FIDUXA

WHITE PAPER

The single source of truth on certifications and employee history for Recruiters and Corporate Hiring departments.

Fiduxa is the solution that will fill the gap of trust between employees and employers.

The power of the blockchain to provide a trustful permanent record of personal competencies.
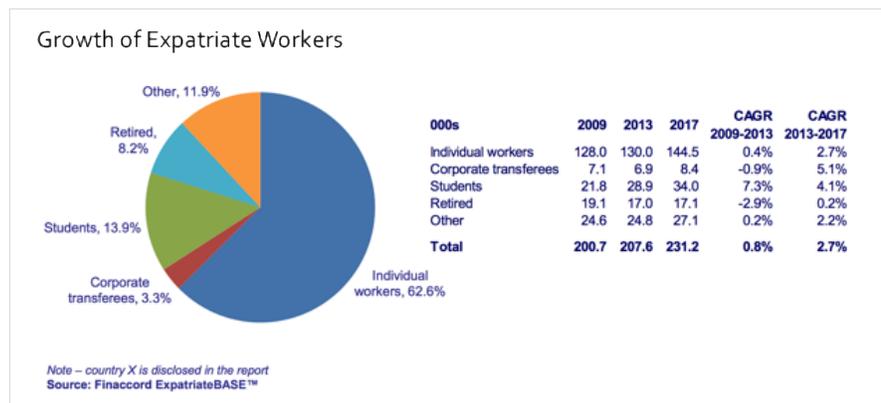
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Introduction

THE PROBLEM

The **$550 Billion worldwide recruitment market** sees millions of people looking to change jobs every day according to the International Confederation of Private Employment Services (Ciett's) latest economic report published in 2016. Yet the processes for hiring, resume submission, qualification validation and onboarding are very disjointed with a lack of standardization and much breakage between systems. This leads to excessive costs for employers, significant time and effort for job seekers and impedes economic activity.

The situation is exacerbated when job seekers are looking to cross borders, an increasing trend, with over **231 million people** changing countries for work or studies:

Growth of Expatriate Workers

000s	2009	2013	2017	CAGR 2009-2013	CAGR 2013-2017
Individual workers	128.0	130.0	144.5	0.4%	2.7%
Corporate transferees	7.1	6.9	8.4	-0.9%	5.1%
Students	21.8	28.9	34.0	7.3%	4.1%
Retired	19.1	17.0	17.1	-2.9%	0.2%
Other	24.6	24.8	27.1	0.2%	2.2%
Total	200.7	207.6	231.2	0.8%	2.7%

Other, 11.9%
Retired, 8.2%
Students, 13.9%
Corporate transferees, 3.3%
Individual workers, 62.6%

Note – country X is disclosed in the report
Source: Finaccord ExpatriateBASE™

While today's job market mechanics are highly digitalized, with several players leading local or vertical markets and a major player leading the international market, Linkedin, there is still a great deal of breakage between individuals and company systems and inter system processes.

DISTRUPT THE WORK ECOSYSTEM

*We intend to disrupt educational and corporate processes to make it easier for the **millions of employees annually** who change jobs, both inside and outside their home countries.*

In so doing we will save companies money, speed up hiring and create an uplift in economic activity.

In such an ecosystem one of the key elements is the verification of the information provided within the CV, resume or public profile of a job applicant.

Today's approach is based on personal experience of the recruiter where the first filtering (automatic and/or manual) of the applicants is mostly based on 2 factors:

1. The matching characteristics of the applicant versus the job description
2. The description of the specific experience and the consequent evaluation from the HR/Headhunter of the information provided.

While the first factor is direct and less affected by the CV writing style, it is heavily affected by the terminology used: e.g. the typical mismatch by the definition of a Project Manager between the employer and the employee.

In our development model, we decided to start a standardized profiling process in the ICT domain, referring to CEN ICT European Profile model. This process will then be extended to the whole set of skills, always taking as a reference the major standardization bodies.

The function of European ICT Professional Profiles is to offer users structure and clarity for designing or identifying and clustering the multitude of activities that are essential to support the digital strategy of an organisation. They are less detailed and less specific than job descriptions and offer a simple but flexible start point. They also represent a European multi-stakeholder shared perspective and provide a common reference language and communication tool to support mutual understanding e.g. both between countries but also within organisations such as between HR and ICT departments.

There is a huge range of different job titles across the ICT profession and they are created for a variety of purposes including attracting new recruits and providing recognition for organisation loyalty through promotion and construction of enhanced job titles. Jobs are unique but a similar title can be used to describe a widely different job, or similar jobs can be described by different titles. This can be confusing and prevent clear understanding between different actors and stakeholders of the job described and its associated tasks and responsibilities.

