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COLLABORATIVE PURCHASING: GAMERS OF THE WORLD, UNITE!

"What our life is? It is game!"
P.I. Tchaikovsky, Arya of Herman, "Dame of Spades" (based on A.S.Pushkin novel).

"Money shall be so much below the gentlemen, that it is not worth to care about".
F.M.Dostoevsky, "The Gamer" (previously translated mostly as "The Gambler". But if you read the book, you would agree that the Gamer is more appropriate translation).

"… the economic structure of society always forms the real basis from which, in the last analysis, is to be explained the whole superstructure of legal and political institutions, as well as of the religious, philosophical, and other conceptions of each historical period".
Friedrich Engels, "Anti-Duhring"[1]

[1]Marx and Engels used terms INFRASTRUCTURE or BASE for the economic structure of the society, and SUPERSTRUCTURE for the juridico-political institutions, the State, the law, the culture, the philosophy, etc., and the "form of social consciousness" which correspond to a determinant infrastructure.

Synopsis:

TycheKo PlaySell: Collaborative Purchasing for Gamers - a New Concept of Buying & Selling Assets, Virtual and Real

The idea shortly described in the present paper is aimed to provide easy-to-use, simple-to-understand, transparent and fair e-volutionary alternative to existing methods and means of facilitating purchasing transactions for gaming community organic to existing and perspective in- and inter-gaming environments.

PlaySell Collaborative Purchasing system has ubiquitous nature which guarantees its applicability as on-line so off-line, as for gamers so for non-gamers, which has certain similarity to closed in-community lotteries, and when compared with traditional massive lotteries and games of chance provides distinctively higher chances of winning along with establishing new powerful model/channel of e-retailing for vendors of real and virtual assets. The gaming community, who is generally distinctive by mathematical mode of thinking is, however, positioned the best to immediately appreciate the benefits of a new model.

Whilst PlaySell Collaborative Purchasing has certain similarities to group purchasing and lottery mechanisms, especially on the last stage of transactional implemention, as most picturesquely demonstrated in the blockchain version of the concept, it has completely different business ideology of synergy between buyers and sellers.

Particularly, PlaySell Collaborative Purchasing shall smooth the in- and inter-gaming economic environment by deploying simple model and technology that weaves together numerous B2C, C2C, and peer-to-peer relationships and interests, and thus facilitates a continuous flow of win-win transactions.

The most appropriate immediate application of the concept is seen in purchasing expensive items, as virtual so real/material with values exceeding the individual financial capacities of potential acquirers. However, the process can be easily streamlined to serve commercial transactions with all and any class of assets of any value, for any purchasing audience.

References to eBay.com and Amazon.com, such as samples of modified eBay.com on-line buyer interface screenshots/templates are used throughout this memo merely to simplify the presentation of the PlaySell Collaborative Purchasing principles and mechanisms by calling analogy with familiar household e-retailing platforms.

It is feasible, however, to implement the Collaborative Purchasing platform using blockchain technology.

DEFINITIONS (in alphabetical order):

- Bid – a stake, a token of fixed value and price which confirms possession of a fixed percentage in the Special Purpose Virtual Community ("SPVC"). Bids are issued by Organizer and bought by Gamer-Buyers. Bids are issued for each particular asset listed for sale on the Platform in fixed quantities defined by the listed price of the asset, generally for the amount exceeding the asset listed price. Values of Bids issued for a purchase of a particular asset are equal. Gamer-Buyer can buy one and more Bids at his/her discretion and depending on availability of the Bids;

- Collaborative Purchasing / PlaySell – a new concept of purchasing generally similar to group purchasing with several critical differences. During the Collaborative Purchasing the group of independent partners – Gamer-Buyers – unite into a Special Purpose Virtual Community ("SPVC") where they combine their limited resources to accumulate monetary or quasi-monetary power for the single purpose of purchasing a particular valuable asset of common interest. The stake of each participating partner in SPVC - Gamer-Buyer - is defined by the number of Bids (see "Bid" definition) he/she acquired. Once the necessary total amount of Bids has been accumulated by SPVC through voluntary uniting of Gamer-Buyers' Bids, the asset is bought by SPVC from the Seller and transferred to Special Purpose Virtual Community where it is then decided by pre-formalized set of rules to which particular participant of SPVC, i,e., to which particular Gamer-Buyer the asset shall be allocated by unanimous consensus of the participants of the SPVC;

- Gamer-Buyer - individual gamer, gaming team, individual, household, interest association and club, etc. - who is looking to acquire particular high-value asset of interest at a fraction of a price of it and prepared to bid this paid fraction of a value under regulated chance provisions;

- Monetary Instruments – money and freely negotiable equivalents acceptable as payments for the value items in accordance with the laws;

- Organizer: Owner of the Platform. Entity, which runs integrated on-line environment of the electronic listings of the assets, facilities for creating virtual communities of bidding Gamer-Buyers, accumulates Bids, processes payments and transactions between Gamer-Buyers and Sellers, establishes rules, tools, and mechanisms of structuring relationships and transactions and ensures implementation of the transactions in accordance with established regulations of the Platform environment. Responsible for organizing the relationships with Sellers and Gamer-Buyers and in-flow supply of the legitimate real and virtual goods for sale/purchasing. Responsible for organizing listings, issue and sale of Bids, providing instruments for formation of DAO / Special Purpose Virtual Communities, processing and settling of inter-payments, conversion of monetary and quasi-monetary instruments. Responsible for the consumer protection of Gamer-Buyers, compliance with relevant consumer laws and settling possible disputes between Gamer-Buyers and Sellers. Responsible for observing all relevant laws and regulations.

- Platform – e-commerce e-merchant system where virtual and real assets are listed by Sellers and purchased by Gamer-Buyers through the mechanism of Collaborative Purchasing / PlaySell;

- Quasi-monetary instruments – digital instruments convertible to Monetary Instruments;

- Seller - individuals and corporations who want to sell their high-value virtual or real assets at fair market prices (e.g., gaming equipment, virtual in-game items, new or used luxury cars, new or used luxury watches, real estate, etc.);

- SPVC / Special Purpose Virtual Community ("SPVC") / Virtual Bidding Community ("VBC") / DAO - a community formed by interested Gamer-Buyers for the single purpose of purchasing a particular asset in format of Collaborative Purchasing / PlaySell.

3 PHILOSOPHICAL CENTS ABOUT WHAT IS VIRTUAL AND WHAT IS REAL

Are the thoughts in your head real? Or virtual? Are they related to the real world?

