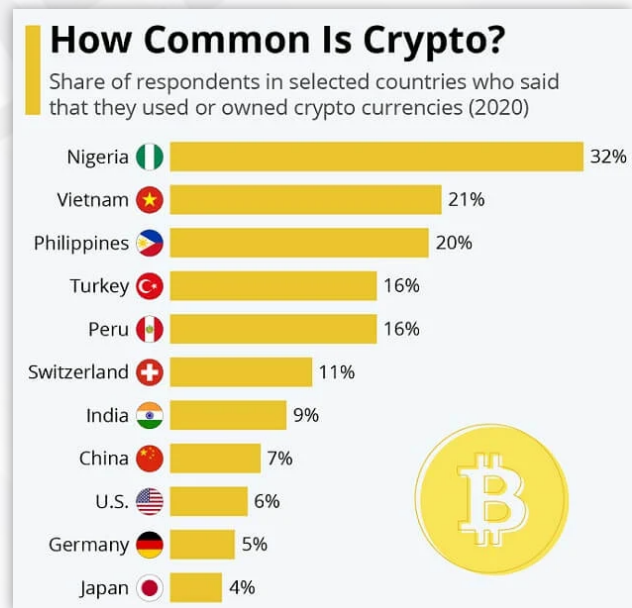
## Teens and Social Media

As one of the biggest social networks worldwide, Instagram is especially popular with teenagers. As of fall 2021, the photo-sharing app ranked third in terms of preferred social network among teenagers in the United States, second to Snapchat and TikTok. Teenagers are highly engaged social media audiences: In an April 2018 survey, 27 percent of teen respondents confessed to checking their social media on an hourly basis. Teens report feeling more confident, popular, and better about themselves when using social media, and less lonely, depressed and anxious. Social media can have negative effects on teens, which is also much more pronounced on those with low emotional well-being. It was found that 35 percent of teenagers with low social-emotional well-being reported to have experienced cyber bullying when using social media, while in comparison only five percent of teenagers with high social-emotional well-being stated the same. As such, social media can have a big impact on already fragile states of mind.

## A social media post about crypto appears every 2 seconds

A recent analysis by Reuters shows between 14,000 and 32,000 daily tweets appear on Twitter. A subreddit with over 2.0 million members posting regularly each day. Facebook sees significant amounts of discussion in numerous groups. Telegram hosts live discussions about cryptocurrencies around the globe. Social media the world over is flush with discussion about cryptocurrencies. Since 2015, several new crypto-trading platforms and brokerages have cropped up to facilitate crypto transactions. Despite the IRS including a question on page 1 of Form 1040 about crypto transactions people may have been part of during the year, many likely still fail to report any tax liability.

















- Developing an algorithm which can find crypto market-moving signals costs between \$500,000 and \$1 million.
- Nigerians report the most common ownership and use of virtual currencies (32%), with U.S. coming in 9th at 6%
- The Bitcoin community is disproportionately Male. 85.77% of Bitcoin community engagement comes from Males as opposed to 14.23% from females.
- Globally, crypto miners use 121.36 terawatt hours (TWh) per year to run their computers, amounting to more electricity usage than the entire country of Argentina.
- Of the total Bitcoin mining income generated each year on average (\$20,180,061,869), miners spent 22.13% of their income on electricity costs (\$4,466,697,344 / \$20,180,061,869).
- Assuming a global fixed rate of \$0.05 per kilowatt-hour (kWh), over \$4.45 billion gets spent on electricity costs for Bitcoin mining.
- The energy and carbon intensity of Bitcoin mining has an equivalent carbon footprint of 735,121 Visa transactions or watching 55,280 hours of YouTube.
- Based on the estimated amount of global carbon emissions tied to gold mining, 81 million metric tons of CO<sub>2</sub>, Bitcoin mining produces more global carbon emissions.





