Skillchain
Your Certified Skills on Blockchain

White Paper

ABSTRACT

Imagine a meritocratic world where rewards are distributed in a fair and objective manner to those who truly stand out for their abilities, proving themselves to be cut out for a job.
It would be a perfect world.

Moved by this ideal and by the skills that members of our team have individually developed in their respective fields, we have created Skillchain, a protocol that can comprehensively certify all past and present experiences of people.
Skillchain allows academic education institutions around the world to interact quickly and easily, certifying students' career paths, the qualifications they earned and exams they took.
Skillchain's goal is to bring clarity to the job world by making sure that candidates' resumes are not merely based on self-declarations, but are the result of certified and swift interactions with the institutions they come from.

Our protocol will be made available to Universities and non-academic education companies to store data such as diplomas, e-learning courses, and in-class personal development training programs.
This is set to become the most secure way to store personal data which can only be accessed by its owners or by people they have authorized to do so.
Primary and secondary schools, career paths, e-learning platforms, non-academic training courses will be some of the data stored in one simple key sequence that can be used by job seekers or people in search of that perfect employee.

Our goal is to **globalize the Life Skill Passport**, through which everyone will get a personal profile which certifies their academic credentials, participation in non-academic training courses, their skills, previous work experience and recommendations received.

It will be user-friendly, quickly accessible, and subject to the profile owner's desire for privacy.
But this is just the beginning. This application can incorporate any certifiable skill, people's career paths, or even personality test results of candidates applying for a job.

The challenge is to create a single place where those who wish to be admitted into a training academy, people applying for a job or participating in non-academic training courses can look up their own track record, while simultaneously making it available to parties who request access to it.

Sommario

WHAT IS BLOCKCHAIN TECHNOLOGY

Blockchain technology is ideally suited for making certificates more secure and intuitive. It's a distributed ledger which can contain any record, not just monetary transactions.

What makes it special is that it is durable, secure, and its transparency is decentralized. These characteristics, in our opinion, make it a perfect fit for use in the Skillchain project.

Once a data item, a certificate, or a skill gets stored in the blockchain, it can be verified by anyone.

Furthermore, blockchain is censorship resistant. There is no organization which controls the data on the blockchain, and both data and transactions, once written on the blockchain, can't be altered. This property ensures that the certificate on the blockchain is not a fake one.

Users have complete control over the certificate, and they can choose whether to share it or not.

MARKET ANALYSIS

Education is a key social resource, which is seen as as a right in many countries. The education industry is conventionally divided into two sectors:

1. Academic learning, which includes the academic and professional training market
2. Non-academic learning, which includes in-class training as well as online course programs

ACADEMIC EDUCATION

The academic educational system has traditionally provided students with basic literacy skills and techniques needed to help people fit into the labor market. This includes traditional stages: school, university, and post-graduate professional training.

It is based on a vertical relationship between teachers and students, with the former passing on precise knowledge to the latter, and one whose end result is a certificate or diploma attesting successful completion, something that is useful for breaking into the job market.

Over the past two centuries, we have seen a major advancement in global education. In 1800, only 12% of the world's population could read and write. In 2014, this number had increased by 85%.

Figure 1. Literacy Levels from 1800 to 2014
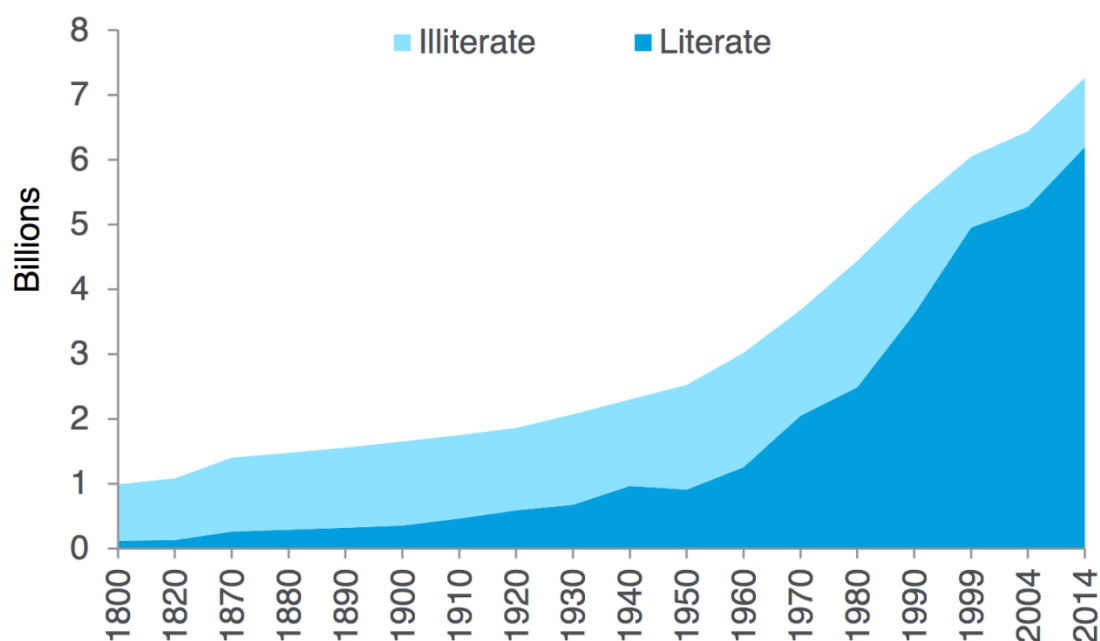
Source: Citi Research; Max Roser and Esteban Ortiz-Ospina (2016)

Figure 1. Literacy Levels from 1800 to 2014.

Every country, of course, benefits directly from a more educated workforce.

For example, in the United States, the total public costs incurred for a male to attain a tertiary education diploma are estimated at $64,200, while the benefits resulting from their income earnings and social contribution are estimated at $328,000, giving a total net benefit of $264,000.

The net benefits from education of women are instead estimated at just $112,000.[1]

Higher levels of education are typically associated with higher levels of educational accessibility. This improves rates of social mobility, economic equality, and social cohesion.

Additionally, education has a series of intrinsic individual and public benefits.

Higher levels of individual and social education are strongly associated with lower levels of crime, better life satisfaction, and have been shown to result in improved health outcomes.

All in all, education holds tremendous power as a means to generate social improvement.

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[1] OECD (2016). *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris. http://dx.doi.org/10.1787/eag-2016-en

The global education market has increased from $4.4 trillion in 2012 to almost $5 trillion in 2017, and it is estimated to reach $6.3 trillion in 2020.
In recent years, education has become a globally traded commodity.

The global population of students who move to another country to study was 5 million in 2014, and it is estimated to reach over 8 million students per year by 2025. [2]

Students from Asia represent more than half (53%) of the international students enrolled in master's and doctoral programs in the various OECD countries.

NON-ACADEMIC EDUCATION

The non-academic education market encompasses online and offline courses aimed at enhancing, both theoretically and practically, students' specific skills.

Non-academic learning takes place outside the formal education system, and is aimed at facilitating personal, social and technical growth of participants.

Over the past few years, especially, the development of skills through online and offline training programs has become very important for both individuals and companies.

Technology and automation are changing the skills that are needed in the workforce, and the academic education system is currently being criticized for not providing these needed skills for the workforce.

The size of the eLearning market was estimated at over $165 billion in 2015, and is expected to increase by 5% between 2016 and 2023, exceeding $240 billion. [3]

The global corporate eLearning market is projected to reach an approximate revenue of $31 billion by the end of 2020. [4]

The Economist Intelligence Unit said in a recent report that 52% of executives confirmed that a skills gap is actually affecting their organization's performance. [5]

According to the U.K. Commission for Employment and Skills, 22% of job vacancies in 2013 were not filled because of the lack of appropriate skills and training.

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[2] University of Oxford (2015). *International Trends in Higher Education 2015*. University of Oxford, Oxford.

[3] Docebo, Elearning trend reports 2017

[4] Technavio

[5] Harding, A. H. (2015 March 6). Back to School: The Importance of Adult Learning. *HuffPost UK*. Retrieved from: http://www.huffingtonpost.co.uk/andrew-h-harding/back-to- school-the-import_b_7468792.html

*"Yahoo is reimbursing employees for the cost of
verifed course-completion certifcates from Coursera."*
Deloitte University Press, 2013
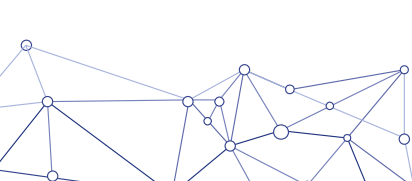
Non-academic education has become key for companies pursuing personnel development, by focusing on operational efficiency as well as individual and group performance levels, thus contributing to enhancing corporate assets, much like a traditional academic career path would do.

