Abstract

DMarket is a global marketplace solution that turns every virtual item into 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, DMarket is a new ecosystem where gamers, developers and entrepreneurs can efficiently and securely evaluate and trade virtual items. Thus, DMarket 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 DMarket and this whitepaper as good as they are. Any faults that remain are, of course, the authors’.
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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 new experience and/or real assets. And since it is yours, you can sell, gift it or just throw any asset away.

Every day, 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 $3 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 satisfy that need.

We are now developing a marketplace based on blockchain and smart contracts that enables one-click sale, exchange or evaluation of every virtual item between all games on any platform. The DMarket 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 DMarket 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 DMarket and gain from the increased value, revenue and time spent in their games.
There are approximately 2.3 billion gamers across the globe who are expected to generate revenue of $109 billion in 2017. 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 2017, 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.

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. 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.

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

- Number of daily active users\(^4\): 12,853,536 (as of 2017-07-15);
- Number of games\(^5\): ±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 monthly\(^6\));
- 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**

Along with the gaming and virtual reality markets, virtual currency markets are booming. Although no one is currently giving a prognosis on the cryptocurrency market, the numbers clearly state that demand is growing swiftly. Even though the market value of each currency has been fluctuating (due to the various events that marked the different phases of what is known as Gartner’s Hype Cycle for Emerging Technologies), we can still expect an increasingly widespread adoption. Cryptocurrencies are here to stay.

For the first time, cryptocurrencies hold a market cap larger than $100 billion\(^7\). Bitcoin (BTC) owns the biggest share, with slightly over $46.6 billion (47.9% of

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\(^4\) [http://store.steampowered.com/stats/](http://store.steampowered.com/stats/)

\(^5\) [https://steamspy.com/year/](https://steamspy.com/year/)

\(^6\) [https://www.similarweb.com/website/opskins.com#overview](https://www.similarweb.com/website/opskins.com#overview)

all cryptocurrencies\(^8\). But the recent wave of other coins, like Ethereum ether (ETH), has helped bring the total cap over the top.

Putting the World's Money into Perspective

- **$83.6T** All money
- **$31T** Physical Money
- **$8.2T** Gold Market Cup
- **$402B** Amazon Capitalization
- **$100B** All Cryptocurrencies

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

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\(^8\) [https://howmuch.net/articles/worlds-money-in-perspective](https://howmuch.net/articles/worlds-money-in-perspective)
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 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 of 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 are 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 DMarket, 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. DMarket will also be an easy place to start showing off to other players. This adds a completely new dimension to game assets: the notion of virtual capital.

For Gamers

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

- Token crediting, during in-game items trading;
- Token deduction, during the acquisition of in-game items;
• Transaction fees (no more than 5%);
• In-game item crediting/deduction (during the in-game item transaction);
• An influence on the platform development.

All these processes will be automated, with the help of smart contracts technology. The Ethereum platform is an example of a fully-automated system. However, instead of DMarket tokens it executes ETH currency. Also, the platform uses any other tokens produced for Ethereum, instead of digital items.

**Items Unique Signature & History**

There is also another, major aspect in collecting unique assets over time.

Smart contract technology will ensure immutable records of one’s assets, adding a unique form of memorabilia that will create a natural game certification process, forever safe on the blockchain. Thus, digital goods become truly unique. They can adapt over time, develop a different value, creating a new realm of memorabilia and collectable assets, as well as a sense of history for users.

This will also add a sense of history through digital goods globally.

Let’s imagine, for example, a collection of seven unique items from the video games released in 2017. These items cannot be bought, but can still be traded. All owners (the winners and all subsequent owners) add to the assets’ history and may add long term value due to their own popularity.

Players can collect items from all the championship finals. They can even collect all the armor used by their favorite esports star. These are just few instances where all the useful history data is securely stored on the blockchain.