Total amount of money in the world is estimated to be around 60 trillion US dollars - which includes national cashes, various types of deposits, liabilities, loans, money markets, funds, and other highly liquid current assets that presumably can be fairly easy liquidated and spent on something else. Total international cash (national banknotes and metal money) is estimated at about 5 trillion dollars, i.e. 8.3% of the total amount.

In other words, about 91.7% of world's money exist in one *digital form* or another. Are those digital money real? Or virtual?

And how about the banknotes?

The ancient Greek philosopher Plato contributed his Theory of Forms in 4th century B.C. which overhauled the Western philosophy throughout and is still one of the major drivers of the philosophical thought. In basic terms, Plato's Theory of Forms asserts that the physical world is not really the "real" world; instead, ultimate reality exists beyond our physical world.

Plato asserts that there are two realms: the physical realm and the spiritual realm. The physical realm is the material stuff we see and interact with on a daily basis; this physical realm is changing and imperfect, as we know all too well. The spiritual realm, however, exists beyond the physical realm. Plato calls this spiritual realm the Realm of Forms (also called the Realm of Ideas or Realm of Ideals).

Plato's Theory of Forms asserts that the physical realm is only a shadow, or image, of the true reality of the Realm of Forms.

So what are these Forms, according to Plato? The Forms are abstract, perfect, unchanging concepts or ideals that transcend time and space; they exist in the Realm of Forms. Even though the Forms are abstract, that doesn't mean they are not real. In fact, the Forms are more 'real' than any individual physical objects. So, concepts like Redness, Wealth, Power, Justice, or Goodness are Forms (and thus they are commonly capitalized). Individual objects like a red book, a green buck, a golden coin, a just action, or a good person reside in the physical realm and are simply different examples of the Forms.

How virtual are virtual in-game economies? If you consider the enormous volumes of time, physical and psychological efforts, and money the gamers continuously spend in such economies, would you still be comfortable to call these economies "virtual"?

Video games as a consumer product have changed significantly in recent years, with the monumental rise of "games as a service"[2].

Examples of such games include the extremely popular online 'battle royale' genre (e.g., Fortnite), online subscription-based games such as massively multiplayer online (MMO) games (e.g.,WorldofWarcraft), and free-to-play game apps on smart phones and tablets (e.g.,Clash of Clans).

Games as a service are designed to encourage users to make 'in-game purchases' or 'microtransactions', which involves spending money, usually in small amounts (e.g., between $1 and $5, with observable tendency for growth and quickly going out of really "micro" fetters), to access, or have the possibility of accessing, virtual items or currency within the game.

The phenomena is big. In 2017, the publisher Activision Blizzard declared a $4 billion revenue from microtransactions[3]. Many other major 'AAA' game companies, including Ubisoft and ElectronicArts, have been very active in this area by incorporating microtransactions into their franchise game titles, such as Madden, FIFA, StarWars: Battlefront and Assassin's Creed[4]. All in all, the gaming industry in heavily monetizing itself, and by that has been meant real money, not virtual one (though the last plays over-exaggerated role, too).

So, can you really call "virtual" the economy which sucked Billions of Dollars from real monetary system? For any sane mind it is not quite "virtual", but is clearly as real as it could be.

Why, then, when it comes to the relationships between virtual in-game economies and real word economies we are talking about "bridging", "connecting", "interconnecting", "channeling", "binding", "gating" them, instead of stating the facts of "fusing", "melting", "melding", "intertwining", "merging", "integrating", "unifying", "amalgamating"?

Until we change our lingo, the things will not change much either, and we will proceed out sad course in the fog of the double standards and euphemisms.

ON THE CURRENT STATE OF AFFAIRS IN GAMING ECONOMIES

Looking at the modern gaming environment as a whole, above the separate realms of particular games in gaming Middle-earth, one could fairly judge it as medieval on the universal scale of human progress. It is not ancient any more, but neither it is in an Enlightenment or even Renaissance stage yet. You can feel the tempo of a headlong evolutionary run towards advanced virtual civilization competing with material surroundings, but the desired state is still a long way to go. We do not talk particular in-game technologies here, or course, we talk here overall policies and politics. Despite to inspiring rhetorics about

[2]Games as a service refer to abroad class of online games which provides in-game content on a continuing revenue model (Lehdonvirta,2009)
[3]Activision Blizzard, 2017
[4]Drummond&Sauer,2018

virtual gaming worlds beating material world in terms of users' satisfaction and quality of life, the gaming worlds are still lagging quite far behind their real counterparts, mostly in terms of the quality of economy, societal organization, politics, and culture. Economical aspect is the most picturesque indicator of what is wrong.

The gaming worlds are reminding now a plethora of beautiful fiefdoms who exercise self-sufficient economic policies. They welcome new vassals (gamers) to join their autarkies and start economic activity within the boundaries and rules of the closed economies they sustain. Except for enthusiastic speeches of future integration and convergence of multi-world gaming universe, not much of "international trade" is implemented by the fiefdoms between each other.

The only reason why it is so is that this a direct result of the conscious policies of the lords (well, gods!) – the games owners. They are looking for the ways better than total self-sufficiency, but did not find such yet.

Of course, the gamers are free knights who can be in any number of fiefdoms they choose, i.e. in any number of different games. However, unfortunately for the itinerant knights, such liberty lacks inter-game continuity and consistency. You cannot take your status from one game to another. You cannot transit your weaponry, your army, and *capital* from one kingdom to another. Each time you have to start anew, and this is damn wasteful.

They face similar complexities when they want to convert their virtual in-game assets into material brick-and-mortar out-game items. Hard trade do they have to do. Often in grey forests with strange ghosts.

What goes for individual players goes for the associated online communities, making social networks game-dependent, not inter-game-related, and thus fragmented. No considerable critical mass can be achieved this way to bring the gaming-multiverse onto qualitatively higher level of social interaction.

Until the owners of the games will change their mentality from: "Hey, we are good enough to survive on our own without external cooperation from our peers" to "United we can bring better worlds to our communities", the gamers will have to rely heavily on intermediaries, who bring the liquidity and fluidity (ability to convert form one type of asset to another with minimal friction) so much needed in the supra-game universe.

Closed economies, which refuse free, open inter-economy foreign trade make intermediaries inevitable, and even desirable, though not always the most efficient solution. In any case, the more complicated the process is, the higher the costs for the customers.

Well, as far as people enter these virtual economies for recreation and entertainment rather than necessity, all these complications are more or less Ok. Virtual economies still lack the aspects of a real economy that are not considered to be "fun". However, more and more people do interact with virtual economies for "real" economic benefit, and more and more of them are drifting to relying on the virtual economies as the major, if not the only source of income. And more and more of them use gaming as primary means of social interaction. This trend makes things as serious, as gaming community actually pretend them to be.

