

The Universal Proof-of-Skill Protocol

Whitepaper *v1.3 – Jan 12th 2018*

"There's no need even to have a college degree... at all, or even high school [...]. I'm looking just for evidences of exceptional ability and if there's a track record of exceptional achievements, then it's likely that it would continue for the future." **Elon Musk**

Table Of Contents

1- Abstract

2- Talent Discovery & Recognition

The Problem

The Market Opportunity

Workkola: A Proven Solution And The Team Behind Skyllz

3- The Skyllz Distributed Platform

SDP: The Universal Protocol For Proof-Of-Skill

What Problem Does The SDP Solve?

The SDP Architecture

The SDP Protocol

The 7 Rules Of The SDP

From A Competitive Landscape To A Co-operating Landscape

4- Proof-of-Skill (Skyllz Reputation)

5- The Skyllz Token (SKT): Fueling The Skyllz Distributed Platform

Why SKT Needs To Exist To Fuel The SDP?

SKT: Usage And Utility

6- Workkola: The First STapp On The SDP

How The SDP Adds Value To Workkola And Workkola Adds Value To The SDP

Business Model

Early Ignition: Go-to-market Strategy

7- Use Cases

Use Case 1: Non-sponsored Challenges On Workkola

Use Case 2: Sponsored Challenges On Workkola

Use Case 3: Partner STapp On Top Of The SDP: E-learning Platform

8- Technology Overview

Decentralized Proof-of-Skill: Why Blockchain?

The Skyllz Distributed Platform: Why Ethereum Protocol And Smart Contracts?

SKT: An ERC-20 Compliant Token

Security

Open-source Application Programming Interface (API)

Raters: The Oracles

9- The Relevance Of UX

The Problem Of Blockchain: Disappointing UX

Heading Up Mainstream

10- Skyllz Roadmap

11- The Team

- **12- Partners & Current Investors**
- 13- Conclusion
- 14- Legal Considerations Disclaimer
- 15- Appendix

Mougayar Test Glossary Of Terms References / Sources

skyllz.org

This Whitepaper is a v1 of the Skyllz by Workkola Project and can be updated and improved. Any update and new version will be notified to our subscribers list by email.

1. Abstract

The world is changing incredibly fast. The demand of new and specific skills from the labor market makes harder than ever the adaptation of professional AND personal profiles to the requirements of the market.

In addition, new talent scouting and recruiting is focusing more and more on empirical evidences of your skills (the "what"), the way that you apply them (the "how"), and what really drives you (the "why"). Tangibilizing human skills that are the basis of work behaviors such as problem-facing, solutions analysis, and team roles, is a key factor in order to meet the needs in this fast-paced environment.

There are no limits to the skills you can showcase, and put into practice in any aspect of your life.

Skyllz by Workkola comes to fulfill this new idea of no limitation of possible skills you can develop, proof, share and use.

"Skyllz by Workkola aims to build a **distributed**, **meritocratic**, **transparent and unified** platform to **assess**, **validate** and **empower human skills**."

It is a result of more than two years working in new ways of curating talent, and hosting 1,000 projects that have attracted 20k users to their current platform: Workkola.

Skyllz reinvents how talent gets access to work and work gets access to talent in an open ecosystem where meritocracy, transparency and decentralization play together to disrupt status quo in talent assessment and skills certification.

In order to nurture the vision of Skyllz by Workkola, a powerful ecosystem is born: the Skyllz Distributed Platform (SDP)-- the open-source, public, blockchain-based and distributed skills-validation protocol.

The mission of the **Skyllz Distributed Platform (SDP)** is to build a **universal** and evolving **Human Skills Ecosystem** that replaces CVs.

The SDP ecosystem is fueled by two different elements:

- Proof-of-Skill, which is the reputation related to every specific skill on the SDP. It is non-tradeable and handles skills validations as traceable annotations on the Ethereum Blockchain.
- SKT, which is an exchangeable ERC-20 compliant token that fuels the SDP ecosystem and operations. It enables users to participate, validate and certify their skills across applications.

2. Talent Discovery & Recognition

The Problem

In the last decade, the acceleration of technology in every industry has come with a lot of new jobs (data related jobs, new coding technologies, new marketing techniques...) and type of jobs (flexible jobs, freelancers, remote workforce...) that didn't exist before. Traditional education is several steps behind labor market's needs and the result is a new era of "easy and cheap" knowledge acquisition channels (e-learning, bootcamps, MOOCs, Wikipedia, how-to videos on Youtube ...).

In addition to that, the "commoditization" of degrees and the hyper competition related, have shifted the requirements of the labor market. A new era of skill allocation (show me what you're able to do) has started. This skill allocation era has also brought a new paradigm in skill contextualization (how you allocate the knowledge/skills you acquire: soft skills) and skill boosting (how you multiply the effects of skill acquisition, allocation and contextualization: the attitude).

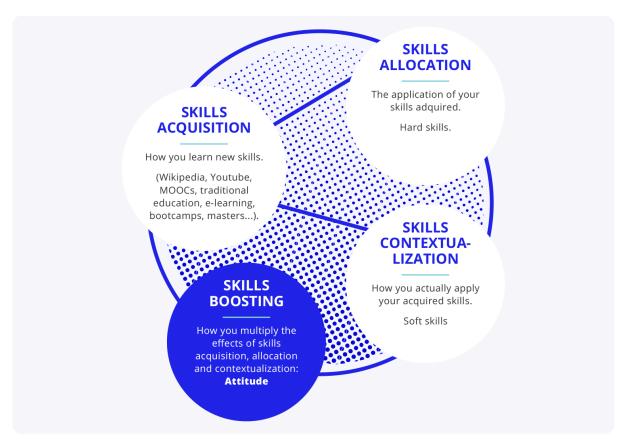


Figure 1: Human Skills Cycle

The Market Opportunity

In line with these challenges, the market for innovative, technology-based solutions for skill acquisition and sharing is huge and growing. As an example, the market for edtech solutions is forecasted as of \$94b by 2020. And this is just the top of the iceberg. Edtech mainly makes reference to skill-acquisition-related platforms such as e-learning or Learning Management Systems (LMS), but there is still a huge opportunity for technology-based solutions for skills allocation (online portfolios), skills contextualization (soft skills related platforms) or even skills boosters (platforms that will empower values or will get attitudinal metrics and profiles from their users).

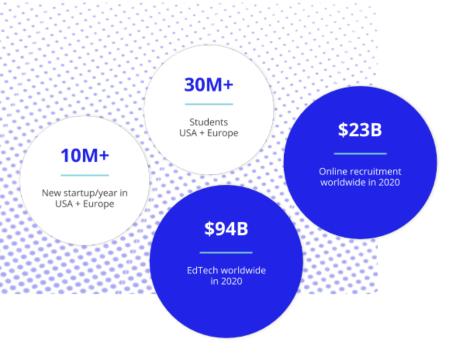


Figure 2: Market opportunity. U.S Department of Education, Center for Venture Research, US small Business Administration, Angel Resource Institute, Angel Education Foundation

Workkola: A Proven Solution And The Team Behind Skyllz

Workkola (https://workkola.com), has been working for two years in a proven solution to empower, boost and measure what they call Talent Branding.

Talent Branding replaces CVs with a **human-centred system of metrics**, **validations and endorsements** based on **hard & soft skills**. It works as **evidence of outstanding abilities** and track record of achievements through challenges posted by companies.

"At Workkola, we want to change the way talents get access to work and work gets access to talents." | Commitment To Awesomeness, Workkola, Inc

Workkola helps **digitally-skilled students showcase their skills**, build their **Talent Brands** and find amazing **job opportunities**, while helping companies **assess and attract** vetted talent.



Short-term challenges with real companies.

Companies post 7-day challenges for talented international higher-education students.
Online and on a project-by-project basis.



The right project for the right student.

Our matching algorithm proposes the best projects, challenges and opportunities to our students according to their hard & soft skills, interests and career path.



Bye bye resumé. Hello Talent Branding!

Students get real-world experience, rewards and unlock incredible job opportunities at the coolest companies thanks to their Talent Brands

Figure 3: How Workkola works.

