

Whitepaper

OPEN SOURCE UNIVERSITY

The World's Academic & Career Development Ledger





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Disclaimer

Please read this entire section and do not take any actions until you finish it.

This Whitepaper is a summary of OS.University's business model and technology, plus a brief introduction to the OS.University fundraising principles, and it should be read in its entirety.

If you are in any doubt about what action you should take, you should consult your legal, financial, tax, or other professional advisor and do not contribute to the development of OS.University.

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No information in this Whitepaper should be considered to be business, legal, financial or tax advice regarding contribution to the development of OS.University.

OS.University will do its utmost to launch its operations and develop the OS.University platform, but does not provide any guarantee it will manage to successfully achieve them. OS.University assumes no liability or responsibility for any loss or damage that would result from or relate to the incapacity to use OS.University's EDU tokens, except in case of intentional misconduct or gross negligence.



Introduction

The OS.University decentralized platform bridges the gap between businesses and education through the **blockchain** (used for validating and verifying learners' credentials) and **smart contracts** (managing content purchases, marketplace transactions and hiring processes).

We apply open source technologies and principles of collaboration to re-engineer the current-state educational model by building a system to enable smarter transactions of information & value through institutional, national borders.

There will be a highly sophisticated matching algorithms system which will take care of:

Professional opportunities will be presented to every learner in accordance with their interests and level of skills he has. Matching algorithms will rely on already verified data related to the skills and experience of the Learner gained through the years.

Auto-suggesting talents to a company based on the percentage of overlap between interests of the Learner and the Business. This particular matching algorithm will facilitate the job of HR specialists and will drastically optimize business costs regarding all stages of the recruitment process.

Academy analytics which allows Learners to gather in alumni networks and closely collaborate with the educational providers. Introduce trust in achieved results along with open and clear communication processes.

Abstract

A diverse team of renowned academic, corporate and technology leaders is about to roll out a first of its kind global education and professional development platform, based on the Ethereum blockchain, that will serve two main product functions:

- **As a distributed credentials database** that enables Academia, Learners, and Businesses to record and verify educational and professional development accomplishments. This in turn will enable businesses to locate suitably qualified learners through highly-targeted searches.
- **As a global decentralized marketplace** upon which high-quality academic and broader L&D offerings will be made available, bought and sold with the help of the EDU token that will enable transactions on the platform and will be traded on leading cryptocurrency exchanges.









Starting with the integration of 700+ of the world's top universities and 60+ million MOOC learners, our blockchain-based platform is introducing the concept of the "Distributed



University” — one that enables transferability of knowledge & skills beyond institutional and national borders, reduces operational costs and opens up the access to high-quality education and career development opportunities to hundreds of millions.

The more the OS.University marketplace scales in a global trillion-dollar market, the more its EDU token value is expected to rise, hence the idea for a token generation and distribution campaign through which tokens can be offered at a set price — sharing the cost, but also the benefits from launching such a global social innovation project.

We solve the following problems:

- | | |
|--|--|
|  Dispersion of Content
Lack of organization in the online ocean of education and development opportunities. |  Global Catalogue of Courses
OS.University's platform provides a searchable catalogue of a broad range of courses and programs. |
|  Strained Existing Model
Universities lack modernization & respond slowly to job market needs; MOOCs gain popularity, but lack credibility. |  Flexibility & Modularity
Access to a new, higher quality educational model with option to curate and customize programs, optimised for results. |
|  Trust & Transparency
Issues with fake diplomas, certifications, unverified CVs and skillset claims. |  Credentials Wallet
The learner's profile contains verified educational, work experience, skills & qualifications track record, |
|  Business & Education Gap
A decades-old problem that can be solved by information coordination, trust, and smart contracts between the parties. |  Tokenized Marketplace
Businesses can reach out to content providers through a marketplace, powered by a reputable system. Optimization of corporate L&D costs. |

The OS.University platform provides a systematic response to a seemingly unrelated set of challenges in learning and development:

- Robots and automation to replace up to 30% of jobs by 2025, according to BBC. 35% of core employment skills will change between 2015-2020, according to the World Economic Forum.
- At present, employers spend over a month and up to thousands of dollars on verifying employee credentials, according to industry-wide research. In more than 50% of the cases there are unreliable or false claims.



- 30+ million U.S. learners with some college education, no degree or certificate, according to the National Students Clearinghouse. 1,714% increase in tuition & fees since federal student loans introduction, according to Mises Institute, U.S.
- Higher education penetration as low as 15% in the world's 2nd and 5th most populated nations , i.e. India and Brazil.

Our multifaceted value proposition can be summarized in 3 key points against which existing products are used for comparison:

- **"Competence Passport"** – one credentials wallet to store and share all your accomplishments and achievements across the world, validated and verified through the blockchain.
- **"Booster for Learners"** – a global peer-to-peer marketplace for learning and development. More scalable and cost-effective than e-commerce because it operates without an intermediary.
- **"Meant for Education"** – without claiming superiority, EDU tokens will be the only once used for 0% fees on transactions between educators, learners, and businesses.

Vision

Learners:

Learners will save time and effort - instead of preparing CVs and motivational letters, they will invest time in activities important to the development of their unique skills and expertises. We aim to increase the Learner's profitability and maximizing their own potential, while doing what they are passionate to do.

Academia:

Academia will have the opportunity to be modernized not only technologically, but also to speak the same language with a new generation of Learners. This modernization will inevitably lead to enhanced communication and effective collaboration between Academia & Learners and Academia & Businesses.

Besides constant improvements and innovation in the academic structure, OS.University enables the growth and development of alumni network for each Academy which, in a later stage, will be a reliable source of feedback and crowd intelligence.

Business:



Businesses will get transparent communication and trusted relationship with all of their current and future employees. Transparency, trust and clear communication are one of the key factors to high employee recognition and expectations based on the given value.

A smarter recruitment process based on verified professional achievements will be one of the game changers which will save a lot of time and investments in potential candidates without needed qualification and experience for the position they apply for.

CURRENT SITUATION

Today over 3.16 billion Internet users from all ages, especially young people, are still waiting for a global solution to revolutionize the way **they learn, develop, progress and succeed in life**.

Despite living in the Information Age, 4-5 years of on-campus programs in a single-institution set-up – be it public or private, are becoming a growingly inconvenient solution for an increasing number of people. That applies especially to attractive, highly-desired areas, such as IT, in which young professionals enter the workforce, often relocating, before finishing their full studies. That leaves them to choose between a successful career and the completion of their formal degree.

There are indeed more than 50 platforms that provide free or open educational content and are established online brands – universities, networks of universities etc. However, the main idea behind platforms like “EdX”, “Coursera”, “Novo Ed”, “Udemy”, etc. is to provide an opportunity for the educational content creators – colleges, public/private/individual educational content providers, to meet the end users, who can enroll in different courses.

One of United Nations' Development Goals is **to ensure everyone inclusive and quality education and to promote lifelong learning**. This goal completely corresponds with our vision to also be able to use the Open Source University platform for donations. They will be in the form of free education paid by businesses and organizations while the educational system (Academia) will reap financial benefits based on rate and successful candidates. Having in mind that “Universitas” stands for “the whole, the universe, the world”, our intention is simple – to re-establish this classical community of teachers and scholars in a way which fits its purpose in the information age we live in.

The crypto-revolution that is happening now has the potential to achieve that goal. It will change things around by making education affordable, more beneficial by reducing the workload of third parties and will achieve traceability of all certificates. *Decentralization, cryptocurrencies and smart contracts* are **the new solution for educating people and making them qualified** for the constantly changing business demands.



Business Development

As part of our sustainability and traction building strategy, the team is approaching and building partnerships with businesses, academic institutions and student organizations.

Some of the potential partners that are recognized on the edtech vertical and are mentioned within the whitepaper on a number of occasions are Coursera, EdX, Udemy, Future Learn, Open 2 Study and others, listed in the document "Research on the existing EdTech business landscape", accompanying the project's documentation.

In order to build traction among students, the team is approaching directly international, national and local (technology-oriented) representative student bodies, including: ESU (European Students Union); ESTIEM (European Students of Industrial Engineering & Management); BEST (Board of European Students of Technology); NASC (National Association of the Students Councils).

Blockchain Credentials Validation is a Reality.

OS.University is not alone in its quest. As outlined on a number of occasions throughout the whitepaper, universities such as Open University, University of Nicosia, MIT, etc., along with corporations, such as Sony, are all working on pilot projects.

According to OU's Knowledge Media Institute "**the blockchain technologies may hold an answer to collating the outcomes of the new distributed learning reality**" and they intend to explore the possibilities that this infrastructure could provide.

