

Abstract

is a global marketplace solution that turns every virtual item into a real commodity. This paper discusses how we combine blockchain technologies and seven years of industry experience to open this multi-billion dollar market to the existing world economy. All that time people spend playing games on their mobile, PC, console or any other platform could finally be worth something.

Essentially, is a new ecosystem where gamers, developers, and entrepreneurs can efficiently and securely evaluate and trade virtual items. Thus, creates a new economy that joins with existing real-equity markets.

Early-access to the present paper was given to a number of individuals from the gaming industry and blockchain community. The authors deeply thank and acknowledge the comments and criticisms that have made the design of and this whitepaper as good as they are. Any faults that remain are, of course, the authors'.

Table of contents

Introduction

Market & Industry

Video Games & VR

Digital e-Commerce & Gaming Market Analysis

Cryptocurrency Market

Product Details

Problem Definition

The Solution

For Gamers

Items Unique Signature & History

Influence on Market Development

For Developers and Publishers

Increased Revenue

Bounty program for the game developers and publishers

Use-case

business opportunities Modders,

Designers & Contributors

Technologies

The System

Coin

Token as in-game item

Product monetization & Coin economy

Summary

Product Roadmap

Token Sale

Token Sale Phase #1

Token Sale Phase #2

Use of Funds

: Projections

Our Commitment After the Token Sale Phase #1

Our Team

Advisory Board

Sources

Introduction

In real life, whether you are a lawyer, a crypto trader, a game developer or a miner, you spend time, experience, and even luck working to achieve something. This always results in a new experience and/or real assets. And since it is yours, you can sell, gift it or just throw any asset away.

Around 2.3 billion people play games on different platforms and devices, creating **a gaming industry that in 2016 reached \$100 billion and continues to boom**. Only 4,000 pro gamers make a profit from the time and skill they spend gaming, including the trading of in-game items they accumulate. Just a couple of games accumulating only 6% of the global audience made a turnover of \$4 billion of in-game items. The rest of gamers are out of the market.

The existing technologies cannot connect the many game universes and platforms together. As a result, players are stuck with their useless items, despite their time and effort. The growth of the gaming audience and the rise of the VR and AR markets has compounded this situation.

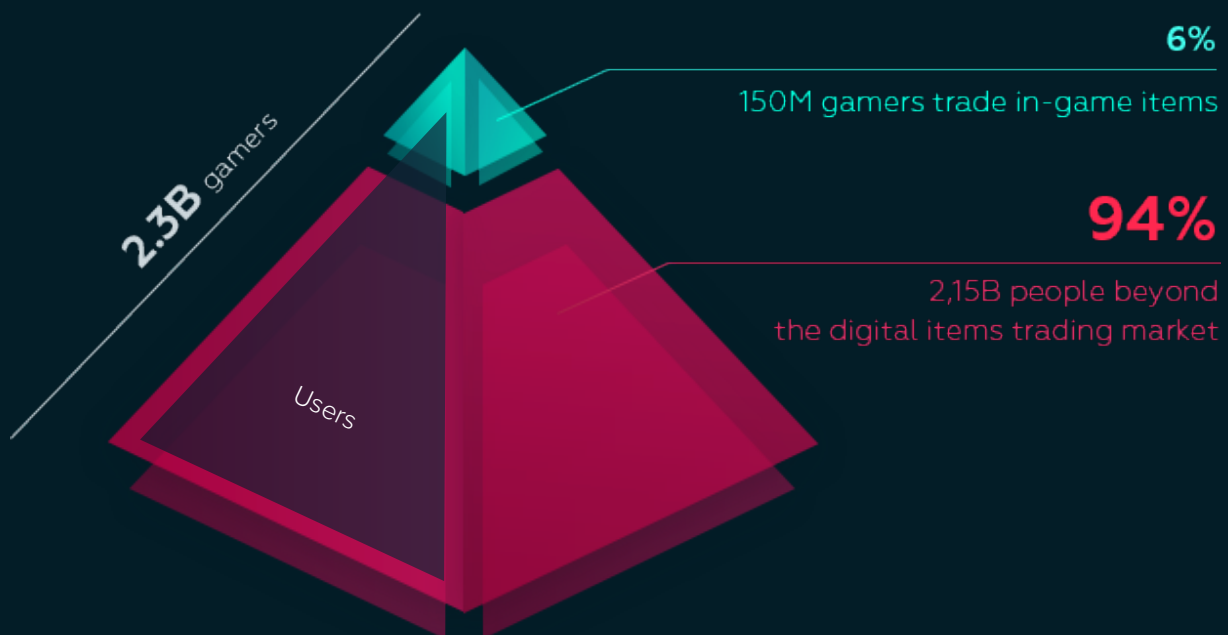
Our team knows exactly what gamers want. **Twelve months ago, we started trading virtual items in just a couple of games, and since then we have traded 12 million virtual items**. We know what the market needs and have already developed a unique platform that enables us to satisfy that need.