**Influence on Market Development & Voting System**

A simple voting system and 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

We offer a unique win-win solution for game developers. DMarket’s developer’s API is a ready-to-use solution for giving value to any digital item, whether it is skins, gems or other items, as well as for the item monetization. First, libraries and integration will cover most popular engines, such as Unreal, Cry Engine and Unity 3D. That will open DMarket integration to most games on the market. Then, we will add custom engine support (the choice of the next engine will depend on the audience and community vote). Also, we are working on a mobile solution for iOS and Android.

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 DMarket API into their games. Moreover, they have helped us compose the case studies and monetization methods for different platforms (PC, consoles, mobile), and expand our knowledge of in-game economics.

We have a roadmap for single player PC games, multiplayer PC games, free to play PC games, pay-to-win mobile games, free-to-play mobile games, console single and multiplayer games. After studying all these monetization types, we have a win-win solution for every market.

Value for game developers:

• Marketing and general audience increase. All events, promo and general advertising of the platform will grow the number of supported games and publishers;
• Increased general revenue. Publisher will receive the most of the fees from every exchange of his intellectual property – game items;
• Increased LTV. Lifetime value will dramatically increase as gamers naturally spend more time in the game hunting for items. This will also ignite a sort of mining rush. Farming items could become the next big thing.
• DMarket gives an opportunity to the gaming community to create in-game assets for any game stored on DMarket blockchain. New items, approved by publishers and voters, will bring an additional revenue to both, gamers and publishers, and enrich the gaming world with new and unique in-game assets. Many gamers and game fans will satisfy their ambitions in game content creation. Smart contracts and blockchain technology will guarantee the transparency of all transactions and automatically distributes profits within agreed terms along with all parties.
Bounty program for the game developers and publishers

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

Increased & Recurrent Revenues

Our global decentralized marketplace will provide developers and decision-makers with a recurrent market in which games can leverage additional years of existence. Combined with a strong in-game economy system (ex: EVE online virtual economy) and interesting new features, a single game franchise can hope for a lifetime recurrent return.

With DMarket, game developers gain the most of the fees from every trade commission, and on each subsequent resale (when your game assets, items, mods are listed on the market). 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 any kind of fraud, whether it’s database hacking or account hacking. It is the key criterion in our decision to create DMarket.

Also, the expansion of the tradables market will connect an ever-increasing number of potential customers and open a whole new world of marketing and visibility.

Use-case

Single player or even multiplayer PC and console games could benefit from the trade of hard-to-get, rare and fancy items. Skins for in-game items could fulfill the human drive to be different, and avoid changing the balance of existing game.

Mobile games with pay-to-win could benefit from skin turnover. Another option is 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 things and add revenue from every used item sale, not cannibalizing main sales.

Both platforms should benefit from 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 blockchain, creating additional demand for these items from armies of fans.

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

**Multiple business opportunities**

DMarket API provides multiple business opportunities. It is suitable for every online business that is involved in any kind of in-game items trading. For instance, the in-game items integration into online store with real goods; the gaming assets usage as loans and payments; providing rare items as awards, etc.

**Modders, Designers & Contributors**

The market for modders will open any game to developers, designers, modders and codebase contributors. 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 individual economic network.

The DMarket network will help gamers leverage their virtual capital and help game industry players increase their revenues.
Technologies

At the moment, we are reviewing the following platforms: EOS, Tezos, Aeternity, Exonum and a Bitshares fork as a possible base for DMarket. The main focus is on performance, in which we seek:

- Predictability
- Stability
- Ease of use

We are developing DMarket as a very high-load system. Market potential consists of billions of users, each of them having 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. Currently, we are developing it using the DMarket Core, a Solidity DAO framework and web-based decentralized app (dApp).

DMarket Development Process

To implement the concept of trading virtual items between different games, we plan to use the most advanced developments in IT to achieve the maximum technological result.