This is why a growing number of companies have taken, or are taking, to internally training their employees through platforms, courses, and educational materials, in line with the specific needs of the individual and the company.

The topics addressed on non-academic paths are extremely varied, as indicated in the chart below, but there is no unified database where skills acquired by an individual are unequivocally certified, which may instead be extremely significant for recruiters and companies.
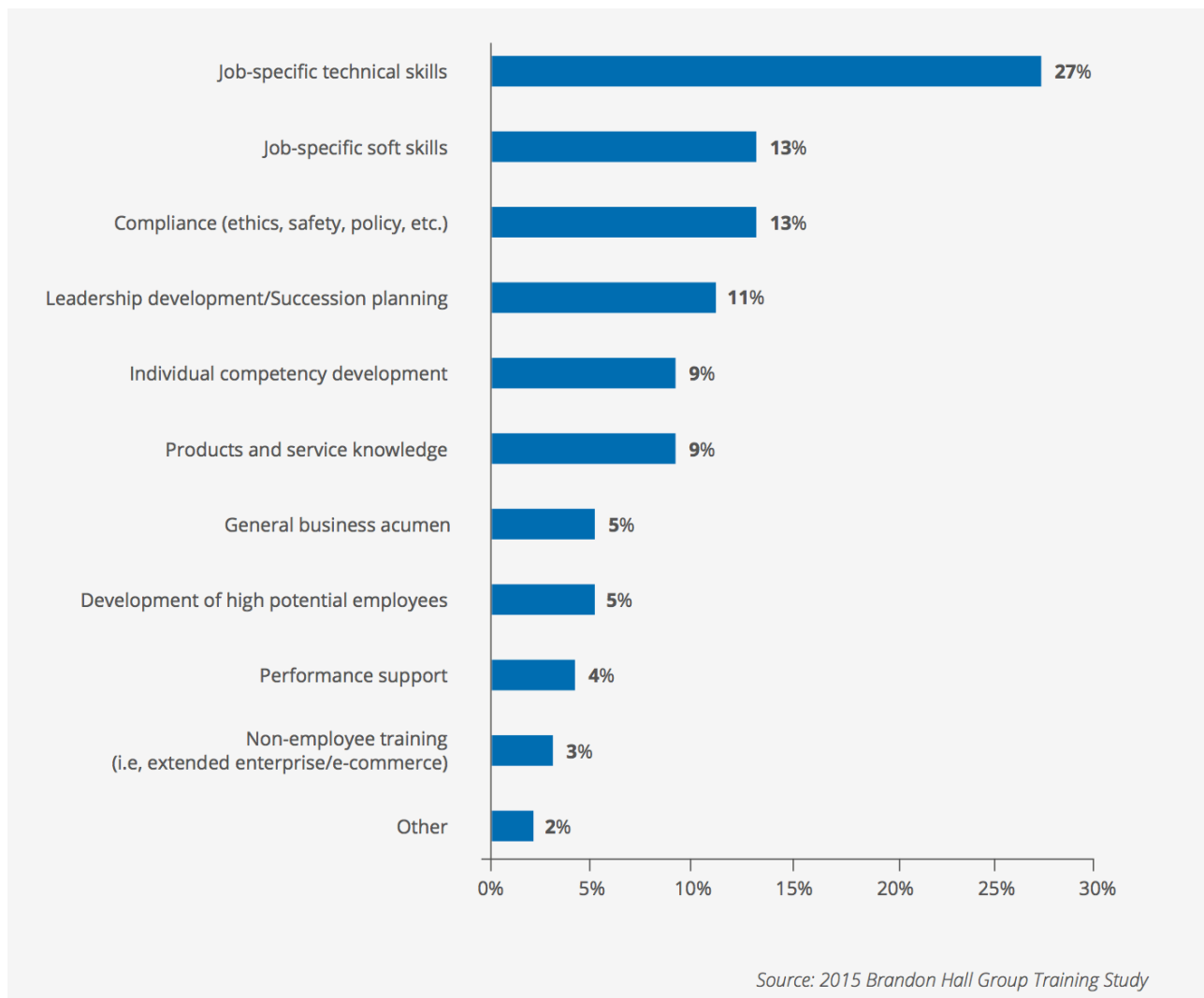

Source: 2015 Brandon Hall Group Training Study

Figure 2. Non-academic paths.

THE RECRUITING AND JOB MARKET

The job market is immersed in what is called the "Fourth Industrial Revolution" or "Industry 4.0", and operates within the confines of three different large talking-point clusters:

3.   Innovation: growing integration between hi-tech tools and businesses that generates newproduction models and, in turn, new work categories;

4.   Digitalization: the digital era promotes efficiency and productivity;

5.   Revolution: change takes place by moving from a cultural revolution to a structural one, whichfundamentally revolves around having the courage to change in order to stay marketable.

The goal of industry 4.0 is to create new jobs that are the result of a high degree of cooperation between workers and technologies.

New players have emerged on the heels of this trend: job boards (LinkedIn, Monster, Indeed) are platforms that operate on a global market, seeking to meet the required demands of speed, automation and specialization.

As a matter of fact, in 2017, the social network LinkedIn, primarily used to build professional contacts, topped 530 million registered users who put their curriculum vitae (CV) on their public profile, including details of their academic career and relevant work experience.

The tools to advertise a candidate's skills for use by recruiters and employers are essentially based on self-declaration, which is called a CV (or resume).

Anyone can pepper a CV with both true and false information, without there being the possibility of actually verifying the full truthfulness of that information.

In fact, according to a HEDD survey (UK Higher Education Degree Datacheck), **about 33% of graduates or job seekers fudge crucial details on their CV every year.**

Among the transgressors, 40% misrepresent their academic qualifications, while 11% lie about even earning a degree.

According to a sample survey of 2,500 recruiters conducted by CareerBuilder in 2016, 56% of them hired candidates who lied on their CV.

    This factor has a remarkable impact on many different levels:

6.   In terms of perceived social equality, not allowing individuals who have actually invested in their skills to flourish professionally.

7.   In terms of domestic economic situation, having unqualified personnel in key positions, businesses are unable to produce their real market value.

8.   In terms of corporate business, as companies have to invest resources (both in time and money) in managing information, rather than devote resources to development.

The working professional issue emerges even more starkly for professions that require licensure to practice, such as lawyers, doctors, and dentists.

The impact of this not only affects individuals' ability to service customers, but also insurance coverage in the event of wrongdoing and subsequent compensation.

EDUCATION AND WORK ISSUES

What motivated so many professionals to team up to create Skillchain was a shared feeling of dissatisfaction that all of us exhibited in our respective industries, which can be summed up as follows:

Lack of a unified DataBase to certify all past educational or working experiences required to fill vacancies within companies.

Big portals (LinkedIn, Monster, etc.) have succeeded in filling the gap between businesses and potential candidates by actually creating a Database prototype.

A decidedly unfinished product whose error margin is unfortunately terribly large.

Without a protocol capable of certifying the career paths (academic and non-academic) of potential candidates, companies and recruiters must still invest thousands of hours and millions of dollars every year to vet the reliability of each Curriculum Vitae!

And there is one additional problem.

It's an issue rarely seen in Anglo-Saxon culture countries, but it's an everyday occurrence in the rest of the world.

Having a "dirty" Database, without a single tool to certify data reliability, enables all the people who fudge their CV as they please, as long as it lands them a prestigious job.

These misrepresentations usually concern the following data:

9.   Previous work experience at big-name companies;

10.   Academic and non-academic career paths;

11.   Skill references;

meritocracy be damned.

In fact, not all companies have time to vet candidates, and, sometimes, the need to fill a vacancy is so urgent that all appropriate checks are forced to take a back seat.
There are times when it's not even possible to verify the plausibility of specific non-academic career paths.

In many professional sectors, academic career paths are unable to cover all required skills, which is why there is great demand.

However, many portals don't issue any certificates, and checking ALL non-academic career paths of EACH candidate would command an extremely high time commitment.

Why spend millions of dollars and hundreds of hours to hunt for certificates when you could get all of them instantly, while sitting in front of your computer screen?

ARCHITECTURE OVERVIEW

WHY BLOCKCHAIN?