The University of Nicosia has been issuing academic certificates whose authenticity can be verified through the Bitcoin blockchain since 2014. These certificates are being issued to students who successfully completed or participated in DFIN-511 Introduction to Digital Currency, which is the first university course offered on the topic of cryptocurrency.

By 2015, Philipp Schmidt, the director of learning innovation at the MIT Media Lab, had begun issuing internal, non-academic digital certificates to his team. Schmidt, according to his words, had realized that, despite the rise of decentralized, informal online learning opportunities, there was no digital way to track and manage these accomplishments. He says he became interested in finding a "more modular credentialing environment, where you would get some kind of recognition for lots of things you did throughout your life."

All of the above mentioned are invaluable potential future partners to OS.University, given that its multi-chain character and its **Platform-as-a-service (PaaS)** business model provide the opportunity to integrate other private and public projects for the advancement of the common cause.

In general, OS.University is open to partnering with anyone who shares our vision which is well summarized by Prof. John Domingue, Director of OU Knowledge Media Institute: "**We envision a**



world in which the awarding and validation of qualifications no longer occur exclusively under the management of an education institution or an employer and individual students, teachers, and peers take more ownership of the learning experience and its outcomes".

The Open Source University Project is Recognized by:



Featured in International Scientific Conferences and Journals:



Official Partners:



Supported by:



Additional Information.

Many additional materials are collected and made available during the process of building a Proof-of-Concept. Research material has been peer-reviewed by the European scientific community and featured in leading academic journals. From a corporate and social perspective, the R&D project has been recognized by international organizations as the innovative solution to enable better information coordination relationships.



Roadmap

TRACTION

2015 - The Open Source University proof-of-concept phase was initiated, along with corporate partners from the Bulgarian industry and software development sectors, resulting in early versions of the system's architecture and design. The Open Source University research project initiated at the Faculty of Management within the Technical University of Sofia, resulting in scientific publications on the subject, published in Bulgaria, Latvia, and the Czech Republic.

2016 - Open Source University was announced among the top 10 social innovation ideas globally, in competition with 400 technology concepts and 130+ project proposals as part of the Living Progress Challenge of Hewlett Packard Enterprise. Open Source University receives positive reviews and engages itself in expanding its partnership network under programs for supporting young entrepreneurs, led by the Ministry of Economy and the Open Society Institute.

2017 - OS.University was announced as a 2017 "YouthSpeak" forum winner in Latvia, based on a scaled-down prototype version, resulting in a 2-month distributed learning program implementation project at a community center in Sao Paulo, Brazil. OS.University development phase reaches an important milestone, leading the way to our initial coin offering (ICO).

NEXT MILESTONES

2018 and beyond - OS.University received significant recognition – the project was nominated among the best IT projects of 2017 by the Bulgarian Association for Information Technology (BAIT). In H2 EDU tokens will be registered for trading at various cryptocurrency exchanges (first partners announced). Universities, online platforms, and other L&D providers, will be onboarded, along with their educational offerings. The alpha version of OSU DApp is to be released in Q2 2018.

- **Software Development**

H1 2018 – OSU Platform Alpha release

The alpha release of the OSU platform will have the following functionalities:

- Learners will be able to store their certificates and search for professional opportunities
- Businesses will be able to post job positions and filter the right candidates from a pool of talented learners
- Academia will be able to upload courses and programs along with the ability to verify already issued certificates over the blockchain technology.



- Payments/Withdrawals will be in ETH and EDU.

H2 2018 – OSU Platform Beta release

In addition, the Beta release will have the following functionality upgrades:

- Learners will be able to participate in challenges, receive scholarships provided by a particular Academy or Business and form Alumni Networks.
- Business will be able to request custom courses and programs along with preparing challenges and internship programs for the employees.
- Academia will have the additional functionality to gather Alumni Networks and manage academic challenges.
- Additional integration of fiat payments which will open the platform for mass adoption and increase its flexibility.

● **Marketing**

H1 2018 - Demonstrating the progress of OSU platform development in front of blockchain funds, venture capital investors and advisers. Attracting experienced marketing and branding managers. Keep close connection to all supporters and giving scheduled updates about the overall status and future plans for development.

H2 2018 – Promoting the OSU platform alpha release via PR materials and article reviews in major news and crypto websites. Ads campaign for gaining more traction and growing the learners database. Organizing and participating at events and workshops for promoting the usage of the platform among Business and Academia.

H1 2019 – Releasing video tutorials for better user experience. Participating in Academic events to promote the Beta version after the first tests are made and preparing a stable Beta release. Massive campaign for adoption in the HR business. Organizing events with our partners from the HR industry in order to present our platform and the way it could ease the recruitment process. Working closely with the Ambassadors for promoting the Beta version globally among local student communities and universities.

● **Business Development**

H2 2018 – At the beginning of that period, the EDU token will be tradable on several platforms approved in advance by the OS.University team.

H1 2019 – Establishing strong connections with a broader group of High Schools and Universities in North America, Europe and Asia. Building a network of business developers who are actively collaborating with Academia and Businesses in regard to integration processes and mass adoption of the platform.



The OSU DApp

WHY IS A DECENTRALIZED PLATFORM THE BETTER WAY TO GO?

Centralized systems are currently the most widespread model for software applications. They directly control the operation of the individual units and the flow of information from a single center.

So what's the difference between decentralized and distributed?

Distributed means computation is spread across multiple nodes instead of just one. Decentralized means no node is instructing any other node as to what to do. A lot of Stacks such as Google have adopted a distributed architecture internally to speed up computing and data latency. This means that a system can be both centralized and distributed.

A DApp based on the Ethereum (or any other public blockchain) gives us several things for free:

Payment processing: No need to integrate with Stripe or PayPal to accept funds from users. All users can send/receive Ether or other cryptocurrency as a common payment means.

User Credentials: Users have an account, which is a public/private key to bind with their user session and metadata.

Database: Storing a lot of data in the blockchain is expensive and there are already several alternatives like IPFS that claim to be more efficient and flexible in regards to data storage. To be able to use the strong sides of the blockchain technology, it can be used only for trustworthy verifiers of the content saved in alternative data storage.

Logging: Ethereum contracts can create their own events which are being stored throughout the mined blocks and used as logs, which a DApp can query to know what has happened in the past, rather than needing to create separate logs.

Trust: Your users can trust your code, since not only is the front-end (Javascript) code visible (via browser inspection tools), but the back-end logic (contract code) can be inspected too, so it can be independently verified that your code doesn't have backdoors in it to steal all their funds.



ACCOUNT AND PROFILES

The platform offers potentially transformative value, generating proposals to all three participating categories of stakeholders in the education and professional development value chain.

Every user's account can be used as each of the three stakeholders on the platform. Even though the *Profile type* is set during the initial onboarding process, adding additional *Profile* specific details in the *Account* settings unlocks multi-profiling.

For example: this enables an *Academy* to switch to a *Business* profile and start hiring staff or a *Learner* can create and switch to *Academy* profile and upload a course that they have produced.

To give a better overview of the *user profiles*, we will provide an explanation about the used terms and what they represent.

Academy Profile



Academia include high schools, universities, MOOC platforms, corporate training and non-formal education providers, independent experts, organizations in the field of education & professional development.

An Academy will be able to:

- Market their offerings globally and at an ultra-low cost, given that attracting students via conventional methods in the Digital era is increasingly difficult and inefficient;
- Benefit from the reliable transferability of L&D achievements, reducing admin. costs and assisting smooth continuance of learning for mobile students and life-long-learners;
- Modernize educational operations — from organizing distributed offerings to improving internal record keeping.

Business Profile



Businesses include companies of various sizes from startups to enterprizes , NGOs, institutions, seeking better and faster candidate sourcing, optimization of costs & results, and improvement of employee recognition.

A Business will be able to:

- Receive instant access to a global pool of talents with credentials verified through the ultra low-cost system built on top of the distributed database;



- Leverage highly specific search facilities, allowing businesses to identify and contact qualified candidates, therefore disintermediating conventional slow, expensive and less specific recruitment methods;
- Generate massive cost savings in corporate L&D operations — from finding and paying for educational services to monitoring the progress of employees' certification.

Learner Profile



Learners include students and employees gaining new knowledge, lifelong learners and curious minds who are seeking challenges and/or new academic or professional paths.

A Learner will be able to:

- Access some of the world's best L&D opportunities, irrespective of where the learner is, no matter what barriers exist — geographic, social, economic, or political;
- Get incentivized by the knowledge that potential employers are more likely to find them through targeted searches on the platform than via conventional recruitment methods;
- Learners would control the access to their secured credentials information, but would be able to promote their blockchain-validated portfolio of accomplishments.