The development of the first version of the marketplace is being conducted on proven platforms, such as PHP 7, PostgreSQL, js/nodeJs. However, we constantly monitor alternative technical implementations of the system and at the moment we are also considering the possibility of implementing a system based on Erlang in conjunction with Nitrogen + N2O, as alternative stacks for the development of a fault-tolerant system using WebSockets.

To ensure full transparency in trading operations, blockchain technology is used as a decentralized data storage unit. At the moment, the system is being developed on Etherium, but in the future this platform will be revised and possibly replaced with a more economically robust one.
We are also studying the possibility of writing our own platform, taking into account all the technical and functional requests that our potential users have expressed. In this case, we will emphasize the choice of the optimal consensus algorithm, to maintain a balance between system performance and security in general.

We will pay great attention to the scalability of smart contracts. At the moment, there are three main approaches to scale platforms for smart contracts: sharding, database optimization and conditional channels. We plan to use the best of each of these approaches to build our own platform.

We will also implement technologies based on BigData, which will enable us to take into account the constant acceleration of data growth in the system. These technologies will allow us to:

1. Gain access to detailed information about consumer preferences, on which we can build detailed analytical profiles for specific game developers, virtual products and everything that has value in the network;
2. Integrate detailed data on transactions and purchase statistics for certain groups of virtual goods by different categories of users;
3. Receive detailed analytical data on the transmission links of virtual goods and monitor the constantly changing demand for certain goods in the network;
4. Counteract falsifications of the release of game items, increase the effectiveness of combating money laundering and fraud, etc.

To solve the problem of analyzing enormous amounts of statistical data, we will also use technology based on Machine Learning, which will greatly simplify the processes of analysis and decision-making. Technologies that will predict the liquidity of certain digital items on the basis of available statistics are already being developed.

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

The user creates an account on DMarket. During registration, the system will create a user profile and a balance account that will be based on the DMarket token.

Once the user has access to his account, he will have the opportunity to add
the needed amount of DMarket tokens to his balance. To do this, he will be able to use the account deposit system, where he can select one of the appropriate methods to top up the account balance for the purchase of DMarket tokens. Processing companies will be involved in this stage. For example, users can use their credit card to buy DMarket tokens. If a user has some other cryptocurrency, the system will allow an instant exchange of the user’s tokens for DMarket tokens, using existing exchanges, such as Coinbase, etc. Standard regulatory and anti-fraud measures could apply to this stage.

For trading operations in the system, the user will have to specify his credentials to enter a game. After that, the system will automatically synchronize the user’s game items with their personal cabinet on the trading platform. This synchronization will be completed via API, using the user’s game credentials. A synchronization of objects with the tradable property will be held between the blockchain and the marketplace with the subsequent display of these items in the user’s cabinet.

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;

Game developers will receive all the necessary tools in the form of DLL libraries to manage game items, and API documentation for the integration of game items with the player’s personal cabinet on the trading platform. The blockchain network will be used as a storage layer for information about the movement of game items, thus ensuring transparency, honesty and security for the above-described marketplaces.
The synchronization of information exchange about existing and past transactions is based on two program layers that will be located between the marketplace and blockchain:

- The backend layer, with all the necessary programming interfaces, based on implemented methods and functions, that receive all the necessary information from the marketplace, current transactions in the system, their statuses, etc.;
- The blockchain layer, which is implemented on the basis of smart contracts, that has the main task of ensuring the transparency and reliability of the transaction for all its participants. All operations that the contract manipulates use the hash of a particular item that the game developer created when the game was developed.

In order to ensure the correct functioning of the second layer, the contracts implement functions that check the availability of game items (based on HASH), their available quantity, the solvency of the user who wishes to acquire them and other parameters that will be pre-determined in the system. The specification of all these functions will be outlined in the relevant documentation and provided to the developers.

The mechanics of the smart contract will include the ability to check the parameters assigned to it, using the API of the first layer or the built-in functions of the contract itself, which receive input values passed to them through the backend layer.

Also, we are considering using blockchain Oracles\(^9\) as an additional public source of information (three additional layers of interaction), which will allow us to uncompromisingly ascertain the veracity of the information received.