Blockchain is a data structure that can not be changed can only be added only. Each data from this blockchain is connected to each other. Where if there is a change on one of the data blocks then the change will affect other data. Every transaction of bitcoin is stored in a distributed open ledger. Each blockchain will be distributed to each computer connected to the network. In each addition of data, there will check whether the data is valid or not which is usually called mining process or known in other term Proof of work. Blockchain offers the opportunity to include all forms of documents. The documents such as business agreement documents, education certificates, land deeds, births, marriages or other important documents into the database. So it isn't possible to be hacked or faked. Blockchain, with databases split into hundreds of millions of servers, will ensure that the agreement is automatically executed, recorded, and stored in a transparent system so that it can be verified.
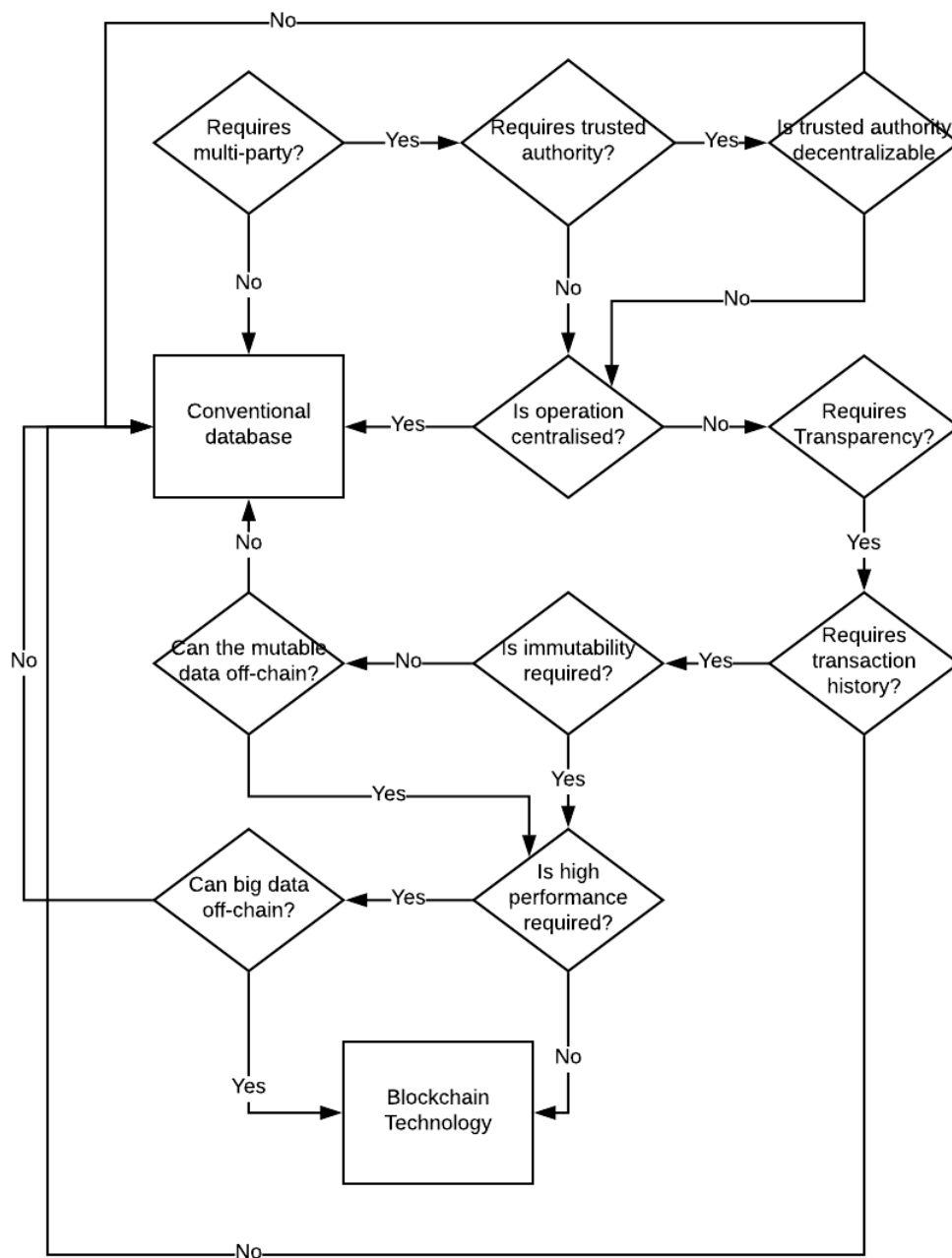
Figure 3. Suitability Evaluation Framework[6]

We check the suitability of the application of blockchain to use case requirements. The picture above illustrates the framework using blockchain. There are ten key questions that need to be answered to evaluate the suitability of blockchain. Under this framework, we conclude that our decentralized platform is suitable for implementing blockchain technology rather than conventional technology. Thus, we choose blockchain technology rather than conventional ones.

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[6] Sin Kuang Lo et al, "Evaluating Suitability of Applying Blockchain", *2017 International Conference on Engineering of Complex Computer Systems*, 2017.

Consumer data (data.gov.au) interacts with the registry to find the dataset, but retrieves the dataset directly from the data provider. Data providers can perform multiple permissions management to access data independently. The design is shown in Figure below. Different sets of data refer each other by importing metadata from repositories referred to the main repository. Then, transfer it to the format used by the primary repository with a field that may be determined by the customer.
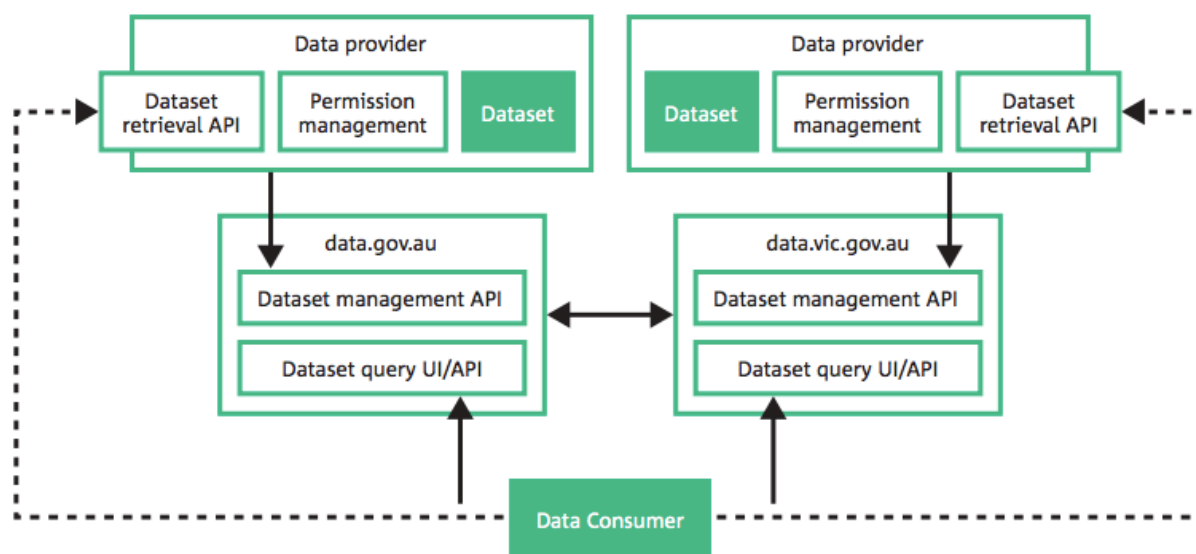

Figure 4. Concept of Conventional Database on Registry[7]

Besides conventional database, the registry can keep separate databases for administrative purposes of licensing management. As shown below, data providers perform multiple permissions for data access independently. The data provider must integrate it with a shared blockchain. Consumer data accesses the registry through one open data portal, which is hosted by a government agency.

