

# WHITE PAPER

VolunTeer - The world's first blockchain-based marketplace platform that combines e-commerce and charity

## **Abstract**

Blockchain technology has evolved greatly since the introduction of Bitcoin in 2008, the first decentralized peer-to-peer electronic cash system. Today, innovators in various fields are realizing the benefits of the technology behind Bitcoin. From medicine to finance, many sectors are looking for ways to integrate blockchain into their infrastructures.

Blockchain solutions are not only limited to the exchange of cryptocurrencies. There are numerous benefits that this technology can present to businesses in many different industries, through its distributed and decentralized nature:

### **#1 Greater Transparency**

Blockchain's greatest characteristic stems from the fact that its transaction ledger for public addresses is open to viewing. In financial systems and businesses, this adds an unprecedented layer of accountability, holding each sector of the business responsible to act with integrity towards the company's growth, its community and customers.

### **#2 Increased Efficiency**

Due to its decentralized nature, Blockchain removes the need for middlemen in many processes for fields such as payments and real estate. In comparison to traditional financial services, blockchain facilitates faster transactions by allowing P2P cross-border transfers with a digital currency. Property management processes are made more efficient with a unified system of ownership records, and smart contracts that would automate tenant-landlord agreements.

With its decentralized and trustless nature, Blockchain technology can lead to new opportunities and benefit businesses through greater transparency, enhanced security, and easier traceability.

### **#3 Better Security**

Blockchain is far more secure than other record keeping systems because each new transaction is encrypted and linked to the previous transaction. Blockchain, as the name suggests, is formed by a network of computers coming together to confirm a 'block', this block is then added to a ledger, which forms a 'chain'. Blockchain is formed by a complicated string of mathematical numbers and is impossible to be altered once formed. This immutable and incorruptible nature of blockchain makes it safe from falsified information and hacks. Its decentralized nature also gives it a unique quality of being 'trustless' – meaning that parties do not need trust to transact safely.

## **#4 Improved Traceability**

With the blockchain ledger, each time an exchange of goods is recorded on a Blockchain, an audit trail is present to trace where the goods came from. This can not only help improve security and prevent fraud in exchange-related businesses, but it can also help verify the authenticity of the traded assets. In industries such as medicine, it can be used to track the supply chain from manufacturer to distributor, or in the art industry to provide an irrefutable proof of ownership.

However, the early applications of blockchain still have many problems to solve.

Marketplaces exist to remove risk from peer-to-peer trades and enforce penalties on any actors that misbehave. They also play an important role as rating agencies - enabling customers and sellers to rate those they have transacted with and provide a level of reassurance to others considering a trade with either party. The idea of a fully distributed, peer-to-peer marketplace arises naturally with the advent of the completely decentralized blockchain public ledgers.











There are many implementations of digital marketplaces using various blockchain technologies, utilizing different sets of protocols, added value services and incentives. Naturally, these platforms are concerned with user-to-user (seller-to-buyer, buyer-to-seller, arbitrage-to-buyer & seller) interactions within the context of trading - exchanging goods or services for indirect financial incentives (coins or tokens) . While this is expected for any kind of marketplace or exchange, none of these services promote funding worthwhile causes as a central purpose. Being moral and helpful is not the primary driving force behind most economic interactions, but there are ways for this impetus to be incentivized by purely financial means.

Herein, we introduce a distributed, trustless peer-to-peer marketplace with DONATE and CROWDFUND support and an optional arbitration component, where the service is shifted towards verified DONATE organizations and other CROWDFUND initiatives, while the value is expressed in TRC-20 ) compatible tokens (VLT). While anything could be traded on such a platform, we emphasize the evaluation and trading of unneeded, second-hand goods (from now referred to as clutter) for supporting (fully, partially or symbolically) a DONATE or a CROWDFUND initiative. To put it simply, VolunTeer provides an easy way of exchanging your clutter with others willing to buy your items for VLT tokens. Whatsmore, both sides are able to help a cause (or causes) during the transaction by donating items and/or tokens.