We are now developing a marketplace based on blockchain and smart contracts that enable the one-click sale, exchange or evaluation of every virtual item between all games on any platform. The token will be the only currency on the platform, providing different options that affect every trade, exchange, fee and smart contract. By the end of this whitepaper, you will see how we are building a new online economy with the token. **2.3 billion gamers will finally be able to enter a global virtual item market**. Using our API, every game developer will easily connect their game to and gain from the increased value, revenue and time spent in their games.

Market & Industry

Video Games & VR

There are approximately 2.3 billion gamers across the globe who are expected to generate revenue of \$109 billion in 2017¹. This shows a \$7.8 billion (7.8%) growth compared to 2016. Digital game revenue will account for about \$95 billion (87%) of the global market.



The most profitable segment is mobile, showing \$46.1 billion (19%) and claiming 42% of the market.

According to the VR/AR Report Q3 2017², provided by Digi-Capital, the virtual reality and augmented reality (VR & AR) market is expected to reach up to \$122 billion by 2021. Also, Digi-capital claims that the size of the gaming market is going to reach \$200 billion over the next five years. Many companies, such as Microsoft Corp., Nintendo Co. Ltd, and Sony Corp., are launching their own VR-compatible console, and this competition accelerates the industry as a whole.

1 <https://newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-withmobile-taking-42/>

2 <http://www.digi-capital.com/reports/#augmented-virtual-reality>

Digital e-Commerce & Gaming Market Analysis

In this section, we review the biggest players in the global in-game items trading market.

The **Steam** platform was released on September 12, 2003. Over the past 4 years, it has gained enormous popularity among the gaming community, reaching **\$3.5 billion revenue in 2016**³. This platform was the first to allow trading of in-game items, but all the profit received from trading is held inside the platform, without the possibility of cashing the money out. Moreover, the possibility to trade in-game items is very limited and presented in just a few games (CS:GO, DOTA2, TF2, PUBG, H1Z1).

Steam Pros:

- Steam has become the largest marketplace for video games and mods commercialization;
- It had \$3.5 billion revenue in 2016. Steam's rate of acquisition and catalog offering have shown rapid growth. Up to this day, almost 370 million paid games have been activated;
- Steam also offers many services for players, modders and game developers, like object trading, beta/alpha release, game presale, objects listing, payment processing and credit card verification.

Steam Cons:

- Steam technology and servers are centralized, and have complete control over the availability of any single product or item in their catalog, which leads to security (account) fraud;
- Most of the games on Steam don't have any functionality for in-game item trading. Only three games have a significant influence on overall turnover of in-game items (CS:GO, Dota2, TF2);
- Steam users don't have any real influence on platform development;
- Steam doesn't allow users to cash out virtual platform currency;
- Steam has high fees for trading in-game items (up to 12%);
- Steam technology does not support multi-platform and multi-engine trading.

3 <https://www.statista.com/statistics/547025/steam-game-sales-revenue/>

Here are some figures that show average daily Steam user numbers and the overall number of games connected to Steam:

- Number of daily active users⁴: 12 853 536 (as of 2017-07-15);
- Number of games⁵: +- 14 398 (as of 2017-07-15).

Opskins is an in-game items trading marketplace that was launched in December 2014. The service implements the Steam API to enable the trading of in-game items. Currently, Opskins is the biggest skins trading platform on the planet with ten million unique users monthly.

Opskins pros:

- Q1-Q2 2017 turnover conducted around \$250 million;
- One of the biggest communities for skins trading (over 10 million users monthly⁶);
- Real money cashout.

Opskins cons:

- Doesn't have official support from Steam (lots of account fraud);
- High fees for transaction and cashout (up to 10%);
- Supports only a few Steam games;
- Due to the use of the Steam API, is highly dependent on Steam.