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[7] Staples, M., Chen, S., Falamaki, S., Ponomarev, A., Rimba, P., Tran, A. B., Weber, I., Xu, X., Zhu, J., Risks and Opportunities for Systems Using Blockchain and Smart Contracts. Data61 (CSIRO), Sydney, 2017
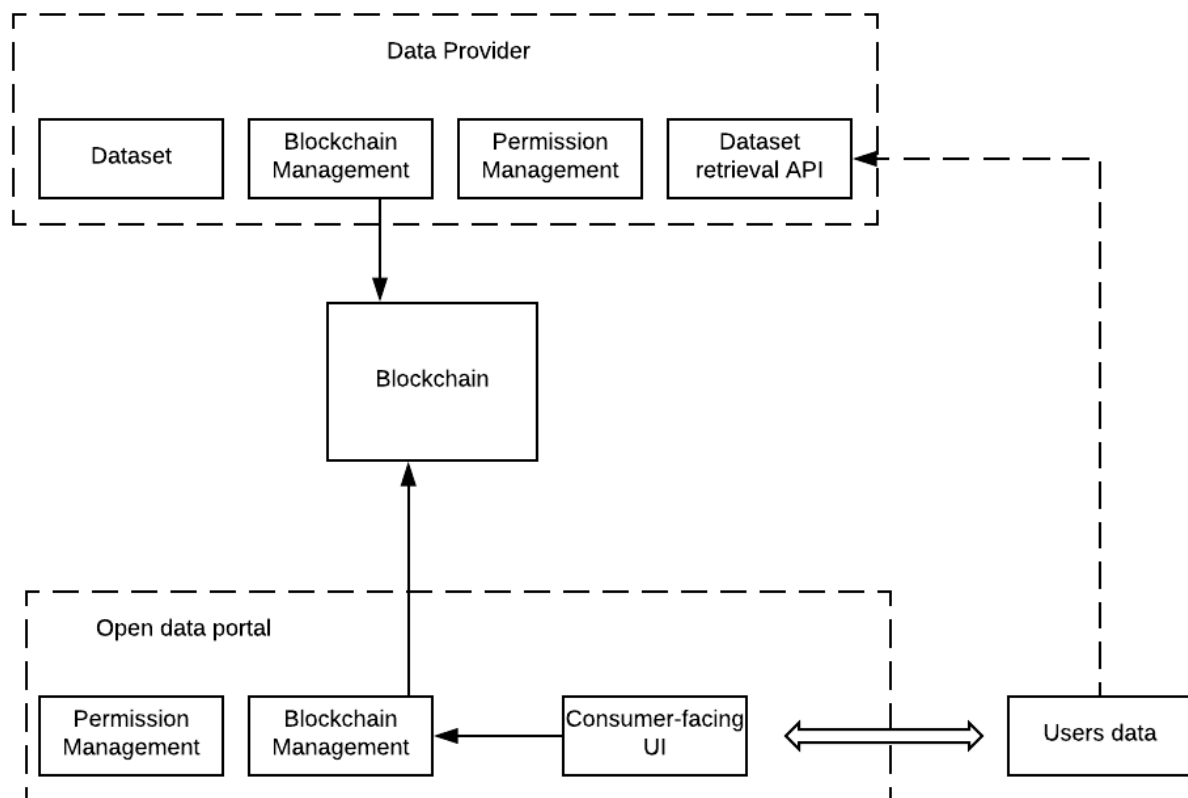
Figure 5. Concept of Blockchain on Registry

BLOCKCHAIN ADVANTAGES

Multi-Party: Blockchain provides infrastructure along with a neutral position in which none of the participating organizations so is suitable for scenarios involving multiple parties.

Trusted authority: Blockchain technology offers great trustworthy authority to avoid problems.

Centralized operation: No one acts as a system controller but each user can control their own data and assets.

Data transparency: Regulated data can be verified by anyone who has access to blockchain.

Data integrity: Blockchain can track physical assets that may change ownership and handling.

Data immutability: Nothing on the blockchain can be changed without the consensus of the network. Any confirmed transactions on the blockchain cannot be changed.

High performance: Blockchain technology offers a faster and high-performance process to access or store data.

SKILLCHAIN WITH BLOCKCHAIN

Skillchain aims to give clarity in the world of work so there is no more false in skills, graduates, and others. In this case ensure that candidate resumes are not only based on self-declaration, but are the result of a certified and rapid interaction with the institutions they originate. Skillchain will act as an intermediary medium for users to store and process data through another user's server, in this way it can protect and monitor data in a decentralized way. Therefore, users can remove environmentally inhospitable methods to accommodate servers and data more closely to users and suppliers.

SKILLCHAIN CORE FRAMEWORK

The Skillchain platform makes it easy for user or server owners to access and change their data through extensions. Extensions can be used through a browser to help users connect or access the skillchain platform. The API will be used as an interaction medium for extensions to interact with Skillchain frameworks.

1. Extension Security

A security extension is an extension that is created to clarify and validate whether it contains destructive behavior. This security extension uses bytecode validation as a tool.

2. Access Control

Currently if the user wants to access sensitive information only through their skillchain extension. Skillchain will provide some resources to the extension using the Access Control Lists (ACL) approach where permissions are specified on the object in question (eg files) and in the case of defined agents (eg user accounts). This is a type of computer security model where certain objects can perform transferable operations. The Skillchain platform will send permissions to the extension to grant certain access.
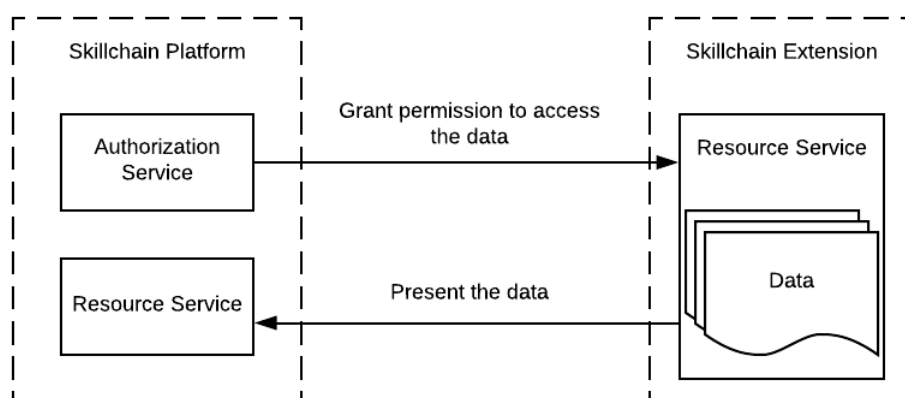

Figure 12. Skillchain extensions authorizations with Skillchain platform.

THE SKILLCHAIN SOLUTION

12.   Introduces to the academic as well as non-academic education landscape anonpartisan verification system that is reliable, trustworthy and transparent.

13.   Connects private and public training institutions with companies and Head Hunting firms.

14.   Gives everyone the opportunity to have their own online personal LIFE SKILL PASSPORT profilewith instant certification of acquired personal skills that are relevant to the job recruiting marketwhich can then do without any additional references or brokers.

SMART CONTRACT

Smart contracts are a great feature for blockchain technology. Smart contracts can pave the way for a completely new scope of commercial applications and applications for blockchain technology. It can also remove the necessary intermediaries in commercial transactions.

Skillchain will have four type of contracts to facilitate the operation.

15.   Data Storage Smart Contract
16.   User Profiles Smart Contract
17.   Employer Profiles Smart Contract
18.   Public Training Institutions Smart Contract

19.   Token Smart Contract

1. Data Storage Smart Contract

Skillchain will use a smart contract for organizing user data. Users can sync their data via Skillchain by encrypting their important data first and entering it into IPFS (InterPlanetary File System). Then will do this Ethereum contract with reference to blob data and some metadata (for organization and search). Important user data will be deleted from their local machine. During synchronization, this contract will be checked for new changes. Full history will be downloaded from this contract during the migration. So it can be used to collect data for migration to blockchain destination.

2. User Profiles Smart Contract

User Profile Smart Contract stores Skillchain user profiles including ID of residence, name, personal information, and others. Users may also store passwords or other private keys for this contract. All data will be encrypted with 2-factor authentication that requires not only passwords and usernames but also other details that are only and only owned by those users. This is to

ensure that we can provide the best security aspects for our users to gain their trust. UUID will be added to the list on their profile after installing the extension. Users will be asked to request permissions they are willing to grant to the extension, and the selected permissions will be stored in smart contract data. This permission can be revoked.

3. Employer Profiles Smart Contract

Smart Contract employers save their Skillchain profile. All data will be encrypted with 2-factor authentication that requires not only passwords and usernames but also other details that are only and only owned by those users. employers will be required to request permissions they are willing to grant to the extension, and the selected permissions will be stored in smart contract data. This permission can be revoked.

4. Public Training Institutions Smart Contract

Like users and employers, the Public Training Institutions data will be stored under smart contracts. All data will be encrypted with the 2-factor authentication that requires not only the password and username but also the other details.

5. Token Smart Contract

The users of Skillchain can buy the SKI tokens by exchanging their ETH that they have in their wallet. If they do not have any ETH in their wallet, they need to deposit some ETH first in order to exchange it to SKI. Same case happens when the users want to participate in the auction. Here are the ways to get SKI tokens.

20. They can purchase the SKI immediately based on the previous day auction price

21. They can become instructor to provide some trainings to the Skillchain users and get paid by SKI tokens.

Skillchain anticipate if the user base of Skillchain platform grow by providing token reserve mechanism. The token reserve scheme will be used when the SKI tokens number in token pool is low. Skillchain auditor or committee will be in charge in doing the refilling process. The restriction applies for the auditor where they only can query the ledger. On one hand, the client will only able to invoke, query, and deploy certain types of chaincode. The refilling process only can be happened when the SKI tokens in token pool is below than 1,000,000 SKI or 100 ETH. When that case happen, the Skillchain auditor will fill the token pool. The token pool will be audited in daily basis to ensure that there are always enough SKI tokens to facilitate transactions for Skillchain users. At the initial step, the token reserve pool will be filled with 190,800,000 SKI and 5% of ETH funding.