Given the fact that smart contracts will enable the platform to implement complex chains of interactions between market users, there is a need for an instrument that will simplify the possibility of using a smart contract by end users in general. To this end, we are considering the possibility of creating a special constructor that will enable us to specify the main conditions for the implementation of a contract in a few clicks, and the necessary checks and their sources, making this interface as user-friendly as possible for the trader.

\(^9\) https://blockchainhub.net/blockchain-oracles/
DMarket Tokens

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

After the Token sale period, all contributors will receive an ERC-20 exchangeable DMarket Token on the Ethereum network. After the launch of the main DMarket network, it will be exchanged 1-to-1 with a native DMarket coin.

All digital goods are set with a DMarket coin value. Every in-game item will have a form of DMarket token in the DMarket coin wallet. All transactions of digital goods are made in DMarket coin, with DMarket coin-evaluated prices. Fees are paid in DMarket coins at asset creation and at asset exchange, using blockchain confirmations.

In other words, the DMarket coin is the money that runs DMarket.

DMarket Coin Functionality

DMarket Tokens will be represented by DMarket coin. They will be used within the DMarket platform, but they won’t be limited by the platform in the future. DMarket coin can be used for the following purposes:

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

Digital goods

Developers, designers and modders create digital goods. Each item will be marked as property of the company or the person who created it, identified by its own unique ID. Making it possible to track the item within the system and the blockchain. Optionally, with specific time-related features (premium,
normal, used) or any other additional properties, which are defined in a smart contract. Technically, they will be DMarket blockchain network tokens.

**Digital Goods can vary from:**
- Game currency;
- Games items/goods/services;
- Game collectables;
- Game trophies;
- Skins, designs, animations, texture objects.

DMarket tokens are created through the use of the API’s endpoint and a token factory, itself using a library submodule that can be optionally imported, thus giving great flexibility to asset creators.

The token will represent consistent information stored on the blockchain, thus the unique ownership of one’s digital goods. The goods’ ownership, properties and state will live in the marketplace, outside of the game realm.

The digital goods token will be transferable, meaning that it can be bought or sold or given from one owner to another. The assets will also bear their own evaluation methods that can be called in one click (or API request) with minimal fees.

Each transaction held in the DMarket has a main fee of 5% of the total amount of the transaction. At that most of the fee will be sent to the game developers whose items participated in the transaction. The remaining sum of the main fee will be obtained by the DMarket as of a reward for closing blocks of blockchains and creating smart contracts.

**Product Monetization & DMarket Coin Economy**

Monetization is achieved via a transaction fee (in DMarket coin) on each change of item ownership taking place on the DMarket.

The fees minus the remittance rights of asset creators are the net profit.

Thus, the marketplace is free to use and to browse. Fees will be paid with asset exchanges between users, or between users and merchants. The network will
charge fees directly at the smart contract level in DMarket coin. Remittances will be awarded in DMarket coins, using smart contract technology.

**DMarket Coin Features**

DMarket Coin is the only currency for transmitting, buying, selling, and exchanging virtual goods within the DMarket marketplace. A certain amount of Dmarket Tokens will represent every virtual item, which will be connected to the marketplace wallet. Only the creators of the virtual items will be able to set prices for their goods.

**The creators will be able to:**

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

As soon as the user receives access to his or her account, he or she will be able to deposit the amount of DMarket Tokens they need on their newly created wallet.

You can buy DMarket Tokens during the two sales stages in several ways, including buying tokens for BTC and ETH. The first sales stage will be held on 17-21 August 2017. During this period, users will be able to buy tokens for lower prices and receive bonuses. The second sales stage will start in November 2017.