Privacy of Data & GDPR Compliance

The General Data Protection Regulation (GDPR) is expected to set a new standard for customer rights regarding their personal data. GDPR will require the same level of protection for things like an individual's IP address or cookie data as they do for name, address, personal ID (or Social Security Number) etc.

GDPR is meant to protect following types of data:

- Basic identity information (including names)
- Web data such as location, IP address, RFID tags etc.
- Health and genetic data
- Biometric data
- Racial or ethnic data
- Political opinions
- Sexual orientation

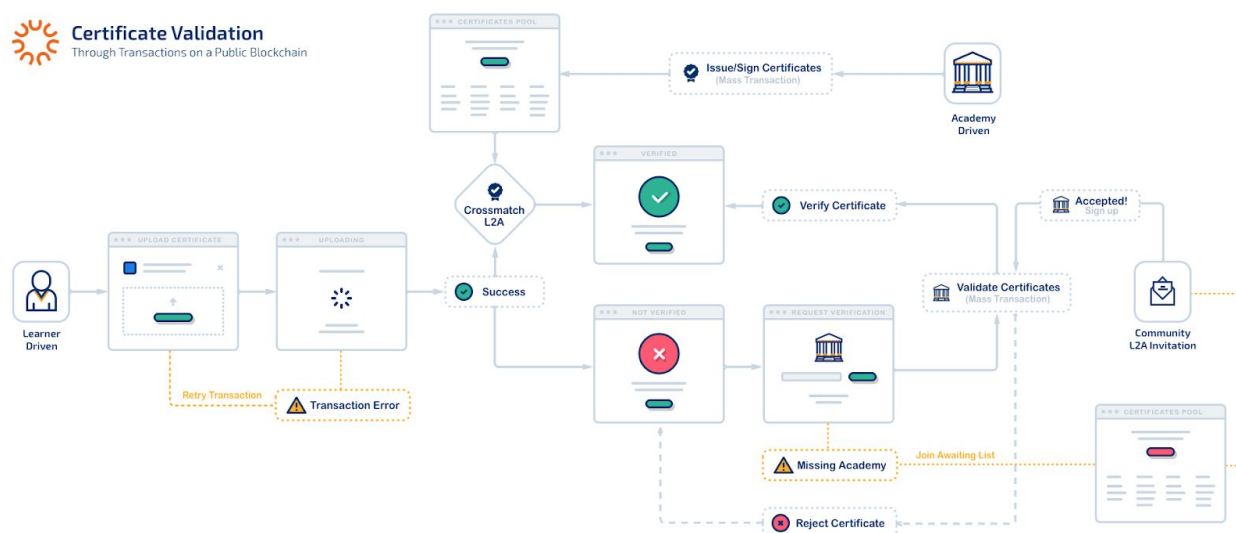
The OS.University team during the design phase of the platform has taken all available information about data privacy and GDPR regulations into account and has built the main data structure on it. By using IPFS, all users on the OSU platform will always have their personal information with them (every user is the owner of their own personal information) and that information will be encrypted.



Access to the Information of every single user of the OSU platform, regarding the regulations, will be granted only by the owner of the information to a specific requester. The OS.University team designed the access to sensitive information to be fully controlled by the owner of this information. This means that all rights in regards only to the visibility over the personal information of a certain user (such as being able to communicate and see the profile data to another user) will be shared to another user for a specified period of time.

USE CASES

Upload, Validation & Verification of Certificates



During the process of clearing the technical requirements, the OS.University team prepared simplified diagrams divided by user roles.

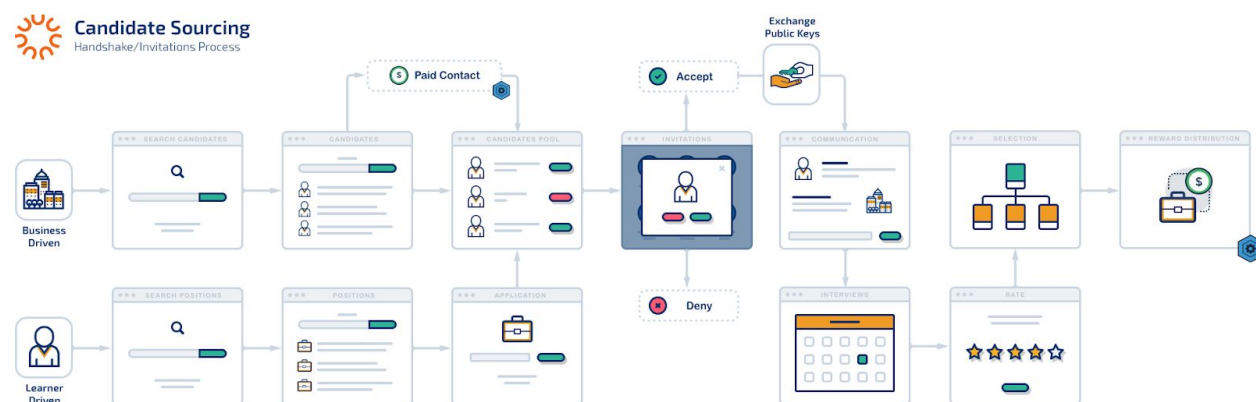
Learner-driven user flow gives the opportunity for every learner to upload their own certificates which were gained before launching OSU platform. This particular approach will stimulate all the learners who have certificates to upload, verify and gain undoubted trust in their skills and knowledge, verified by the blockchain technology. Joining the platform will give them the needed competitive advantage compared to the rest of the learners who are not using the OS.University platform and will make them shine brighter than the rest of the learners struggling to prepare right CVs and motivation letters. **There is no CV or motivation letter which can replace proven experience and gained knowledge.**

The OS.University team will allow learners, academia and businesses to join and operate on the platform independently from the rest of the participants. Learners can start joining and uploading certificates issued by academia without any obligation for the Academia itself to be



already registered. That makes a pool of unverified certificates pop up as notifications to the academia when it's registered as well.

Candidate/Job Searches & Matching



Processes related to candidate sourcing are depicted in the figure above. Candidate sourcing is one of the main reasons for interaction between businesses and learners. User flow for this functionality is visualized from a business and learner perspective.

Businesses land on a page for searching candidates by a custom filter (skills, location, etc.). After filtering, businesses get a list of candidates suitable for the specifics of the work, based on the skills pointed in the filter. All retrieved data about learners will be compliant with the active regulations and GDPR restrictions, in order to protect the users' private information.

Learners will have the opportunity to specify a price for contacting them if they don't want to be bothered by different organizations and learners. If the businesses have paid successfully to a particular alumni they are exchanging public keys in order to decrypt the private information and be able to communicate over the platform.

The last two steps in the business user flow are to check whether the candidate has accepted the job position. When the job offer is accepted, learners may receive a specific reward depending on the arrangement between both parties.

From a learner's perspective, user flow is clear and easy to follow. After finding a job position, learners can send their application, which can be accepted by the business. Accepting the application will be followed by a date for an interview while the last step after the interview will be the opportunity for both parties to give their feedback by rating each other.



TECHNOLOGY

Overview

The technology behind the Open Source University project is based on the specifics between the communication and interaction between all the participants on the platform.

This section can be divided in two parts:

- Retrieve data from OSU DApp
- Store all the needed information in OSU DApp

The OS.University team is completely aware of all the regulations in regards to storing and providing personal information. The entire project from the very beginning is made compliant with the latest legal requirements. Some of the privacy protection requirements were not active at the time when the development of OSU DApp started. One of the EU regulations which starts during the development, concerning handling information privacy, is the EU General Data Protection Regulation (GDPR). The GDPR applies to personal data as any information, in any format, that can directly or indirectly identify a natural person. The Regulation exercises a much stronger control on the processing of special categories of personal data.

OS.University's approach to solve the above-mentioned problems and to serve the users in the best way possible, is to be secure of users perspective which means that all private information will be in device owned by the user of this information and also we'll encrypt all the information. All these actions will make the personal information literally not usable to anyone else except the rightful owner of it and those who has a special permission to see it.

Retrieve data from OSU DApp

All the information which is already saved in the application will be retrieved by the user with the help of one of our inventions related to the blockchain technology called Blockchain Delivery Node (BDN). Tests of this new innovative node have been made and the results measured in terms of speed and reliability indicate significant speedup of the whole process of massive data extraction from the blockchain >10 times.