THE OPTIONS OF THE POOR KNIGHTS

When you want to buy something you do not have enough money for, you basically have three choices:

- continue dreaming;

- steal it;
- borrow the money for the purchase;
- play lottery in a hope to get the prize you want or money to buy one.

The first two choices are self-explanatory. The calamities of the third one have been explored enough. As for the fourth one, the probabilities of winning contemporary lotteries are so minimal, that it is even sad to try.

However, in absence of other choices, whether we like it or not, people play lotteries, and they do play a lot, and they always will.

Poor people play much more than well-off people do as for the poor a lottery is normally nothing but a desperate attempt to make ends meet and, possibly, to jump to the upper deck. For them, lottery usually is not a fun, but an act of last resort. Thus, a mass market. That is why traditional lotteries are often called "a tax on the poor". And yet, the factual volume of the *official large lotteries* surpassed $320 billion in 2017, and is growing[5]. Expected CAGR of *the official market* in 2018-2030 is 10%[6].

It is ironical that whilst the chances of substantial winning in modern lottery are minute (average odds are ranging from 1 in 100 million to 1 in 600 million[7]), those lucky few who win, win much more than they would need.

"Normally nothing, occasionally overmuch" – abnormal situation so typical for the modern world.

If you want to buy something which is priced well above your purchasing capacity you do not have much of a legitimate choices. You can either play lottery or borrow money for the purchase.

Is there any feasible alternative to lottery and debt?

PLAYSELL COLLABORATIVE PURCHASING: GAMERS OF THE WORLD, UNITE!

When the digital worlds allow our capabilities to go above the ordinary we call such worlds virtual. When they deprive us of capabilities that we enjoy in real world, we call them synthetic.

The main goal of the concept of PlaySell / Collaborative Purchasing is to enable, not to deprive.

PlaySell / Collaborative Purchasing offers to a gamer an opportunity to acquire virtual and real assets through imitation of playing hybrid in-community lottery by combining efforts and limited resources with other gamers who have similar interests and budgets. The interests of gamer-buyers are combined through creation of common-interest-based, purpose-bound virtual association, whose existence is limited in

[5] Global Lottery Market: By Key Players, Application, Type, Region and Forecast to 2023, EmarketResearch, 2018.
[6] Global Lottery Market, Technavio Report, March 2018.
[7] Just to compare:
- According to CDC numbers (https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6022a1.htm?s_cid=mm6022a1_w), you have a 1 in 10,000 chance to get injured in your bathroom;
- National Weather Service Data (https://www.weather.gov/safety/lightning-odds) shows you have odds of 1 in 1,171,000 to be struck by lightning this year;
- according to the Florida Shark Museum (https://www.floridamuseum.ufl.edu/shark-attacks/odds/compare-risk/death/), death by shark attack has odds of about 1 in 3,748,067.

scope and in time by acquisition of the desired asset and further allocation of the asset to a particular member of the community ultimately chosen by unanimous consensus of community, following strictly established and pre-accepted rules.

PlaySell / Collaborative Purchasing provides considerably higher probabilities of acquiring the asset of interest compared with probabilities of winning a prize in traditional lotteries, and does it in a transparent, concise way, as easy to understand and get used to as implementing ordinary purchase transactions on traditional e-retail platforms. Simultaneously, it equips the private and corporate sellers/vendors with a principally new powerful sales channel.

Collaborative Purchasing is organized, operated and processed online through user-friendly platform (the Platform) of the Organizer with overall user environment similar to eBay.com, Amazon.com or other well-established e-retailers, with strong presence of e-gaming cultural context. The principal difference of the method is not in the form, but rather in the essence of architecture and implementation.

Despite to overall user experience strongly reminding convenient functionality of traditional e-marketplaces environment, the Platform is strikingly different as from existing e-retail marketplaces so from on-line and off-line lotteries.

The distinctions of Collaborative Purchasing from traditional e-retailing and on-line games of chance:

- The Gamer-Buyers form a bidding pool, or virtual bidding community, similar to group purchasing. The pre-established rules of the pool define algorithm of choosing ultimate beneficiary from the number of participants of the bidding community;
- The probability of being chosen as a winner are notably higher for each and any legitimate gamer-participant of the bidding pool than in any alternative of acquiring the asset for the price the gamer-participant pays;
- Each gamer-participant has high chance of acquiring the asset of interest for the fraction of its value;
- The bidding pool, once formed, is guaranteed to have possession of the asset, unlike in lotteries;
- The seller of the asset gets fair price for its asset which he defined in his selling proposal.

The participants of Collaborative Purchasing:

- Gamer-Buyers – individual gamers, gaming teams, individuals, households, interest associations and clubs, etc. - who are looking to acquire particular high-value asset of interest at a fraction of a price of it and prepared to bid this paid fraction of a value under regulated chance provisions;
- Sellers – individuals and corporations who want to sell their high-value assets at fair market prices (e.g., gaming equipment, virtual gaming items, new or used luxury cars, new or used luxury watches, luxury real estate, etc.);
- Organizer – company, which runs integrated on-line environment of the electronic listings of the assets, facilities for creating virtual communities of bidding gamer-buyers, accumulates bids, processes payments and transactions between Gamer-Buyers and Sellers, establishes rules, tools,

and mechanisms of structuring relationships and transactions and ensures implementation of the transactions in accordance with established regulations of the environment[8].

What do we all get from the Collaborative Purchasing:

- Gamer-Buyers: get unprecedented high probability of acquiring an asset at a fraction of a cost with minimal procedural efforts, enjoying higher liquidity for the non-negotiable in-game currencies and credits, tokens and other instruments of cyber-payment;

- Sellers: get extraordinary powerful sales channel for their products;

- Organizer/Platform Owner: gets decent profit while advancing the cause of the evolution of the gaming worlds and blockchain technology.

1. The Collective Purchasing is asset-centric:

The owners of the assets - as individual, so corporate Sellers - submit their proposals to the Organizer to list their assets for sale on the Platform. After verifying eligibility and terms and accepting a proposal, the Organizer lists the asset in an open access for the registered Gamer-Buyers, just like, say, sellers list their goods on eBay.com.

However, the assets are sold through accumulating bids from the interested Gamer-Buyers. Each bid is equal to a fixed fraction of the stated price/value of the asset. The price of one bid and the total number of the bids accepted for the asset is fixed and set by the Organizer. The total value of bids cannot be less than the total value of the underlying asset.

To acquire the asset, a Gamer-Buyer has to buy at least one bid. The more bids she buys, the higher the probability that she will be chosen as the ultimate owner of the asset. The virtual bidding community is formed incrementally of the Gamer-Buyers, each of whom bought at least one bid. The virtual community is complete as all bids for the asset are sold.