**DMarket tokens as In-Game items**

Every in-game tradeable item will have a form of DMarket network token, connected to the main DMarket coin wallet and transferable and tradable through the network. A concept example could be taken from Ethereum network with ERC-20 tokens.
Summary

2.2 billion gamers currently face technological denial of their right to trade in-game items. With time and effort, they earn these virtual assets on computers, phones or consoles, assets that have actual value, being rare, fancy and sometimes simply wanted by other players. By creating DMarket, a blockchain-based marketplace, we can connect all games and platforms together. Using built-in token and smart contracts, users will be able to make one-click sale, exchange or evaluation of every virtual item between all games on any platform. DMarket makes virtual items real.

Using our API, every game developer will easily connect their game to DMarket. That will increase lifetime value, revenue and time spent in their games. Users will finally enter the global economy with virtual items. Creating a new community in the billion-dollar market economy.

Game developers are very welcome to discuss API implementation and DMarket 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 can participate in the token sale with the main phase starting on November 3rd.

Become part of the new world economy. Support DMarket and join us today.
Product Roadmap

Q1 2017: The DMarket idea birth
Q2 2017: Market research and integration meetings with game developers
Q3 2017: Brand awareness and Token Sale Phase #1
Q4 2017: DMarket Alpha (testnet), Token Sale Phase #2, Token emission, DMarket Token listing
Q1 2018: DMarket security audit and product launch
Q2 2018: API integration in 10 games with 1M users, in-game items value exceeding $200M
Q2 2019: API integration in 100 games with 10M users, in-game items value exceeding $2B
Q2 2020: API integration in 2000 games with 100M users, in-game items value exceeding $40B
Token Sale

Token Sale Phase #1

Start date: 17th of August 2017 (12:00 PM NYC Time, UTC-4)  
End date: 21th of August 2017 (12:00 PM NYC Time, UTC-4)

DMarket token sale cap (Phase #1): 50,000,000 DMarket tokens  
Minimal goal to start: 5,000,000 DMarket tokens  
Currency accepted: ETH, BTC  
Token exchange rate: 1 ETH = 1,000 DMarket tokens  
Amount of tokens per one person: unlimited  
Minimum transaction amount in Ethereum: 0.1 ETH  
Minimum transaction amount in Bitcoin: 100 DMarket tokens (The transaction rate is dependant on BTC rate fluctuations)  
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: 3rd of November 2017 (12:00 PM NYC Time, UTC - 4)  
End date: 17th of November 2017 (12:00 PM NYC Time, UTC - 4)

DMarket token sale cap (Phase #2): 100,000,000 DMarket tokens  
Currency accepted: ETH, BTC, ETC, LTC  
Token exchange rate: 1 ETH = 750 DMarket tokens  
Amount of tokens per one person: 25K DMarket Tokens (33,333 ETH)  
Minimum transaction amount in Ethereum: 0.1 ETH  
Minimum transaction amount in Bitcoin: 100 DMarket tokens (The transaction rate is dependant on BTC rate fluctuations)  
Maximum transaction amount: 25K DMarket Tokens (33,333 ETH)

After the token sale is closed, 10% of the total token amount sold are issued and reserved for DMartk’s core activities, and 5% is reserved for DMartk advisory board and partners. The DMarket Tokens will be sent to the User’s personal respective cryptocurrency wallet by the end of DMarket Tokens Sale phase #2.
## USE OF FUNDS