Blockchain Delivery Acceleration

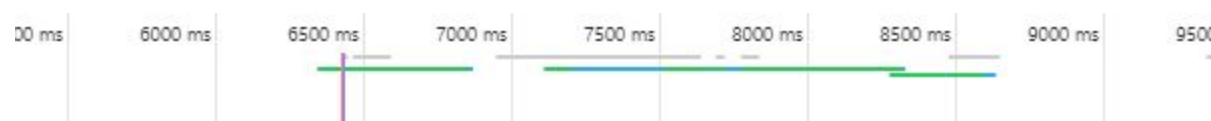
BDN (Blockchain Delivery Node) technology is used as a blockchain accelerator, aggregating and caching data based on the events being raised within the OS.University platform. Its primary purpose is to speed up the delivery of content being stored on- and off-chain, as well as to provide a mechanism for non-deterministic computations and matching capabilities based on Machine Learning (ML) algorithms.

The design of BDN was made to be as simple as possible which makes it respectively more reliable and maintainable in the long run of development and improvements. It's basically a web



server which is responsible for listening all the events raised during the normal workflow from our blockchain behind the scene. All events are indexed and collected for future use which makes the UX experience remarkable and can only be compared with native web applications like the biggest e-learning platforms nowadays.

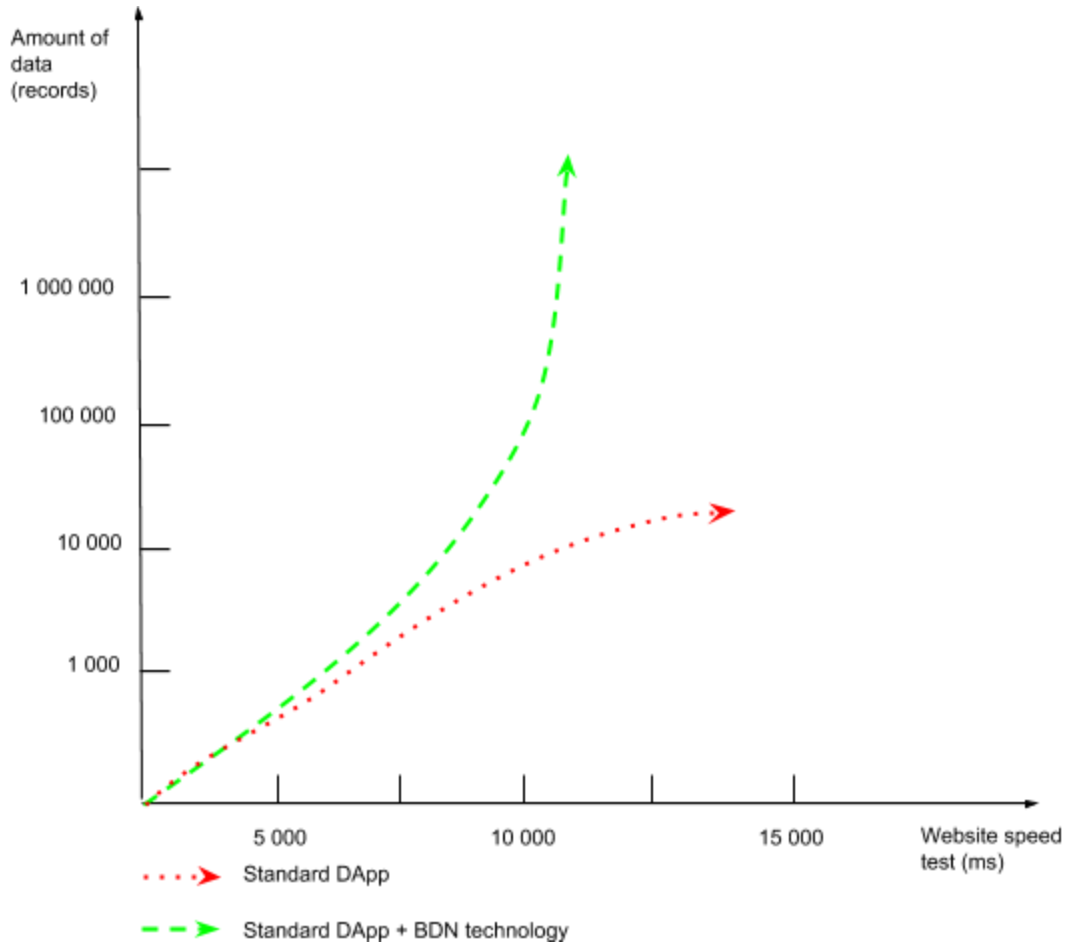
Below you see the loading time of the DApp without BDN technology which is optimized by also introducing IPFS and results are a bit less than 1 000 records.



Load was performed with a reasonable speed for DApp applications but the OS.University team realized that in order to make a better product which can handle thousands, even millions of users, something simple needs to be developed but powerful enough to be a game changer in the race for a better application made on top of the blockchain technology.

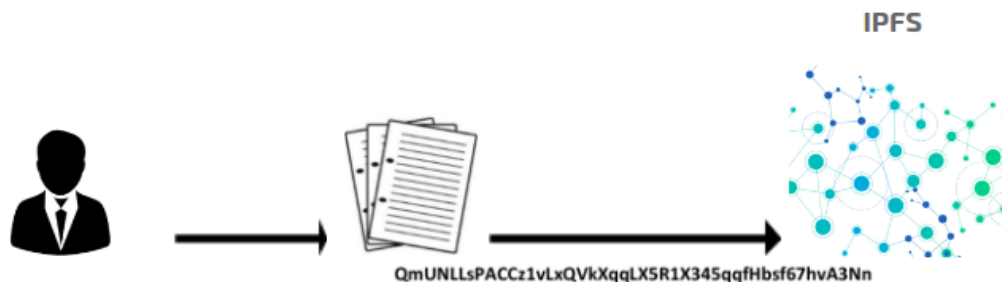
Finish: 9.84 s | DOMContentLoaded: 6.89 s | Load: 6.88 s

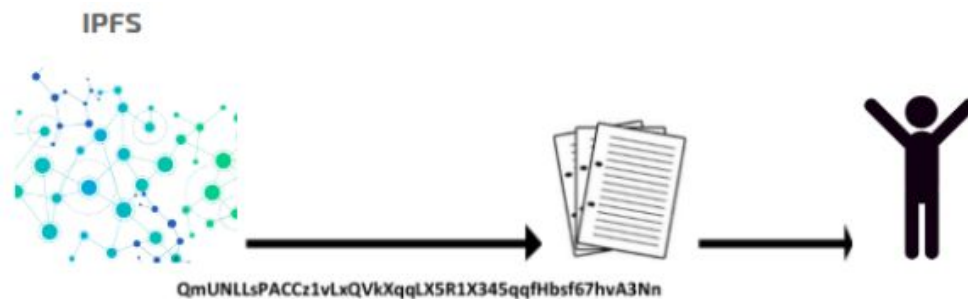
Based on empirical results taken from several DApps and the current performance state of the OS.University platform, an expected behavior of our platform was forecasted when it comes to reading data of all smart contracts.



It can be noticed on the diagram above that even with 1 000 records all the users can see the difference in the speed with which all data has been processed. The very basics of the platform were designed to be able to handle millions of users with speed and UX experience unseen before in DApp applications.

Here are simple examples of how IPFS works. In these examples one user can upload all kinds of files to IPFS by adding them, which generates a hash. When the data is uploaded to IPFS it can be shared with anyone by giving the root hash to the person who needs to download the entire data package.





Security flaw in the standard workflow is that as long as anyone has the hash of the PDF file, they can retrieve it from IPFS. So sensitive files are not well suited in their native status.

IPFS is very powerful when coupled with the blockchain. We keep the simplicity of data that's required in smart contracts (storages of hashes generated by IPFS) on the blockchain. A mixture of storing hashes on the blockchain and uploading all kinds of data in IPFS is the best of both worlds. Since we added security with **asymmetric encryption**, we have a very elegant way of storing, encrypting and sharing large data sets.

It will be possible for the peers to access someone else's private information only after explicit permission by the owner of the data.

Store data in the OSU DApp

The unique combination of blockchain and IPFS technology gives us the flexibility to store as much data as needed. The most essential information stored in the smart contracts is the hashes of data stored in IPFS, encrypted by the users of the OSU platform.

Architecture

- EDU Token: the ERC20 token, used to trade products/services;
- OSU Business Registry: handles information about company profiles & their degrees;
- OSU Academia Registry: handles information about educators & their courses/degrees;
- OSU Learner Registry: handles information about students, progress & certification;
- OSU Interview: handles communication between businesses & learners;
- OSU Generosity: handles education-related donations for courses and degree.

Versioning Scheme

The OSU Core is going to use a semantic versioning model.

Given a version number MAJOR.MINOR.PATCH, increment the:



- MAJOR version when you make incompatible API changes;
- MINOR version when you add functionality in a backwards-compatible manner;
- PATCH version when you make backwards-compatible minor improvements.