LIFE SKILL PASSPORT

The LIFE SKILL PASSPORT will be a world market standard in education and work. Accuracy and transparency of data stored therein will be the new standard for CVs.

This Blockchain-Based document will incorporate users' career path certificates, as well as Blockchain-Based work experience references. By means of a basic URL, users will be able to substantiate their career path and education credentials in a definitive and unquestionable way to ensure a transparent and genuine presentation.

Skillchain's vision is one of an ecosystem where certified workers can easily own, manage and monetize their verified skills (user profile) as well as data from their LIFE SKILL PASSPORT experience. Skillchain will be a decentralized career network to translate references and verified appeal into a brand-new CV.
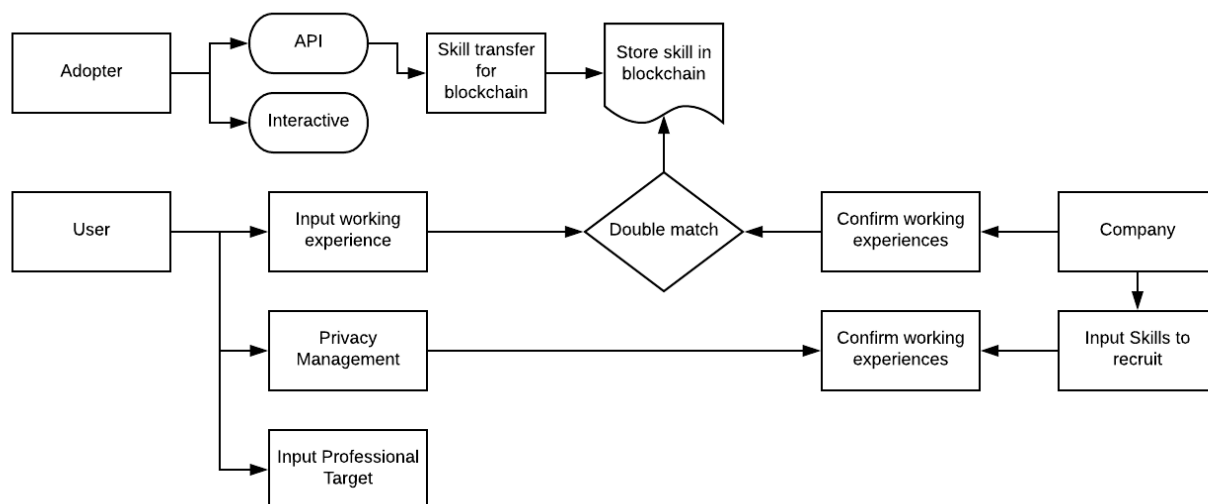

Figure 13. Life Skill Passport scheme.

Blockchain brings us:

22. Peer-to-peer trust mediation
23. Anonymity, smart contracts
24. A Token Economy

These are the answers to the problems.

Thanks to Skillchain and LIFE SKILL PASSPORT, students and course takers can use their certification URL on LinkedIn and other social media networks, without any sort of time constraints.

We have come up with a solution to allow users to protect and store their data. An ecosystem where career data can be rubber-stamped as well as monetized by users.

By using a controlled reference process to collect skills data, we can ensure that the information is more reliable than the current solutions available.

For the first time ever, workers and students can own their work and education history, the LIFE SKILL PASSPORT, and skills data, and monetize it through SKI Tokens. Our unique solution to the problems in hiring will be the framework for a tokenized career ecosystem.
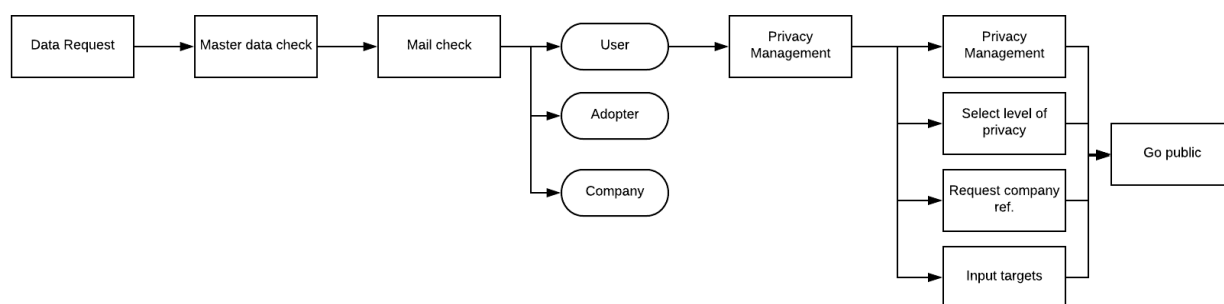
DATA OWNERSHIP

Figure 14. Data Ownership

Data that has been stored in IPFS will be encrypted and then synchronized. During synchronization, data will be checked for new changes. Then migrate the data to blockchain destination. This truly represents an added value to the platform and LIFE SKILL PASSPORT. Every single piece of information will be analyzed and will remain under the owner's control.

This means that:

25.   Universities and training institutions, as well as non-academic training programs, will be able to communicate data via the adoption process.

26.   Recruiters will only be able to access certified data that was released with permission from individual users. Recruiters will be able to verify certified data received from universities (certified diplomas).

27.   Users will be able to grant permission, access and availability to different levels of data stored in the blockchain. They will be able to integrate their data with work experience

(subject to formal business certification), the opportunities they are looking for, and personal features that will carryout transactions on the blockchain.
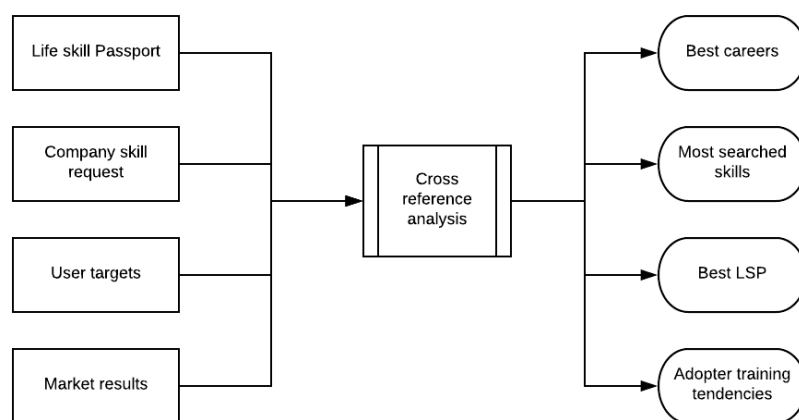

Figure 15. Cross-reference analysis.

CASE STUDY

As indicated by this chart, with respect to data received from our Non-Institutional Education partner firm, parties shall proceed to:

28. Survey businesses and contact points (web page and writing/reading web service)
29. Survey courses that you want to import (data import process via Excel sheet: web service and associated Package)
30. Survey users who have taken courses (data entry web page)
31. Create an import file for data of business X to display the data collection and writing process into the blockchain. This process will be customized for each individual "Adopter". This file [in line with detailed standard terms] will have to boost the following areas:
32. Set up the privacy management process as one of the major added values for the project (data acquisition methods - web services - protected by the privacy level selected by users). At the LIFESKILL PASSPORT visualization level, the extent of published information shall be available.
33. Web pages to search for registered and public profiles, for use by partner companies and potential recruiters.
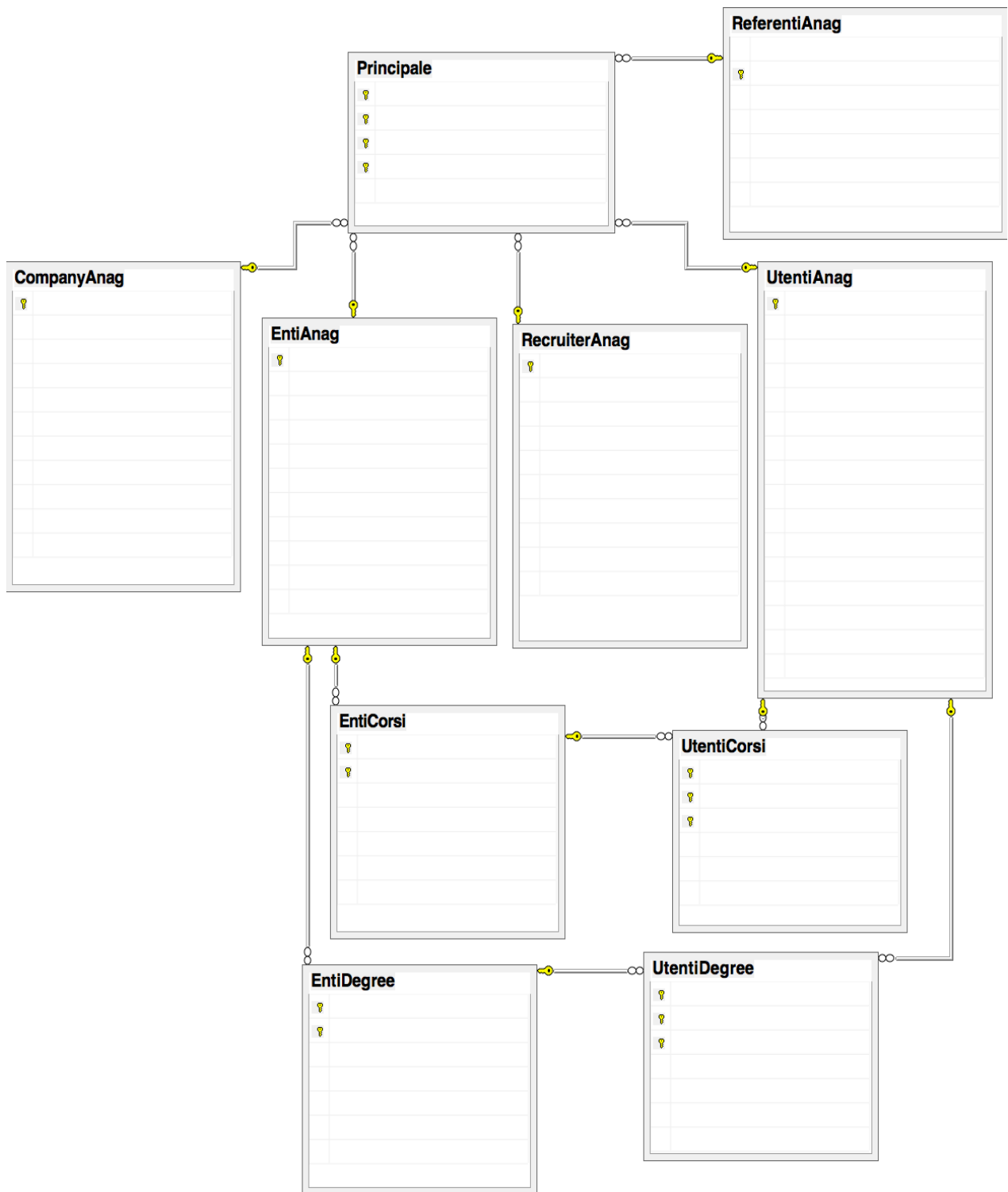
PROPOSED INTEGRATIONS

1. WALLETS

Skillchain will come with a wallet support for Ethereum, and finally all the major blockchains. Many wallets exist to solve this problem, and they do a pretty good job, but this function needs to be built directly into Skillchain to operate effectively.

The wallet will have the capacity to detect blockchain automatically and utilize the currency required to operate in the environment. Trusted purses on this network can securely transfer funds to one another in a way that prevents losses incurred by mistakenly sending crypto to a non-existent address.

2. INTEGRATION

Skillchain platform will be able to be accessed in 3 ways:

34.   Verified Skillchain extension
35.   Website
36.   Mobile app (future development)

API will be used in order to integrate the Skillchain platform to above mentioned ways.

3. BROWSER

Over time, Skillchain will develop a browser extension for Google Chrome and Firefox. In the near future, we will also create browser extensions for internet explorer as well as safari for mac users. At first, when a user opens a Skillchain platform through a browser, the Skillchain platform will advise users to install browser extensions per browser currently in use. Official Browser Extensions only transmit data to the browser application, and therefore do not perform any processing. The image below explains how it works.
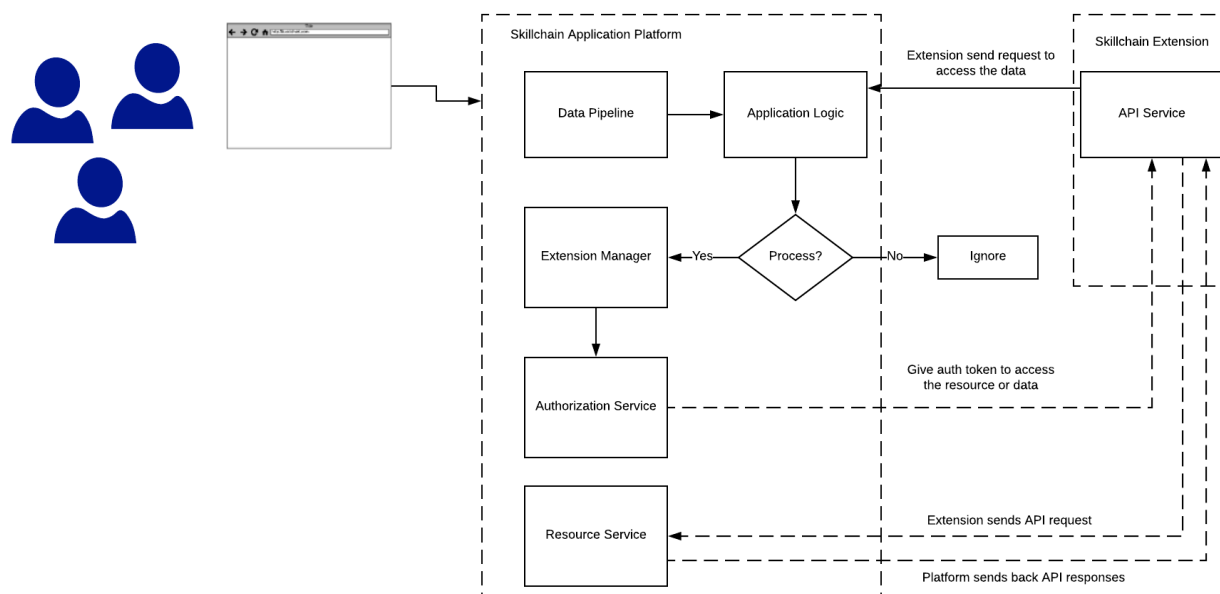
Figure 16. Advanced concept of browser extension

LONG TERM STRATEGY

1. Maintenance

Skillchain will establish a security and quality assurance team that will often audit system security. We will also do maintenance to ensure that we can handle an increasing number of users and provide some features our users want. We will use JIRA platform as issue tracking management system and TLA+ software to do frequent testing to the system.

2. Standard Committee

Committees in the blockchain and associated technology space will be set up to oversee the progress of the open source specification. We will cooperate with regulatory bodies and standards, including but not limited to ISO and W3C.

3. Mobile App Development

Skillchain will develop android-based apps and iOS to make it easier for users to access this platform. This development is expected to be completed in mid-September 2018 according to our roadmap. At first step, we will provide a basic features on our mobile app development due to the limitations of mobile operating systems. Therefore, Inter-App limitations will be used as integrations medium to Skillchain platform.

4. Artificial Intelligence & Data Analytics Feature

Skillchain will develop data analytics feature that is embedded with artificial intelligence in order to perform thorough analysis about the job market, high-paying job, or even provides some suggestions about which employer that suitable for the user based on their skillset and previous working experiences.

TEAM

The partners who have decided to establish and carry out this project are all highly successful professionals who believed in the potential of blockchain.

All of them have put their technical skills and experiences on the line to create the first Blockchain-based Protocol that can verify all work experiences, career paths and skills that self-declarations, such as CVs, can't provide.

Alfio Bardolla-Leadership

Alfio Bardolla is an entrepreneur, best-selling personal finance book author, and financial coach, He is the go-to guy for anyone who sets out to dramatically improve their financial standing.

He has penned six books published by Sperling & Kupfer and Gribaudo, including "I soldi fanno la felicità", which was also released in English, under the title "Money Makes You Happy". To date, over 300,000 copies of his works have been sold.

He is the founder and master trainer of Alfio Bardolla Training Group S.p.A., which is a leading personal finance training business in Europe that has trained 40,000 people through its audio and video programs, live workshops, and personal coaching sessions. The company employs a 70-strong staff and operates in Italy, the UK and Spain.

Alfio Bardolla is also the owner and a founding member of six companies that operate in different industries throughout Italy and Europe. His net worth is estimated to be around $40 million.
His mission is to help as many people as possible live their lives to the fullest, through informed financial management decisions.

As a philanthropist, Alfio Bardolla is one of the main benefactors for the CharityStars project and for charities campaigning for advances in literacy levels worldwide.

Since 2016, he has been a partner at Endeavor, a non-profit organization devoted to identifying and supporting high-potential investors.

Link bloomberg: https://www.bloomberg.com/quote/ABTG:IM

Davide Mitscheunig - Marketing e Relations

An investor and manager with over twenty years of experience at large corporations like eBay and Yahoo! Having a deep knowledge of the digital landscape, he has successfully managed several teams and companies, putting special emphasis on studying, testing and implementing rules that govern marketing activities and people management.