### **I. Introduction**

#### **1. World Marketplaces and DONATE**

# The world's top online marketplaces

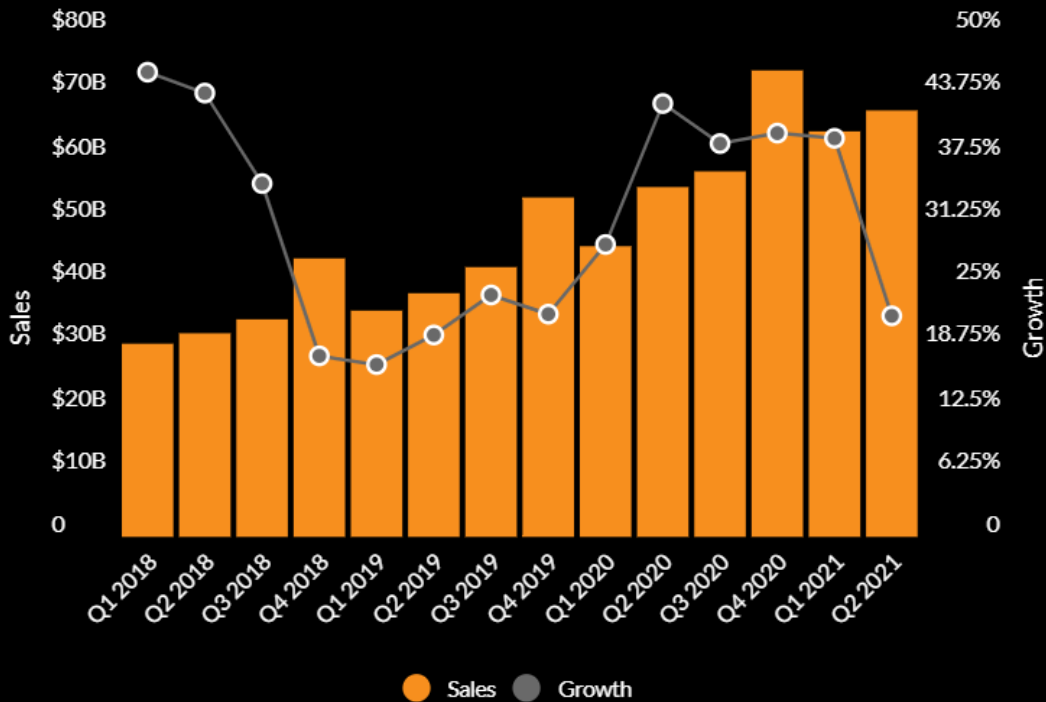
#	Type	Name	Region/Country	Product Category	Visits/month
1		Amazon	Global	General	5.2B
2		eBay	Global	General	1.7B
3		Mercado Libre	Latin America	General	683.9M
4		Rakuten	Japan	General	575.8M
5		AliExpress	Global	General	534.4M
6		Shopee	Southeast Asia	General	457.9M
7		Walmart.com	USA	General	410.3M
8		Etsy	Global	Arts, Crafts & Gifts	391.8M
9		Taobao	China	General	329.4M
10		Pinduoduo	China	General	241.5M

Consumers worldwide spent \$11.19 billion on Amazon sites during the two-day Prime Day event in June, up 7.6% from \$10.39 billion during the October 2020 sale, according to Digital Commerce 360.

For the third quarter 2020, Amazon projected net sales of between \$106.0 billion and \$112.0 billion, which would represent year-over-year growth of 10% to 16%.

## Amazon sales growth slows as pandemic eases

North American net sales in \$billions with year-over-year growth



Source: Digital Commerce 360 analysis of Amazon's quarterly reported earnings

North American operating income increased 47.0% compared with the second quarter last year. Amazon's profits, while strong during the pandemic, were impacted in the second quarter of 2020 by Amazon's heavy spending to protect workers and customers during the pandemic. The company reported with its Q2 release last year that it had incurred \$4 billion in such expenses from March to June 2020.

As usual, a big part of Amazon's profits came from its industry-leading cloud computing unit, Amazon Web Services. AWS increased its revenue by 37.0% and its operating income by 24.9% in the second quarter. While AWS accounted for only 13.1% of Amazon's Q2 sales, it contributed 54.4% of operating income, down from 57.5% in the same quarter last year.

Also contributing to the profit surge was an increase of nearly \$3.7 billion, or 87.5%, in what Amazon calls its "Other" category, which is mainly revenue from ads retailers and brands purchase to promote their goods to Amazon shoppers on the company's websites. Facebook Inc. and Google parent Alphabet Inc. also reported big increases in online advertising this week as companies increased their ad spend this spring in response to a surge in post-pandemic shopping, both online and offline.

Amazon's Q2 net income of \$7.8 billion was just shy of its record profit of \$8.1 billion in the first quarter of 2021.

At the same time, There are around 160,000 general charities in the UK. According to the UK Civil Society Almanac 2012, these charities have a combined income of around £37bn. Big household names such as Cancer Research UK, NSPCC, Oxfam and the RSPCA with annual incomes above £10m make up less than 1% of these charities, yet these few hundred charities account for almost half of the total income. Take the next 4,000 or so largest charities, with incomes of between £1m and £10m a year and we still have less than 3% of the total charities in the UK. In contrast the majority of charities (54%) are very small, local volunteer-run organisations with less than £10,000 a year coming in.

Donations and purchases, which includes membership dues and legacies, account for around £14bn of charities' total income (39%). Donations make up more than a third of the income of the household name charities. They employ teams of professional fundraisers and have departments dedicated to securing legacies, getting major gifts from wealthy philanthropists and signing up new supporters in the sVLTet which shores up their income year on year even during a recession. The RNLI, for example, says that six out of ten of its launches are funded by legacies. For every £1 given to the RNLI 81p is spent on providing a rescue service, but 16p is spent on generating voluntary income. The big cancer charities and animal charities, such as the Donkey Sanctuary and People's Dispensary for Sick Animals, consistently top the list for legacy income.