Additional labels for the pre-release and the build metadata are available as extensions to the MAJOR.MINOR.PATCH format.

WHY BLOCKCHAIN?

Why Blockchain and Smart Contracts? The true potential of cryptocurrencies is still not fully revealed and expands far beyond the financial sector. The Ethereum blockchain technology brings trust between untrusted parties and can facilitate potential agreements and all kinds of communication between businesses, educators and learners. That in turn saves time, money and any misunderstandings are avoided. Nowadays these benefits are one of the most valuable assets an organization could have.

This new technology introduces transparency and removes delays as well as third-party commissions between businesses, educators and learners. Blockchain enables us to regulate participants and give them more options in this microenvironment by introducing clear and highly customizable framework to automatically connect all the participants.

All information, which is saved on the blockchain, is immutable and transparent for everyone. This technology will give real-time information about the most important KPIs of all the participants. For example, it can give real-time information about the performance of every single employee in a business, which is part of the Open Source University network.

The smart contracts will also take care of verifying and storing all of the learners' certificates on the blockchain, making them immutable and accessible to all businesses and organizations. The feature is for innovators who dare to change the old rules and bring benefit to all valuable parties.

Focus on Security

Securing our Token and sensitive information distributed over the blockchain is our highest priority. The OS.University's team makes three-step security audits.

- The first step is a detailed internal test for information security vulnerabilities such as reentrancy bugs, manipulation of smart contracts outcome, etc.
- The second step is to test every new version and upgrades of the contracts over test network consulting with private, already launched, successful ICOs.
- The third step is vulnerability testing in a sandbox environment organized with the white-hat community members, incentivized by a bounty programme.



We know that smart contract developers must be a lot more security-focused than their traditional software counterparts. Over the blockchain, the design and programming paradigms evolved exponentially. Unlike the traditional software lifecycle, where version upgrades is the norm, smart contracts are immutable once deployed. Smart contract architecture must be highly modular foreseeing future changes.

OSU DApp testers of the smart contracts' security understand the new paradigm of distributed trust computing and showing proficiency in frameworks such as Open Zeppelin and Oyente.

We strongly believe that raising awareness and responsibility on smart contract security are both essential steps in beginning to build a solid defense.

SMART CONTRACTS

L2A, B2L, B2A: represent a series of *smart contracts* that cover *Learners-to-Academia* (L2A), *Business-to-Learners* (B2L), and *Business-to-Academia* (B2A) interactions within the OS.University decentralized application.

L2A Smart Contracts (*Learners-to-Academia*)

These smart contracts have been built with the intent to bring transparency and traceability in the entire ecosystem between learners and educators. They will help the old educational system enter the new technological age by achieving complete security and flexibility, provided by the distributed blockchain.

Our smart contracts will create endless possibilities to take already designed functionality to a completely new level of instant contact between educators and learners. For example, learners participating in a specific course or degree can securely store certificates and diplomas into the blockchain and have real-time feedback about ongoing courses and how they can improve their performance, based on historical data.

Learners who use the L2A smart contracts will have the ability to get instant information about newly-formed programs.

Another benefit of the L2A smart contracts is that groups of learners can be formed automatically based on areas of interests and these groups can be matched to specific internship programs and real-life specializations, apprenticeship schemes, etc.

End results (in L2A) include:

- Authentic and immutable skill sets, saved on the blockchain;
- Instant access to new programs, related to the area of interest;
- Traceability of all participants on courses and degrees;



- Feedback from learners about features and ideas and feedback on how a learner can improve their performance.

B2L Smart Contracts (*Business-to-Learners*)

The OSU DApp highly advanced matching algorithms between businesses and learners will be implemented in a smart contract, which will take care of the whole interaction. The connection between learners who have a set of skills in the blockchain and a business with matching requirements for these skills will be done automatically through the contract.

Learners will use an advanced matching algorithm to find the best position in accordance with their experience and knowledge, saving hours of searching on different platforms. The biggest opportunity for the learners is getting approached by businesses, based on their performance and accomplishments.

The B2L smart contracts will also be used to keep track of employee performance, which can lead to transparent social benefits for top performers. It is a completely secure system built on top of the blockchain, allowing businesses to have up-to-date knowledge about their employees' achievements and aspirations.

End results for learners and businesses (in B2L) include:

- Advanced matching algorithm (approaching right candidates);
- Dramatically lower recruitment time and expenses;
- Increased success rate of new candidates;
- Real-time performance indicators for current employees;
- Transparent social benefits for top performers;
- Up-to-date in-house knowledge base;

B2A Smart Contracts (*Business-to-Academia*)

The OSU DApp will give the opportunity for businesses to pick the right candidates directly from the student desks and involve them actively. Businesses will have a talented pool of learners from which they can hire the right candidates. B2A smart contracts will also facilitate the process of organizing internal specializations and trainings, which in turn will build in-house knowledge base.

End results for Businesses (in B2A) include:

- Solving scalability constraints;
- Access to an infinite pool of new talents;



- Ability to approach learners by top performance results;
- Customizing semi-completed learners.

On the other hand, we have the Academia, which will be paid by the Business for the opportunity to reach out to talented candidates, potentially through 0% commission fee EDU tokens.

High-quality education, provided by Academia, will increase exponentially along with the increasing financial incentives, coming from businesses and higher rating scores.

Here are some of the outcomes on the supply side, benefiting the demand side:

- Scalability of education, corresponding to the ever-changing corporate and public demands;
- Partnership with businesses to organize internship and various other programs for engagement of learners;
- Institutional and individual expert prestige, based on ratings which will be reflected on the blockchain.

These were just some of the smart contracts we start with. Beyond them, the system has the potential to eliminate the friction and costs of various current third-party intermediaries when considering the learners' records management and other personal identifiable information or sensitive data, whether it comes to education or career development.

There are indisputable promises of improved data integrity, reduced transaction costs, decentralization and disintermediation of trust. By being able to coordinate, store, and share the learners' events, stakeholders essentially alleviate unnecessary and duplicate services, which lowers cost and increases security.

The EDU Token

We have invested in seeking out legal and compliance expertise to ensure that the EDU crowdsale meets all current regulatory rules of the Initial Coin Offering at the ICO-stage. According to the professional opinion of our legal advisors, based on the Howey Test, our EDU Tokens should not be deemed as a security tokens and do not need to be registered as security. OS.University focuses on the legislative regulation of the ICO, digital tokens and operations with cryptocurrencies to provide our users and contributors safe and reliable solutions for crowdfunding. The EDU Token is a utility token and it does not constitute any kind of securities.



Symbol: EDU	Total Supply: 48 Million	ICO Hardcap: 34,000 ETH
Standard: ERC20	Distribution: Automated	KYC: Yes

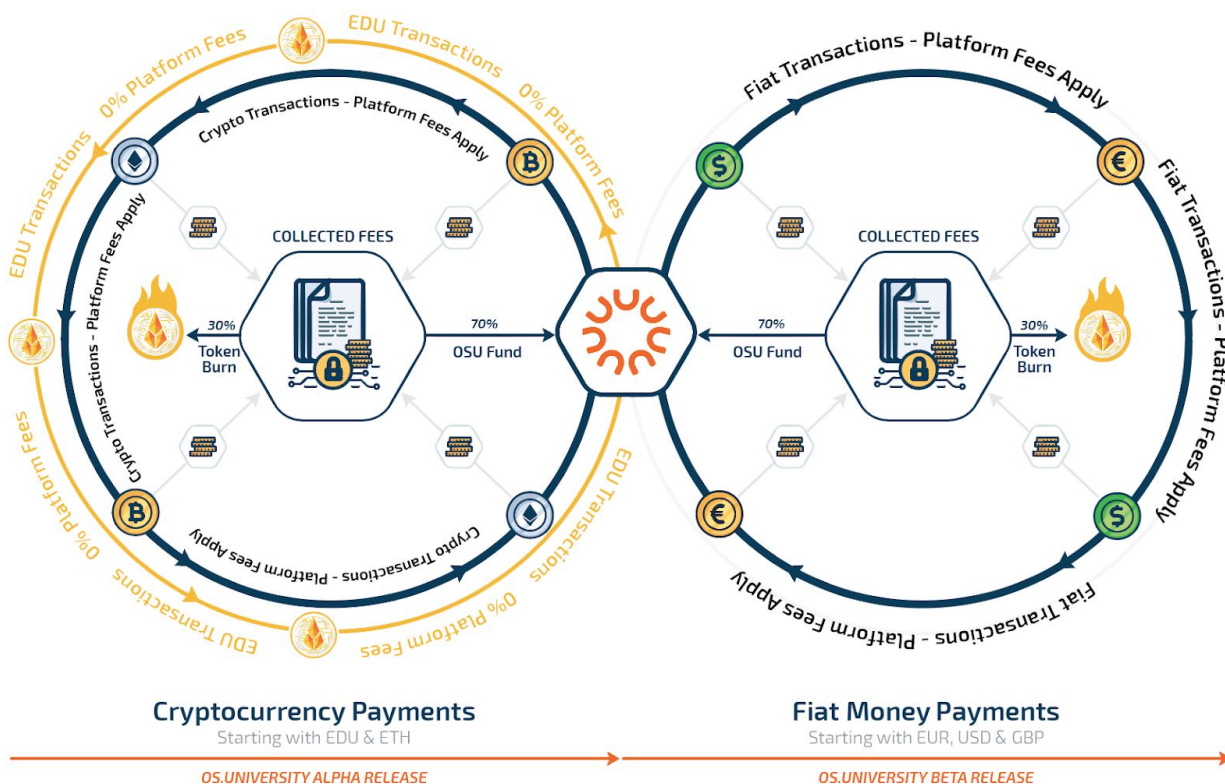
EDU token: the Open Source University's *utility token* (built on the ERC20 standard) that enables the usage of the OSU DApp