With more than **17K students** and more than **1,500 companies** on board, Workkola's current platform is already working hard on changing **talent assessment and talent placement.**



900+

Challenges and jobs opportunities on Workkola's current platform 98%

Learning Projects (Challenges) matched & applied 100%

Recruiting Projects matched & applied

Figure 4: Workkola's key metrics

A gamified **system of points rewards users** when some actions are completed (depending on quality of challenges completed, when users finish the Personality Selfie Quiz, when users are referred...), and helps curate talents within the platform.

Workkola's team takes a step further on embracing all the possibilities of the **blockchain technology** to impact the globe with the first **open source development environment and protocol** that will change the way we **proof** our skills and knowledge: **the Skyllz Distributed Platform**.

2. The Skyllz Distributed Platform (SDP)

SDP: The Universal Protocol For Proof-of-Skill

After Workkola's model having been proven and validated by the market, it's time to take a step ahead with the deployment of the **Skyllz Distributed Platform (SDP)**: a distributed, open source, skill-validation protocol that will allow anyone to validate and empower skills in a standardized and meritocratic way.

"Skyllz Distributed Platform (SDP) is an open-source, public, blockchain-based and distributed skills-validation protocol that aims to build a universal and evolving Human Skills Ecosystem that will change the way we showcase and boost our talents. Forever."

What Problem Does The SDP Solve?

Even if technology is booming, the qualification of knowledge/skills is still mostly focusing on the knowledge acquisition layer not even touching the rest of the layers (allocation, contextualization and boosting). In addition, solutions are in most cases centralized and atomized (like current Workkola) providing with exceptional power to qualifiers. A good example is the traditional education system (1 professor to many students, 1 institution to many students) or most of e-learning platform such as Udemy, Coursera or Udacity (1 professor to many students). The atomization of solutions and platforms is also a big problem in order to unify all knowledge/skills interactions because of the trust problem and the small-players problem. Skyllz Distributed Platform aims to **unify, scale and connect the whole ecosystem of platforms** that put one or more layers of Knowledge/Skill in value (**Skills Touchpoints Applications or STapps**) with a single, standardized and distributed protocol that builds integrated and automated portfolios.

The SDP Architecture

The following graph synthesizes the different layers of the SDP:

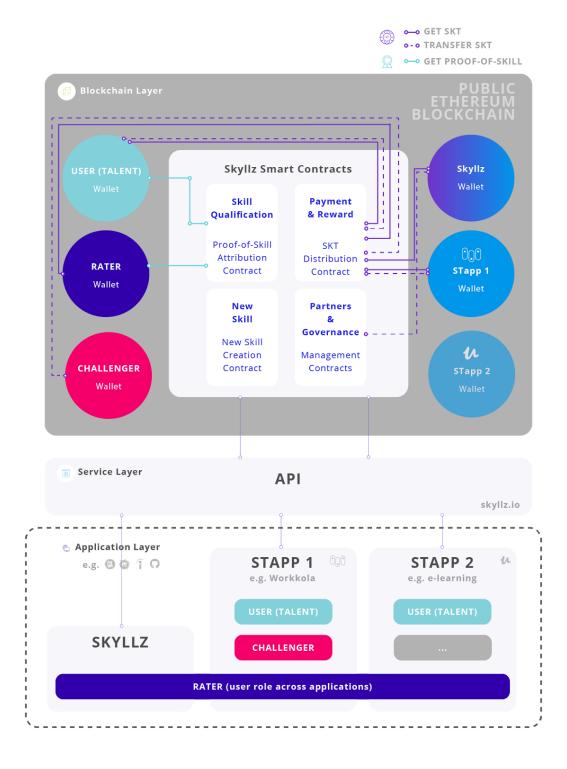


Figure 4: The SDP Architecture

- **Application layer**, where STapps can participate and benefit from the ecosystem on top of the SDP
- **Service layer**, providing the necessary technology and abstraction, through Application Programming Interfaces (APIs) to support the application layer
- **Blockchain layer**: the Ethereum protocol has been chosen as the technological platform for the SKT, Proof-of-Skill and smart contracts.

The SDP Protocol

Skyllz Distributed Platform sets the standards to create a **cross-platform ecosystem** where:

- Any user that acquires, applies or improves a skill on any application from the SDP with a
 resolved rating greater than the minimum for qualification, will automatically see its
 Proof-of-Skill of this specific skill updated with the resulting amount on the Ethereum
 Blockchain.
- The Proof-of-Skill of every skill stored by any user will be publicly visible and hereunder shareable (via its Ethereum address).
- Any Skill Touchpoint Application (STapp) can participate on the SDP if it follows the 7
 Principles of the SDP, meets the technical requirements to connect with the APIs
 (skyllz.io), and is accepted by the Skyllz community (proof-of-skill and SKT holders' vote).
- Any STapp on top of the SDP, will be able to add any new skill to the Blockchain, if accepted by the Skyllz community (proof-of-skill and SKT holders' vote), in order to ensure the evolution and adaptability of the SDP over time (new jobs, new relevant skills, new priorities...).
- A community of Raters -- experienced users from a specific area or skill -- that acts as
 oracles between the off-blockchain triggers and the on-blockchain resulting processes. They
 will decide whether a skill has been acquired, applied or improved successfully or not,
 and whether Skyllz Tokens (SKT) should be transferred to the user or not, in an
 anonymized way and using a Proof-of-Skill betting system. This will ensure quality of the
 ratings, avoid biases (maintaining anonymity during the rating period) and will keep bad
 actors out of the game.
- Raters will get Skyllz Tokens (SKT) in exchange for their ratings.
- Skyllz Tokens (SKT) will allow to access to the services of any STapp on top the SDP.

The 7 Rules Of The SDP

1. **The Meritocracy Rule:** Skyllz is designed to exclusively empower people based on their exceptional abilities and talents. It aims to allow any person, no matter its gender, race, country of residence, or social, economic and education background, to access, improve and develop its inner potential without external limitations.

2. The Distribution of Power Rule:

Qualifier Power: 3+ anonymized ratings from different Raters are needed to resolve the overall rating that triggers the smart contract(s) that allocates Proof-of-Skill to a pre-specified skillset and, if appropriate, transfers SKT to the user.

Decision-making Power: working in tandem with the Meritocracy Rule, all crucial decisions that directly impact the Skyllz ecosystem such as, but not limited to, its partners, its Raters and its next milestones and governance will be decided by Proof-of-Skill holders along with SKT holders in a decentralized voting system.

Data Ownership Power: Disrupting monopolization of data ownership, all the data related to Proof-of-Skill and Skyllz Tokens transactions are publicly accessible. STapps are welcome to design profitable business models around the data but cannot lock or restringe the public information to themselves.

- 3. **The Unbiased Rule:** Users and Raters need to remain anonymous during the Rating Period to avoid biases and possible corruption of the validation system.
- 4. **The Inter-connected Impact Rule:** The whole ecosystem is intended to create and extract value from the collaboration between all agents. Only solutions that also have a positive impact for the ecosystem as a whole will be accepted.
- 5. **The Transparency Rule:** Every new skill or skillset created, and any annotation or update of Proof-of-Skill and SKT transaction is recorded and publicly accessible by anyone, avoiding data ownership by centralized institutions.
- 6. **The Positive Achievement Rule:** Skyllz wants to create a universal and evolving Human Skills Ecosystem that replaces CVs based on individuals' capabilities and potential. The SDP only tracks positive achievements of their users to incentivize shareability. It will never store under-qualifying performance.
- 7. **The Game-changing Rule:** Every solution, feature or improvement on the SDP or the Skyllz ecosystem as a whole, should focus on innovation and adaptability to the market and the society needs.

From A Competitive Landscape To A Co-operating Landscape

Bearing in mind that blockchain and smart contracts are extremely recent technological developments, competition in the field of tokenization of talent and knowledge is scarce. Existing players – first movers – find themselves in the earliest stages of technology deployment and product/market fit tests.

Nevertheless, the following graph maps a broad array of established "old school" and tech-based players in the learning-recruiting-talent management industries, with the aim of showing a broad scope of direct and indirect competition.