- For total global energy consumption by Bitcoin miners, over 60% of power consumed comes from non-renewable energy sources. Primarily, this includes coal-fired generation technology.
- With the amount of carbon emissions produced from Bitcoin mining, the FT estimates making a purchase worth \$50,000 USD with Bitcoin produces 270 tons of CO<sub>2</sub>, equivalent to 60 internal combustion cars






## Market quote of the main Cryptocurrencies

#	Name	Price	24h %	7d %	Market Cap	Volume(24h)	Circulating Supply	Last 7 Days
1	 Bitcoin BTC <a href="#">Buy</a>	\$48,708.53	-1.69%	-1.53%	\$925,339,960,662	\$36,500,930,018 745,625 BTC	18,902,431 BTC	
2	 Ethereum ETH <a href="#">Buy</a>	\$4,037.09	-5.28%	-6.33%	\$481,940,248,196	\$28,089,318,795 6,921,921 ETH	118,762,300 ETH	
3	 Binance Coin BNB <a href="#">Buy</a>	\$537.02	-2.92%	-9.49%	\$90,556,743,440	\$2,024,053,044 3,728,208 BNB	166,801,148 BNB	
4	 Tether USDT <a href="#">Buy</a>	\$1.00	-0.02%	-0.03%	\$76,773,457,200	\$78,280,666,668 78,199,857,662 USDT	76,694,204,084 USDT	
5	 Solana SOL <a href="#">Buy</a>	\$184.96	-12.64%	-1.87%	\$57,242,591,740	\$3,982,566,470 21,414,028 SOL	307,790,082 SOL	
6	 Cardano ADA	\$1.30	-5.07%	-4.76%	\$45,044,405,923	\$1,729,986,920 1,311,991,412 ADA	34,160,878,921 ADA	
7	 USD Coin USDC	\$1.00	-0.03%	-0.02%	\$41,852,465,304	\$5,719,427,261 5,714,919,277 USDC	41,819,477,690 USDC	
8	 XRP XRP	\$0.8246	-2.65%	-10.54%	\$39,120,601,632	\$3,001,665,568 3,625,214,720 XRP	47,247,295,769 XRP	

“Without a doubt, right now Polygon is the “programmable Blockchain of the world”. The internet that we know, Web 2.0, will change radically with the entry of Web 3, and of course it will change the way we live (Metaverse).”

## IV. Competitive Analysis

We have no direct competition in the market but our indirect competitors are given below:

					
<b>About the Company</b>	Sandbox VR is a company that provides virtual-reality experiences.	VR World NYC is an entertainment lifestyle technology company operating virtual reality location-based entertainment venues.	OTHERWORLD is a provider of social entertainment solutions	Croteam is an independent game development company creating games and 3D engine technologies.	Arena Space is a VR amusement parks chain.
<b>Founding Date</b>	2018	2017	2017	1993	2016
<b>Type</b>	Private	Private	Private	Private	Private
<b>Locations</b>	San Mateo, US HQ Richmond, CA Singapore, SG Los Angeles, US	New York, US HQ	London, GB HQ London, GB London, GB	Zagreb, HR HQ	Moskva, RU HQ
<b>Employees</b>	983% increase	60	356% increase	30	8
<b>Twitter followers</b>	4 k	872	732	18.7 k	2.5 k
<b>Number of tweets (last 30 days)</b>	N/A	3	3	6	N/A
<b>Average likes per tweet (last 30 days)</b>	N/A	4.3	2.3	37.7	N/A
<b>Percentage of tweets with engagement (last 30 days)</b>	N/A	66.67%	100%	100%	N/A
<b>Alexa Website Rank</b>	147541	344140	208710	310330	417649
<b>Employee Rating</b>	3.3	N/A	N/A	3.3	N/A

# 8.0

## ROAD MAP



**2022. 1Q**

Foundation establishment and business start  
XOOX Project Team Formation  
White paper v1.0 writing and distribution  
Developed XOOX TOKEN  
1st Private Sale in progress

**2022. 3Q**

XOOX PLATFORM open  
DAPP Grand Opening XOOX Wallet open  
XOOX TOKEN IDO and listing on one of global exchanges

**2022. 3Q/4Q**

Introduction of NFT music transaction history automatic management service  
Listed on the 2nd global exchange 2nd Private Sale in progress  
Global Pets exclusive music partnership and business expansion