Cryptocurrency Market

For the first time, cryptocurrencies hold a market cap larger than \$100 billion⁷. Bitcoin (BTC) owns the biggest share, with slightly over \$46.6 billion (47.9% of all cryptocurrencies⁸). But the recent wave of other coins, like Ethereum ether (ETH), has helped bring the total cap over the top.

4 <http://store.steampowered.com/stats/>

5 <https://steampy.com/year/>

6 <https://www.similarweb.com/website/opskins.com#overview>

7 <http://www.marketwatch.com/story/with-bitcoin-surge-cryptocurrencies-top-100-billion-in-marketcapitalization-2017-06-06>

8 <https://howmuch.net/articles/worlds-money-in-perspective>

Putting the World's Money into Perspective



Bitcoin peaked to its all-time high (ATH) recently in both price and market cap.

Product details

Problem Definition

Every minute spent in-game leaves gamers with virtual goods. This could be new armor, a fancy car or just a pile of crystals. Unfortunately, there is no easy way (or no way at all) to trade these virtual assets among the billions of gamers around the world.

Game universes are not connected to each other, which means there is no safe and easy way to trade between them, and no reliable way to approve these trades. It was not technologically possible to build a bridge between the dozens of game engines, independent and global game developers, and the mobile and console worlds.

More than 70% of the 15 million games we sold in the last 5 years is 2 or more years old. There are currently thousands of games, where people can potentially trade and exchange digital items. But this is impossible, due to the inability of game developers to provide local trading markets for each game.

Billions of gamers possess rare items, fancy items, memorabilia items. All in high demand, but technologically limited to trade.

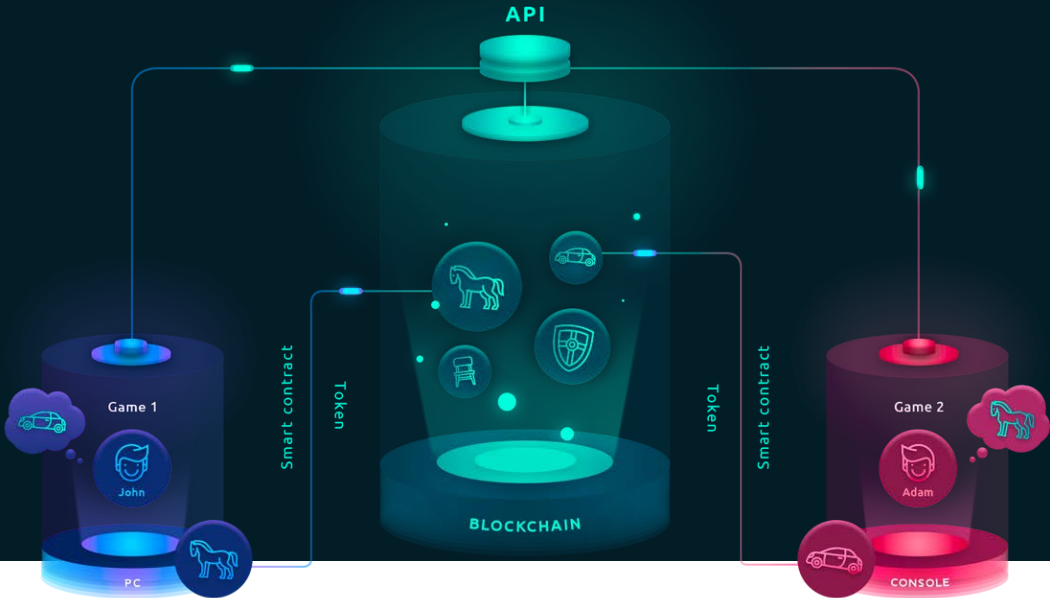
The Solution

This market void and our many years of experience have inspired , the first decentralized, global marketplace for trading any digital items. To fill in the gap, we have to offer a scalable, cross-platform solution that enables gamers to trade any virtual item from any game.

We are creating a new economic segment. Any kind of collaboration between gamers and game developers on our platform will be regulated by market demand. Therefore, gamers have their own interest in collecting rare items, and game developers are interested in creating and maintaining unique, relevant and tradable gaming content.

Users (players as well as developers) will be able to leverage their own achievements and time spent, either for a better gaming experience or for profit. will also be an easy place to start showing off to other players. This adds a completely new dimension to game virtual assets: the notion of virtual capital.