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<td>1 665K</td>
<td>4 996K</td>
<td>7.87%</td>
</tr>
<tr>
<td>Administrative and General business expenses</td>
<td>361K</td>
<td>457K</td>
<td>550K</td>
<td>550K</td>
<td>1 918K</td>
<td>3.02%</td>
</tr>
<tr>
<td>External and internal legal support</td>
<td>485K</td>
<td>218K</td>
<td>200K</td>
<td>200K</td>
<td>1 103K</td>
<td>1.74%</td>
</tr>
<tr>
<td>Accounting and audit</td>
<td>45K</td>
<td>70K</td>
<td>86K</td>
<td>85K</td>
<td>286K</td>
<td>0.45%</td>
</tr>
<tr>
<td>IT development and product development</td>
<td>2 300K</td>
<td>5 870K</td>
<td>6 200K</td>
<td>7 600K</td>
<td>21 970K</td>
<td>34.59%</td>
</tr>
<tr>
<td>Marketing and advertising</td>
<td>520K</td>
<td>3 260K</td>
<td>4 350K</td>
<td>5 300K</td>
<td>13 430K</td>
<td>21.14%</td>
</tr>
<tr>
<td>Conferences, business trips</td>
<td>980K</td>
<td>1 240K</td>
<td>2 250K</td>
<td>2 100K</td>
<td>6 570K</td>
<td>10.34%</td>
</tr>
<tr>
<td>Game developer bonuses</td>
<td>0</td>
<td>3 550K</td>
<td>4 200K</td>
<td>3 800K</td>
<td>11 550K</td>
<td>18.18%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5 300K</td>
<td>16 420K</td>
<td>20 000K</td>
<td>21 800K</td>
<td>63 520K</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
DMarket: 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 $3 billion. And this volume is generated only by 150 million people. DMarket 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 DMarket 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.

<table>
<thead>
<tr>
<th>Games</th>
<th>Users (mln)</th>
<th>In-game asset value (USD, mln)</th>
<th>DMarket annual trades turnover (USD, mln)</th>
<th>Target Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>10</td>
<td>900</td>
<td>108</td>
<td>180.00%</td>
</tr>
<tr>
<td>2019</td>
<td>100</td>
<td>9000</td>
<td>1080</td>
<td>1800.00%</td>
</tr>
<tr>
<td>2020</td>
<td>2000</td>
<td>180000</td>
<td>21600</td>
<td>36000.00%</td>
</tr>
<tr>
<td>2021</td>
<td>3500</td>
<td>315000</td>
<td>37800</td>
<td>63000.00%</td>
</tr>
<tr>
<td>2022</td>
<td>5000</td>
<td>450000</td>
<td>54000</td>
<td>90000.00%</td>
</tr>
<tr>
<td>2023</td>
<td>10000</td>
<td>900000</td>
<td>108000</td>
<td>180000.00%</td>
</tr>
</tbody>
</table>
Our commitment after the token sale phase #1

<table>
<thead>
<tr>
<th>5M</th>
<th>15M</th>
<th>25M</th>
<th>50M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 5M tokens sold:</td>
<td>From 5M up to 15M tokens sold:</td>
<td>From 15M up to 25M tokens sold:</td>
<td>From 25M up to 50M tokens sold:</td>
</tr>
<tr>
<td>Contributors will receive a full refund.</td>
<td>DMarket v0.01 Alpha development</td>
<td>Spreading the word about DMarket’s idea around the gaming community</td>
<td>Launch of DMarket’s marketing campaigns and brand awareness creation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Starting with token sale phase #2 in November 2017, with the purpose of scaling and realization of project deadlines and optimization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Participating in gaming and blockchain related exhibitions and conferences (can also replace both words with ‘events’). Building brand awareness and reaching agreements with industry leaders</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Meetings with game developers from all across the world and signing MOUs to establish agreements</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amplifying of development and QA teams for growing DMarket as a platform</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Advisory board extension, with experienced members in the upcoming niches: e-commerce, gaming, 5G-6G, DMarket v0.01 alpha development, and our assurance of availability on November 2017</td>
</tr>
</tbody>
</table>
Our team

Volodymyr Panchenko
Founder & CEO
- #1 private merchant of digital games in the world (15M games sold over the past 5 years via Ebay, G2A, Kinguin)
- Founder of skins.cash – 2nd biggest virtual items marketplace (12M items sold over the past year)
- Founder and CEO of SunTechSoft
- $50M total annual revenue

Alexander «ZeroGravity» Kokhanovskyy
Co-founder
- 17 years of experience in the e-Sports industry
- Founder of Na`Vi (Natus Vincere) - 2nd most popular and one the most successful e-Sports teams
- In 2016 became shareholder of ESforce Holdings - 3rd biggest e-Sports entity funded by USM Group (Mail.ru, VK .com, Megafon) with more than $100M of investments in last round

