UNIVERZ

An incentivized, decentralized, blockchain-based, E-commerce platform

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Abstract

Univerz is a decentralized database and multi vendor e-commerce platform with cryptocurrency reward. Based on the Ethereum blockchain network, that is supported by the Buyer/Seller community, that builds and interacts with cryptocurrency rewards. Platform will provide all the necessary functionality to buy and to sell physical or digital goods. Combines, adapts and improves concepts from already established ecommerce platforms and blockchain P2P communities. Providing immutable and uncorrupt product listing, reviews and price history with witness power to vote over product and store/seller. The main goal is to disrupt existing centralized marketplaces with token incentives to role-model users with high rankings and give more control to them (Buyer/Seller). Univerz is the first cryptocurrency that attempts to transparently reward any number of individuals who make positive contributions to its community.

Contents:

Goals

1. Rewards/Incentivized
2. Decentralized
3. Block-chain
4. Free Market Economy
5. Open source

Info on P2P:

In computer science, a peer-to-peer (P2P) network consists of a group of devices that collectively store and share files.

Each participant (node) acts as an individual peer. Typically, all nodes have equal power and perform the same tasks.

In financial technology, the term peer-to-peer usually refers to the exchange of cryptocurrencies or digital assets via a distributed network.

A P2P platform allows buyers and sellers to execute trades without the need for intermediaries.

In some cases, websites may also provide a P2P environment that connects lenders and borrowers.

Centralized E-commerce

Decentralized univerz E-commerce
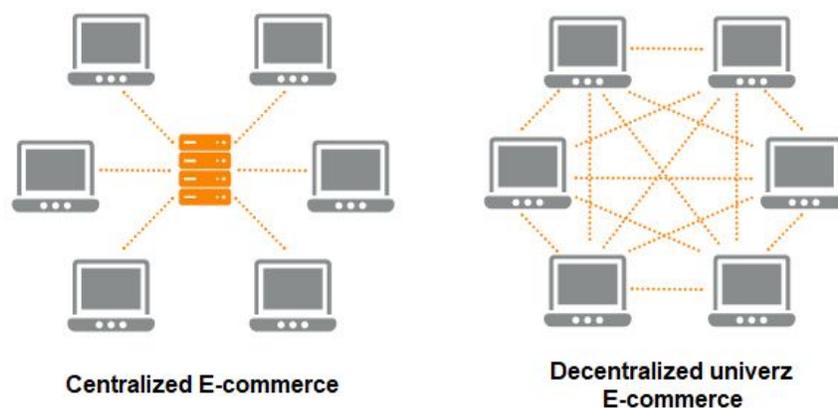
Figure 1: Centralized vs. Decentralized platform

Introduction

This kind of new concept or web 3.0 has the goal of inspiring its users to participate and build their own safe (open source) ecosystem, that reflects each person's contribution. In addition, you can make money with Univerz. Anyone can buy/sell products posted on Univerz without an account, and users can be entirely anonymous if they choose. What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers. Merchants must be wary of their customers, hassling them for more information if they are not registered, than they would otherwise need. A certain percentage of fraud is accepted as unavoidable.

Univerz governs its users behavior through Community moderation, Univerz Etiquette if you will. There will be no set guidelines of etiquette, but they will be created organically and will be self enforced by the Community through their combined voting power called "Univerz Witness".

These guiding principles in many ways encourage quality Listings/Reviews from fellow Univerzians, otherwise the user is simply wasting their time since they will likely not earn any rewards for posting bad listings, undesirable feedback or spam.

Voters on Univerz are called "Witnesses" and are encouraged to evaluate listings, product descriptions, reviews, and prices to improve and maintain a safe marketplace, then vote and moderate based on the information's factuality, price relevance and product quality, rather than on biased competitions or centralized marketplace.

Giving cryptocurrency credit where it's due and review listings is encouraged, since the original poster is being rewarded for the Listing, original content is preferred when it comes to handing out rewards.