HOW WORKS



For Gamers

We want to provide an opportunity for every gamer (user) in the world to be able to evaluate their time, skills and luck. Gamers will be able to perform easy, one-click buy/sell, exchange, and evaluation of every possible game asset, item, skin, or another game object. To make this possible, each user will be provided with an account on a full-time basis. The account will preserve all data in our decentralized database and interact with users utilizing smart contracts.

Value for gamers:

- in-game item trading and profit-making;
- opportunity to create in-game content and participate in its turnover on ;
- security accreditation for every transaction within ;
- opportunity to get a unique collectible in-game item;
- opportunity to switch between games without losing gained arsenal of in-game items.

Items Unique Signature & History

Blockchain technology and unique identification turn every item on into an exclusive product with its own history, providing each item with additional and even collectible value. Thus, achievements of previous holders could influence the price and value of an item over time.

Let's imagine, for example, a collection of unique items used by cybersports champions who took part in world tournaments in 2010-2017. Those items couldn't be bought from the game developer, but they could be bought from members who had them. Thus, for one player, it could be important to collect items from a tournament series, while for others it will be their exciting mission to collect all kinds of armor used by their favorite Esports players.

Influence on Market Development

Buying power will provide users with a real impact on the development of game assets, items, and mods. The cross-platform and cross-game items exchange will open new opportunities to discover and play games while leveraging each user's virtual gaming capital.

For Developers and Publishers

Early access to the present paper was given to a number of developers from the gaming industry. Most of them showed intense interest in integrating the API into their games. Moreover, they have helped us compose case

studies and monetization methods for different platforms (PC, consoles, mobile, VR-compatible platforms), and expand our knowledge of in-game economics.

We offer a unique solution for game developers. API is a ready-to-use solution for giving value to any digital item—whether it is armor, sword, gems, or other items—as well as item monetization. First, libraries will cover the most popular engines, such as Unreal, Cry Engine, and Unity 3D. That will open to integration with most games on the market. Then, we will add custom engine support. Also, we are working on a mobile game solution for iOS and Android.

We have a roadmap for games with different business models (pay-to-play, free-to-play, and pay-to-win) with a different number of players (console single and multiplayer games) for all types of platforms (PC, consoles, mobile games). After studying all these monetization types, we have a win-win solution for every market.

Value for game developers:

- marketing intensification and general audience increase. Up to 32% of raised funds will be put into events, promos, and general advertising that will expand the audience of games presented on ;
- revenue increase. Publishers will receive most of the fees from every exchange of their intellectual property: in-game items;
- LTV increase. Lifetime value will dramatically increase as gamers are expected to spend in the game hunting for items. Gamers will be able not only to have fun, but also to get additional revenue while playing;
- gives an opportunity to gamers and game fans to test themselves as content developers and create unique in-game assets for any game stored on . The best items, approved by publishers will be integrated into the game. This will enrich the gaming world with new and unique in-game assets, as well as bring additional revenue to both gamers and publishers. Smart contracts and blockchain technology will guarantee the transparency of all transactions and automatically distribute profits within agreed terms to all parties.
- Up to 18% of raised funds will be used for the development of cost-effective business models for in-game item turnover. It will be applied to the business models suggested by publishers and developers.

Increased Revenue

will provide developers and decision makers with a platform on which games can leverage additional years of existence. Combined with a strong in-game economy system and interesting new features, even single games (not part of a franchise and without multiplayer features) could expect to see a constant income increase.

Developers of virtual items presented on will gain most of the fees from every trade commission (up to 80% of every transaction on). This solution aims to generate new ways of game monetization and increase lifetime value.

The evolution of blockchain technology and smart contracts has enabled us to exclude fraud to the maximum possible extent, whether it's database hacking or account hacking. It is the key criterion in our decision to create .

In addition, the expansion of the tradable market will connect an ever-increasing number of potential customers and open a whole new world of marketing.

Bounty program for the game developers and publishers

We offer a special bounty program for developers and publishers. Up to 18% of the funds attracted by two phases of token sales will be spent to stimulate the developers and publishers to create cost-effective and attractive business models for the turnover of the in-game items stored on blockchain.

Use-case

Single player and multiplayer PC and console games could generate revenue for developers from the trade of hard-to-get, rare, and collectible items. Skins for in-game items could fulfill the human drive to be different and avoid changing the balance of an existing game.

Mobile games with pay-to-win or pay-to-play models could benefit from skin turnover. Developers will be provided with the option of adding durability to

every item officially sold in the game, as well as opening a trade market for used items. That will increase the turnover of new virtual assets and add revenue from every used item sale without cannibalizing main sales.