- The EDU token powers the Open Source University DApp.
- It is the only circulating asset enabling zero platform fees.
- Token burning is part of a deflation mechanism in the platform's tokenomics, which accelerates the token value appreciation.
- The EDU token will allow future scaling of the platform as a multi-blockchain decentralized application beyond Ethereum.

Business Model & Tokenomics

All fees will be taken only from users which have made transactions using non-EDU crypto or fiat currencies as a payment method. The token fee will be divided accordingly:

- OSU DApp will collect a transaction fee for subscriptions of new businesses and educators on the platform, aggregating paid courses on the blockchain, bidding for preparing custom courses and interview bounties.
- Learners will receive EDU tokens when they win certain challenges or accomplish certain milestones (similar to PDU).
- Academia will receive fees from requests for custom courses by businesses, along with benefits from all paid courses.



As far as the market opportunity is concerned, the findings from the recent research report of European Commission's "Joint Research Center" were primarily analyzed. The report concludes that in an educational context, the blockchain as a technology has the potential to "disrupt existing institutional norms, information systems and empower learners". The appraisal mentioned earlier concluded that there aren't any competitive projects to claim the end-to-end multi-faceted value proposition of OS.University and its EDU token, while a range of potential partners are identified along the value chain and competitors should be expected in the future with the successful implementation of the venture. A deeper market analysis concluded that neither the value proposition, not the software architecture of OS.University are a subject of successful replication as of the date of the appraisal.

- o Fees for transactions between learners, academia and businesses are 5% of the transaction volume for each transaction.
- o These fees flow to the Open Source University project to guarantee its sustainability.
- o Fees are charged only for transactions with other cryptocurrencies and fiat.
- o EDU token transactions have 0% platform commissions.
- o The higher the transactions amount - the faster the EDU token value grows.



Team

We come from various backgrounds - academic, entrepreneur, development - from large tech companies to startups. Different, yet united, the Open Source University team forms a unique blend of technology, R&D and business development talent.



Hristian Daskalov, *Project Lead* – Co-Founder of the Center for Open Science at the Technical University of Sofia. Former Advisor on the National Specialization Strategy for Research & Innovation.



Jordan Jambazov, *Technology Lead* – Senior software developer with 10+ years of experience. Co-founder of the software consulting company IO Era. Open source software advocate.



Dobromir Kovachev, *Blockchain Developer* – Senior software developer with 10+ years of experience in development of solutions with national significance. Passionate lifelong learner.



Momchil Jambazov, *Creative Technologist* – Digital designer, web developer and problem solver with 8+ years of experience in building e-commerce products and other digital experiences.



Gordon Kerr, *Senior Investment Advisor* – Founder and CEO of Cobden Partners, London based investment consultancy. From 1983 he worked as a capital markets investment banker.



Aly Madhavji, *Senior Strategy Advisor* – Founder and Former CEO of Global DCX, an innovative technology company launching secure digital currency exchanges, he served in several advisory roles including as a Governor of the University of Toronto.



Detelina Smilkova, *Senior Academic Advisor* – Vice President of the University of Finance, Business and Entrepreneurship (VUZF) - the first specialized higher education institution in Bulgaria in the field of finance, insurance, business, management and marketing.



Teodora Alexieva, *Marketing Lead* – 5 years of experience in online marketing and advertising, a bitcoin enthusiast, previously an event manager at a major European co-working space.



Vsevolod Okhrimenko, *Software Developer* – Full-stack developer with expertise in HTML, CSS, jQuery, Swift, C++. Leader of OS.University Russian-speaking community across multiple nations.



Margarita Taskova, *Graphic Designer* – An avid graphic and web designer, passionate about cryptocurrencies and blockchain. A lifelong learner, who is ambitious to help other learners.



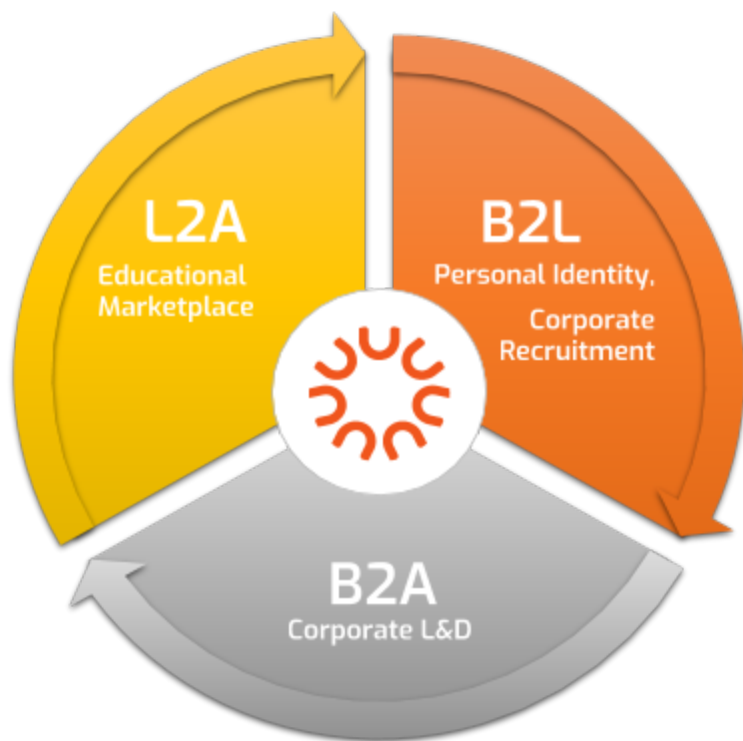
Alex Bozhinov, *Crypto Community* – Marketing Manager of the successful “Crowdholding” crypto-project, growth hacking advocate. Previously a Business Development Manager at Google in Dublin.



Kalin Tsekov, *Senior Technology Advisor* – Founder Navigato - technology startup, providing electric vehicle solutions. He is also a CEO at iOSBuild software consultancy. He is a man of many talents - AI, big data, and blockchain evangelist above all.



Market Potential



According to Forbes, the online education market alone is worth over USD 165 billion (2016). Projected to reach USD 240+ billion by 2023.

According to U.S. Bureau of Labor Statistics up to 24% of the workforce change jobs annually.

In a recruitment market of USD 200+ billion, blockchain-verified profiles can cut the hiring period in half.

According to "Training Industry", in 2017, corporations estimated spending was around USD 360+ billion – insourced and outsourced corporate training initiatives.

According to "Academia 4.0 – University on the Blockchain" research, the arising "learning on demand" industry would be best managed through smart contracts, erasing the borders between higher and further education.

Example of the potential and scale of change on the market as a result of the implementation of OSU's DApp B2L smart contracts:

Nowadays

- 65% of the employers claim talent shortage is the biggest challenge in hiring.
- 62% of employers felt the labor market was candidate-driven.
- 64% of the companies only measure employee engagement once a year.
- Almost 60% of the job seekers report having poor candidate experience.
- 74% of the workforce is open to making a career move.

Future with B2L smart contract

- Business and learners will form the market by constantly changing demands. Our B2L smart contracts will let businesses and learners (featuring employees and business owners) generate new ideas and actively collaborate.
- All businesses on the blockchain will be able to measure all-important KPIs for them in real time.
- B2L smart contracts will ensure the connection between businesses and learners by common areas of interest by avoiding common mistakes made during the old hiring process.
- <15% of the workforce will be open to make a career move because the matching algorithm will pick the right candidates by measuring their interests.