Univerz web platform will propose Univerzal Token (UT), and later Univerzal Stable Token (UST) for buyers/sellers and for voting/commenting/Good standing rewards. Also it will accept all major cryptocurrencies and stable coins for the transactions.

The Platform will perform as p2p system architecture with all blockchain derivatives and DeFi technology that comes with it.

transferring all major crypto and fiat currencies. It will also speed up adoption and attract new users on the network to interact.

I. Platform Services

- A source of physical and digital goods and reviews.
- A safe Cryptocurrency for rewards.
- A means to get quality products from business or individuals.
- Lowest cost fees in the market per successful transaction.
- Jobs providing above services to other members of the community.

Overall Description

I. Platform Perspective

Platform itself will look like a modern easy to use e-commerce platform with multiple user roles including sellers and buyers. Armed with functionality for both sides, the platform will provide an easy to use and intuitive interface and for product research and for uploading and publishing appropriate product's information. Transactions between users will be also based on blockchain network, token holders of the platform will receive service fee from each transaction - this is the main business concept for the network. All the products information and orders book will be kept on-chain network, however separately we will create a database where the required and structured data will be kept for the platform's future development. With its concept platform aims to be like a blockchain alternative for major multi-vendor e-commerce platforms like amazon.com, ebay.com, aliexpress.com, however, providing similar functionality & quality like these major marketplaces with given terms and budget is obviously impossible. These sites will serve us as a guide to explore and fix all the flaws that centralized shopping platforms bring with them.

E-commerce fees per item sold
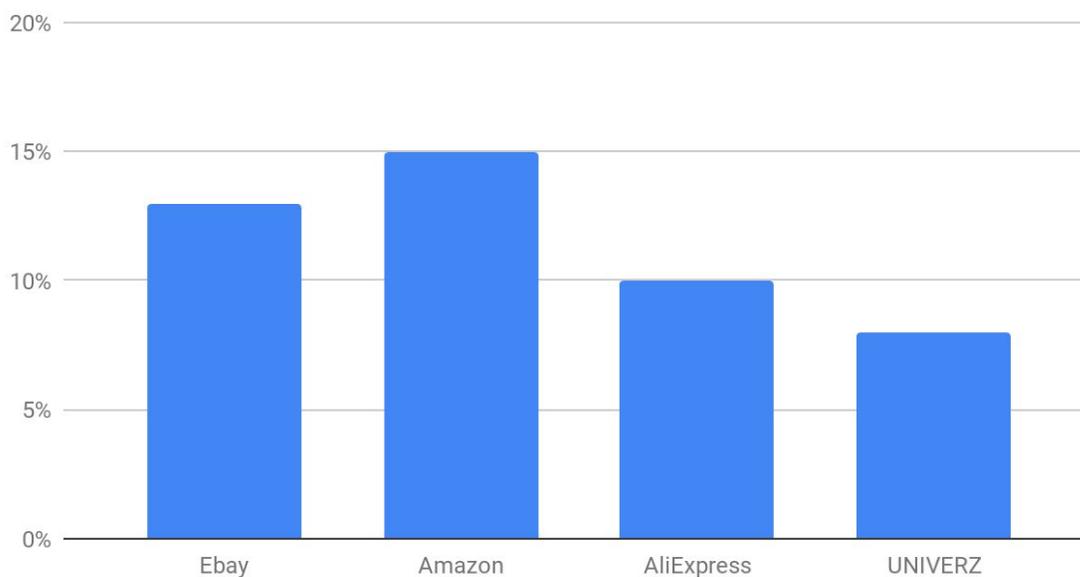
Figure 2: Fees per item sold

II. Platform Features

Any user entering the website will be able to research among all the categories and products, however the major part of platform functionality will be visible only after creating an account and logging in. Each action that is disabled for non authorised users will open a popup with login request. Users will be able to create accounts via metamask. Authorised users will be able to buy and sell - there are no separate accounts for users. Users will have all the required functionality in their admin panel to showcase and sell the products. Product sections and categories will be determined initially by admin from the admin dashboard, these sections can always be managed, while uploading a new products users will choose the categories where the products will be shown. All payments on the platform will use Ether (ETH) in the future, but a payment gateway will be integrated to provide other cryptocurrencies and fiat payments as well. Basically by converting the user's currency to ethereum in the background.