Sergey Nemesh
CTO
- Blockchain development and implementation
- 10 years of experience in Big Data Solutions development
- 8 years of experience in AI development and integration (Smart sensors, Databases)

Andriy Khavryuchenko
Blockchain architect
- Senior Developer of DASH cryptocurrency (world top 8, market cap $1.4B)
- 4 years of crypto developing
- 26 years in software development
Advisory board

**Oren Klaff**
Managing Director at Intersection Capital ($2 billion in aggregate trade volume across a diversified portfolio of companies and transactions), Author of «Pitch Anything» Bestseller

«The DMarket team knows more about cryptocurrency and smart transactions than the next five companies combined. They impressed me with the idea of combining all known gaming worlds into the one society, giving players the tools to buy & sell directly with each other. This is the next generation of commerce and DMarket is leading it.»

**Dr. Moe Levin**
CEO of Keynote, a global technology conference company which has been responsible for over $250MM of investments into cryptocurrency and blockchain startups. Co-Founded the first accredited Blockchain Academy

«There is a tremendous amount of locked-up value in the world of eSports. Value that has been created via hard work and skill, but is locked due to a lack of infrastructure, efficiency, and capabilities. DMarket streamlines the process by creating an interoperable marketplace which is game and platform agnostic. With a marketplace such as this, users are able to unlock and recover their billions of dollars worth of hard work and open up even greater possibilities.»

**Brian Kerr**
Managing Director at GL Ventures, Founder & CEO Fnatic Gear

«DMarket is a game changer for the game industry! The Steam marketplace is huge, but this will be on another level unifying mobile, console, and PC gaming industries while empowering gamers to monetize their time and skill.»
Advisory board

**Igor Matsanyuk**
Chairman at Game Insight, Senior ex-Vice President at Mail.ru, Founder at IMI.VC, Founder at Farminers

«It seems that this future is already happening: the virtual goods get real value, while the virtual economics are setting the rules for the real markets. The DMarket’s initiative to organize and optimize the in-game assets ecosystem will set new standards of quality and comfort for users. It is yet another opportunity for our society of consumption to reassess its values.»

**Oleg Yavorsky**
PR & Marketing Director at Vostok Games

«We seem to be seriously going into virtual worlds, virtual items and their related economies. DMarket promises to become a strong foundation in such creation of the worlds, as far as gaming is concerned. And it’s great to be a part of that process!»

**Evgeniy Grygorovych**
Project Leader at GSC Game World (S.T.A.L.K.E.R., Cossacks game series)

«This is an incredible breakthrough for the whole gaming world. The DMarket team creates a valuable product, connecting game developers and the gamers into separate gaming cluster of the global economy»
Advisory board

Denis Dovgopoly
Founder at GrowthUP, investor, advisory

“This is one of the most interesting, blockchain related projects in 2017. Great because industry leaders are working on it, which should bring an incredible success!”

Igor Karev
CEO at Tatem Games

“There is a huge market for mobile game developers. Many new and interesting opportunities exist where their time will be compensated handsomely with the opening of DMarket. We support the DMarket team in building this project.”
Sources


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


http://store.steampowered.com/stats/

https://steampowered.com/stats/

https://www.similarweb.com/website/opskins.com#overview


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

https://venturebeat.com/2013/11/25/more-than-1-2-billion-people-are-playing-games/


https://bitcoin.org/bitcoin.pdf

https://blockgeeks.com/guides/smart-contracts/

http://www.blockchaintechnologies.com/blockchain-smart-contracts

https://venturebeat.com/2013/11/25/more-than-1-2-billion-people-are-playing-games/

https://support.steampowered.com/kb_article.php?ref=6088-UDXM-7214

https://blockchainhub.net/blockchain-oracles/