Additional sources of income are memorabilia items for winning championships, collaboration with designers, or previously owned by game stats. Information about each item's owner and history will be secured on the blockchain. This will create an additional demand for these items from rare asset collectors or celebrity gamers.

We will provide detailed case studies for every platform, along with technical data, in a standalone document.

business opportunities

The API developed by provides multiple opportunities for entrepreneurs. In-game items could be integrated into popular online stores, used as payments for goods and services.

Potentially will enable in-game items to become real assets. When this happens, you might be able to insure your in-game assets or receive a loan from the bank using your virtual assets as security. That's what we strive for.

Modders, Designers & Contributors

The market for modders will open any game to developers, designers, modders, and content creators. The well-balanced percentage and use of smart contracts will provide the ecosystem with the opportunity to win presale and beta/alpha production cycles, increasing the community while building a user base and setting up an individual economic network.

The network will help gamers to estimate the value of their virtual capital and help game developers to increase their revenues.

Technologies

We are developing as a very high-load system. The market potential consists of billions of users, each of whom has thousands of digital items. After passing the milestone of 10 million users, the second phase of product development will focus on our own blockchain solution.

The current version of the network blockchain, implemented using Rust and C++, has the following characteristics:

- High-speed response. It can process up to 3,000 transactions per second, which will enable the platform to ensure a proper transaction processing speed.
- Elasticity. The developed blockchain ensures smooth operation (even if up to one-third of the nodes in the blockchain network are disabled or compromised).
- Improved security. Due to the fact that our system is written in Rust, a systems programming language designed without segmentation faults to guarantee thread safety, the blockchain ensures improved security of all processes occurring on the platform.

Our development team uses Exonum blockchain framework. At this stage, this framework is the optimal solution for unleashing 's potential, which allows you to create an efficiently functioning blockchain product with all the necessary characteristics listed above in a short period.

The System

The system is divided into two independent parts.

The first is a decentralized blockchain database - a completely independent distributed information storage system for all transactions that take place in the game and/or on the trading platforms.

's blockchain uses smart contract technology, which will ensure transparency and security of the transaction for all participants.

The capability of smart contracts involves the management of required conditions, digital items, and internal cryptocurrency, acting as an independent intermediary. The payment and transfer of digital items are processed through a smart contract based on all of its terms.

Smart contracts provide a much higher level of security than ordinary contractual right. In addition, the technology allows for reducing transaction costs. implements the following functions through smart

- contracts;
- control of in-game items` presence (based on HASH) and their available quantity;
 - control of users` solvency to purchase a particular item;
 - other parameters that will be preset by the user or system.

A smart contract is activated after a successful purchase function initiation and is responsible for making mutual cost clearings. A smart contract verifies the user`s solvency, as well as the right to own items and the size of the commission. The second part of the system:

This is an independent trading platform that is capable of processing hundreds of thousands of operations per second and interacting with blockchain. This layer is developed using the GoLang, PostgreSQL. In order to deliver high performance, developers have chosen a micro-service architecture with the RestFull API. Clusters, built on Kubernetes, ensure the stable operation of micro-services.

The system also uses an independent multimedia storage service. This service interacts with both the blockchain and the trading platform, functioning as a high-speed storage of media resources. Thanks to this service architecture, even its complete disconnection will not affect data continuity and safety.

Additional modules

The team is developing a huge number of additional modules that will be implemented in the marketplace - in particular, the development of statistics management modules using AI, which in turn will use BigData analysis modules. This will provide an opportunity to monitor the dynamics of growing amounts of data in the system, obtain detailed analytical data on

the transmission chains of virtual items, and monitor the demand for certain virtual items on the network.

Architecturally, all modules are built independently of each other, which increases the stability of the entire system. The crash of one module will not cause the failure of the entire system.

All components of the platform interact with each other with the help of RestFull API, specially designed to provide data exchange between the internal and external modules of the system.

Integration of `s API

To manage in-game items, game developers will receive all the necessary tools in the form of API documentation, DLL-libraries or ready-made solutions that will be developed for popular game engines.

That greatly simplifies `s integration into games.

At the moment, we are already developing services that will help to make the adaptation process of games written in Unity 3D, CryEngine or Unreal Engine as quick and understandable as possible, and also allow you to design and flexibly adjust the economy of in-game items.

Also, the API will provide a number of additional features. In-game items can be integrated into popular online stores and used as payment for goods or services.