User Classes and Characteristics

Platform will have 3 kinds of users.

User - buyer or seller who have registered on the website.

Voters/Witness - The token holders who will be able to vote for banning/removing a seller or an individual product.

Admin - website admin (or the smart contract owner) that has access to all the provided functionality.

III. Operating Environment

The main data of users/products/reviews and any other data structures will be stored on Ethereum blockchain, and all the operations will be processed via smart contract. In order to optimize the performance a NodeJS backend will be used to cache or to store less sensitive data.Interaction with smart contract will be through Vue.js-based frontend.

System Features

I. Suppliers/Sellers

Any user may become a Seller by signing up on the platform and providing necessary information to create his own shop. Also options will be available for high limit sellers to purchase a storefront and gain Voting power if they buy a certain amount of Univerzal Tokens.

I.I. Shop

One user may launch only a single shop, to create multiple stores, multiple Ethereum accounts need to be created.

Shop model will consist of 6 fields:
- Id
- NameDescription

- Location (optional)
- Logo
- Cover (optional)

Though, only shop id will be stored on the smart contract, images will be hosted on IPFS.

I.II. Products

After registering a shop, users will be able to create as many products as they want.

Product characteristics:

- Id
- Name
- Description
- Price
- Images

All product information will be stored on-chain, images will be hosted on IPFS.

I.III. Customers

After signup every user will be counted as a customer until he/she creates a shop. Customers will be able to browse products, buy them and leave reviews.

II. Purchase System

II.I. Purchase system will work as follows

- Customers selects a products and initiates a purchase
- Ethereum sent to smart contract and a purchase object is stored on-chain
- Seller gets notified about a purchase and confirms it
- Ether transferred to seller and commission is distributed to token holders
- Seller delivers the product
- User and seller leave reviews to each other

II.II. Purchase model fields:

- Id
- Product Id
- Customer Id
- Date
- Price

All purchase information will be stored on-chain.

## III. Review system

In order to ensure pltaform's quality and sellers' honesty all users will be able to leave a review after the purchase. In order to encourage users to leave reviews, a reward system will be implemented to reward active buyers with platform tokens.

III.I. Review model fields:

- Id
- User Id
- Purchase Id
- Rating
- Pros
- Cons

All review information will be stored on-chain.
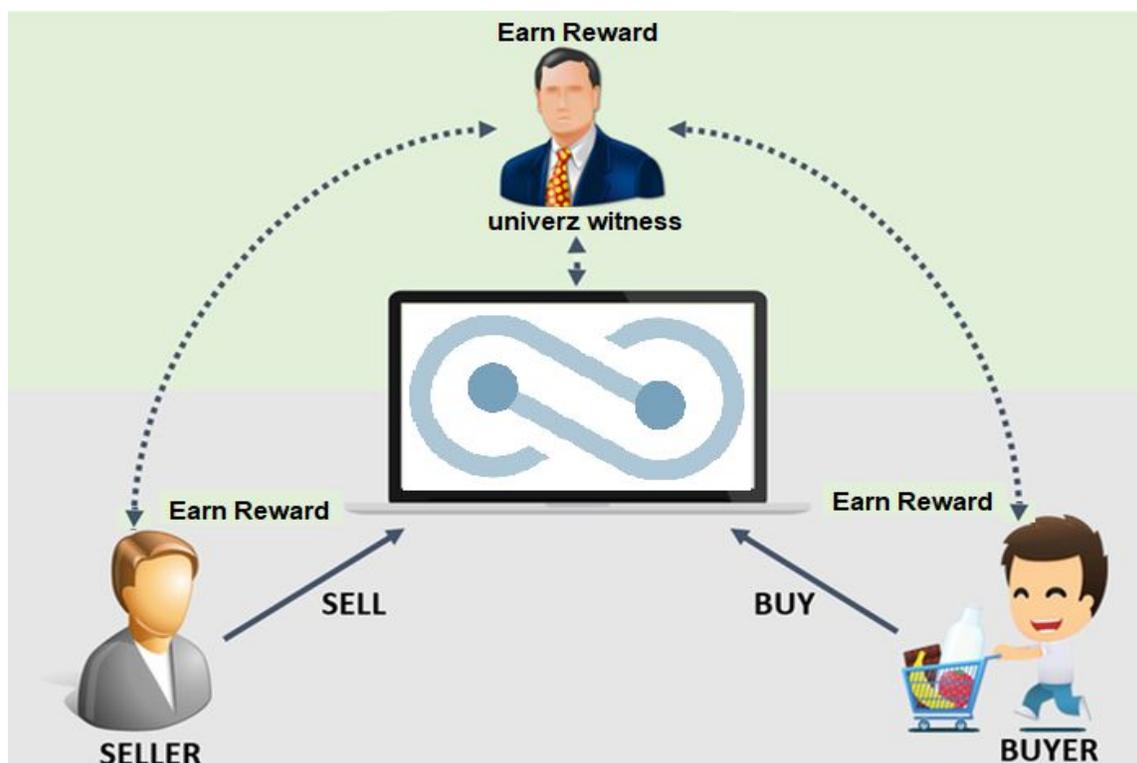
Figure 3: Reward System

IV. Platform Tokens

An ERC20 standard tokens will be launched to power the platform, token roles will be the following:

- Receive a stake of commissions generated by the platform
- Vote for banning/removing products or sellers from the platform

Platform Tokens may be received by:

- Completing purchases and leaving reviews
- Direct buying/selling/gifting

V. Sybil attack

The Sybil attack in computer security is an attack where a reputation system is subverted by forging identities in peer-to-peer networks. It is named after the subject of the book Sybil, a case study of a woman diagnosed with dissociative identity disorder.

Centralized websites prevent spam through rate limiting and some form of ID verification. Even something as simple as reCAPTCHA is sufficient to limit the creation of fake accounts. If someone abuses their account then centralized websites are free to block the account.

In a decentralized system there is no direct way to ban users, nor is there a centralized provider that can host a reCAPTCHA and enforce rate limiting of accounts. In fact, the inability to censor users is one of the main selling points of blockchain technology.

A Sybil attack occurs when one actor acts as multiple separate entities. Because many distributed systems have no form of identity management beyond accounts, and because accounts are trivially created, any actor can create an unbounded number of accounts.

This is a problem if, for instance, you want to implement a voting system, or in other situations where who someone is, or whether two different identifies refer to the same person matters, such as an auction (where allowing the seller to bid on their own items would give them an unfair advantage).

There are several ways to mitigate this, depending on your constraints:

1. Use a mutually trusted external identity provider to determine who can do things.
2. Manually authorize which identities are allowed to do things using some out-of-band mechanism.
3. Require participants to stake something there's a limited quantity of, such as ether, so that they gain no advantage by pretending to be multiple different participants at once.

Option 3 is the easiest to implement in many cases, but isn't universally applicable; for instance, in a system like "Quadratic Voting", 100 ether pledged by one person holds less weight than 10 ether pledged by each of 10 people, so an attacker still has an incentive to use multiple identities.

Token Proposal Launch

I. Token summary:

Our goal is to raise a maximum of $50 million USD and a minimum of $10 million USD. Some of the numbers may change with ETH/USD exchange rates and volatility, but the following numbers are best effort estimates as of May 15, 2020.

- Maximum financing: 252,525 ETH - this may change with exchange rates.