These figures imply that an intersection between a marketplace and charitable fundraising, and gluing, genuine ideas, such as clutter-based donations in a distributed marketplace, would generate substantial operational revenue even in local markets, such as the United Kingdom. It also has the potential of a million grade user base and helping billions worldwide by promoting charities and CROWDFUND.

## **2. VolunTeer Overview**

Over the past few decades, technological advances and, in particular, the development of modern information and communication technologies (ICT) have enhanced our capabilities to communicate and exchange information on a global scale.

The advent of the Internet and digital technologies marked a shift from centralized communication systems (one-to-many) towards a more distributed and decentralized communication network (many-to-many), which has radically changed the way we work and organize ourselves. Originally designed as a resilient telecommunication network that could resist a nuclear attack, the decentralized structure of the Internet

has also been found to be a key requisite to ensure the scalability and flexibility of the network.

As the Internet grew, it evolved into an open ecosystem for permissionless innovation, with a variety of new players deploying projects and initiatives that significantly disrupted the status quo. On the one hand, the Internet provided new tools for companies and startups to experiment with innovative business models and economic practices that challenged the operations of established market players. On the other hand, it supported the emergence of commons-based communities relying on alternative legal regimes and new participatory models to promote openness and distributed collaboration.

Over time, as the Internet gained mass adoption, some companies and corporations established themselves as dominant players in this emergent ecosystem. While the building blocks of the Internet still consist, for the most part, of open and standardized protocols (e.g., TCP/IP, HTTP, SMTP) and open source software projects (e.g., Firefox, Linux, Apache, MySQL), services built on top of these protocols are mostly made up of centralized platforms and proprietary applications. Today, a few large online operators (e.g., Google, Facebook, Amazon) effectively dominate the Internet landscape by controlling the key online infrastructures through which users and companies interact with the network.

More recently, a new technology has emerged, together with a whole new set of promises for decentralization and disintermediation. By combining peer-to-peer technologies, game theory, and cryptographic primitives, blockchain technology makes it possible for people to experiment with new forms of peer-production and decentralized collaboration. Just as the Internet enabled users to communicate on a peer-to-peer basis, bypassing traditional intermediaries, Bitcoin and other blockchain-based applications enable users to exchange value directly with one another, relying on economic models and incentivization schemes that do not require the intervention of any trusted authority or intermediary middleman.

Yet, despite its promise to establish a more decentralized society with a novel economic order, many of the blockchain based networks or applications implemented thus far ultimately rely on market dynamics and economic incentives for distributed coordination. Indeed, consensus, in a large majority of existing blockchain based networks, is established at the protocol level through a combination of code based rules and game theoretical mechanisms that ultimately replicate the current economic order. This type of governance by the infrastructure has already shown its shortcomings, especially when it comes to promoting or preserving decentralization, mostly due to its inability to account for external political and economic forces that exist outside of a blockchain-based platform. We claim that, in order to ensure that

these platforms cannot be co-opted by these external forces, a more comprehensive governance model must be elaborated, one that extends beyond the realm of pure algorithmically verifiable actions, and that supports or facilitates the governance of the infrastructure.

After providing a general overview of how the decentralized nature of the Internet enabled different models of innovation to emerge in terms of both market-driven innovation and distributed commons-based collaboration we will look at the potential for blockchain technology to incentivize new forms of decentralized collaboration and to enable new distributed governance models .

Heightened customer expectations, massive advancements in technology, and the rise of omnichannel commerce are just a few of the VLTnds reshaping the world of retail. In an industry already known for thin margins, these changes can increase cost pressures and uncertainty for retailers all while opening the door to significant opportunities. Traditional approaches will no longer work in the face of change; now is the time to clearly define new aspirations, make fundamental changes to operating models, and rethink retail. Those that make moves now may enjoy a sustained advantage for decades to come.

We provide a new take on store operations while flashy technology attracts and engages customers in the “store of the future.” the make-or-break technology is actually behind the scenes. That’s the technology that gathers and connects data for a seamless customer experience. In our own “store of the future” this includes dwell sensing, heavy investments in the data lake, and the logic needed to map the customer journey. But technology is only one piece of the puzzle; solving the operations equation also involves analytics, new store processes, and upskilling the store team. Such a transformation can add several points of profitability to the average store.

Online marketplaces are the future of retail and are growing rapidly, disrupting both brick and mortar shops and exchanges as well as small niche ecommerce sites. While some conventional marketplaces do support charitable giving, this is not the focus of most corporations - whose raison d’eVLT is to provide a return on shareholder’s investment by facilitating conventional trade.