How does the system work from the perspective of the end user?

Here is how the platform shall operate upon its complete launch. The user needs to create an account on . Automatically, the system creates a wallet on the basis of the already existing cryptocurrency: Tokens.

Once the user has access to his account, he can immediately start working with the wallet, adding the needed amount of Tokens or in-game items presented on the marketplace.

To conduct trading operations, the system automatically synchronizes the

in-game items of the user with his personal account on the blockchain and marketplace. Synchronization is carried out with the help of an API using the user`s credentials for authorization.

To implement this synchronization and the overall interaction of the game with the trading platform, game developers will be provided with an API that will contain the following basic groups of methods:

- Methods for registering a developer in the system, while the system registers a new balance account for the developer;
- Methods for generating HASH values for each game item (HASH will be used as a unique value, to account for virtual items.);
- Methods for transferring HASH values within the network between players and sellers;
- Methods allowing the identification of the state of each game item;
- Methods that track certain parameters of certain virtual objects.

Since smart contracts allow you to implement complex chains of interaction between all market users, you need a tool that simplifies the usage of a smart contract by end users. For this, we intend to create a special design with a user-friendly interface that will allow you to easily set basic parameters for contract implementation.

Coin

Coin – is the only virtual currency that operates on . All transactions with digital goods (including fees) are made in Coin only.

After the Token Sale Phase #2, all contributors will receive an ERC-20 exchangeable Token on the Ethereum network. After the launch of the main network, this will be exchanged 1-to-1 with a native Coin.

The issue of Tokens will be held once only. The number of tokens produced will correspond to the number of tokens sold at the crowdsale, but no more than the declared Hard Cap.

Coin functionality within the platform:

- As a virtual currency for buying or selling in-game items;
- Delivering sales commission to the owners of the rights on digital property;
- Buying premium accounts for wholesale and individual sellers;
- Purchasing BigData analytics.

Coin will be used on the platform and will not be limited to the platform; in the future it will become a fully-fledged virtual currency item. You can buy Tokens during two sale phases. The first sale phase was held on 17–21 August 2017. During this period, users were able to buy tokens with more favorable purchase terms. The second sale phase will start on November 14, 2017 and will continue through November 28, 2017.

Token as in-game item

PLEASE NOTE: CRYPTOGRAPHIC TOKENS REFERRED TO IN THIS SECTION OF WHITE PAPER ARE CRYPTOGRAPHIC TOKENS ON A LAUNCHED BLOCKCHAIN THAT ADOPTS .IO SOFTWARE. THEY ARE NOT THE ERC-20-COMPATIBLE TOKENS BEING DISTRIBUTED ON THE ETHEREUM BLOCKCHAIN IN CONNECTION WITH THE TOKEN DISTRIBUTION.

A blockchain connection will be established between each Token (in-game item) and a Coin. Each game element will be represented in the wallet in the form of a Token.

Each item will be marked as the property of the company or the person who created it, identified in the blockchain by its own unique ID. This will make it possible to track the item within the system with specific features or any other additional properties, which are defined in a smart contract. Virtual items (Tokens) will only be released by their developers and copyright holders.

Types of digital goods:

- Game virtual currency;
- Games/goods/services;

- Game items and consumables;
- Skins and designs;
- Mods, cards, and additions;
- Music and SFX.

Tokens (in-game items) are created through the use of the API's endpoint and a token factory. The API itself can be imported into the libraries of the most popular engines; this simplifies the connection of the asset creators (developers and publishers) with .

The creators of virtual items will be able to:

- Add and delete virtual goods;
- Set the basic prices for goods;
- Add different features to their goods (e.g. a virtual item can be labeled as premium, common or used);
- Allow collective creation of goods;
- Ban certain users from conducting transactions with the goods.

A Token is a unique property of the digital goods of a particular user, which is stored on the blockchain. The ownership of goods and property will be secured by the system on the marketplace outside of the game world.

A Token (virtual good) is subject to alienation, meaning that it can be bought or sold or given from one owner to another. The system will also have its own evaluation methods that can be requested in one click (or API request) with minimal fees.

Each transaction held in the has the main fee of 5% of the total amount of the transaction. Most of the fee will be sent to the developers and copyright holders whose items are involved in the transaction (publishers and developers). The remaining element of the fee will be due to the .

Product monetization & Coin economy

One of the key priorities is monetization, which is beneficial for all participants.