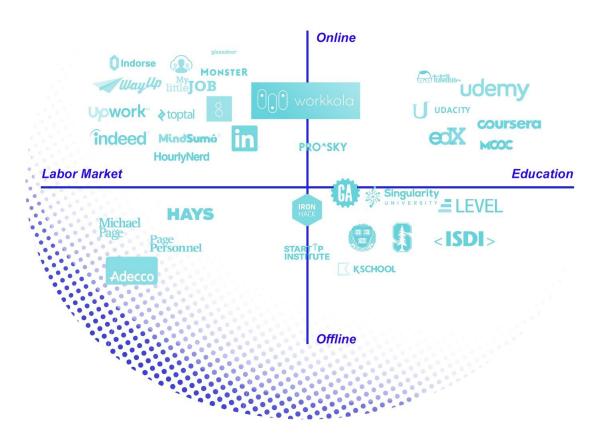


Figure 5: Current competitors landscape in Talent Industry

The competitors landscape is composed by a wide variety of different solutions (Workkola among them) that try to "fight alone" to find and propose to the world the perfect solution.

Skyllz moves forward and see all this competition as a big opportunity for potential partners towards the Skyllz vision of universalization and distributed management of talent acquisition and recognition ("One *protocol* to rule them all" -- adapted from the Lord Of The Rings Prologue).

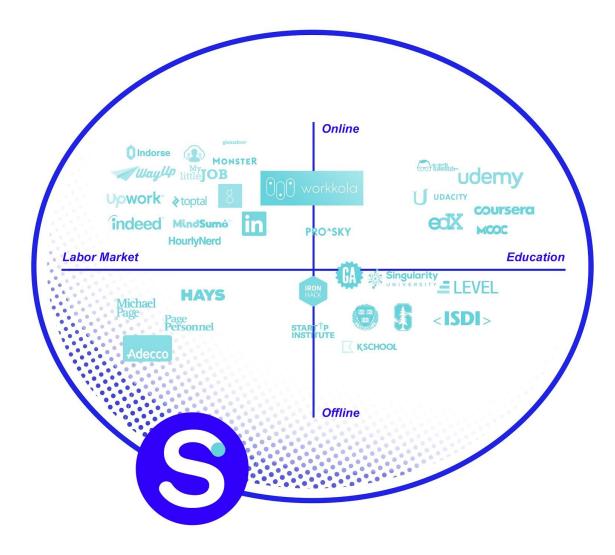


Figure 6: "Co-ompetitors" landscape within Skyllz

4. Proof-of-Skill (Skyllz Reputation)

The **Skyllz reputation**, called **Proof-of-Skill**, is the backbone of the Skyllz Distributed Platform and the Skyllz ecosystem. It is **non-tradeable and traceable**, and handles the attribution of reputation to specific skills and skillsets that a user possesses directly on the **Ethereum Blockchain**.

Once the requirements of the smart contract are met on a STapp, a variable amount of Proof-of-Skill (depending on the overall resolved rating by the Raters) is **attributed to the specified skill evaluated**.

This amount of Proof-of-Skill is **updated** by the smart contract(s) on the associated skill of the user's **Ethereum address** (annotation on its address).

Proof-of-Skill works as reputation and, as a result, is **cumulative without any predefined cap**.

A talented individual will perennially have the evidence of his/her skill proofs through annotations on the Ethereum blockchain covering a broad palette of skills, e.g.: business development, coding (languages x, y, z,...), community management, leadership, conceptual thinking, etc.

5. The Skyllz Token (SKT): Fueling The Skyllz Distributed Platform

The Skyllz Token (SKT), an ERC-20 compliant utility token, enables users to access and transact on the SDP. They serve as units of account that enable users to participate and get validations of their skills on or across any application of the ecosystem.

SKT is a utility token of **fixed supply** that can be integrated into applications as the **transactional layer of value**.







Figure 7: Skyllz Token main features

Why SKT Needs To Exist To Fuel The SDP?

The SKT aims to fuel the economy and operations of the ecosystem maintaining its decentralized and cross-platform core functionalities. It allows the SDP to **include and reward the**

community of Raters (they get SKTs in exchange for their ratings) to comply with the Distribution of Power Rule and the Unbiased Rule, and to support the Inter-connected Impact Rule and the Positive Achievement Rule.

To have a **supra-platform token** is necessary to attract current and future applications and to allow Inter-connected Impact Rule among the ecosystem. SKT is the **"gas" of the SDP**, and is the **common and exclusive token** to **get validations and exchange value** on the SDP.

Users can also gain SKTs as a reward of **exceptional quality or performance** in any STapp on top of the SDP, empowering self-development and complying with the Meritocracy Rule.

SKTs will be exchanged for the STapps main services (e.g. accessing to online courses on Udemy, sponsored challenges on Workkola, or premium features on Linkedin).

Strategically, a percentage of total issued Skyllz Token will be allocated to early ignition of the first STapps on top of the SDP and to reward early-adopter STapps.

The Skyllz Token (SKT) is mainly a utility token that will be exchanged between STapps, Users and Raters within and across STapps on top of the SDP.

SKT: Usage And Utility

The Skyllz Token (SKT) is a multi-purpose tool for the SDP needed to create and maintain the SDP structure, its business model and help maximize all STapps' business models within the ecosystem.

As William Mougayar points out, there are three tenets to token utility and they are:

- Role
- Features
- Purpose

Mougayar designed a table that helps classify and summarize token roles with they own set of features and purpose.

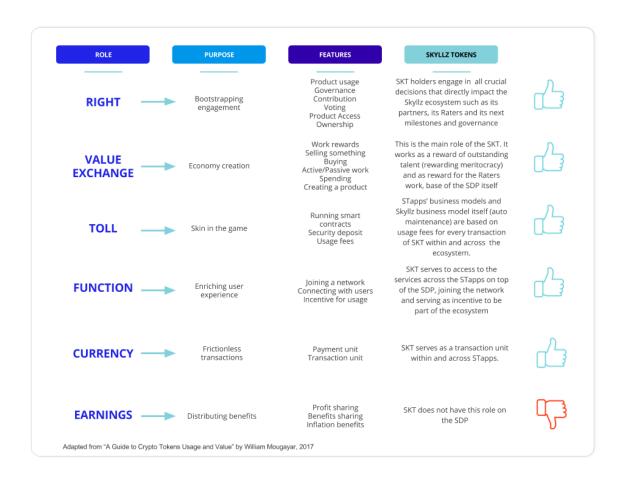


Figure 8: SKT Usage and Value.

6. Workkola: The first STapp on the SDP

Workkola, as a proven ecosystem already working, offers the best opportunity to take the lead to be **the first STapp on the SDP**; while helping to **test, debug and secure** the SDP features.

How The SDP Adds Value To Workkola And Workkola Adds Value To The SDP

Workkola's current application focuses on a very specific niche: digitally-skilled students from higher education that want to gain relevant experience and build their Talents Brands. After hundreds of experiments during the last two years to measure talent and marketing it, its growing community and its agility make Workkola the perfect agent to **test, debug and consolidate the standards of the SDP and the SKT.**

Tokenization of Workkola operations through the Skyllz ecosystem will scale up and fuel the current platform as well as the whole Skill Ecosystem.

- It will help **redefine talent assessment**, **skills certification and distribution of talent**, adding an immutable layer of certification.
- **The Raters community** will help transform Workkola into a more scalable, fair and transparent platform where meritocracy and decentralization govern.
- **The basis of the SDP** will help Workkola become a part of the natural replacement of old CVs thanks to the Proof-of-Skill, the track record of exceptional achievements and the metrics about users.
- It will help users' **hidden talents get out from the noise**, no matter who you are, your gender, your economic situation or your place of birth.

Operations, SKT, and Proof-of-Skill dynamics within the Workkola STapp are summarized in the following diagram:

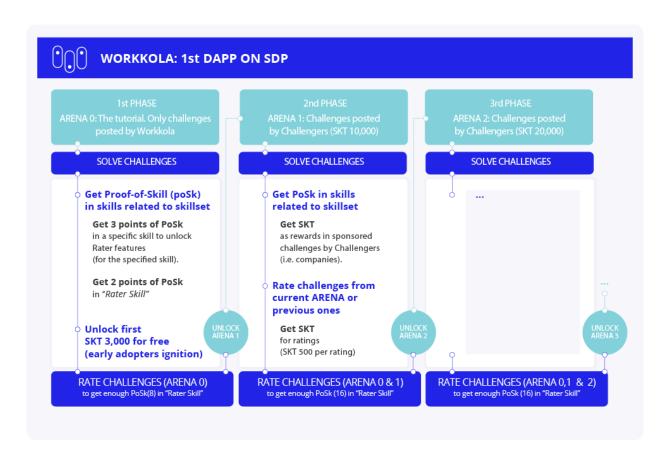


Figure 9: Workkola, the first STapp on top of the SDP. Customer journey diagram

Main elements and stakeholders:

Talents: Talents are the users on the Workkola STapp that want to **validate specific skillsets.**

Challengers: A Challenger is a user (mainly companies, professionals or educators) that posts a **problem to be solved** by the community of Talents. A Challenger has 2 main reasons to post a challenge:

- -They need **help or support** in a specific area (Open Innovation channel)
- -They want to open an **Inbound Scouting channel** to get in touch with the members of the community in order to discover and recruit or sponsor the most talented ones.