While there will always be a need for new goods, many of us are victims of consumerism accumulating clutter that can act as a millstone around one’s neck rather than provide the benefit the items were designed to. One in ten Americans rent storage lockers despite the fact that the average home in the US has nearly tripled in size over the past 50 years. In Great Britain, the average 10 year old owns over 200 toys and games but uses no more than 12 of them. Examples like this are easy to find, and someone’s clutter is usually someone else’s VLTasure. Most of us would like to think



of ourselves as generous, and happily donate unused items to DONATE. But there is no guarantee that dropping off unwanted items at DONATE shops will see the items donated provide their maximum benefit - and sometimes we'd like a share of the proceeds too.

The advent of modern blockchain technologies opens up the possibility to help solve the clutter problem and maximise the benefit a donation or sale would provide by tapping into the power of decentralized economy dynamics. An example of such dynamics is the proposed VolunTeer platform - a distributed, trustless marketplace with DONATE and CROWDFUND support as well as an optional arbitration component.

Let's consider the following case:

- Tommy has cluttered an old Phone. He's willing to sell it and donate the tokens to an orphanage DONATE;
- Lisa has a pair of kid's clothes she can't use anymore and is willing to sell for tokens. She also wants to donate these tokens to a cancer research foundation.

The VolunTeer market model gives the following options to the participating peers (Tommy, Lisa, the orphanage and the cancer research foundation):

- Sell the clutter to somebody willing to buy it and keep the tokens as a future financial prospect;
- Sell the clutter to somebody willing to buy it and (fully or partially) donate the tokens from the trade to a DONATE or CROWDFUND of choice. In our case, Tommy will donate his tokens to the orphanage, while Lisa will donate hers to the cancer research foundation.

While these options seem trivial, their dynamics raises the following set of possibilities:

- DONATE synergy and cooperation. Usually charities are competing for a single pool of resources (donations) . The VolunTeer market implicitly turns this competition into cooperation. For example, if the orphanage needs Lisa's kid clothes, it could use the tokens, donated by Tommy's tablet trade to pay Lisa and receive the clothes;

- Clutter is envisioned as added value in a predominantly consumer society . This is the psychological breakpoint where every participant in the trade is having some kind of inherent incentive;
- The inherent value in VLT tokens as a trading and donation instrument instead of a direct value asset. Thus token market value is not just related to the trading levels, but also to the extent of DONATE and CROWDFUND support;
- DONATE auction support. If the cluttered item is designated solely for DONATE or CROWDFUND, it could be auctioned either at the highest proposed price or for the cumulative price range of all the participants willing to fund the DONATE, no matter whether they receive an item or not. In the former case, the item is received by the party proposing the highest price;
- Rating system, based on trading feedback (successful and failed transactions), arbitration polls success rate (whenever requested) and donation statistics (quantity, repeatability, spread or narrow DONATE spectrums).

Any trade could have an undesired outcome for at least one of the participating peers. Usually this is the buyer, the side receiving a traded good or item. Thus another desirable property of the VolunTeer marketplace is the Optional Arbitration Systems (OAS), based on polls and incentivized by commissions from the disputing sides. Any marketplace peer who doesn't participate in the deal of interest, and who is having at least 16 successful consecutive trades and rating above 32 points, could apply for an arbitrator. The arbitration system is thus community-based, while employing different incentivization mechanisms for promoting arbitration application and fair judgment. VolunTeer's arbitration mechanisms are described in detail in the following sections.

## **II. Problem identification**

Blockchain technology is really strategic in order to improve the credibility of charities.

Furthermore, as we will demonstrate in this work, the Blockchain technology is able to:

- create a transparent relationship with donors and recipients as well as with other stakeholders;
- reduce the administrative costs through automation and through the smallest number of intermediaries;

- improve efficacy in reaching the right people;
- acquire funds rapidly through CROWDFUND;
- create a wider and complete synergy between the numerous players in the philanthropic system.

A further and specific aspect strictly related to the use of Blockchain for philanthropic purposes consists in cryptocurrencies' advantages. In the last years hundreds of millions of dollars in cryptocurrencies have been donated, with notable donations including over \$100 million to Fidelity Charitable, \$29 million to Donors Choose, \$4 million to The Ellen DeGeneres Wildlife Fund and many more

A series of scandals have rocked the way that the public perceives the typical DONATE, and trust in charitable organizations. It's no coincidence that headline-grabbing scandals in the world of philanthropy coincided with the decline in faith toward these organizations.

Charities face declining donations among the young, increasing skepticism over CEO pay and concerns about where donations end up. At the same time, they struggle with inefficient, underfunded administration, often can't direct aid adequately and frequently see the most vulnerable and needy miss-out.

Essentially, the term DONATE has been used and abused, and much of the public is no longer willing to take charities' word as a bond.

Blockchain technology could help resurrect the images of charities willing to adopt its services.

By minimizing administrative costs through automation, providing more accountability through traceable giving milestones, and allowing donors to see more clearly where their funds are going, blockchain may help restore some of the lost credibility to charities that prove worthy of the public's trust.