Monetization is achieved via a transaction fee on each change of item ownership on the . It will not be more than 5%, and the rightsholder of in-game assets will receive most of this commission.

Both transactions and commission charging are carried out in Coin using smart contract technology.

offers a number of additional features. The game assets represented on can be integrated into popular online stores and used as payment for goods or services.

Up to 18% of raised funds will be spent to stimulate the developers and publishers to create and develop cost-effective business models for in-game item turnover.

Summary

2.3 billion gamers are currently facing technology limitations to their right to trade in-game items. With time and effort, they earn virtual assets that are rare, fancy, and sometimes simply wanted by other players. By creating [Eternity](#), a blockchain-based marketplace, we can connect all games and platforms together. With the built-in token and smart contracts technologies, [Eternity](#) will enable users to make a one-click sale, exchange every virtual item among all games on any platform, as well as evaluate their assets. [Eternity](#) makes virtual items real.

By offering gamers an opportunity to buy and sell in-game assets to all gamers globally, [Eternity](#) creates a new in-game item economy worth more than \$450 billion and turns virtual items into real assets with the help of blockchain technology.

Using our API, every game developer will easily connect its game to [Eternity](#). That will increase lifetime value, revenue, and time spent in the games. Users will enter the global economy with virtual items.

Furthermore, [Eternity](#) API provides a number of business opportunities for other entrepreneurs. Items stored on [Eternity](#) blockchain can be integrated into popular online shops, and then used as a payment method.

Game developers are very welcome to discuss [Eternity](#) API implementation and economics in their current and future projects. We invite every qualified and interested blockchain and crypto developer to open discussion about network creation. Crypto investors are invited to participate in the Main token sale starting on November 14, 2017.

Be a part of the new world economy worth more than \$450 billion.

Join [Eternity](#) today!

Product Roadmap



Token Sale

Token Sale Phase #1

36,037,245 tokens were sold

Start date: August 17, 2017 (12:00 PM NYC Time, UTC-4)

End date: August 21, 2017 (12:00 PM NYC Time, UTC-4)

token sale cap (Phase #1): 50,000,000 tokens

Minimal goal to start: 5,000,000 tokens

Currency accepted: ETH, BTC

Token exchange rate: 1ETH=1,000 tokens

Amount of tokens per one person: unlimited

Minimum transaction amount in Ethereum: 0.1 ETH

Minimum transaction amount in Bitcoin: 100 tokens

Maximum transaction amount: unlimited

Bonuses:

Day 1: +10% bonus

Day 2: +5% bonus

Day 3: +3% bonus

Day 4: no bonuses

Token Sale Phase #2

Start date: November 14, 2017, at 12:00 PM New York / 16:00 UTC / 17:00 London / 17:00 CET / 19:00 Moscow / 21:30 Mumbai / 00:00 Shanghai, UTC +8 / 01:00 Tokyo, UTC +9

End date: 28th of November 2017 at 12:00 PM New York / 16:00 UTC / 17:00 London / 17:00 CET / 19:00 Moscow / 21:30 Mumbai / 00:00 Shanghai, UTC +8 / 01:00 Tokyo, UTC +9