2. The bidding community bids for a singular, individualized asset, e.g.:

- a house;
- a car (new or used);
- expensive jewelry (new or used);
- gaming equipment (gaming desktop, gaming laptop, gaming gear, etc.);
- virtual in-game game-dependent[9] functional role-related tool or instrument (sword, crystal, axe, etc.);
- virtual in-game game-dependent status, level, or score;
- other similar items (assets, products, or services) of high market value.

The assets are classified by categories similar to how it is done on eBay, to simplify the process of search and choice by the Buyers.

[8] Further referred to as the Platform

[9] As technology emerges, hopefully game-independent, supra-game (transient or, at least, universally convertible) tools, instruments, statuses, scores, capabilities, etc., will find their way to commercial application.

3. If a corporate Seller has a continuous supply of the assets to sell – for example, automakers or car dealers have a stream of cars to sell, watchmaker has a stream of watches, developers have a pipeline of houses, gaming equipment manufacturer offers a continuous steam of modern equipment and gear, game developers have sufficient supply of advantageous virtual items to sell - then the identical assets for different types of products of a particular Seller will be listed for bidding regularly or periodically, for example every week or every day.
Since the operational costs of organizing a sale on the Platform are low, the Organizer can run millions of sales for different items as of individual, so of corporate Sellers every day, similar to major e-retailers.

4. The Organizer issues *a fixed limited number of electronic bids (each of equal price)* for the total monetary amount which *is larger* than the price asked by the Seller by a factor predetermined by the Organizer of the lottery, say, by a factor of 2, which means that total revenue from the sale of the particular asset will be twice as much as the price the Seller wants to get.

After the sale is complete, the Seller gets the amount of his pre-established price, and the Organizer gets amount in excess of the Seller's pre-established price as his income for organizing the sale and investment for furthering the Platform development.

5. Gamer-Buyers have a wide choice of options of payments for the bid. They can choose paying in traditional currency, cryptocurrency, value token, negotiable and non-negotiable in-game and game-dependent currencies, etc. The mechanism and ratios of conversion provided by the Organizer to the bidding Gamer-Buyers shall be financially not less attractive for the Gamer-Buyers than any terms available on the market and cyber-market at the moment of conversion.

EXAMPLE 1 – A GAME OWNER SELLS IN-GAME VIRTUAL TOOL

1. On-line game owner (or authorized and accredited official partner of game-owner who, say, specializes on creation or trade in in-game virtual items) wants to sell downloadable virtual in-game item which gives extraordinary gaming advantages to a gamer who owns it. The item is called Magic Sword and the game owner established the price of the item at $500. In fact, the virtual item is an in-game built-in downloadable individual subprogram integrated into the overall on-line game which opens a number of special action opportunities for the gamer in possession of the item.

2. Game-Owner-Seller submits his asset proposal to the Organizer's online Platform to be sold through the Platform, one item each week.

3. The Organizer verifies the eligibility and lists the item Magic Sword for the weekly sales on the certain day, e.g., Thursday.

4. The Organizer lists the item Magic Sword online on the Platform along with the parameters of the bidding to be held for the Sword, issues and sells online fixed amount of electronic Bids. The amount and price of the electronic Bids are announced to the Gamer-Buyers beforehand, thus the chances of acquiring the Magic Sword for the holder of 1 Bid are clear and transparent.

5. Say, the Organizer issues 100 electronic Bids at $10/each. Thus:

    - The Seller's price of the Sword $ 500;
    - The total amount of Bids issued $ 1 000 (100 Bids * $10);

    The probability of winning the Magic Sword for 1 electronic Bid is 1 to 100, which is considerably higher (by millions of times) than, e.g., in playing well established lotteries.

6. Buyers who want to have the Sword seek on the Platform's search engine through the category listings for virtual in-game items, find the Sword they want and buy Bids to bid online until all 100 electronic Bids are sold, just as they buy goods on eBay.com or Amazon.com. Virtual Bidding Community is formed as the Bids are being sold.

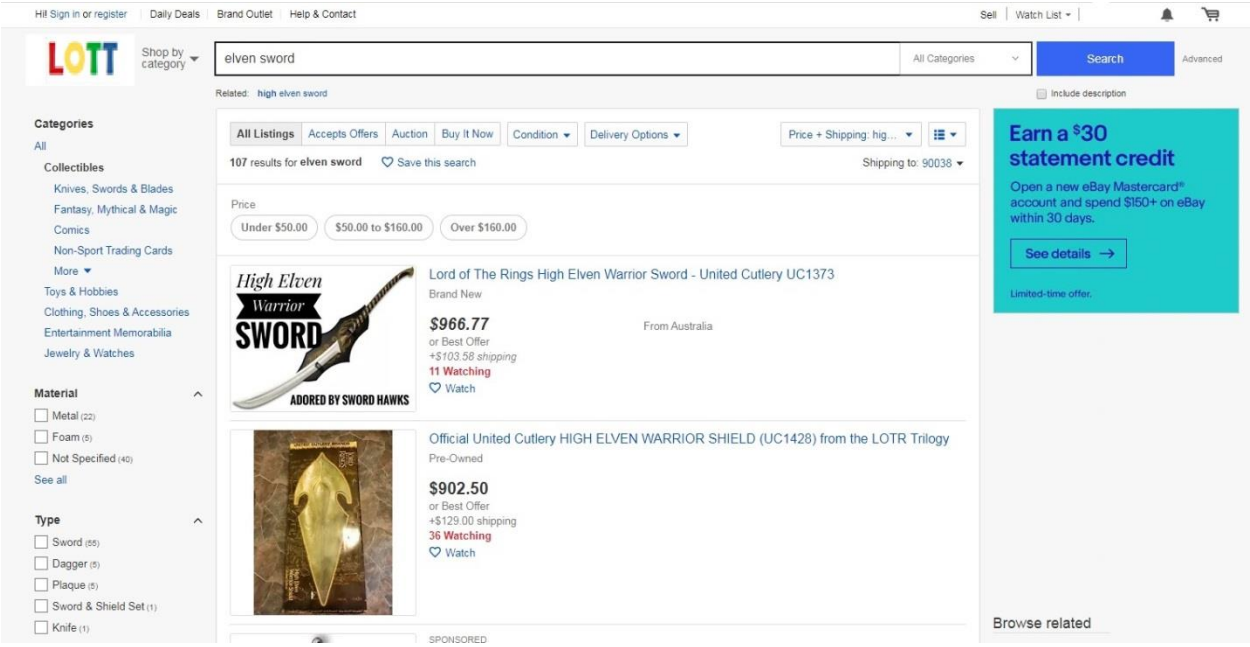
7. On announced time-date, Thursday, the sale is implemented, the Seller transfers the downloadable Magic Sword subprogram to the Virtual Bidding Community.