The Blockchain builds trust with donors, recipients, and other stakeholders to reach the right people and improve administration costs and efficacy. Show donors the difference their donation makes, acquire funds rapidly through CROWDFUND and hand control to the people you help.

In addition to solving existing problems, blockchain solutions can enable charities and non-profits to deliver results in entirely novel ways that would be impossible without the blockchain.

The foundation is a revolutionary donation platform for nonprofits to provide transparency and accountability by providing financial information to donors.

The platform is built on the Blockchain technology to ensure that the process is traceable, immutable, and reliable.

This platform can also provide proof of need and proof of receipt to ensure that the cause is indeed a worthwhile one and that the funds reach the intended party. And because blockchain lowers administrative costs, more funds can reach the right, needy recipient.

For charities, overhead costs have been a point of much contention. These costs denote the number of donations that goes to administrative expenses versus an actual cause, and while many see overhead costs as necessary, exorbitant administrative expense percentages are a red flag.

With the aid of it, the alliance is running a poverty campaign to empower 1 million women in developing countries to improve feminine health and wellbeing. Even this shows how blockchain can iterate charities' workflows in the best way.

The primary administrative cost for charities is associated with fundraising and marketing or getting the word out about the DONATE. Blockchain-based platforms are aiming to provide charities with a marketplace to reach a ready-to-give audience, and these platforms take far fewer fees than traditional marketing and fundraising agencies.

VolunTeer's decentralized marketplace will solve a set of pressing, real-world problems that are inherent within the centralized nature of marketplaces, charities, and CROWDFUND campaigns in the current landscape. Carefully identifying these problems has informed the very core and structure of our distributed marketplace solution. VolunTeer SWOT analysis addresses two major groups of issues - business (ideological) and operational (technical).

VolunTeer business agenda specifies the following list of pressing problems:

- Centralized marketplaces are not even optionally trustless. No peer-to-peer trading is possible. Arbitration is not optional as well;
- Clutter marketplaces are scarce. Decentralized clutter marketplaces do not exist;
- Some (major) part of DONATE and CROWDFUND donations is spent on solving logistic or side problems - mediation fees, administrative expenses, international transfers, induced fraud and many others ) .

Combining clutter, marketplace, charities and CROWDFUND conceptual economies in a decentralized ecosystem with an optional arbitration layer is a challenging technical and operational task as well. Operational pressing problems include:

- Decentralized economy - generic, cheap, real-time decentralized key-value (KV) storage.
- Planned to store user, transaction and market-related metadata. Desirably operating off- chain to fulfil the ‘real-time’ and ‘being cheap per transaction’ requirements;

### **III. VolunTeer - the decentralized marketplace for DONATE donations and CROWDFUND with optional arbitration system**

#### **1. Goals**

Donation and social impact platforms encourage social organisations (social enterprises, NGOs, charities) to manage projects in a transparent way. Blockchain solutions are designed to reduce financial and legal intermediaries and consequently also costs and time. In order to better understand the potential impact of Blockchain technology, it is essential to understand the system in which donations take place more generally. At the moment there is a great interest in the third sector because at a social level there is a great attention to humanitarian causes and people always respond strongly and reactively to difficult situations. The reasons for donating can be intrinsic:

- in order to contribute to a collective good;
- in order to respond to ethical and moral codes;
- in order to have a moral satisfaction (warm glow);

or extrinsic:

- economic incentives and material rewards;
- because they’re convincing (action of fundraisers).

VolunTeer’s decentralized marketplace model targets a well defined agenda of goals, based on the set of pressing problems described in the previous section. This includes addressing both the business and technical challenges. Our SWOT analysis outlines the following list of goals:

- Completely decentralized, incentive-controlled economy for all functional peers. That is anybody, obeying the fair play and providing or requiring service, could be any kind of functional peer. Obviously, operationally-critical peers would require mandatory KYC identification (licensing);
- Serving DONATE and CROWDFUND specific-operations - token donations, needed items delivery, auctions;
- Decentralized marketplace - optional trustless peer-to-peer trades. Optional peer-to-peer SHIPPERS for physical goods shipping. Optional dispute resolution with implicit arbitration protocol;
- Turning charities' competition into synergy. A DONATE could spend some of its token donations to buy anything it needs from within the same marketplace, thus supporting another DONATE;
- Creating an incentive to trade clutter, instead of throwing it away. Adding a share-like value to clutter in the form of tokens;
- Adding a moral value to clutter by supporting different charities and CROWDFUNDS;
- Giving additional platform to the charities and CROWDFUND initiatives;
- Using the public ledger technology for transparent trading and fraud prevention.

## **2. Functional structure; economic and fairplay incentivization**

The strengths of VolunTeer from a technical point of view are numerous:

- Utility Token and marketplace;
- Blockchain transaction certificate;
- Widget;
- Money flow control both for income and expenditure;
- VolunTeerPay (VolunTeer's Payment system for donations);
- Donations from third parties' websites;
- Double Blockchain System (Tronchain & BSC Chain) ;
- Donations in crypto

- Certificate of advance donation;
- Web API;
- Documental check.