- Minimum financing: 50,505 ETH.

- Exchange rate: 1 ETH = 3,960 Univerzal Token (UT) - this may change with ETH exchange rates.

- Token contract address: TBD (Published through various channels, 1 Week before crowdsale launch date).

- Launch date and time: TBD.

II. Token distribution:

- Univerz software: 25% of max; 250 million Univerzal Tokens.

- User growth pool: 250 million Univerzal Tokens.

- Token available to the public at launch: 500 million (corresponding to the ETH raised at token launch).

III. User growth pool:

- User growth fund is used to incentivize users to participate in the Univerz ecosystem.

- A 250 million endowment is for early adopters of Univerz platform and the Univerzal Token at up to 5UT/user.

- Univerzal Token received as a reward can only be used within the Univerz ecosystem for value added services.
- Unused Univerzal Tokens after 6 months will be sent back to the user growth fund which can then be used for new users.

- Existing Univerz users can get tokens by updating their app and verifying phone numbers.

- No new tokens will be created once the user growth pool is exhausted.

Budget Allocation
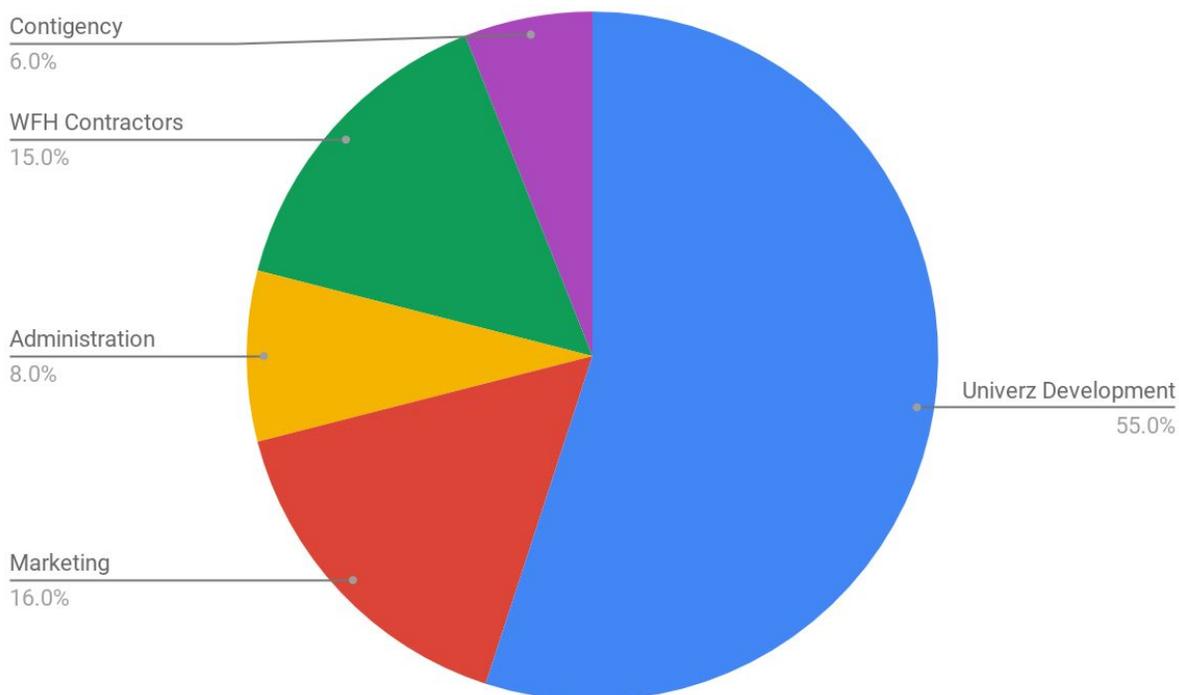
Figure 4: Budget allocation of ETH raised

- **Univerz Development: 55% of budget** The Team will consist of just 30 engineers. This financing allows for the rollout of the Univerzal Token (UT) solution and development, including the necessary future adjustments, system maintenance, modifications to correct faults, and to improve performance.