**2023. 1Q**

XOOX PLATFORM AI system open  
(Song recommendation through Pets voice search and auto-playback system for favorites)  
XOOX PLATFORM Contents creator support project  
XOOX TOKEN 1st Buy-Back



# 9.0

## DISCLAIMERS





**PLEASE READ CAREFULLY ALL OF THIS DISCLAIMER. If you are unsure about your future actions, we recommend that you seek the advice of other experts, including legal, financial, tax, etc.**

### **Legal notice**

- a. As of the time of writing, this white paper has been distributed for general reference purposes only in relation to the XOOX project and may be reviewed and modified. Please note that this white paper reflects the latest information as of the date of the cover and is not the final version. After that date, the information described in this document, such as XOOX token business operation and financial condition, may change. This white paper may be updated from time to time.
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- c. This white paper shall in no case be construed as an offer to sell or purchase tokens by the XOOX token issuer/distributor/company, and the presentation of this document or the document itself shall not be based or relied on for contract and investment decisions.
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- e. XOOX Tokens shall not be understood, interpreted, classified or treated as an opportunity for
- f. purchasers to participate in connection with the XOOX Services or to receive any return on investment/income/payment/profit or any portion thereof.
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### **Exclude responsibility**

- a. The related services provided by the XOOX Foundation and its affiliates are provided 'as is' and 'as available'. The XOOX Foundation and its affiliates do not make express or implied guarantees or representations about the accessibility, quality, suitability, accuracy, adequacy, completeness, etc. of XOOX tokens and related services, and errors, delays, omissions, or actions taken in reliance on this Please note that we are not responsible for any
- b. The XOOX Foundation and its affiliates do not represent, guarantee, promise or assert to any entity or individual the authenticity, accuracy, or completeness in any form, including the information contained in this white paper.
- c. The XOOX Foundation and its affiliates have any indirect, special, incidental or consequential losses (loss of investment returns/income/profits, utilization and data (including, but not limited to, loss, etc. of

### **A warning for future prediction statements**

- a. Certain expressions specified in this white paper contain forward-looking statements regarding the future of the project, future events, prospects, etc. These statements are not statements based on historical facts and are identified by word-like expressions such as 'anticipate,' 'estimate,' 'believe,' 'expect,' 'prospect,' and 'anticipate'. These forward-looking statements may also be included in other public materials such as presentations, interviews, and videos other than this white paper. Forward-looking statements contained in this white paper include, but are not limited to, the future results, performance and achievements of the XOOX Foundation and its affiliates.
- b. Forward-looking statements involve various risks and uncertainties. These statements are not guarantees of future performance and therefore should not be relied on unduly. If risks and uncertainties materialize, the actual performance and development of the XOOX Foundation and its affiliates may differ from expectations set due to forward-looking statements. Even if these circumstances change in the future, the XOOX Foundation and its affiliates have no obligation to provide updates on forward-looking statements. If you act based on forward-looking statements contained in this white paper, the XOOX Foundation and its affiliated websites and other materials, you are solely responsible for the non-realization of the forward-looking statements.
- c. As of the date this white paper was written, the XOOX project has not been completed or fully operational. Although the description has been made on the premise that the XOOX Project will be completed and fully operational in the future, it should not be construed as a guarantee or promise as to the completion and full operation of the XOOX Project.

### **Potential Risk**

- a. Before deciding to purchase and participate in XOOX tokens, we recommend that you read the following carefully and thoroughly analyze and understand the relevant factors and risks.
  - i. Risks of purchaser negligence related to storage, such as restriction of access to XOOX tokens due to loss of identification information and loss of essential private keys related to digital wallets storing XOOX tokens. Due to these uncertainties in the value of the XOOX token, the XOOX Foundation may not