All these features make DONATE Wall a complete tool to focus on the actual use of the donations and their traceability.

The VolunTeer model resolves (and requires) the following list of functional network participants:

- SELLER - Peer wishing to exchange goods (including clutter) for tokens or wishing to directly donate goods for a cause. SELLER could donate (fully or partially) tokens from a sale to a cause;
- BUYER - Peer wishing to possess particular goods (including clutter) in exchange for an agreed token value. The same peer may donate an arbitrary amount of tokens to a cause on top of the received goods' cost;
- CROWDFUND - Peer looking to raise funds for a personal or undisclosed cause. If the peer has passed KYC it becomes a licensed CROWDFUND;
- DONATE - Peer looking to raise funds for a particular charitable organization;
- ARBITER - Peer servicing the arbitrage polls as a voter. Arbitrage polls are VolunTeer's mechanism for mediating disputes between peers. To register as ARBITER, a peer must have at least 16 successful consecutive trades and rating above 32 points and to pass the KYC identification process;
- SHIPPER - Peer servicing the shipping of physical goods. Any locally-licensed SHIPPERS or entities with rating above 100 points, that have also passed KYC, could apply for SHIPPER function;
- SERVER - Peer servicing distributed KV storage for VolunTeer functional metadata - transactional, user-related, marketplace-related, etc.
- KYC is required;
- KYC NODE - Peer servicing know-your-client (KYC) identification.

Simply having these types of network participants (peers) implicitly solve logistic marketplace problems is not enough for a functional decentralized economy. That is, every peer needs to have one or (ideally) several economic incentives to participate. Adding complexity to the situation is the fact that some incentives require reaching a

certain 'critical mass' node quantity to function as expected. The following comparative table clarifies the incentivizations of any of the peer types, while norming the incentives by the 'critical mass' criterion (underscored):

### **Functional Peer**

#### SELLER

- selling goods and clutter;
- donating to a cause;
- good transactional rating.

#### BUYER

- buying goods and clutter;
- donating to a cause;
- good transactional rating.

#### CROWDFUND

- receiving funding and needed items;
- having a platform for the cause;
- good charitable rating.

#### DONATE

- receiving funding and needed items;
- having a platform for the cause;
- good charitable rating.

#### ARBITER

- receiving a commission;
- receiving bonus if participating in a majority vote;
- good arbitration rating.

#### SHIPPER

- receiving funds for the service;



- having a platform;
- donating to a cause;
- good SHIPPER rating.

#### SERVER

- receiving commission from SELLERs and BUYERs;
- receiving commission or service from other SERVER nodes for relaying and storing data;
- donating to a cause;
- good server rating.

#### KYC NODE

- receiving funds for the service;
- good KYC rating.

There is an implicit incentive that corresponds to any peer type - the rating. Ratings stimulate fair play between peers. Lower rated peers have a lesser chance of remaining as active in their related functional performance in the marketplace. Various types of ratings are achieved by function-dependent, automatic or user feedback.

To incentivize peer identification, KYC-processed peers are considered licensed. The licensed status imposes higher limits on the performed functional constraints. For example, a SELLER with a higher trading rating has a better chance of populating her items on the network than SELLERs with a lower rating. Or an ARBITER with lower arbitration rating has less chance to be selected to participate in an arbitration poll than an ARBITER with higher arbitration rating.

### **3. Architecture**

#### **Double blockchain system**

In order to guarantee a reduction in transaction costs, and not to burden the costs of associations, the VolunTeer solution is available both on Tronchain and BSCchain. This makes VolunTeer the first Blockchain company in the world to provide this choice, with a huge technological and economic impact.

#### **VolunTeer Pay**

VolunTeerPay is VolunTeer's payment system that can be used also on client's websites or web portals to receive donations. Money goes to the e-wallet of the project opened in VolunTeer and is added to the amount of donations received from VolunTeer's portal for the specific project. Money will, then, follow all the flow and steps of traceability by VolunTeer.

### **Web API**

VolunTeer has introduced Web APIs, or web services, to allow third-party systems to communicate directly with Blockchain without changing their internal processes, but simply by calling the features made available.

Third-party systems can interact with the VolunTeer services both to update information and to certify documentation and donations in Blockchain.

### **Donation check**

It is also possible to track and certify in Blockchain all donations made outside the VolunTeer portal.

VolunTeer has created a feature that allows users to certify the information relating to the donation in Blockchain such as who donated, who received, donation methods (bank transfer, credit card etc. etc.) and the amount of the donation. Therefore, it's also possible to certify a document that can attest and report the donation made.

Naturally, any decentralized network emerges from a startup core. These are the self-incentivized nodes, which service the network until the critical mass of users and other functional (servicing) nodes is achieved.

Insuring the required distributed key-value storage and its economy allows further infrastructural development, which is not bound to the blockchain scaling problems - price and speed.