- **Work from Home (WHM) Contractors: 15% of budget** These funds will be directed at third party providers blockchain enthusiast and experts offering programming, engineering, marketing, PR, social media exposure, hacking, affiliate programs and etc.

- **Marketing: 16% of budget** Marketing will focus on expanding adoption and awareness of the Univerz marketplace ecosystem and Univerzal Token solution among users, buyers and sellers. This also includes the growth and maintenance of the community around the world.

- **Administration: 10% of budget** Consist of Univerz Legal Team, for accounting, security and other administration expenses.

- **Contingency: 6% of budget** Allows to be set-aside in the budget for an unforeseen event or circumstance.

Univerzal Token FAQs

I. What does UT stand for and what is it?

Univerzal Token. The UT, a token based on the Ethereum technology, is a unit of exchange in a new Blockchain based digital e-commerce system. User interaction or buying/selling activity is monitored in the Univerz platform and publishers (sellers) and buyers (via feedback comments) are rewarded accordingly with UTs. Users Buyers/sellers and Witnesses also get a share of UTs for participating.

II. What do UTs represent?

UTs are tokens in a new Blockchain and e-marketplace-based digital platform. They are not refundable, nor are they securities or for speculation. There is no promise of future performance. There is no suggestion or promise that UT has or will hold a particular value. UTs give no rights in the company and do not represent participation in the company. UTs are sold

as a functional good, or real world use cases who will drive UTs growth. Any value received by the company may be spent without conditions. UTs are meant for enthusiasts, new adopters and experts in cryptographic tokens and blockchain-based software systems.

III. What amount is being raised? What's the cap of tokens? Will there be a follow-on offering?

We are targeting a raise of as much as $50 million USD and a cap of 1 billion tokens. We do not plan to have a follow-on offering.

III. What crypto-currencies are accepted in the crowdsale?

ETH will be accepted in the crowdsale. You will be required to have an Ethereum wallet pointed at the token/crowdsale address to participate in the crowdsale. Univerzal Tokens (UTs) are Ethereum derived ERC-20 tokens. If you hold BTC or some other crypto-currency it can be exchanged for ETH and used to participate in the crowdsale.

IV. When will the Crowdsale happen?

We're working with the security team to finalize the contract.

V. What is the price of UT?

UT will be a fixed ratio to ETH. This may vary slightly with ETH volatility as we get closer to the contract deployment date. The exchange rate will be 3960 UT per ETH.

Project Milestones

I. Smart contracts and basic frontend functionality

Main goal is to prove that the concept may be released and provide a basic frontend in order to test smart contracts. No final design will be provided here.

Functionalities to be implemented on this milestone:

- Platform smart contract, for storing main settings, like products categories and other taxonomies
- Users' smart contracts for signup/login functionality
- Sellers' smart contract for creating shops and listing products
- Purchase smart contract
- ERC20 token

II. User-friendly design, smart search, server-caching

In order to improve performance and get the product ready for the market, a brand new design will be implemented, across with some server-side caching of blockchain data, to provide users a better experience.

III. Review, rewards and voting system

This milestone includes development of the review and voting system smart contracts and integration with platform's ERC20 token system.

IV. 3rd party payment gateways and other cryptocurrencies integration

Future Milestones

On the second stage of the release, Univerz will propose integration of its own decentralized Crypto wallet and Crypto exchange, for storing and trading cryptocurrencies in order to provide Zero fees to transfer and withdraw assets. Also the community will

suggest Stable Token "Univerzal stable token" so that users won't be affected by the fluctuating exchange rate of "Univerzal Token".

Stable coins are actually a promise, that when you come to cash out you will receive the USD equivalent in Univerz of what you've earned. These improvements will bring new users from other marketplaces that will lead to mass adoption.