8. Immediately after the transfer of the asset, the Virtual Bidding Community members run secured unbiased algorithm on the Platform to define who of them will become the ultimate owner of the Sword. The chances of each member of the Community to acquire the asset depend solely on the number of the Bids he or she holds. The members of the Virtual Bidding Community (a.k.a. bidders, a.k.a. Gamer-Buyers, a.k.a. participants) agree on the terms of running the algorithm when they acquire the Bids.

9. As a result:

    - Thus chosen member of the Virtual Bidding Community receives in possession the Magic Sword of her dream;
    - the Seller "A" receives his $500 for the sale of the Magic Sword;
    - the Organizer receives his $500 to cover the costs of organizing, guaranteeing, and implementing the deal, to invest into the Platform development and to make a profit;
    - next Magic Sword is listed for the sale next week.

EXAMPLE 2 – OFFICIALLY AUTHORIZED SELLER SELLS REAL EMBODIMENT ARTIFACT OF IN-GAME VIRTUAL TOOL



1. How about material embodiments of the favorite in-game artifacts? On-line game owner, one happy day, might authorize family owned blacksmith business to forge and sell copyrighted swords and armory out of iron by hot and cold forging on an anvil.

2. In that case, authorized and accredited official smith-partner of game-owner establishes the price of the item she wants to sell, say, of high-quality High Elven Sword close to $1000 and submits her asset proposal to the Organizer's online Platform to be sold through the Platform, one item each week.

3. The Organizer verifies the eligibility and lists the item Elven Sword for the weekly sales on the certain day, e.g., Sundays.

4. The Organizer lists the item Elven Sword online on the Platform along with the parameters of the bidding to be held for the Sword, issues and sells online fixed amount of electronic Bids. The amount and price of the electronic Bids are announced to the Gamer-Buyers beforehand, thus the chances of acquiring the Elven Sword for the holder of 1 Bid are clear and transparent.

5. Say, the Organizer issues 200 electronic Bids at $10/each. Thus:

   - The Seller's price of the Sword $ 1 000;
   - The total amount of Bids issued $ 2 000 (100 Bids * $10);

   The probability of winning the Sword for 1 electronic Bid is 1 to 200, which, again, is extraordinary higher (by millions of times) than, e.g., in playing well established lotteries.

6. Buyers who want to have the Sword seek on the Platform's search engine through the category listings for material embodiments of virtual in-game items, find the Sword they want and buy

Bids to bid online until all 200 electronic Bids are sold, just as they buy goods on eBay.com or Amazon.com. Virtual Bidding Community is formed as the Bids are being sold.

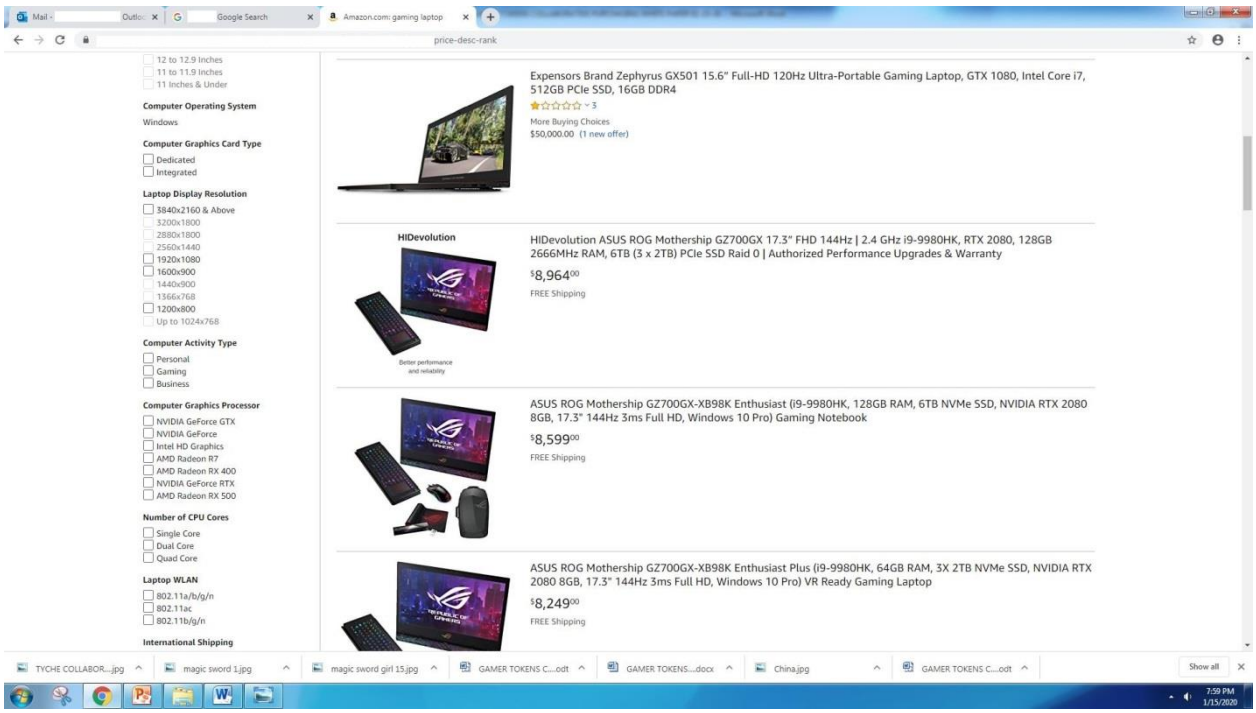
7. On announced time-date, Thursday, the sale is implemented, the Seller ships the High Elven Sword to the Virtual Bidding Community.

8. Immediately after the transfer of the asset, the Virtual Bidding Community members run secured unbiased algorithm on the Platform to define who of them will become the ultimate owner of the Sword. The chances of each member of the Community to acquire the asset depend solely on the number of the Bids he or she holds. The members of the Virtual Bidding Community (a.k.a. bidders, a.k.a. Gamer-Buyers, a.k.a. participants) agree on the terms of running the algorithm when they acquire the Bids.

9. As a result:

    - Thus chosen member of the Virtual Bidding Community receives in possession the High Elven Sword much-yearned for by many;
    - the Seller "A" receives his $1 000 for the sale of her beautiful cutlery master;
    - the Organizer receives his $1 000 to cover the costs of organizing, guaranteeing, and implementing the deal, to invest into the Platform development and to make a profit;
    - next Sword is listed for the sale next week to increase the number of well equipped Elven reservists.