### **The VLT Smart Contract is based on TRC 20 & BEP20**

VolunTeer can trace in Blockchain all the passages of each donation, either money or goods, thanks to its notarization system that allows to certify any kind of file in Blockchain. The VolunTeer certification system allows knowing exactly who and when to upload the file, giving the chance to share it and to make it downloadable, guaranteeing its immutability and its modification-proof across the time.

VolunTeer is the tool to exchange, share and download all the documents and files of each social project. Donation recipients must upload into the VolunTeer portal all the

documents to trace the donation in Blockchain, and decide whether to make them public or to whom to show them and who to allow to download them.

### **3. Order and transaction flow**

Order flow in a marketplace is a complex process, which often requires third-party settlement and human interaction. The process is being complicated even more. To insure stable and well organized order and transaction flows, VolunTeer follows well-established structural practices in the world's biggest e-markets and payment processors, such as Amazon , EBay and PayPal .

An Order is defined by its type and current state. Order types are based on the nature of the traded goods. A Transaction is the financial aspect of an Order, that's why Transaction state machine is completely covered by the Order state machine.

VolunTeer plans to support the following Order types:

ITEM - Physical goods, requiring shipping and other human interactions;

ASSET - Digital goods, allowing immediate property transfer;

SERVICE - Physical service, requiring human performance, paid at once;

SERVER - Digital service, paid at once;

SUPPORT - SERVER, requiring recurrent payments;

Order state describes the current Order condition:

PENDING - Initial Order state;

UNSHIPPED (Physical goods and services only) - Awaiting shipping; SHIPPED (Physical goods and services only) - Shipped to a SHIPPER; DELIVERED - Service or good has been delivered;

DISPUTED - Disputed and requires arbitration; ARBITRAGE - Under arbitration process; SUCCESS - Completed.

A following list of states is being considered for inclusion in the Order state machine:

REVOKED - Canceled by the BUYER; CANCELED - Canceled by the SELLER; FAILED - Failed for third-party reasons.

VolunTeer's major Order Use Cases are described in detail in the following diagrams.

### **4. Rating system**

VolunTeer's rating system is based on the active properties of the marketplace participants (functional peers). Any functional peer is represented by its specific rating (described in Table I), thus allowing assessment of the peer's current service quality.

Ratings are being assigned automatically (direct assessment by an automaton) or manually (user feedback).

## **5. KYC**

KYC Nodes are the authorities who license (or refuse to license) requesting functional peers. If a peer doesn't pass the licensing which is mandatory for performing a function, it is being restricted to apply for the same license for a period of 1 month. KYC Nodes are expected to converge a lot of economic authority and to be completely credible and liable entities.

- KYC Nodes are expected to be online most of the time.

Personal and (particularly) Business/Service identification in general is a time consuming process, which also requires manual labor, access to expensive assets and insuring certain guarantees. Having a licensed KYC partner gives the VolunTeer project a critical startup core of guaranteed KYC Nodes, which will cover the initially expected service usage peaks.

## **IV. The VLT token - planning, distribution and economy**

### **1. The VolunTeer VLT token economy outline**

The use of VolunTeer's utility token is an important step for total transparency because it strengthens the complete tracing of donations. It also allows to reward virtuous and transparent institutions that use VolunTeer, the exchange of goods and services through the marketplace between the various interested parties (for example, non-profit organizations, donor companies or other entities involved in the donation process, suppliers) and facilitates donations.

VolunTeer's utility token does not aim to raise funds but to create an ecosystem in which the involved parties can obtain it according to and in proportion to their virtuosity and transparency, always respecting the rules defined by VolunTeer. In this regard, the VolunTeer approach gives the following advantages:

- give non-profit institutions the opportunity to receive goods and services they need by providing other services in return;

- encourage transparency and adherence to the rules and values that VolunTeer describes in order to have VolunTeer's coin available in exchange;
- use of VolunTeer's coin also to purchase services or goods from companies that want to donate;
- also trace pro bono donations that are not following a normal flow of money.

The VolunTeer distributed economy is mainly driven by the incentivisation mechanisms . Functional structure; economic and fairplay incentivization. To ensure a functioning economy, VolunTeer defines a utility token VLT, with the following properties:

TRC-20 compatible; Fungible and transferable;

- Fixed supply
- Non-inflationary
- Fractionally divisible.

As VolunTeer is inherently a blockchain-agnostic solution, the TRC-20 compatibility is only in the context of the initially used Tron blockchain. The VLT token is purposed to ensure the following economic functions:

Clutter valuation ;

Decentralized economy incentives

Security stakes, deposits, commissions, overdrafts;

Deal : instrument in the trades between BUYER and SELLER nodes;

Fundraising : organisations synergy instrument (as a shared-asset value);

Fundraising: donations valuation (as a shared-asset value);

Future VolunTeer phases will consider the utilization of different backbone blockchains, supporting smart contract functionality similar to that provided by Tron and Bsc .