Challenges: They are the backbone of the Workkola application. **Problems to be solved to validate specific skills.** Resolving a Challenge, once the rating is resolved, triggers the actualization of a certain amount of **Proof-of-Skill to the associated skills** and, if appropriate, the transfer of a **certain amount of SKT** from the Challenger's wallet to the Talent's. There are 2 different types of Challenges:

- -Free Challenges: posted by Workkola on the Arena 0 (the tutorial Arena) to educate users. They don't trigger SKT transfers. They trigger Proof-of-Skill.
- -Sponsored Challenges: posted by Challengers on Arena 1 or greater. They trigger Proof-of-Skill and SKT transfers (depending on the Arena level posted)

Arenas: Based on gamification principles, Workkola as a STapp on the SDP will be composed by Arenas. Arenas are **internal in-app scenarios where users can access to Challenges** posted by Workkola or Challengers.

-Arena 0 (tutorial Arena): This arena works as a tutorial of the dynamics of the STapp and the SDP. It is designed to make Talents learn how the application and the token exchanges work, and how the Raters system and the Proof-of-Skill benefit their automatic track record of exceptional performance empowering their Talent Brands. No SKT are transferred in this Arena.

-Arena 1 or greater: Similar to Arena 0 but with Sponsored Challenges posted by Challengers. The level of the Arena is related to the difficulty of the Challenge and the rewards in SKT associated to the resolution of the Challenges. Proof-of-Skill and SKT are transacted in these Arenas.

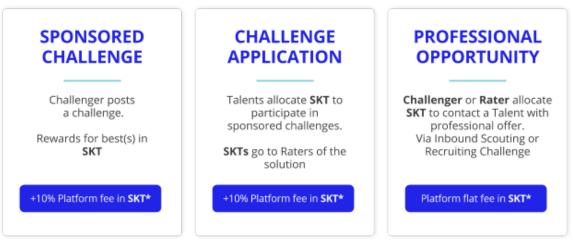
Raters: A Rater is an experienced user in a certain skill that validates other users' skills assigning ratings to them that help to resolve the smart contracts that assign Proof-of-Skill and SKT. Any user could become a Rater for a specific skill after earning enough Proof-of-Skill in them. Raters are cross-platform (check chapter Raters). The first Raters on Skyllz for the Phase I & II (SDP beta limited to Workkola) will be current users with enough Proof-of-Skill on a specific skill.

Business Model

Skyllz Distributed Platform (SDP) allows itself and the STapps on top of it (such as Workkola) to create value-- **impactful and economic value.**

The exchangeable utility ERC-20 token SKT (Skyllz Token) allows exchange of value across the SDP (Skyllz Distributed Platform) and within each Application on it. SKT is thought to help each application build its own internal business model around it and also between all applications to assure value distribution and connection all over the ecosystem.

As the first Dapp on top of the SDP, Workkola's business model is a **transaction fee revenue model** in SKT when a sponsored challenge is posted (by a Challenger), a solution is submitted (by a Talent), and a professional opportunity is matched between a Talent and an employer.



^{*}This fee is for the platform that builds its solution on top of the SDP and could be set by any platform that brings its own solution.

Figure 10: Workkola's business model on top of the SDP

Early Ignition: Go-to-market Strategy

During Phase I of the Skyllz project (see Roadmap), Workkola's adoption to the beta version of the SDP will help test the standards, rules and flows. It will also help to debug and fix possible problems that could appear and are still unknown, before opening the SDP to the World.

Using its already working community and solution is a plus in order to quickly get ignition.

A **1-to-100 conversion from current Workkola points to SKT** will be done during Phase I (around 25,000 points have already been assigned on current Workkola platform, SKT 2,500,000 will be allocated to them).

30% of total Skyllz Tokens issued (SKT 480,000,000) will be reserved for early ignition of the Skyllz Ecosystem with the idea of reaching critical mass (500,000 users).

In Phase I and II, the Go-to-Market Strategy will depend on current Workkola's Growing channels:
-Social Media Ads (Mainly Instagram and Facebook Ads → Average combined Talents CAC in Q4
2017: \$0.93)

-Community management

In Phase III, once the SDP is open to the World, the main Go-to-Market strategies for Skyllz will be:

-Attracting the firsts big STapps to the SDP -- 7.5% of SKT issued are reserved to incentivize early-adopter STapps.

- e-learning platforms such as Udemy, Cousera, EdX, MOOCs or Udacity
- online portfolios such as Github, Dribbble or Behance
- **networking platforms** such as Linkedin or Meetup
- **job platforms** such as Indeed, Monster or Glassdoor
- Offline learning such as General Assembly, Singularity University, Harvard or Stanford
- -Targeting developers and entrepreneurs communities and platforms
 - **Entrepreneurs and startups** from platforms such as F6S, Angel List and Gust, accelerators such as TechStars, StartupBootcamp, 500 Startups and Y Combinator, and communities such as Online Geniuses and BAMF
 - **Developers** from platforms such as Github and Bitbucket
- **-Community network effect**: In Phase III, the SDP will be completely open source and public attracting more contributors and game-changers to the protocol.

7. Use Cases

<u>Use Case 1: Non-sponsored Challenges On Workkola (Arena 0)</u>

New user account creation & submission (Talent)

Jane is a digital marketing student from South Africa that wants to launch her career and needs some **valuable experience and validations** on her digital marketing skills to be **ready for the labor market**.

She **creates an account** (her Ethereum Address) on Skyllz via Workkola. During this account creation she **connects her wallet** (if she already has one) via integration with external applications such as Metamask or **creates a new one with the support of Skyllz**. This **Ethereum Address acts as Skyllz ID and wallet among all STapps on top of the SDP.**

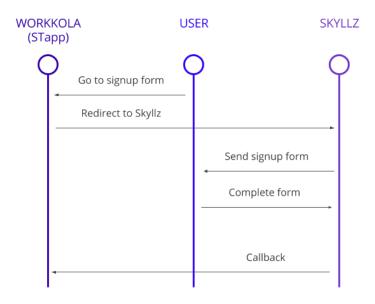


Figure 11: Workkola's signup flow using skyllz.io

During the account creation/connection, some identity information such as email or name is annotated on her Address.

Workkola lists on Jane's Dashboard a couple dozens **challenges** from Arena 0 available for her.

Once a **Challenge has been submitted**, the data is analyzed, hashed and stored in Workkola's database in order to be sent to the **smart contract of the Challenge** via API once requested by the Raters (oracles). If approved by the smart contract, the hashed key will also be **stored on the blockchain** with the resulting **Proof-of-Skill** via annotation.

Workkola also stores the data related to the solution submitted and the hashed key in its database.

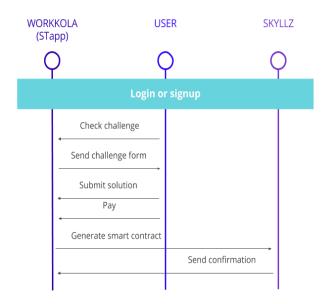


Figure 12: "Submitting a new solution to a Challenge" flow on Workkola using skyllz.io

Raters qualify submissions

Marc, a London-based **online marketer** and **level 1 Digital Marketing Rater from Skyllz**, needs to gain **extra Proof-of-Skill on his "Rater Skill"** before being able to get rewarded with SKT every time he does a rating. Marc sees Skyllz as an incredible opportunity to **bring value back to the community**, **get some prestige** before making his next professional move and, during the meanwhile, **get some extra incomes**.

As everyday, Marc checks his **Rater Dashboard** on Skyllz or his favourite STapp (such as Workkola).

Skyllz API connects all data saved on his timeline and all the **available-for-rating opportunities in every STapp** that meet his level are shown in real time.