EXAMPLE 4 – MANUFACTURER SELLS GAMING LAPTOP (that expensive type, you know):



1. Manufacturer "A" wants to sell top-notch gaming laptop. The fair market value of the laptop is $10 000. Seller submits his asset proposal to the Organizer's online Platform.

2. The Organizer verifies the eligibility of the Seller and the asset, and upon successful completion of due diligence lists the laptop for the sale on the Platform on a certain date, say, seven days after listing date.

3. The Organizer lists the asset online by listing it in his Platform catalog (like eBay.com or Amazon.com list products of their sellers), announces the parameters of the sale to be held for this asset, issues and sells online fixed amount of electronic Bids. The amount and price of Bids are proposed and disclosed in detail to the Gamer-Buyers beforehand, thus the chances of each individual Gamer-Buyer to acquire the asset depending on the number of Bids bought are transparent.

4. Say, the Organizer issues Two thousand electronic Bids at $10/each. Thus:

    - The Seller's price of the laptop $10 000;
    - The total amount of Bids issued $20 000 (2 000 Bids * $10);

    The probability of acquiring the laptop by the holder of 1 Bid is 1 to 2 000, which is considerably higher (by millions of times) than, e.g., in playing well established lotteries.

5. Gamer-Buyers who want to buy gaming laptop seek on the Platform search engine through the category listings, find the asset they want, and buy Bids online until all 2 000 bids are sold. Virtual Bidding Community is formed as the Bids are being sold.

6. The searching for the proper asset and buying electronic Bids for the asset are as simple for the Gamer-Buyers as searching and buying products on eBay.com or Amazon.com. Buyers use key words (e.g. Villa in Monte Carlo, Gaming Laptop, Virtual Sword, ROLEX DAYTONA, G-Class, Glenwagen, etc.) or shuffle through the categories/subcategories and sorting filters (e.g.: "gaming virtual tools", "houses", "watches", "cars", "jewelries", etc.; "high-to-low probability of acquiring"; "low to high price of the bid"; etc.)

7. On the announced time-date, the sale of the asset is implemented between the Virtual Bidding Community and the Seller. Seller transfers the title of the asset, laptop, to the Virtual Bidding Community.

8. Immediately after the transfer of the asset, the Virtual Bidding Community members run secured unbiased algorithm on the Platform to define who of them will become the ultimate owner of the asset. The chances of each member of the Community to acquire the asset depend solely on the number of the Bids he or she holds. The members of the Virtual Bidding Community (a.k.a. bidders, a.k.a. Gamer-Buyers, a.k.a. participants) agree on the terms of running the algorithm when they acquire the Bids.

9. As a result:

    - the Gamer-Buyer, unanimously chosen by the Virtual Bidding Community of Gamer-Buyers enters into possession of the laptop;
    - the Seller "A" receives his $10 000;

- the Organizer receives his $10 000 revenue to cover the costs of organizing, guaranteeing the deal, providing auxiliary services, to invest into the Platform development and to make a profit.

EXAMPLE 5 – AN AUTOMAKER SELLS CARS:

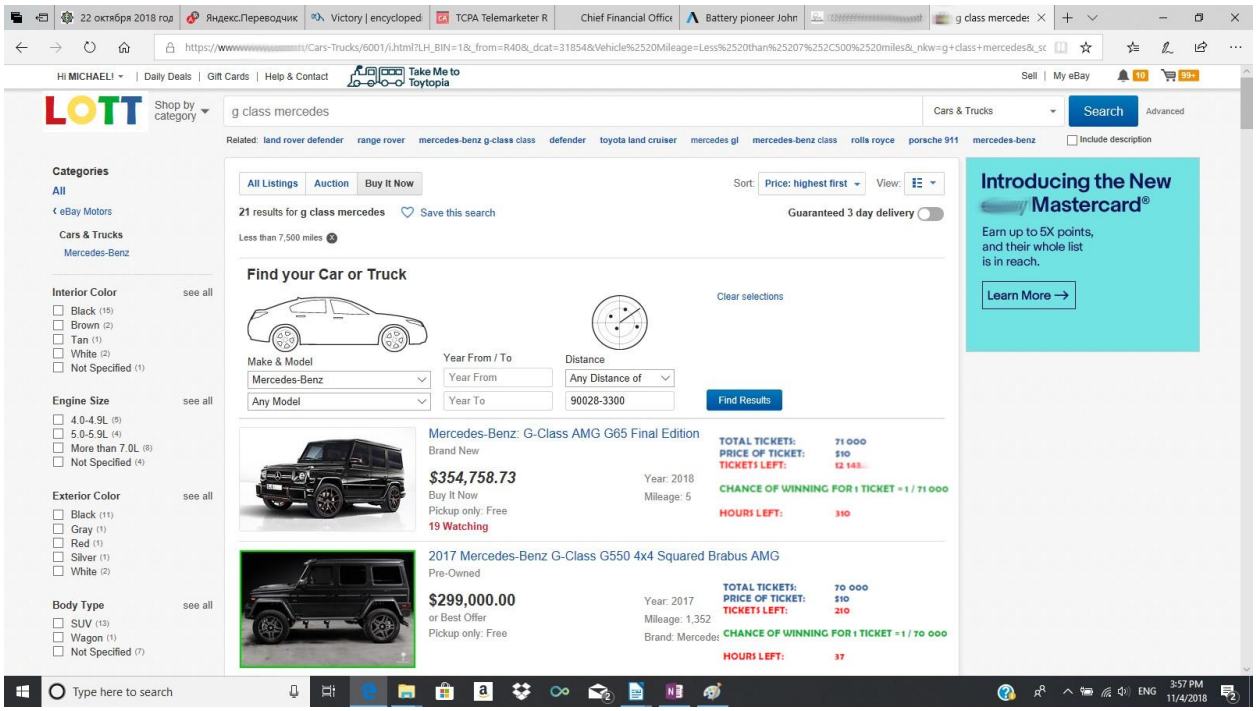


Illustration 1: how the Platform interface can look like – intuitively understandable, familiar, and easy to use. The blockchain technology is hidden behind it.

10. Say, corporate Seller of "Mercedes-Benz" cars wants to sell his cars on the regular basis. The fair market value of the typical car he wants to sell is $350 000. Seller submits his asset proposal to the Organizer's online Platform to be sold through the Platform, three cars each week.

11. The Organizer verifies the eligibility and lists the cars for the periodic sales on the weekly basis on certain days (e.g. Monday, Thursday, Saturday).