Link: https://www.linkedin.com/in/davide-mitscheunig-9594001/

Alecos Colombo - Product Manager

Born in 1988, he is a member of BEN (Blockchain Education Network) http://blockchainedu.it/. He has worked in the Telecommunications industry for eight years at two major corporations as a business strategy consultant. He also served as an advisor to startups in the innovation and digital payment industry.

Link: https://it.linkedin.com/in/alecoscolombo

Enrico Tosi – Chief Technology Officer

He earned a bachelor's degree in electrical engineering in 1982. He lived in the United States from 1982 to 1987, going through an extensive specialization program in finance at some of the most prestigious American universities including New York University and MIT in Boston. Over the following 10 years, his professional career has seen him take up a variety of roles from working as an advisor to acting as the CEO of financial institutions, both nationally and internationally. Since 1991, he has been the CEO of his own company that has been operating in the software development industry for over 25 years.

Link: https://www.linkedin.com/in/enrico-tosi-08a16b46/

Alessandro Sandionigi – Business Development Manager

Commercial network development manager in italian and multinational companies. He has consolidated his professional and personal background in business dynamic systems thinking and modelling... The great spirit of curiosity for positive impactful projects and the passion for innovation brought him, in the latest work experiences, in a world made of Digital, Influencers' Marketing and Blockchain.

Link: https://www.linkedin.com/in/alesandionigicorcione

Christian Ferri - TOP Advisor

Christian is a believer in the power of decentralization, and the remarkable impact it can have on our lives. Dubbed by Forbes as "Blockchain Humanitarian" and "Blockchain Expert", Christian is a writer, public speaker, investor, advisor and connector in the space. Fortunate enough to have lived the transition, he brings two decades of traditional business experience coupled with the new decentralized frontier.

Link: https://www.linkedin.com/in/ironsferri/

Davide Baldi - TOP Advisor

Serial entrepreneur, expert in the creation of commercial networks, owner of companies in various sectors, including management consulting, and blockchain. He believes that Smart Contract systems within the Blockchain and the Cryptocurrencies representing the new challenge on the market, the beginning of a new era, and he wants be a first level player on the international scene.

Link: https://www.linkedin.com/in/davide-baldi-2b645023/

Giuseppe Perrone - TOP Advisor

Consultant in the Performance improvement division of Ernst Young Financial Business Advisors in Rome. He is a blockchain expert, and has gained experience in project management activities in the financial and insurance fields, in digital innovation and in enabling technologies. His main competences include banking compliance (anti-money laundering), blockchain and business process mapping and re-engineering.

Link: https://www.linkedin.com/in/giuseppe-perrone-29a72662/

Giacomo Bruno – Marketing Advisor

An entrepreneur and marketing guru, Giacomo Bruno is known as the "father of ebooks" in Italy. In 2002, in a collaboration with Bruno Editore, he launched educational ebooks in Italy, empowering over 1,500,000 people to grow through "informal education".

Link https://www.facebook.com/giacomo.bruno/

Sonia Giudici – Advisor

A Senior Manager at Bocconi University, an expert in the development and management of strategic alliances with international partners, she is also in charge of coordinating the work of PIM, an organization that encompasses some of the most famous International Business Schools.

Link: https://www.linkedin.com/in/soniagiudici/

Christopher Johnston - Advisor

Chris has been dealing with software during the last 10 years, since 2012 he launched his browser: Liberty, to re-balance the power of big internet advertising players, like Google and Facebook. Liberty has more the 500.000 users and it enables users to decide how and if sharing their data

with advertisers and to have a completely new internet interaction. Liberty AIM is Christopher's blockchain project, related to Liberty browser, for which they recently launched their own ICO.

Link: https://www.linkedin.com/in/cjaim/

Alessandro Arrighi – Advisor

A bachelor graduate in Financial Intermediation Business from Catholic University of the Sacred Heart in Milan, he has a Ph.D. in Small and Medium Sized Enterprise Finance from LIUC University in Castellanza. He has specialized in financial planning for public and non-public companies, while also penning articles for finance and business strategy magazines, as well as books. He is currently serving as a Business Advisor of the International Parliament for Safety and Peace.

Link: https://www.linkedin.com/in/alessandroarrighidotcom/

SKI TOKEN

The SKI Token will be used on the SKILLCHAIN TOOL platform and its ecosystem.

The goal of this project, as explained above, has an impact on different areas, as it provides the training world with a tool to issue transparent certifications, it helps recruitment companies to find talents, and creates an education-minded ecosystem. This allows us to achieve the required critical mass level in order for the service to appeal to a large number of people.

Skillchain utilize Ethereum network and issue the ERC20 standard token, SKI token, The total token supply will be limited of 190,800,000 SKI tokens. The users still be able to use the basic features of skillchain platform without SKI but they need to buy SKI token or exchange it from other cryptocurrencies in order to pay some services on Skillchain platform or upgrade their membership to utilize premium features.

We will anticipate any possibilities for cyber-attacks or any incidents by taking all precautions necessary to secure the limited amount of SKI tokens. We have prepared mitigation plans in order to anticipate any incidents. For example, if SKI token has been stolen by some hacker, at first, we will have a committee that investigate that incident to check whether it is a valid incident or not. If the committee found out that the incident is real and purely happen due to internal or external factors that user has no access to, we will help the user by reissuing the tokens on a enw smart contract to restore the previous state. We will migrate several previous contract to the new contract and integrate it together in order to restore everything to the previous state. We will conduct frequent monitoring and maintenance to our system in order to prevent any bad incident happen.

In the future, Skillchain will expand to other major blockchains than Ethereum, but this does not mean that we will change or increase the number of token supply. The total supply token will remains 190,800,000 SKI, the 0 SKI token will be placed in a new contract for new blockchains in

order to facilitate the other major blockchain user to convert or exchange their cryptocurrencies to SKI tokens.

NAT will be required for following activities in skillchain platform but not limited to:

1. Enrolling small formal / non-formal eduction in Skillchain platform.

2. Upgrade the membership and access Premium features

   a. For job seeker

      i. Additional data analytics about how the user can enhance their profile

      ii. Make their profile become more visible

      iii. Provide job market insight

      iv. Provide suggestions about the new connections that they should connect

      v. Get discount to enroll specific course in Skillchain platform

   b. For employer

      i. Provide search engine recommendations of most suitable candidates

      ii. Additional access to do brand marketing to specific people

      iii. Advanced data analytics

      iv. Get an access to cross-check the employee's profile

3. Fees from transactions, non-basic operations, exchange to other cryptocurrencies.

4. Publishing any small / non-formal course in Skillchain platform.
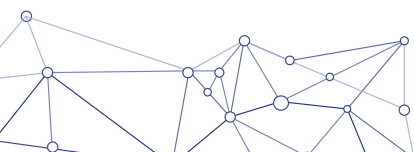
PRE ICO

THE PRE ICO WILL START ON:

APRIL 6TH, 2018 AT 11.59.59 A.M. (CTE)

25-20% BONUS 1ETH=5250/5040

SKI MINIMUM PURCHASE AMOUNT: 1ETH

ICO

THE ICO WILL START ON:

MAY 11TH, 2018 AT 11.59.59 A.M. (CTE)

TOKEN ALLOCATION

- **35**% INITIAL COIN OFFERING (ICO)