He sees that a challenge has just been submitted by an anonymous Talent on Workkola (you got it, it's Jane!) and it still requires 1 more rating to be resolved (it already has been rated by 2 different Raters which ratings remain hidden until the Rating Period ends). To be able to rate level 0 submissions, Marc needs to **allocate 2 points of Proof-of-Skill of his "Rater Skill"** to his **rating**. This means that, if he rates the submission as "not qualified" and the other 2 Raters rate the same submission as "qualified", he will lose the 2 points of Proof-of-Skill on escrow in the Smart Contract. However, Raters that coincide on their rating get their reputation points back

and earn 50% more Proof-of-Skill on their "Rater Skill". This helps the **ecosystem prevent from long-term bad actors or random ratings**.

He clicks on "Rate this" and the Challenge is automatically assigned to him as the third Rater.

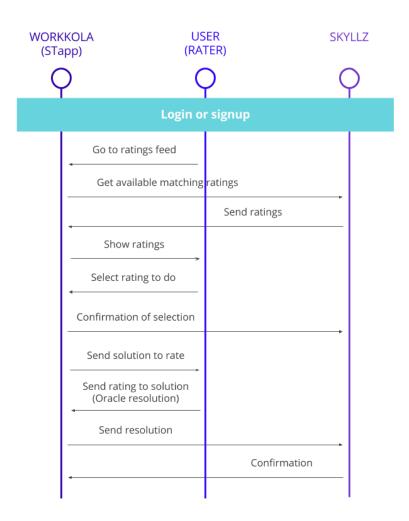


Figure 13: Rating flow from a Rater on Workkola using skyllz.io

After reviewing it, he decides to rate the Challenge with a "qualified", and decides to assign 1 point of Proof-of-Skill to Jane's Digital Marketing skill (Jane is still in stealth mode). In addition, he writes some feedback to improve quality and gives a special recommendation to the Challenger.

Raters act as oracles between STapps and the Smart Contracts. With the third rating, the Rating Period ends, and the Resolution Period starts where Skyllz resolves this action as a result of 3 Raters' ratings.

The Challenge is resolved as "qualified" and Jane receives the assigned-by-the-Raters amount of Proof-of-Skill in each of the skills related the Challenge complete.

Resolution of submission & blockchain storage

For both Jane and Marc, the hashed keys (Challenge hashed key for both) along with the user's wallet and the acquired Proof-of-Skill amount are **stored on the blockchain**, via Skyllz Smart Contract that will **update the resulting Proof-of-Skill amount** in each of the user's skills (Digital Marketing Skill for Jane and Rater Skill for Marc), directly on his address.

Use Case 2: Sponsored Challenges on Workkola (Arena 1+)

Challenger (a company) posting and Talent application

A sponsored Challenge is a Challenge that a Challenger such as a **company**, **an institution/educator or another user** posts. These Challenges associate **Proof-of-Skill and Skyllz Tokens (SKT)**, if approved, once **resolved**.

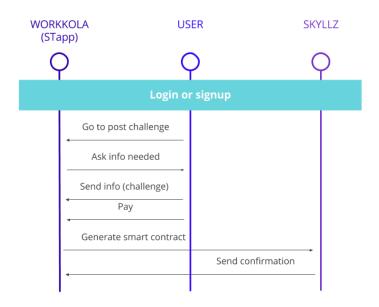


Figure 14: Challenger posts a new Challenge on Workkola using skyllz.io

When a Challenger posts a **new Challenge**, a **new Smart Contract is created**. The Smart Contract, via oracles (Raters), **governs the qualification**, **attribution and allocation of Proof-of-Skill (always) and SKT (in the case of sponsored Challenges only)**.

The Challenger decides:

- How many SKT are going to be associated as rewards for the Talents
- The **rules of distribution** of those SKT (i.e. the best Talent earns 100% of SKT; or 50% of the SKT for the best, 35% for the 2nd, 15% for the 3rd)
- **How long** is the Challenge going to be available for new submissions (i.e. during 1 month, unlimited Talents can submit a new solution)
- **How many Raters** per submission they want to work with (3 by default)

A small startup team needs help with its online marketing to launch a special campaign to promote their platform. None of them is an expert in digital marketing and they need help. They post their Sponsored Challenge on Workkola that will be available for the next 15 days. They decide to reward the best solution with SKT 9,000 (Arena 1: SKT 10,000 - 10% platform fee).

Sponsored Challenges serve as well as **Inbound Scouting channels** for companies that want to **discover and attract young and vetted talents**. They will be able to discover **hidden talents** attracting them with their proposed challenges and rewards.

Talents submit their submissions

The experience and the technology is very similar to how Talents submit their solutions for the non-sponsored Challenges.

The biggest difference is that Talents need to **spend a certain amount of SKT** (depending on the Arena) to complete Sponsored Challenges. This gives them the possibility to **get the rewards proposed by the Challenger** and **guarantees that at least 3 Raters** will rate their submissions and will **validate and assign Proof-of-Skill**, if appropriate, to the skills associated.

Once a **Challenge has been submitted**, the data is analyzed, hashed and stored in Workkola's database in order to be sent to the **smart contract of the Challenge** via API once requested by the Raters (oracles). If approved by the smart contract, the hashed key will also be **stored on the blockchain** with the resulting **Proof-of-Skill** via annotation.

Workkola also stores the data related to the solution submitted and the hashed key in its database.

Raters qualify submissions

Like in the non-sponsored Challenges, Raters rate the submissions of Sponsored Challenges.

A Sponsored Challenge is associated to a level (depending on its Arena) and can be rated just by **Raters from the same level or higher**, if they possess the **necessary amount of Proof-of-Skill** in their "Rater Skill" and in the skill or skillset related to the Challenge to rate.

Raters get SKT, as well as Proof-of-Skill in their "Rater Skill", in exchange for their ratings on Sponsored Challenges. The amount of Proof-of-Skill and SKT earnt by rating depends on the level of the Challenge.

Technologically, the Rating Period for a Sponsored Challenge works exactly the same than the Rating Period of a non-sponsored Challenge.

Resolution of submission & blockchain storage

Like non-sponsored Challenges, the hashed keys along with the user's wallet and the acquired Proof-of-Skill and the reward amount in SKT are stored on the blockchain, via Skyllz Smart Contract for Sponsored Challenges as well. The **Smart Contract will update the resulting amount of Proof-of-Skill** in each of the user's skills (for Talents and Raters) and transfer the resulting amount of SKT between users (Talents, Raters and Challenger), directly to their addresses.

Use case 3: Partner STapp on top of the SDP: E-learning platform

An **e-learning platform** has been accepted to Skyllz and has embraced the SDP.

An existing user from the e-learning, Rose, **connects her account to Skyllz** (similar to social login) and adds her Ethereum address through third-party applications such as Metamask.

This connects **current users** from the STapp (the e-learning platform) and **new users** to the Skyllz ecosystem and technology.

Rose wants to **shift her career**. She has already completed some other actions on other STapps and has **Skyllz tokens (SKT) in her wallet**. She decides to take a new course about PHP development on the e-learning platform. She "pays" for the course **with the SKT she already** has, empowering **meritocracy across applications** and a **supercharging the whole user experience in the ecosystem**.

This course is a beginner course (level 0 on Skyllz), has 10 modules and each of them has a final project as exercise proposed by the course.

To complete the course, Rose needs to solve each of the projects proposed. Each exercise is associated to a Skyllz Smart Contract and can assign Proof-of-Skill to the skills associated.

Once submitted, the data is analyzed, hashed and stored in the e-learning's database in order to be sent to the **smart contract of the Course** via API once requested by the Raters (oracles). If approved by the smart contract, the hashed key will also be **stored on the blockchain** with the

resulting **Proof-of-Skill** via annotation.

To be qualified to assign Proof-of-Skill, the exercise has to be rated by 3 Raters in an

anonymized way, similarly to the use case 1.

Once resolved, the hashed key of each exercise along with Rose's wallet and the acquired Proof-of-Skill are stored on the blockchain, via Skyllz Smart Contract. The Smart Contract will update the resulting amount of Proof-of-Skill in each of Rose's and Rater's skills, directly on

their addresses.

8. Technology Overview

Decentralized Proof-of-Skill: Why Blockchain?