12. The Organizer lists the cars online on the Platform along with the parameters of the bidding to be held for the cars, issues and sells online fixed amount of electronic bids. The amount and price of the electronic bids are announced to the Gamer-Buyers beforehand, thus the chances of acquiring the car for the holder of 1 bid are clear.

13. Say, the Organizer issues 71,000 electronic bids at $10/each. Thus:

- The Seller's price of the car $ 355 000;
- The total amount of bids issued $ 710 000 (71 000 tickets * $10);

The probability of winning the car for 1 electronic bid is 1 to 71 000, which is considerably higher (by thousands of times) than, e.g., in playing well established lotteries.

14. Buyers who want to have the car (say, new G-Class Geländewagen) seek on the Platform's search engine through the category listings, find the car they want and buy bids to bid online until all 71 000 electronic bids are sold, just as they buy goods on eBay.com or Amazon.com. Virtual Bidding Community is formed as the bids are being sold.

15. On announced time-date, the sale is implemented, the Seller transfers the car to the Virtual Bidding Community.

16. Immediately after the transfer of the asset, the Virtual Bidding Community members run secured unbiased algorithm on the Platform to define who of them will become the ultimate owner of the car. The chances of each member of the Community to acquire the asset depend solely on the number of the bids he or she holds. The members of the Virtual Bidding Community (a.k.a. bidders, a.k.a. Gamer-Buyers, a.k.a. participants) agree on the terms of running the algorithm when they acquire the bids.

17. As a result:

    - Thus chosen member of the Virtual Bidding Community receives in possession the car of his dream;
    - the Seller "A" receives his $355 000;
    - the Organizer receives his $355 000 to cover the costs of organizing, guaranteeing, and implementing the deal, invest into the Platform development and to make a profit;
    - next car is listed for the sale.

EXAMPLE 6 – AN INDIVIDUAL SELLS HIS CASTLE IN TRANSYLVANIA:

18. Individual Seller "A" wants to sell his castle (with dungeons. Pet dragons allowed) in Transylvania (which is in modern Romania). The fair market value of the castle is $10 million (not much, but heavy). Seller submits his asset proposal to the Organizer's online Platform.

19. The Organizer verifies the eligibility of the Seller and the Asset, and upon successful completion of due diligence lists the house for the sale on the Platform on a certain date, say, one month after listing.

20. The Organizer lists the Asset online by listing it in his Platform catalog (like eBay.com or Amazon.com list products of their sellers), announces the parameters of the sale to be held for this Asset, issues and sells online fixed amount of electronic Bids. The amount and price of Bids are proposed and disclosed in detail to the Gamer-Buyers beforehand, thus the chances of each individual Gamer-Buyer to acquire the Asset depending on the number of Bids bought are transparent.

21. Say, the Organizer issues 2 million electronic Bids at $10/each. Thus:

    - The Seller's price of the castle — $10 million;
    - The total amount of Bids issued — $20 million (2 million bids * $10);

    The probability of acquiring the castle by the holder of 1 Bid is 1 to 2 million, which is considerably higher (by hundreds of times) than, e.g., in playing well established lotteries.

22. Gamer-Buyers who are brave and want to buy castle in Transylvania seek on the Platform search engine through the category listings, find the asset they want, and buy Bids online until all 2 million Bids are sold. Virtual Bidding Community is formed as the bids are being sold.

23. The searching for the proper asset and buying electronic Bids for the asset are as simple for the Gamer-Buyers as searching and buying products on eBay.com or Amazon.com. Buyers use key words (e.g. castle in historic real of Count Dracula, Gaming Laptop, Virtual Sword, ROLEX DAYTONA, G-Class, Glenwagen, etc.) or shuffle through the categories/subcategories and sorting filters (e.g.: "gaming virtual tools", "houses", "watches", "cars", "jewelries", etc.; "high-to-low probability of acquiring"; "low to high price of the bid"; etc.)

24. On the announced time-date, the sale of the asset is implemented between the Virtual Bidding Community and the Seller. Seller transfers the Asset title of ownership to the Virtual Bidding Community.

25. Immediately after the transfer of the Asset title, the Virtual Bidding Community members run secured unbiased algorithm on the Platform to define who of them will become the ultimate owner of the Asset. The chances of each member of the Community to acquire the Asset depend solely on the number of the Bids he or she holds. The members of the Virtual Bidding Community (a.k.a. bidders, a.k.a. Gamer-Buyers, a.k.a. participants) agree on the terms of running the algorithm when they acquire the Bids.

26. As a result:

    - the Gamer-Buyer, unanimously chosen by the Virtual Bidding Community of Gamer-Buyers, enters into feudal possession of the castle;
    - the Seller "A" receives his $10 million from the sale of the castle and move to London;

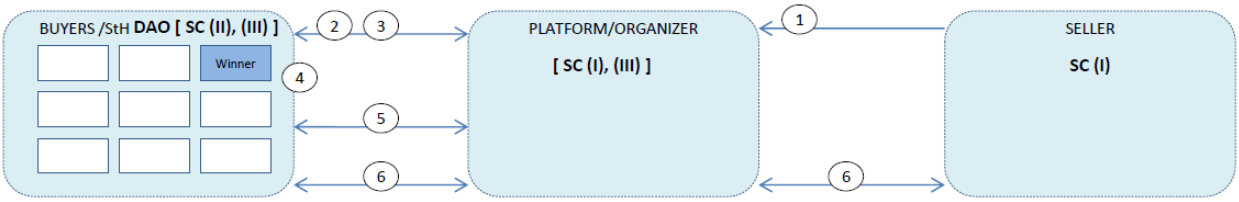
- the Organizer receives his $10 million revenue to cover the costs of organizing and guaranteeing the deal, providing auxiliary services, secure consumer protection compliance, to invest into the Platform development, to make a profit and to explain to the public why the profit is justly to be so much.

Etc., etc., etc.

BLOCKCHAIN WAY TO DO IT

Blockchain technology and tools provide excellent opportunity for creating the proper operational environment for smooth Collaborative Purchasing. There might be a variety of methods and architectures for structuring the appropriate Platform.

One of such ways is shown below. Whilst it might look like a little bit complicated at first glance, it should be remembered that the sample shows mostly backend processes of the Platform. For Gamer-Buyers, the process of purchase will be not much different from the purchasing on the traditional e-retail marketplace, our beloved eBay.com or Amazon.com.



1. Seller submits Asset to the Organizer/Platform for approval. Organizer implements due diligence of the Asset and the Seller and authorizes Asset to be listed for the sale. Smart Contract (I) is concluded between the Platform and Seller where Platform buys the Asset from the Seller under provision of successful event = “all Bids/stakes/tokens in DAO/SPVC/VBC equity are sold to Gamer-Buyers + Sale happens at established Time-Date “A”.