Funding Model

THE RAISE: TOKEN GENERATION & DISTRIBUTION

Unlike most startups, Open Source University raises funds by selling its product directly. This process is called an Initial Coin Offering (ICO). Investors & early adaptors have the first-mover advantage to benefit from the token value appreciation as more users join. In June 2018, organizations and users will have the opportunity to get EDU tokens at a lower price, before the tokens are officially distributed throughout our global network.

The tokensale, intended to distribute the EDU tokens throughout the global OS.University community, is being held through a smart contract. Its address was published on the OS.University website on the 20th of November 2017. The first funding round (the pre-sale) ended successfully on the 31st of December.

The EDU tokens are the fuel of the platform. They are being sold in order to accelerate the development of the OS.University platform, i.e. to raise enough capital in order to realize the full potential of the idea and turn the project into a leading system, facilitating the connection between the educational and the business worlds globally. While this effort leverages upon the knowledge and motivation of each member of the OS.University team, the early investors are ones to enable the team to fulfil its mission efficiently.

In return, team's commitment to investors is in the form of different mechanisms for appreciation of the value of their investment, such as implementing a scheme to 'burn' significant percentage of the fees collected through the platform in order to ensure sustainable EDU growth. The initial amount of tokens to be generated and put in circulation reflects the number of use cases, which will be rolled out upon the initial launch. Some of the broader use cases to be covered with EDU in the future include: handling admission processes; document grading, test scores, and other assessments; executing student accounting and financial aid; individual education plan services; career services management, internships, traineeships, apprenticeships; regulatory reporting and reports for accrediting bodies.

Token Distribution & Budget Allocation

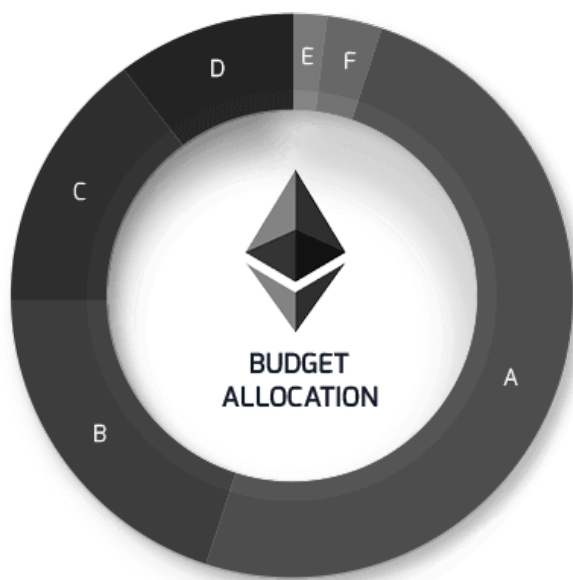
The pre-sale's goal was to raise ~3750 ETH for funding the platform's Alpha release and initial business development. The Alpha release, the main tokensale and the EDU token exchange



listings are all to take place in the first half of 2018. But prior to that, an appraisal had to be made in order to set the original valuation.



- A PRE-SALE**
4,800,000 EDUs
- B PUBLIC TOKEN SALE**
30,000,000 EDUs
- C OPEN SOURCE UNIVERSITY**
8,400,000 EDUs
- D TEAM & ADVISERS**
3,840,000 EDUs
- E BOUNTY PROGRAM**
960,000 EDUs



- A DEVELOPMENT**
50%
- B BUSINESS DEVELOPMENT**
20%
- C MARKETING**
15%
- D REGULATION & TAXES**
10%
- E CONTINGENCY**
2%
- F LEGAL & ADMINISTRATIVE**
3%

The appraisal of the utility token was commissioned by the team and was run independently in an effort to price an asset that belongs to an emerging asset class to which standard valuation methods don't apply. While this appraisal does not intend to offer investment advice of any kind, it is important to share the details, regarding the results of the EDU utility token analysis,



covering the token's value proposition, the market opportunity & the existing alternatives, so that the full extents of the blockchain-based project are taken into consideration.

When it comes to crypto-asset valuation and crowdsale campaigns, they are based on industry-standard concepts, such as total addressable market (TAM), penetration of that market, velocity. As highlighted previously and further repeated ahead in the document, the EDU token is considered a utility token, meaning that it gives the owner access to a specific protocol / network, thus it is not to be classified as a financial security (to which other valuation and regulation procedures apply) – a conclusion, confirmed by the outcomes of the preliminary appraisal and SEC's Howey Test. Based on the outlined areas of assessment, and taking into consideration the ETH market price as of October 15th 2017, a price range of 700 to 1400 EDU tokens per ETH was recommended for a pool of 34.8 million tokens that are to be sold during the different phases of the crowdsale.

TOKEN SALE TIMELINE



HOW TO PARTICIPATE?

In accordance with the laws and with respect to our contributors we adopted a "know your customer" procedure (KYC). This procedure will be in place for all our contributors.



Step 1: Send Ether to the Smart Contract

You can purchase EDU tokens by sending ETH to the OS.University's smart contract. Tokens are distributed immediately, but are locked and non-transferable until you successfully pass KYC procedure.

CHECK CONTRACT



Step 2: Submit Your KYC Application

As soon as your KYC application is approved you will receive a confirmation email that your EDU tokens are transferable.

GET WHITELISTED



Legal

RECHAINED Ltd. company is behind statements like Open Source University, OS.University and We. RECHAINED Ltd. is the legal owner of all the information, code, designs, tokenomics and materials issued which are related to Open Source University project.

DISCLAIMER OF LIABILITY

To the maximum extent permitted by the applicable laws, regulations and rules, RECHAINED Ltd. will not be liable for any consequential, indirect, special, incidental, or other losses of any kind, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss or use of data), which arise from or in connection with any acceptance of this Whitepaper (or any part thereof by you) or reliance on it.

RISKS AND UNCERTAINTIES

Prospective purchasers of EDU tokens (as referred to in this Whitepaper) should carefully consider and evaluate all risks and uncertainties associated with RECHAINED Ltd., the Distributor and their respective businesses and operations, the EDU tokens, the RECHAINED Ltd. Initial Token Sale (each as referred to in the Whitepaper), all information set out in this Whitepaper and the T&Cs prior to any purchase of EDU tokens. If any of such risks and uncertainties develop into actual events, the business, financial condition, results of operations and prospects of RECHAINED Ltd. could be materially and adversely affected. In such cases, you may lose all or part of the value of the EDU tokens.



NO REPRESENTATIONS AND WARRANTIES

RECHAINED Ltd. does not make or purport to make, and hereby disclaims, any representation, warranty or undertaking in any form whatsoever to any entity or person, including any representation, warranty or undertaking in relation to the truth, accuracy and completeness of any of the information set out in this Whitepaper.

TERMS USED

To facilitate a better understanding of the EDU tokens being offered for purchase by the Distributor, and the businesses and operations of RECHAINED Ltd., certain technical terms and abbreviations, as well as, in certain instances, their descriptions, have been used in this Whitepaper. These descriptions and assigned meanings should not be treated as being definitive of their meanings and may not correspond to standard industry meanings or usage. Words importing the singular shall, where applicable, include the plural and vice versa and words importing the masculine gender shall, where applicable, include the feminine and neuter genders and vice versa. References to persons shall include corporations.

NO FURTHER INFORMATION OR UPDATE

No person has been or is authorised to give any information or representation not contained in this Whitepaper in connection with RECHAINED Ltd. and its respective businesses and operations, the EDU tokens, the RECHAINED Ltd. Initial Token Sale (each as referred to in the Whitepaper) and, if given, such information or representation must not be relied upon as having been authorised by or on behalf of RECHAINED Ltd. The RECHAINED Ltd. Initial Token Sale (as referred to in the Whitepaper) shall not, under any circumstances, constitute a continuing representation or create any suggestion or implication that there has been no change, or development reasonably likely to involve a material change in the affairs, conditions and prospects of RECHAINED Ltd. or in any statement of fact or information contained in this Whitepaper since the date hereof.

NO OFFER OF SECURITIES OR REGISTRATION

This Whitepaper does not constitute a prospectus or offer document of any sort and is not intended to constitute an offer of securities or a solicitation for investment in securities in any jurisdiction. No person is bound to enter into any contract or binding legal commitment and no cryptocurrency or other form of payment is to be accepted on the basis of this Whitepaper. Any agreement in relation to any sale and purchase of EDU tokens (as referred to in this Whitepaper) is to be governed by only the T&Cs of such agreement and no other document. In the event of any inconsistencies between the T&Cs and this Whitepaper, the former shall prevail. You are not eligible to purchase any EDU tokens in the RECHAINED Ltd. Initial Token Sale (as referred to in this Whitepaper) if you are a citizen, resident (tax or otherwise) or green card holder of the United States of America, a citizen or resident of the Republic of Singapore, citizen or resident of Republic of China or citizen or resident of South Korea. No regulatory authority has examined or approved of any of the information set out in this Whitepaper. No such action has been or will be taken under the laws, regulatory requirements or rules of any jurisdiction. The publication, distribution or dissemination of this Whitepaper does not imply that the applicable laws, regulatory requirements or rules have been complied with.