- be able to provide the necessary funds for the development of the XOOX token ecosystem or maintain the XOOX token ecosystem in the intended direction.
- ii. Changes in the political, social and economic environment, changes in the stock or cryptocurrency market environment, changes in the regulatory environment of the countries in which the XOOX Foundation and its affiliates operate, and changes in the environment in which the XOOX Foundation and its affiliates can survive or compete Risks associated with changes in capabilities. Certain jurisdictions may apply existing/new regulations related to blockchain technology that are unfavorable to XOOX tokens, which may result in significant changes to the XOOX token ecosystem and projects, such as abolition/loss of XOOX tokens.
  - iii. Risks related to changes in the future capital needs of the XOOX Foundation and its affiliates and changes in the availability of capital and financing to meet them. Lack of funds may affect the development of the XOOX platform and the use and potential value of XOOX tokens.
  - iv. XOOX project suspension, dissolution, or suspension of launch plans for various reasons, such as adverse fluctuations in the value of XOOX tokens, business relationship failure, and intellectual property rights claims by competitors during development/operation, resulting in the XOOX token ecosystem, XOOX token, and This may adversely affect the potential use of XOOX tokens.
  - v. Risks related to the lack of interest by companies, individuals, and other organizations in the XOOX project and services, and the limited public interest in the creation and development of distributed applications. This lack of interest may limit funding or affect the development of the XOOX project and the utilization and potential value of XOOX tokens.
  - vi. The risk of applying major changes to the XOOX Token or the main functions and specifications of the XOOX Project prior to launching or implementing the XOOX Project and XOOX Token Ecosystem. XOOX intends that the XOOX token and XOOX functionality will be consistent with the content of the white paper, but these changes may nevertheless be made.
  - vii. the risk of competition between XOOX Tokens and other platforms that could potentially adversely affect the XOOX Platform. (e.g., when a competing project has prevented commercial success or the prospects are bleak ).



- viii. the risk that a third party or other individual intentionally or unintentionally implants harmful or malicious code into the XOOX Project, interfering with the XOOX Project infrastructure and utilization of XOOX Tokens. The blockchain used in the XOOX project is also vulnerable to these attacks, so it poses a risk to the operation of the XOOX project and related services.
  - ix. The occurrence of catastrophic events such as force majeure natural disasters may affect the business operations of the XOOX Foundation and its affiliates and other factors beyond our control. Events such as mining attacks, attacks by hackers or other individuals may result in theft or loss of XOOX token sale proceeds, theft or loss of XOOX tokens, and impairment of XOOX token ecosystem development capabilities
  - x. XOOX tokens and other cryptocurrencies are new and untested technologies and are constantly evolving. The full functionality of the XOOX token is not yet complete and there is no guarantee of completion. As technology advances, advancements in cryptographic technology and methods, changes in consensus protocols and algorithms, etc. may pose risks to the XOOX Token, the sale of the XOOX Token, the XOOX Project, the XOOX Token Ecosystem, and the use of the XOOX Token.
  - xi. XOOX Token does not grant any other entity any decision-making authority regarding the XOOX project, XOOX ecosystem, XOOX, etc. All decisions, including suspension of XOOX products and services, XOOX token ecosystem, etc., additional creation and sale of XOOX tokens utilized in XOOX token ecosystem, sale and liquidation of XOOX, etc. are made at the discretion of XOOX PLATFORM.
  - xii. The tax and accounting practices of XOOX Tokens are uncertain and may vary from jurisdiction to jurisdiction. The purchase of XOOX tokens may have a negative impact on tax processing, and we recommend that you seek independent tax advice in this regard. In addition to these stated risks, there are other risks that the XOOX Foundation and its affiliates cannot predict. There may also be risks of unexpected combinations and variations.
- b. If the above risks and uncertainties develop into actual situations, the business, financial condition, operational results, and outlook of the XOOX Foundation and its affiliates may be materially and negatively affected. In doing so, you may lose some or all of the value of XOOX tokens.



**No additional information and updates.**

Regarding the XOOX Foundation and its affiliates, and related businesses and operations, no one has the right to provide information/explanation other than those contained in this white paper, and even if such information/explanation is provided, the authority of the XOOX Foundation or its affiliates is should not be taken as representing them.

**No advice**

No information in this white paper shall be regarded as business, legal, financial or tax advice for XOOX Token, XOOX Foundation or its affiliates. We recommend that you seek the opinions of other experts such as legal, financial, tax, etc. for XOOX token, XOOX Foundation and affiliates, and related businesses and operations. The financial risk of purchasing XOOX tokens may apply indefinitely