Blockchain is a type of distributed ledger or decentralized database that keeps records of digital transactions. Rather than having a central administrator like a traditional database, a distributed ledger has a network of replicated databases, synchronized via the Internet and visible to anyone within the network. Blockchain networks can be private with restricted membership similar to an intranet, or public, like the Internet, accessible to any person in the world. When a digital transaction is carried out, it is grouped together in a cryptographically protected block with other transactions that have occurred in the last period and sent out to the entire network. Miners (members in the network with high levels of computing power) then compete to validate the transactions by solving complex coded problems. The first miner to solve the problems and validate the block receives a reward. The validated block of transactions is then time stamped and added to a chain in a linear, chronological order. New blocks of validated transactions are linked to older blocks, making a chain of blocks that show every transaction made in the history of that blockchain. The entire chain is continually updated so that every ledger in the network is the same, giving each member the ability to prove who owns what at any given time." (How does the Blockchain Work? | Collin Thompson).

28

Proof-of-Skill as a concept only makes sense if it is publicly accessible by anyone who needs it, reaching its maximum potential when **trustworthiness and immutability** play together to ensure that you are **capable to track and share your skills**. Those characteristics are inherent to Blockchain technology and become a fundamental part of the Skyllz ecosystem, values and mission.

But, would it make sense to track negative experience on the Blockchain as well as to penalize "bad" users?

No. All individuals are **unique** and have something that makes them **valuable to someone** and to something. In addition, sharing is part of the human being. **Social recognition, status and esteem** is received as a consequence of displaying certain characteristics, reaching certain achievements or engaging in certain activities.

To really become a global solution, Proof-of-Skill should be **shareable**. Every person has something to be proud of and that's the only thing that should be tracked forever, in an immutable way. That's why Skyllz believes in **positive human skills** and only records exceptional achievements on the blockchain.

The Skyllz Distributed Platform: Why Ethereum Protocol And Smart Contracts?

Ethereum is an open blockchain that works as a decentralized computer. It allows the execution of smart contracts. **Smart contracts** help you exchange anything of value in a transparent, conflict-free way while avoiding the services of a middleman. Smart contracts not only define the 10 rules and penalties around an agreement in the same way that a traditional contract does, but also automatically enforce those obligations.

The SDP's main value is provided by the standardization and unification of human skills' assessment, validation and empowerment. To provide the ecosystem with a distributed and automated enabler of the 7 principles, and to become the **easiest and the most attractive global solution to unify skills validations**, the Ethereum Blockchain and the smart contracts are the perfect scenario to build Skyllz.

SKT: An ERC-20 Compliant Token

One of the most significant token standards of all for Ethereum is called ERC-20.

ERC-20 defines six different functions for the benefit of other tokens within the Ethereum system. These are generally basic functionality issues, including how tokens are transferred and how users can access data about a token. ERC-20 also prescribes two different signals that each token takes on and which other tokens are attuned to.

Put together, this set of functions and signals ensures that Ethereum tokens of different types will typically work the same in any place within the Ethereum system.

As part of the Ethereum Network, Skyllz will issue a fixed amount of Skyllz Tokens (SKT) to fuel the ecosystem, and allow meritocracy (the Meritocracy Rule) across its applications.

Security

The Skyllz Distributed Platform along with Proof-of-Skill, Skyllz Tokens and the Skyllz APIs will incorporate all the necessary security mechanisms that guarantee the protection of its users. All connections, both web and mobile, will be encrypted using the HTTPS protocol with a TLS certificate. The architecture of the system will prevent any application, both internal and from third parties, from attacking critical elements, such as the database (which is directly stored on the Ethereum Blockchain), or processing critical actions. The communication API between STapps and the Skyllz Smart Contracts, critical elements in the SDP, will be designed so that all internal calls are secured by secret dynamic keys that limit operations only to verified systems. Additionally; communications between the other components will be similarly secured with hashed keys.

Open-source Application Programming Interface (API)

Skyllz APIs (skyllz.io), the service layer of the SDP, connects STapps with the token and blockchain layers.

The SDP's end state aims to be a universal, standardized software development framework for creating, adapting or connecting STapps that can bring and get value from the ecosystem. Skyllz.io adds an abstraction layer to the SDP to make it more developer-friendly and accessible to more entrepreneurs and game-changers, even if they are not totally familiarized with blockchain technology but see the potential of the Skyllz ecosystem.

Some examples of API endpoints for /api/v1 are:

endpoints	POST	GET

/contract	The STapp requests the creation of a new smart contract associated to a specific submission (e.g. new Challenge on Workkola) with the necessary requirements of data structure from the SDP	The STapp retrieves the list of smart contracts with a valid blockchain query
/submission	-	The oracle requests the matching submissions from all STapps available for him
/submission/{id}	-	The oracle requests a specific submission to access and rate a specific submission.

Raters: The Oracles

An oracle, in the context of blockchains and smart contracts, is an agent that finds and verifies real-world occurrences and submits this information to a blockchain to be used by smart contracts.

Smart contracts contain value and only unlock that value if certain predefined conditions are met. When a particular value is reached, the smart contract changes its state and executes the programmatically predefined algorithms, automatically triggering an event on the blockchain. The primary task of oracles is to provide these values to the smart contract in a secure and trusted manner.

Blockchains cannot access data outside their network. An oracle is a data feed – provided by third party service – designed for use in smart contracts on the blockchain. Oracles provide external data and trigger smart contract executions when predefined conditions are met. Such condition could be any data like weather temperature, successful payment, price fluctuations, or **overall "qualified" rating** in the Skyllz ecosystem.

Raters are the oracles for the SDP and are part of multi-signature contracts where some amount of Proof-of-Skill is assigned to a user for a specific skill, or a predefined amount of SKT is transferred from users if some conditions are met. Before any Proof-of-Skill or SKT get released a Rater has to sign the smart contract as well.

To maintain the quality of the community of Raters and get bad actors out of the game, a "rater" skill is created on the SDP. Any user with the role of Rater, can earn and lose Proof-of-Skill related to this skill. While rating, the Rater allocates some Proof-of-Skill of his/her

rater skill to the smart contract he/she wants to solve. This amount of Proof-of-Skill endorses

the rating. When the Rating Period ends, and the smart contract is resolved by the overall rating

of all Raters (at least 3), the Rater gets the amount of Proof-of-Skill back plus 50% extra, if his

decision of qualifying or not is aligned with the majority. If not, the Rater loses the

Proof-of-Skill betted.

9. The relevance of UX

The Problem Of Blockchain: Disappointing UX

Blockchain technology is still in a very early stage. Some experts like William Mougayar talk about

Blockchain 1.0 making reference to web 1.0.

The extremely demanded security required to run Blockchain applications along with the

product-orientation and not customer-orientation of most of the emerging blockchain

companies, are causing some big issues of User Experience.

The overhyped buzz around technology itself and the absence of track record in the space are

also the main reason why solutions built on top of Blockchain have pretty much a disappointing

UX.

Heading Up Mainstream

Even if the cryptocurrencies are getting mainstream due to a gold rush, the technology behind

them, Blockchain, will never be mainstream if they don't put the final user at the center of

the project.

Skyllz was born from an existing platform, for an existing and proven problem, and after working

very hard on understanding what people really need and what really moves them. People

don't care about how Blockchain works, at all. They don't want to know how oracles, protocols,

cryptography, mining, etc. work. They only want to solve their problem in the simplest and more

effective way. Blockchain is an incredible tool to build amazing solutions, but the really important

thing is the solution itself. Nothing else.

32

Workkola's team, the team behind Skyllz, understands that Skyllz needs to put **humans in the very center of its solution**, building **from the problem to the product** and not the opposite.

UX is extremely important to get mainstream, and mainstream is needed to build a **global solution**. Even if the technological complexity of the project is high, and the technology behind is critical, Skyllz' team will work very hard to make it invisible to the end users. To start building a **Blockchain 2.0 solution**, closer to the real need of disrupting traditional talent assessment.

10. Skyllz Roadmap

Skyllz roadmap is mainly divided in 3 main phases:

- Phase I: Skyllz protocol development and deployment: the SDP and SKT
- **Phase II:** Skyllz Beta in a controlled and closed ecosystem. Adoption of Workkola to the protocol as the first STapp on top of the SDP.
 - Early ignition + model testing + debugging + use cases + security reinforcement
- Phase III: Skyllz v2 release. Opening the protocol to third parties.
 Allocation of a 7.5% of total issued SKT to finance further developments or adoptions of STapps to the SDP. Early ignition of the ecosystem.