token sale cap (Phase #2): 100,000,000 tokens

Currency accepted: ETH, BTC, LTC

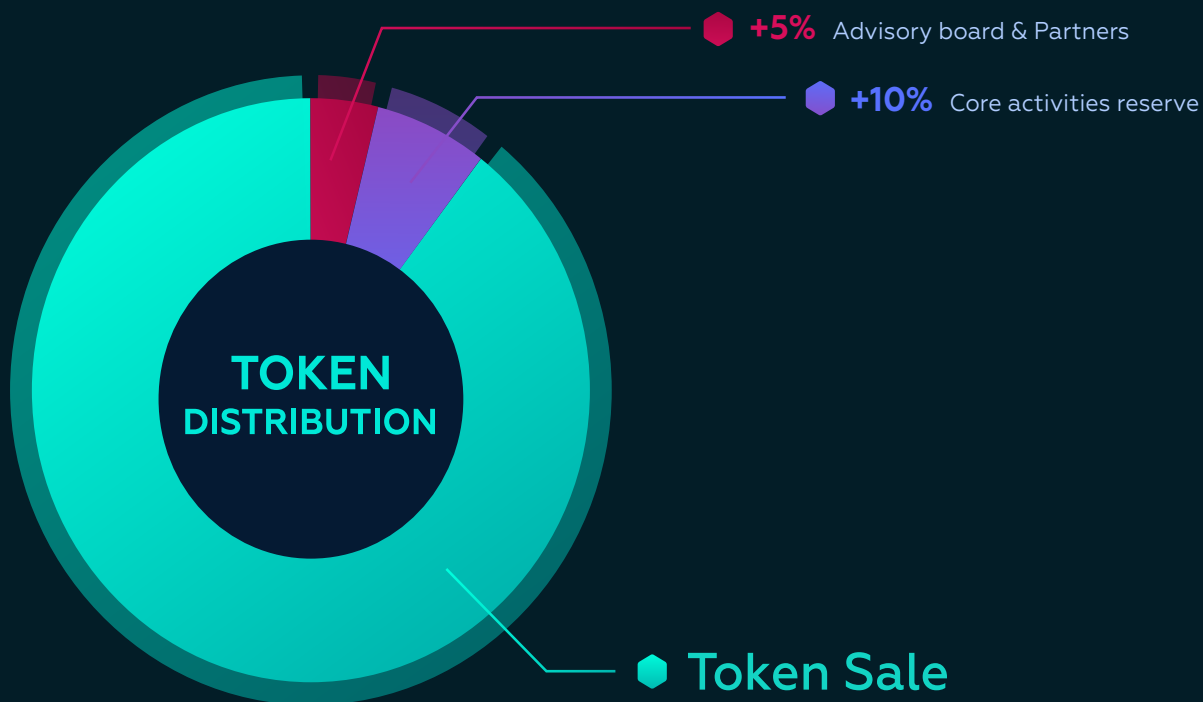
The exchange rate is 1 ETH = 750 tokens

The minimum transaction: 75 tokens (0.1 ETH)

The maximum transaction: 25,000 tokens (33.33 ETH)

Amount of tokens per one person: 25K tokens (33,333 ETH)

After the token sale is closed, 10% of the total token amount sold is issued and reserved for core activities, and 5% is reserved for advisory board and partners. The tokens will be sent to the User's personal respective cryptocurrency wallet after of Token Sale Phase #2.



USE OF FUNDS

	2017	2018	2019	2020	Total	%
Financial analytics	240K	455K	502K	500K	1 697K	2,67%
Sales and business analytics department	369K	1 300K	1 662K	1 665K	4 996K	7,87%
Administrative and General business expenses	361K	457K	550K	550K	1 918K	3,02%
External and internal legal support	485K	218K	200K	200K	1 103K	1,74%
Accounting and audit	45K	70K	86K	85K	286K	0,45%
IT development and product development	2 300K	5 870K	6 200K	7 600K	21 970K	34,59%
Marketing and advertising	520K	3 260K	4 350K	5 300K	13 430K	21,14%
Conferences, business trips	980K	1 240K	2 250K	2 100K	6 570K	10,34%
Game developer bonuses	0	3 550K	4 200K	3 800K	11 550K	18,18%
Total	5 300K	16 420K	20 000K	21 800K	63 520K	100,00%

: Projections

In 2016, the gaming industry's revenue reached \$100 billion and is still booming. It is expected that by 2020 this figure will reach 128 billion dollars. The estimated in-game trading turnover is \$4 billion. And this volume is generated only by 150 million people. unlocks in-game item trading for more than 2.3 billion people – that's the number of people who play games every day on different platforms and devices. The market will exceed \$450 billion.

Considering the growth of the gaming industry and the opportunities that opens, we believe that by 2020 the market for game content will reach such a level that virtual items will be sold on a par with real goods on top-of-the-line online platforms. And well-known designers will cooperate not only with sports or car brands, but they will start to create capsule collections for GTA or World of Warcraft.

We believe that virtual items will extend beyond the game worlds and become an integral part of real life. It is expected, banks will accept in-game content as collateral, or issue loans for the purchase of a rare or collectible virtual item. Insurance companies will easily insure a unique virtual sniper rifle that helped to win the world championship. Jurists and lawyers will advocate and litigate the owners' rights to virtual items just as any other property – a car or a house.

KEY METRICS

	Games	Users (mln)	In-game asset value (USD, mln)	annual trades turnover (USD, mln)	Target Volume
2018	10	1	900	108	180.00%
2019	100	10	9000	1080	1800.00%
2020	2000	200	180000	21600	36000.00%
2021	3500	350	315000	37800	63000.00%
2022	5000	500	450000	54000	90000.00%
2023	10000	1000	900000	108000	180000.00%

Sources

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