2. The Platform organizes the sale of the Asset and sets Time-Date “A” for the sale of the Asset.

3. The Platform creates DAO as virtual SPVC/VBC for sale of the electronic Bids / tokens in a form of fixed discrete stakes (shares, i.e. equally divided percentages) in DAO equity. DAO does not belong to the Platform – before the Bids/stakes in DAO/SPVC/VBC are sold it is just a hollow playground for potential owners of DAO. The number of Bids/stakes/tokens is definite and defined by the Platform/Organizer depending on the price and liquidity of the Asset.

4. Buyers buy/submit Bids. Each bid is submitted as a purchase of a stake (alias share, alias token) in DAO equity. Once Buyer paid the price of 1 Bid he becomes an owner of 1 stake (share/token) in DAO equity out of the total limited number of Bids (stakes/shares/tokens) issued. A Buyer can buy several Bids/stakes or even buy out all of them if she is fast and rich enough, as the number of the Bids/stakes one Buyer may hold is limited only by the total number of the Bids/stakes issued. The purchase of Bids/stakes is regulated by the Smart Contract (II) between Gamer-Buyers/Stakeholders and DAO (some analogue to traditional corporate Articles of Association),

not between the Platform and the Gamer-Buyers. Smart Contract SC (II) contains provision that upon completion of the sale of the Bids/stakes/tokens DAO shall conclude Smart Contract SC (III) with the Platform for the purchase of the Asset and transfer the whole amount of equity float proceedings to the Platform as a payment for the Asset at the moment of the Sale event at Time-Date "A".

Smart Contract SC (II) also contains agreement between all of the Gamer-Buyers participating in DAO that as soon as the Asset is bought from the Platform, the Buyers implement internal play algorithm which determines the single winner out of all the participating Gamer-Buyers (Stakeholders/Shareholders/Tokenholders of DAO) to whom all the equity/stakes/tokens of DAO (and thus also the Asset in possession of DAO) will be transferred by the unanimous consensus of all the Buyers. The unbiased random play algorithm engine is proprietary of the Platform and is provided to DAO as free service;

5. Once all stakes in DAO equity are sold, Smart Contract (III) is concluded immediately between DAO and the Platform where the Platform sells to DAO the Asset for amount equal to the proceedings from the sales of the Bids/stakes in DAO equity. The trigger event for the payment from DAO to the Platform and transfer of the Asset from the Platform to DAO is the sale event of Time-Date "A". Prior to the sale event, the proceedings from the sale of equity of DAO are kept in DAO under MultiSig status – all Gamer-Buyers/Stakeholders have to sign to relieve the funds, i.e. factually the funds are kept under 100% quorum self-escrow. However, Smart Contract (III) triggers irrevocable automatic payment to the Platform by the sale event at Time-Date "A", with no signatures needed from the Gamer-Buyers/ Stakeholders to effect the event payment.

6. Sale event happens at Time-Date "A", which :

   - triggers payment from DAO to the Platform within Smart Contract SC (III);
   - triggers purchase and transfer of the Asset from the Seller to the Platform within Smart Contract SC (I);
   - triggers payment for the Asset from the Platform to the Seller within Smart Contract SC (I);
   - triggers transfer of the Asset from the Platform to DAO within Smart Contract SC (III);
   - triggers internal play algorithm in DAO which determines the single winner out of all the participating Gamer-Buyers (Stakeholders/Shareholders/Tokenholders) of DAO/SPCV/VBC to whom all the equity/stakes/tokens of DAO (and thus also the Asset in possession of DAO) will be transferred by the unanimous consensus of all the Buyers. The unbiased random play algorithm engine is proprietary of the Platform and is provided to DAO as free service;

7. All events of the Stage (6) are happening simultaneously, i.e. at a singular moment of time which is equivalent to pre-established Time-Date "A" of the Sale event.

STATUS

The Patent Application for the concept described herewith has been submitted to the United States Patent and Trademark Office.

The core team, consisting of the seasoned programmers and leaders, are currently located in California and ready to start. We are humble, loyal, professional workaholics.

We are looking for the strategic investor who will lead the project by controlling equity stake.

ANNEXES:

1. Major Global Lottery Market Peers.
2. Main Types of Lotteries.
3. Other.

ANNEX 1: INDUSTRY OF LOTTERY TODAY

The factual volume of the *official large lotteries* surpassed $320 billion in 2017, and is growing[10]. Expected CAGR of *the official market* in 2018-2030 is 10%[11].

The volume and growth rates of global decentralized small and non-legal lotteries are estimated to be equal to the official lotteries figures, thus doubling the actual size of the market.

The most developed lottery regions are Europe (Germany, France, Italy, UK, Russia), North America (Canada, U.S.A., Mexico) and Asia-Pacific (China, India, Korea, Japan).

In the U.S., every resident spends on average $210 a year to play lotteries.

The volumes and growth rates in Asia-Pacific region are high due to the traditional predilection to play of the population in some parts of the region, and growth of personal incomes. The population in the region is not earning yet to be considered prosperous enough not to play lotteries, but wealthy enough to play it more.

Prominently high growth rates are currently observed in Middle East and Africa (primarily Saudi Arabia, UAE, Egypt, Nigeria, South Africa).

Major Lottery Market Peers

- China Welfare Lottery;
- China Sports Lottery;
- Hong Kong Jockey Club;
- Francaise des Jeux;
- Camelot Group;
- Loteras y Apuestas del Estado;
- Mizuho Bank Ltd.;
- Singapore Pools;
- California Lottery;
- Florida Lottery;
- GTECH;
- New York State Lottery;
- INTRALOT;
- MDJS;
- Connecticut Lottery Corporation;
- Berjaya Sports Toto Berhad;
- Magnum;
- Minnesota State Lottery;
- Tennessee Education Lottery Corporation.

[10] Global Lottery Market: By Key Players, Application, Type, Region and Forecast to 2023, EmarketResearch, 2018.
[11] Global Lottery Market, Technavio Report, March 2018.

ANNEX 2: Main Types of Lotteries

Types:

- terminal-based games;
- the lotto;
- sports lotteries;
- Quizzes Type Lottery;
- Numbers Game;
- scratch-off instant games.

by platforms:

- traditional;
- online.

by device:

- mobile;
- desktop.

by key regions

- the Americas;
- APAC;
- EMEA.

The terminal-based games segment held the largest market share in 2017, accounting for nearly 55% of the market.

ANNEX 3: other.