General Roadmap Workkola (Past) + Skyllz (Present And Future) Milestone





Figure 15: Workkola + Skyllz Roadmap

Previous steps (Workkola)

- 1. **Harvard Pilot | Summer 2015:** Without platform, we did a proof of concept in a class at Harvard and a group of international startups in Boston, USA.
- 2. **Alpha release** | **Dec. 2015**: First version of the Workkola's platform based on the Harvard results.
- 3. **Incorporation | Jan. 2016:** Workkola, Inc a Delaware C-Corp.
- 4. **Beta release** | **June 2016:** New release with a new and better focus after the feedback and results of the Alpha version. First paying customers: startups.
- 5. **Startup Bootcamp acceleration program | Nov. 2016:** Selected to be part of 2016-17 SBC's batch of startups in Barcelona. Inflexion point.
- 6. **Full version release | May 2017:** New and enhanced version of Workkola's platform. New UX, features and focus on Talent Branding of users.
- 7. **Seed Round | June 2017:** Closing of Workkola's seed financing round. EUR 250K with investors from Spain, UK, Hong Kong and Estonia.

Next Steps (On-going operations by Workkola + Launch of Skyllz by Workkola)

1. **Skyllz Distributed platform and Skyllz Tokens beta release** | **Q4 2018:** The first version of SDP will be open source but limited to the 1st STapp on top of it (Workkola) to test, iterate and debug the whole protocol. Launching a private and controlled beta will help solve technical but also security problems that we even don't know today. This version will content the v1.0 of the Human Skills Ecosystem and will set the standards of the Skyllz rules of certification, decentralization, meritocracy and transparency as well as the standards of attribution of Skyllz Tokens (SKT).

- 2. **Workkola's adoption to SDP and SKT | Q4 2018:** Adoption of Workkola's platform to SDP and SKT. Workkola will be the 1st STapp on top of the SDP, and current users will get converted current points to Skyllz Tokens (SKT). Having the first Dapp as a private beta will help us test the SDP in a controlled ecosystem. This period will be crucial to debug and secure the whole ecosystem.
- 3. **Full release of the SDP | Q1 2020:** After testing the SDP for a year in a private ecosystem, we will launch the full version of the SDP, totally decentralized, open source and prepared to get the first STapps (centralized and decentralized Skills Touchpoints Applications) adopting SDP and SKT. To fuel early ignition of these first STapps, we will invest SKT on them on a token-holder-voting basis. All Skyllz and SKT holders will decide on a voting basis:
 - which STapps can build their solutions on the SDP
 - which skills can be added to the SDP
 - which STapps will get access to the partners' funds and how much SKT they will receive for early ignition

To bring value to the whole ecosystem and maintaining its decentralization.

11. The team

Workkola's team, the team behind Skyllz, started to design the future of talent empowerment back in February 2015 where, due to their personal struggle to access the labor market, they decided to change the game from the labs of the University of Málaga (Spain).

After closing the founding team, they were taken in by a **Boston incubator** (Dat Ventures) where they did a **pilot with a Harvard class** and a group of international startups during the summer 2015.

After the program, they came back to Spain and launched the **first alpha** of workkola.com in December 2015. They won several prizes from the University and an entrepreneurship program from the biggest bank in Spain and Latin America (Yuzz from Banco Santander).

After six months (June 2016), they **launched their beta** and in November 2016 they moved to Barcelona to be part of the Startup Bootcamp acceleration program. In June 2017, they closed their **Seed Financing Round** of \$300k.

In 2017 Workkola has grown from the founding team to a team of 9 that combines the perfect skillset to have accomplished a **350% growth** of their community in 2017.

Founding Team



Álvaro Mancilla Moreno | CEO & co-founder

Entrepreneur-by-nature and comfort-zone breaker. Background in Marketing and Market Research. Obsessed with impacting the world through technology. Previously founded another startup (mappunto.com). 2.5+ years working at Workkola with the rest of the founding team.



Jesús Chacón Ávila | CTO & co-founder

Full-stack developer and blockchain developer. Background in Computer Sciences. And more than 2.5 years working at Workkola with the rest of the founding team.



Antonio Negrillo Román | CMO & co-founder

Marketing and growth hacking background. More than 2.5 years working at Workkola with the rest of the founding team.

The Team



Alejandro Jurado | Full-stack developer

Background in Electrical and Electronics Engineering and master degree in Web development. Patent pending owner;)



Giorgio Fidei | B2B Growth and Business Dev.

Background in Economics and Management, master degree in e-commerce. Self-taught growth marketer and B2B leads manager. Startups specialist.



Elsa Camí | UX/UI Designer

Background in UX and Bachelor in Arts. Previously working as UX designer at Techstars London, Startup Bootcamp Barcelona and headliner.io.



Rebeca Canal | Communication & Content

Background in Communication and Media. Former experience as graphic designer at Bimba y Lola (Fashion Brand) and as an entrepreneur.



Hugo Immink | HR & org. psychologist

Background in Organizational Psychology, Coaching and Leadership. Former HR manager at HCC Global and other HR companies. Professor at EADA and professional coach.



Brice Chalopet | Senoir Lead Generation

Background in Marketing and Business development. Former Facebook account manager in Ireland (6 years)

Advisory Team



David Riudor | Blockchain Advisor

Background in Telecommunication engineering. Blockchain technical expert and entrepreneur. Formerly part of Real Markets (REAL) Team (blockchain-based real estate investing platform)



Carlos Rodríguez | Blockchain Advisor

Background in Telecommunication engineering. Full-stack and blockchain developer. Entrepreneur. Formerly part of Real Markets (REAL) Team (blockchain-based real estate investing platform)



José Luis Minguez | Advisor

Business Angel (top 100 BA influencers in Spain). Blockchain enthusiast, geek and Investor. Mentor at different Startups accelerators and partner at different VC Funds.



Álvaro Villacorta | Advisor

Serial entrepreneur. Sold his company to Rocket Internet. Former Rocket Internet Managing Director (Foodora). Startup Investor and founder of a Tokenized VC Fund.

12. Partners & Current Investors



Icofunding

Online platform to launch and promote crowdsales of tokens. Experts in ICO smart contracts and ICO governance

likido

Likido Fund

Cryptofund that tokenize and invest in startups' token sales.

Startupbootcamp

Startup Bootcamp

Global acceleration program for disrupting companies with offices in more than 16 different countries.

Avenida Capital

Avenida Capital

Family office based in Madrid, Spain



Contriber

Investment fund from Estonia.



Tom Horsey

Business Angel



María José Céspedes

Business Angel

13. Conclusion

It is clear that we are facing a new phase in the digital revolution. **Moving from the Internet of the information to the Internet of value** opens an incredible set of opportunities to fix and improve inefficiencies in every industry.

It is also known that Talent, with capital "T", is the **most important asset** that companies but also individuals possess. It is the number one factor in personal and professional success and it enriches every human being no matter where you were born, your race, gender, thoughts or background. **Everybody has Talent and this makes us unique and incredibly valuable**.

But the Talent industry is still **underdeveloped**, suffering of **huge inefficiencies and inequalities** and **getting obsolete** in this new world of fast-paced evolution.

The best companies in the world don't care about degrees or old-fashioned diplomas anymore. They even don't care about what you say you know. They only want to see **what you are really able to do and accomplish**.

Skyllz's mission is to become the biggest **unified Skills Validation Ecosystem** disrupting the current, outdated and inefficient talent assessment. We believe in technology as an enabler and booster of **why**, **how and what your real Talent is**, and we focus on **meritocracy**, **transparency and positiveness**. No matter your external conditions, Skyllz helps you develop and empower your **real Talent**, making it **traceable**, **valuable and shareable** to get the most of it.

Because Skyllz is the limit.

14. Legal considerations – disclaimer

Legal Disclaimer

The purpose of this White Paper is to present the Skyllz by Workkola project to potential token holders in connection with the proposed Token Launch. The information set forth below may not be exhaustive and does not imply any elements of a contractual relationship. Its sole purpose is to provide relevant and reasonable information to potential token holders in order for them to determine whether to undertake a thorough analysis of the company. Nothing in this White Paper shall be deemed to constitute a prospectus of any sort or a solicitation for investment, nor does it in any way pertain to an offering or a solicitation of an offer to buy any securities in any jurisdiction.

This document is not composed in accordance with, and is not subject to, laws or regulations of any jurisdiction, which are designed to protect investors.