This development vector would ensure further growth, generalisation and globalisation of the VolunTeer marketplace solution.

The VLT token security stake escrows, service and end user rewards ensure a marketplace ecosystem, dominated by fairplay and marked with constant growth.

## 2. VLT token allocation, distribution

Token allocation and distribution terms follow:

Tech : TRC-20 token

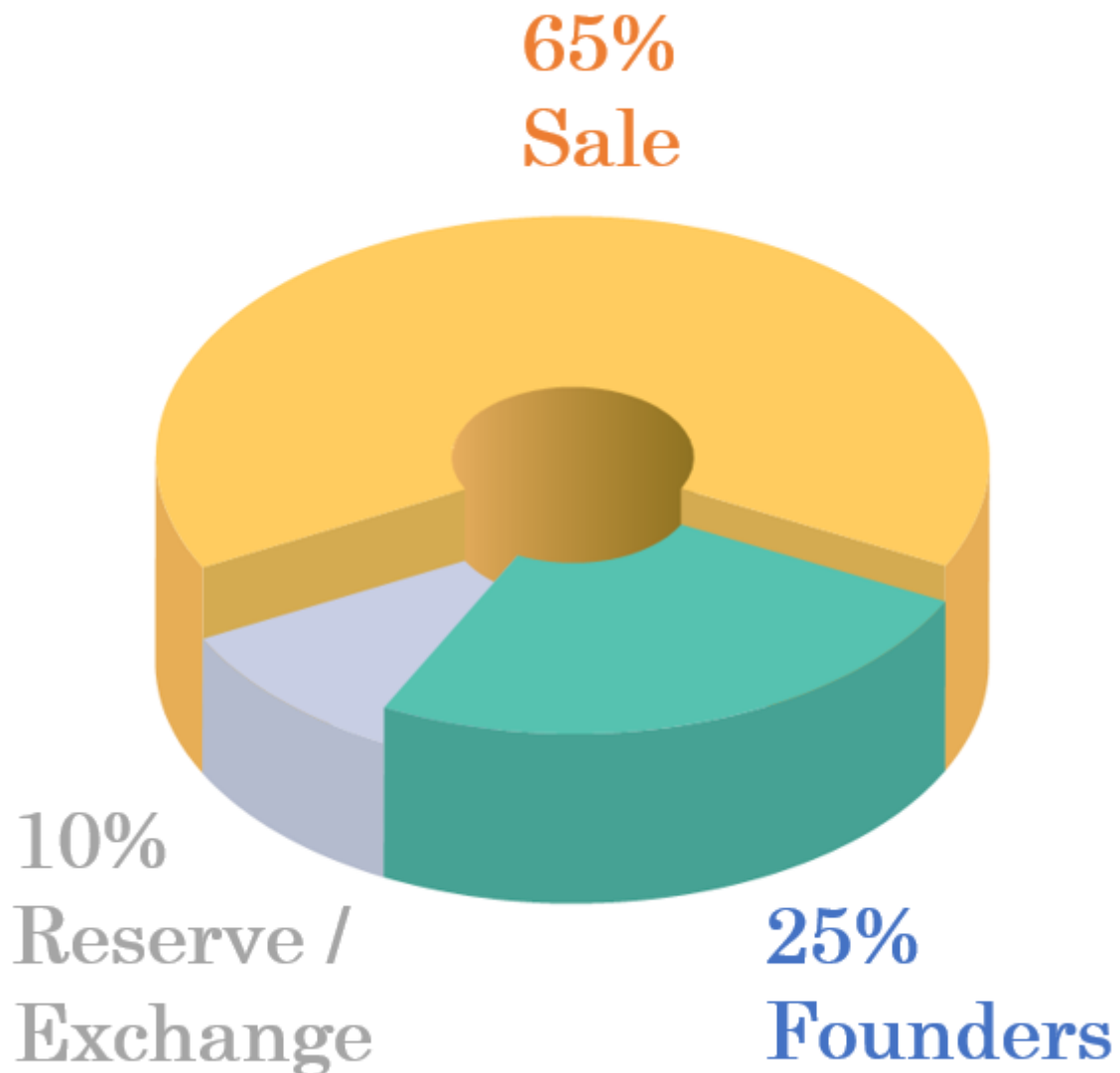
Token Symbol : VLT

Issued tokens quantity: 500 million (500,000,000 VLT)

10% (25,000,000 VLT) reserved for incentivisation, rewards and exchanges,

25% (100,000,000 VLT) reserved for the Founders, locked for 5 year.

65% (325,000,000 VLT) allocated for presale and public sale



### **3. Preliminary Roadmap**

#### **Q4 2021**

- VolunTeer Project Initiated
- Fixed targets; PoC development started

#### **Q1 2022**

- Fundraising started
- POC development finished

#### **Q2 2022**

- Deployment of the VolunTeer marketplace Alpha
- Consensus Event

#### **Q3 2022**

- Deployment of VolunTeer marketplace

### **V . Disclaimers**