- 35% COMPANY RESERVE

- 10% TEAM

- 5% ADVISORS

- 10% BOUNTY & AIRDROP

- 5% SKILLCHAIN POOL
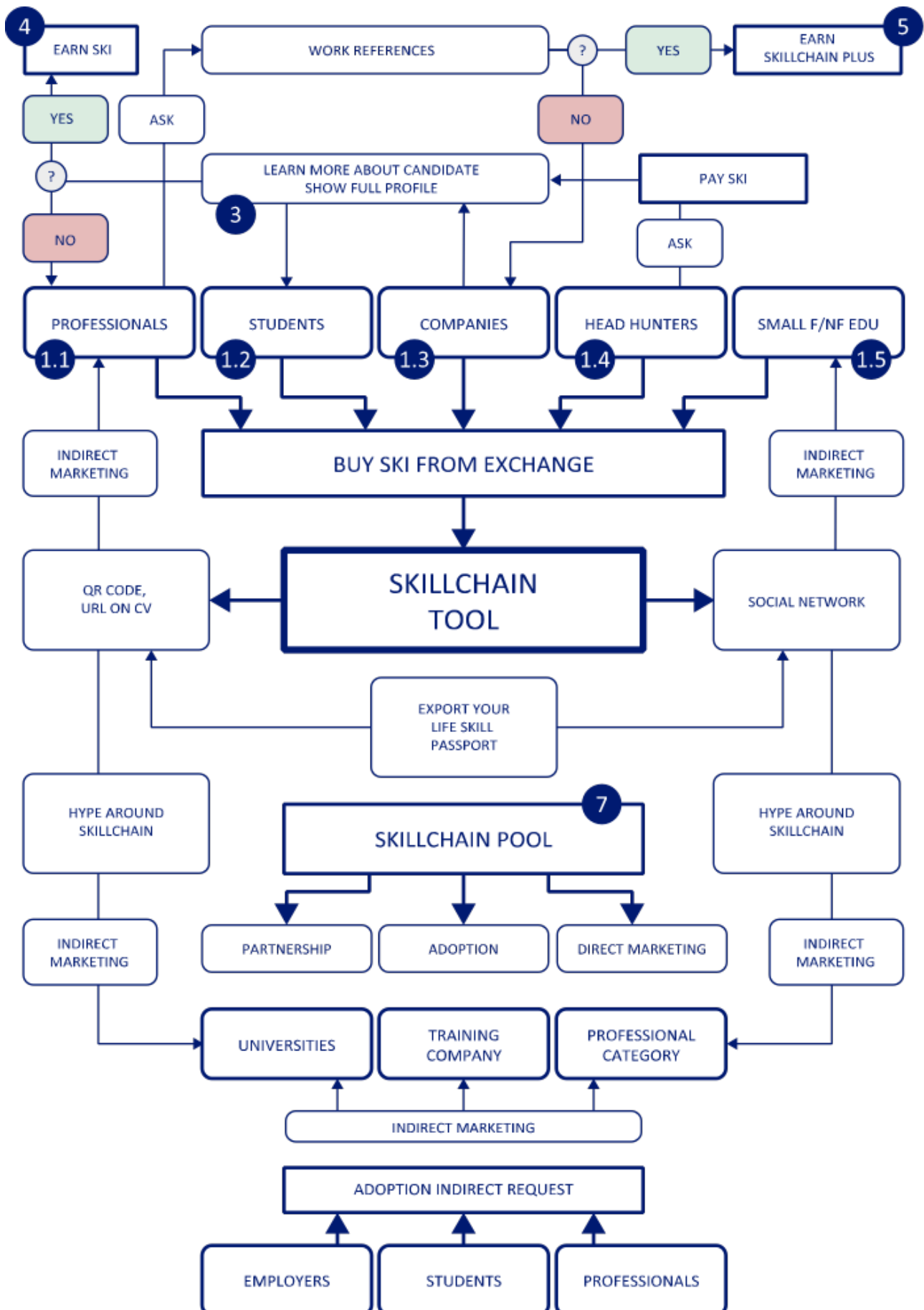
FUND ALLOCATION

- **35**% ADV % MARKETING

- 30% DEVELOPMENT & DESIGN

- 30% OPERATIONS

- 5% LEGAL & AUDIT

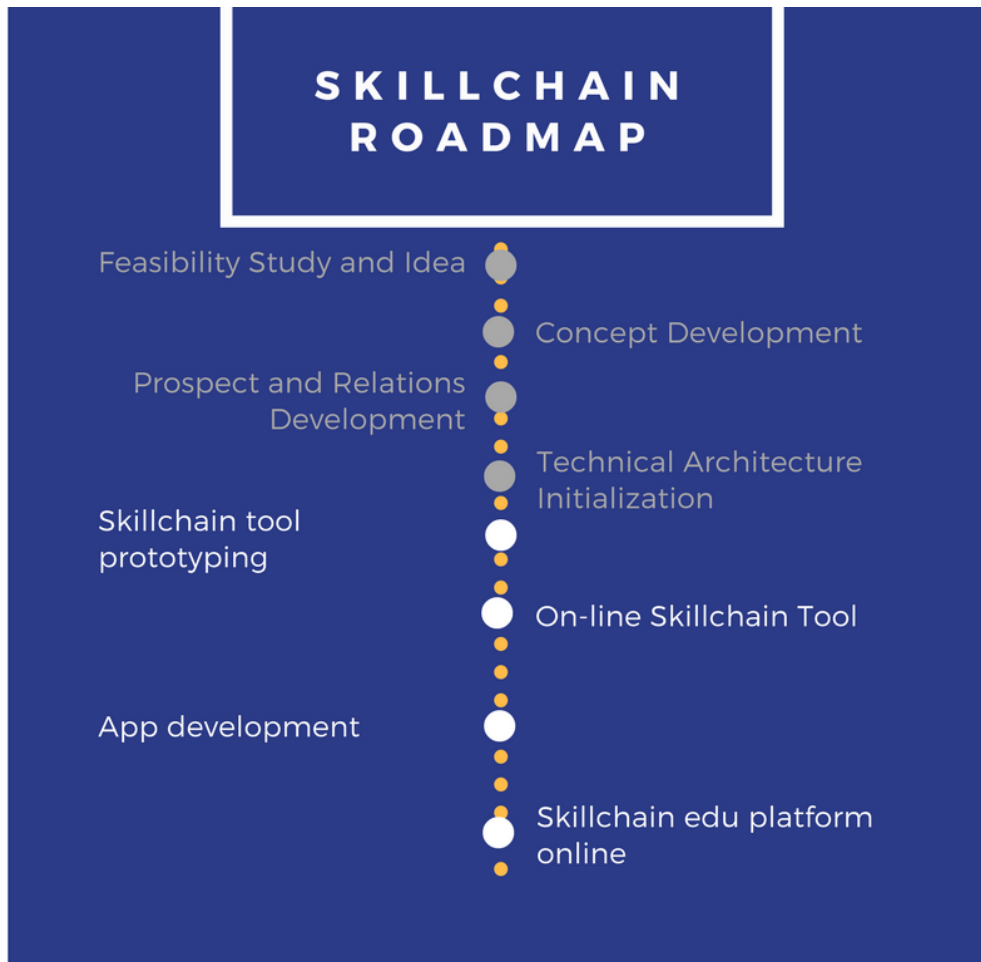TOTAL TOKEN SUPPLY : 190,800,000 SKI

CAP PRE ICO: 3,000 ETH

CAP ICO: 11,000 ETH

Skillchain
Your Certified Skills on Blockchain

4 EARN SKI

WORK REFERENCES

? YES → EARN SKILLCHAIN PLUS **5**

YES

ASK

NO

?

LEARN MORE ABOUT CANDIDATE SHOW FULL PROFILE **3**

PAY SKI

NO

ASK

| PROFESSIONALS **1.1** | STUDENTS **1.2** | COMPANIES **1.3** | HEAD HUNTERS **1.4** | SMALL F/NF EDU **1.5** |

INDIRECT MARKETING

BUY SKI FROM EXCHANGE

INDIRECT MARKETING

QR CODE, URL ON CV

SKILLCHAIN TOOL

SOCIAL NETWORK

EXPORT YOUR LIFE SKILL PASSPORT

HYPE AROUND SKILLCHAIN

SKILLCHAIN POOL **7**

HYPE AROUND SKILLCHAIN

INDIRECT MARKETING

PARTNERSHIP | ADOPTION | DIRECT MARKETING

INDIRECT MARKETING

UNIVERSITIES | TRAINING COMPANY | PROFESSIONAL CATEGORY

INDIRECT MARKETING

ADOPTION INDIRECT REQUEST

EMPLOYERS | STUDENTS | PROFESSIONALS

Roadmap

SEPTEMBER, 2017

Feasibility study and idea.

It includes idea validation, market research and analyze whether the idea will solve the pain point of our current education system or not by conducting several case studies, analysis and collecting several data.

OCTOBER, 2017

Concept development.

It includes proper planning and developing the execution. Analyze what are the resources needed to sucessfully execute the idea, gather the team, and conduct proof of concept study.

DECEMBER, 2017

Prospect and relations development.

It includes identifying seveeal partnership possibilites, what are the value that we can bring to the partner and other parties, and reach out to several potential partnership that might be beneficial between both Skillchain and the partner.

JANUARY, 2018

Technical Architecture Initialization.

It includes the initial study of the skillchain tool that detail what are the features should be available on the platform, how the UI should be looked like, and other technical setup necessary in order to develop Skillchain tool.

MARCH, 2018

Skillchain tool prototyping.

It includes prototype the Skillchain platform and perform frequent testing and analysis about the Skillchain prototype before hand it over to the public.

APRIL, 2018

On-line Skillchain Tool.

Skillchain tool will be published to the public through world wide web as version one.

JUNE, 2018

App development

Mobile application will be developed in order to facilitate the mobile users and provide the capability for the user to use the skillchain platform on the go.

SEPTEMBER, 2018

Skillchain edu platform online, App on android/IOS.

Skillchain will add new feature that allows the user to enroll or publish any course in Skillchain platform. This course will be able to be accessed on the mobile application of Skillchain as well.

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