Certain statements, estimates and financial information contained in this White Paper constitute forward-looking statements or information. Such forward-looking statements or information involves known and unknown risks and uncertainties which may cause actual events or results to differ materially from the estimates or the results implied or expressed in such forward-looking statements.

This English language White Paper is the primary official source of information about the SKT Token Launch. The information contained herein may from time to time be translated into other languages or used in the course of written or verbal communications with existing and prospective customers, partners etc. In the course of such translation or communication some of the information contained herein may be lost, corrupted, or misrepresented. The accuracy of such alternative communications cannot be guaranteed.

In the event of any conflicts or inconsistencies between such translations and communications and this official English language White Paper, the provisions of this English language original document shall prevail.

Please note that Workkola is in the process of undertaking a legal and regulatory analysis of the functionality of its Skyllz Tokens (SKT). Following the conclusion of this analysis, Workkola may decide to amend the intended functionality of its Skyllz Tokens (SKT) in order to ensure compliance with any legal or regulatory requirements to which we are subject. In the event that Workkola decides to amend the intended functionality of its Skyllz Tokens, Workkola will update the relevant contents of this whitepaper and upload the latest version of this to its website.

Nevertheless, Workkola believes they have taken all commercially reasonable steps to ensure that its planned mechanics are proper and in compliance with currently considered regulations.

Important Note: As described elsewhere and in this White Paper, SKT Tokens are not being designed or sold as currency, securities or any other form of investment product.

Accordingly, none of the information presented in this White Paper is intended as a solicitation for investment, or to form the basis for any investment decision, and no specific recommendations are intended. Any interest in purchasing SKT Tokens should be solely for use in connection with the token's utility, as described in this White Paper, and not for any other purposes, including, but not limited to, any investment, speculative or other financial purposes.

15. Appendix

Mougayar Test

William Mougayar is an advisor to the Ethereum Foundation and to Consensus 2016, CoinDesk's flagship conference. He has proposed a set of questions to avoid obscurity around a Token and thus determine its functionality and prove its utility nature:

Every question answered as "YES" provides with 1 point out of 20.

1- Is the token tied to a product usage, i.e. does it give the user exclusive access to it, or provide interaction rights to the product?

YES. SKT is used in the SDP as a transaction unit to reward Raters, exceptional achievements and cross-platform economy.

2- Does the token grant a governance action, like voting on a consensus related or other decision-making factor?

YES. SKT along with Proof-of-Skill ponderates your voting rights for critical decisions making such as the entrance of a new STapp to the ecosystem or the creation of a new skill to be validated with Proof-of-Skill.

3- Does the token enable the user to contribute to a value-adding action for the network or market that is being built?

YES. SKT fuels the whole Skyllz ecosystem adding permanent value. The more it's used the higher the network is valuable.

4- Does the token grant an ownership of sorts, whether it is real or a proxy to a value? **NO**.

5- Does the token result in a monetizable reward based on an action by the user (active work)?

YES. SKTs are received as rewards by users that perform exceptionally and Raters of the ecosystem. They are convertible to economic monetization through cryptoassets exchanges.

6- Does the token grant the user a value based on sharing or disclosing some data about them (passive work)?

NO. User's data is publicly accessible and doesn't depend on SKT.

7- Is buying something part of the business model?

NO

8- Is selling something part of the business model?

NO

9- Can users create a new product or service?

YES. New skills will be created and added by STapps on top of the SDP once validated by the token and Proof-of-Skill holders.

10- Is the token required to run a smart contract or to fund an oracle? (an oracle is a source of information or data that other a smart contract can use)

YES. Oracles (the Raters) are exclusively fund by SKTs. The main feature of the SKT is to reward Raters.

11- Is the token required as a security deposit to secure some aspect of the blockchain's operation?

12- Is the token (or a derivative of it, like a stable coin or gas unit) used to pay for some usage? **YES**. For instance, to reward ratings and to pay platform fees.

13- Is the token required to join a network or other related entity?

YES. Within and across STapps (the network), users need SKTs to get access to their services

14- Does the token enable a real connection between users?

YES. For example, on Workkola as a STapp on top of the SDP, Challengers, Talents and Raters are connected through SKT transactions (among other features).

15- Is the token given away or offered at a discount, as an incentive to encourage product trial or usage?

YES. Tokens are unlocked for free at end of the initial stage (Arena 0) in the Workkola STapp for example. 30% of SKts issued are reserved for early ignition of the ecosystem (to encourage STapps usage)

16- Is the token your principal payment unit, essentially functioning as an internal currency?

YES

17- Is the token (or derivative of it) the principal accounting unit for all internal transactions?

YES

18- Does your blockchain autonomously distribute profits to token holders?

NO

19- Does your blockchain autonomously distribute other benefits to token holders?

NO

20- Is there a related benefit to your users, resulting from built-in currency inflation?

NO

Total points: 12 / 20

Glossary Of Terms

Proof-of-Skill (PoSk): Skyllz reputation. Annotations on the users' Ethereum Address associated to a specific skill that enable the user to get cumulative validations of it.

Skyllz Token (SKT): ERC-20 compliant token on the Ethereum Blockchain.

ERC-20: token standard that defines a common list of rules for all Ethereum tokens

Commoditization of degrees: Degrees' process of becoming a commodity with almost exclusive value.

Skill acquisition: learning of a new skill.

Skill allocation: application of a skill to a certain situation.

Skill contextualization: the process itself of applying a skill to a situation. It makes reference to how we use the skills acquired to solve or face a situation. Soft skills

Skill boosting: skill multiplier. It makes reference to the inner motivation to face or solve a situation using a specific skill or skillset. The why. The Attitude.

Edtech: Education Technology. Technology applied to the Education Industry in general.

e-learning: online learning platforms such as Udemy, Udacity, EdX, Coursera, etc.

Online portfolio: online platforms that allow users to showcase specific work done such as Github, Dribbble or Behance.

Networking platforms: online platforms where users connect. In this whitepaper, it makes reference to professional applications of networking such as LinkedIn or Meetup.

Job platforms: online job boards such as Indeed, Monster or LinkedIn as well.

Skills Touchpoint Application: Is an application or platform that puts some user's skill in value for acquisition, allocation, contextualization or boosting such as e-learnings, online portfolios, networking platforms, job platforms and offline platforms among others.

Talent Branding: methodology that consists in applying company-related and branding techniques to humans related to their talents.

Scale-ups: Companies in a growth-stage phase. The term is usually applied to tech companies.

Personality Quiz: Gamified test that Workkola does to its users to detect personality patterns.

Workkola Points: Points earnt as rewards on Workkola's platform when a user outstandingly performs or to incentivize some in-app actions.

Open-source: Open-source software (OSS) is computer software with its source code made available with a license in which the copyright holder provides the rights to study, change, and distribute the software to anyone and for any purpose.

API: Application Programming Interface, e.g. skyllz.io

skyllz.io: Skyllz API that brings an abstraction layer to connections between STapps and the Skyllz Distributed Platform (SDP).

Skyllz Distributed Platform (SDP): Distributed and open-source skill validation protocol that allows users to validate and empower skills acquisition, allocation, contextualization and boosting in a standardized and meritocratic way.

Oracle: Agent that finds and verifies real-world occurrences and submits this information to a blockchain to be used by smart contracts. E.g. Raters on Skyllz.

Rater: Experienced user that acts as oracle in the SDP connecting in-stapp actions with smart contracts. They resolve actions that trigger or not the assignation and allocation of Proof-of-Skill and SKTs to users.

Token Velocity: defines how quick the tokens are going to be sold after the Token Sale.

Dapp: Decentralized application that works on the blockchain

User: user on the SDP

References / Sources

https://medium.com/the-intrepid-review/how-does-the-blockchain-work-for-dummies-explained-simply-9f94d386e093

https://blockgeeks.com/guides/smart-contracts/

https://www.investopedia.com/news/what-erc20-and-what-does-it-mean-ethereum/#ixzz51dgim UvV

https://blockgeeks.com/guides/why-most-icos-will-fail/

http://woobull.com/data-visualisation-118-coins-plotted-over-time-this-is-why-hodl-alt-coin-index es-dont-work/

https://blockchainhub.net/blockchain-oracles/

Skyllz by Workkola. Get notified of important updates. Join Skyllz subscribers list: http://bit.ly/skyllz-subscribe

skyllz.org