NO ADVICE

No information in this Whitepaper should be considered to be business, legal, financial or tax advice regarding RECHAINED Ltd., the Distributor, the EDU tokens, the RECHAINED Ltd. Initial Token Sale (each as referred to in the Whitepaper). You should consult your own legal, financial, tax or other professional adviser regarding RECHAINED Ltd. and its respective businesses and operations, the EDU tokens, the RECHAINED Ltd. Initial Token Sale (each as referred to in the Whitepaper). You should be aware that you may be required to bear the financial risk of any purchase of EDU tokens for an indefinite period of time.

REPRESENTATIONS AND WARRANTIES BY YOU

By accessing and/or accepting possession of any information in this Whitepaper or such part thereof (as the case may be), you represent and warrant to RECHAINED Ltd. as follows:

- you agree and acknowledge that the EDU tokens do not constitute securities in any form in any jurisdiction;
- you agree and acknowledge that no regulatory authority has examined or approved of the information set out in this Whitepaper, no action has been or will be taken under the laws, regulatory requirements or rules of any jurisdiction and the publication, distribution or dissemination of this Whitepaper to you does not imply that the applicable laws, regulatory requirements or rules have been complied with;
- you agree and acknowledge that this Whitepaper, the undertaking and/or the completion of the Blockchain Initial Token Sale, or future trading of the EDU tokens on any cryptocurrency exchange, shall not be construed, interpreted or deemed by you as an indication of the merits of the Blockchain, the EDU tokens, the Blockchain Token Sale (each as referred to in this Whitepaper);
- the distribution or dissemination of this Whitepaper, any part thereof or any copy thereof, or acceptance of the same by you, is not prohibited or restricted by the applicable laws, regulations or rules in your jurisdiction, and where any restrictions in relation to possession are applicable, you have observed and complied with all such restrictions at your own expense and without liability to Blockchain ;
- you agree and acknowledge that this Whitepaper does not constitute a prospectus or offer document of any sort and is not intended to constitute an offer of securities in any jurisdiction or a solicitation for investment in securities and you are not bound to enter into any contract or binding legal commitment and no cryptocurrency or other form of payment is to be accepted on the basis of this Whitepaper;
- you agree and acknowledge that in the case where you wish to purchase any EDU tokens, the EDU tokens are not to be construed, interpreted, classified or treated as:
 - 1) any kind of currency other than cryptocurrency;
 - 2) debentures, stocks or shares issued by any person or entity (Blockchain)
 - 3) units in a business trust;
 - 4) derivatives of units in a business trust;
 - 5) units in a collective investment scheme;
 - 6) rights, options or derivatives in respect of such debentures, stocks or shares;



- 7) rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss;
- 8) any other security or class of securities.
- 9) you are fully aware of and understand that you are not eligible to purchase any EDU tokens if you are a citizen, resident (tax or otherwise) or green card holder of the United States of America, a citizen or resident of the Republic of Singapore, a citizen or resident of South Korea or a citizen or resident of China;
- 10) you have a basic degree of understanding of the operation, functionality, usage, storage, transmission mechanisms and other material characteristics of cryptocurrencies, Blockchain-based software systems, cryptocurrency wallets or other related token storage mechanisms, Blockchain technology and smart contract technology;
- 11) you are fully aware and understand that in the case where you wish to purchase any EDU tokens, there are risks associated with Blockchain and its respective business and operations, the EDU tokens, the Blockchain Token Sale (each as referred to in the Whitepaper);
- 12) you agree and acknowledge that Blockchain is not liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss of use or data), arising out of or in connection with any acceptance of or reliance on this Whitepaper or any part thereof by you;
- 13) all of the above representations and warranties are true, complete, accurate and non-misleading from the time of your access to and/or acceptance of possession this Whitepaper or such part thereof.

RESTRICTIONS ON DISTRIBUTION AND CIRCULATION

The distribution or dissemination of this Whitepaper or any part thereof may be prohibited or restricted by the laws, regulatory requirements and rules of any jurisdiction. In the case where any restriction applies, you are to inform yourself about, and to observe, any restrictions which are applicable to your possession of this Whitepaper or such part thereof (as the case may be) at your own expense and without liability to RECHAINED Ltd. Persons to whom a copy of this Whitepaper has been distributed or disseminated, provided access to or who otherwise have the Whitepaper in their possession shall not circulate it to any other persons, reproduce or otherwise distribute this Whitepaper or any information contained herein for any purpose whatsoever nor permit or cause the same to occur.

CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

All statements contained in this Whitepaper, statements made in press releases or in any place accessible by the public and oral statements that may be made by RECHAINED Ltd. or its respective directors, executive officers or employees acting on behalf of RECHAINED Ltd. (as the case may be), that are not statements of historical fact, constitute "forward-looking statements". Some of these statements can be identified by forward-looking terms such as "aim", "target", "anticipate", "believe", "could", "estimate", "expect", "if", "intend", "may", "plan", "possible", "probable", "project", "should", "would", "will" or other similar terms. Neither RECHAINED Ltd., the Distributor nor any other person represents, warrants and/or undertakes that the actual future results, performance or achievements of RECHAINED Ltd. will be as discussed in those forward-looking statements. The actual results, performance or achievements of RECHAINED Ltd. may differ materially from those anticipated in these forward-looking statements. Nothing contained in this Whitepaper is or may be relied upon as a promise, representation or undertaking as to the future performance



or policies of RECHAINED Ltd. Further, RECHAINED Ltd. disclaim any responsibility to update any of those forward-looking statements or publicly announce any revisions to those forward-looking statements to reflect future developments, events or circumstances, even if new information becomes available or other events occur in the future. However, these terms are not the exclusive means of identifying forward-looking statements. All statements regarding RECHAINED Ltd.'s financial position, business strategies, plans and prospects and the future prospects of the industry which RECHAINED Ltd. is in are forward-looking statements. These forward-looking statements, including but not limited to statements as to RECHAINED Ltd.'s revenue and profitability, prospects, future plans, other expected industry trends and other matters discussed in this Whitepaper regarding RECHAINED Ltd. are matters that are not historical facts, but only predictions. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual future results, performance or achievements of RECHAINED Ltd. to be materially different from any future results, performance or achievements expected, expressed or implied by such forward-looking statements.

These factors include, amongst others:

- (a) changes in political, social, economic and stock or cryptocurrency market conditions, and the regulatory environment in the countries in which RECHAINED Ltd. conducts its respective businesses and operations;
- (b) the risk that RECHAINED Ltd. may be unable or execute or implement their respective business strategies and future plans;
- (c) changes in interest rates and exchange rates of fiat currencies and cryptocurrencies;
- (d) changes in the anticipated growth strategies and expected internal growth of RECHAINED Ltd.;
- (e) changes in the availability and fees payable to RECHAINED Ltd. in connection with their respective businesses and operations;
- (f) changes in the availability and salaries of employees who are required by RECHAINED Ltd. to operate their respective businesses and operations;
- (g) changes in preferences of customers of RECHAINED Ltd. ;
- (h) changes in competitive conditions under which RECHAINED Ltd. operate, and the ability of RECHAINED Ltd. to compete under such conditions;
- (i) changes in the future capital needs of RECHAINED Ltd. and the availability of financing and capital to fund such needs; (j) war or acts of international or domestic terrorism;
- (k) occurrences of catastrophic events, natural disasters and acts of God that affect the businesses and/or operations of RECHAINED Ltd.;
- (l) other factors beyond the control of RECHAINED Ltd. ; and
- (m) any risk and uncertainties associated with RECHAINED Ltd. and their businesses and operations, the EDU tokens, the RECHAINED Ltd. Initial Token (each as referred to in the Whitepaper).

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References

- [1] Education - United Nations Sustainable Development <http://www.un.org/sustainabledevelopment/education/>
- [2] Higher Education Technology Landscape 2017 <http://www.eduventures.com/2017/02/introducing-2017-higher-education-technology-landscape/>
- [3] Research on the existing ed-tech business landscape
- [4] Semantic Versioning <http://semver.org/>
- [5] Open edX Open Source MOOC Platform <https://open.edx.org/>
- [6] Crypto-JS <https://www.npmjs.com/package/crypto-js>
- [7] node-rsa package for encrypt/decrypt <https://github.com/rzocoder/node-rsa>