The European ICT Professional Profiles address this lack of clarity by clustering typical and common job components into a consistent profile template. These profiles, built from an organisational perspective, may be adopted and used as a basis for many activities including, personal development, organisation and job family restructuring, curriculum and training course development. The profiles are designed to be consistent in structure but varied in content offering clear differentiation between each profile.

Naturally the standardization process will involve also the recruitment side where the required profiles will have to follow the same approach.

The second factor is highly affected by the details provided and the way they are presented, with high probability of missing a key factor, or conversely over-evaluating it.

The job seeker's capability of tuning their profile or paying a company (mostly online) to improve the information provided can therefore skew the perception of the employer. Likewise, outright fraud can be carried out, which can even lead to official government papers to be issued.

This potential for misrepresentation can lead **companies to spend considerable sums** to verify candidates, especially for high value positions. It also leads to high recruitment agency fees and considerable time of internal resources to ensure that a candidate is the best fit for the proposed role.

Cultural and personal fit considerations are, of course, still a matter for face to face interview but certainty in the factual elements can help there too.

Additionally, the trust issue between candidate and hiring manager is extended to the trust issue among different governments in case one person wants to get a job in a different country. In this case, one of the key elements hampering seamless hiring and business to government processes, is the ability to validate documents across countries. **The process of attestation is cumbersome and causes cost and delay** for people moving from one country to take up a role in another. Even within a single country, attestation of qualifications may be desired as validation of physical copies is a far from perfect science. Are the people validating the proffered documents technically capable to do so, for a start. This friction causes delay and cost for individuals, delays for companies hiring and slows uptake of inward investment or economic growth for governments.

So in summary, the problems Fiduxa aims to solve include:

- Delays and costs for individuals in getting their history certified
- Differences in definition of a profile
- Trusted source of truth for employment history
- Significant costs for companies looking to ensure optimal hiring

The typical cost of replacing a bad hire is:

Entry-level employee	Mid-level employee	Executive-level employee
30-50% of annual salary to replace	50-150% of annual salary to replace	up to 400% of annual salary to replace

Source: Social-Hire.com

THE APPROACH

Fiduxa's approach to these problems is to create an interlaced distributed network of information that allows to precisely identify the credentials and working experiences of a job seeker, while certifying their truthfulness.

This can be achieved with a modern distributed technology and strategic process flow approach that takes success stories from other markets and adapts them successfully to the recruitment ecosystem utilizing the latest technologies including Blockchain and Artificial Intelligence.

Fiduxa has developed a vision for how this technology can be implemented on top of the blockchain ecosystem and also how this technology will evolve and change the fundamentals of today's employment market.

Based on this vision we have examined use cases, identified key requirements and designed a system that we believe will revolutionize the relationship between job seeker, recruiting organization and regulatory authorities.

This document describes the solution starting from the 'Persona', passing through the certification system and on to the technology architecture that will empower such a solution.

PERSONA

To understand the motivators of our target groups, especially the early adaptors we want to build an understanding of who they are.

There are 3 target groups or persona for Fiduxa:

1. Individuals (Job Seekers or professionals willingly to improve their profile)
2. Recruiting Companies / Headhunters / Other Intermediaries (as Job-oriented web sites, etc)
3. Governments who gain incidental benefits

The first Persona (Job Seeker) wants to communicate to possible hiring companies or headhunter his profile, highlighting skills and guaranteeing bona fides and quality in the type of information provided.

The second Persona (Recruiter or Head Hunter) wants to be sure the profile provided is trustful and matches the required skills reducing time to hire and reducing hiring costs.

The third Persona (Government) wants to reduce barriers to entry and enhance services for companies hiring, so as to enhance economic activity. While not a direct customer of the platform, governments gain incidental benefits.

CUSTOMER ECOSYSTEM

Fiduxa aims to fill the gap between Job Seekers and Corporate Recruiters, Headhunters increasing trust and providing a valuable tool to certify skills provided in the career profile of a job seeker. Along the way, Governments can take advantage of the existence of Fiduxa to provide seamless services to companies who are hiring.

All certified skills and experiences are normalized to help hiring companies and job seekers to easily match required skills with defined experiences and then saved into an immutable ledger guaranteeing both parties trustfulness of the defined skill and certifications.

Within our first standardization model, the European e-Competence Framework (e-CF) standard EN 16234-1 is a main element of the ICT Professional Profiles description template. The framework provides a reference of currently 40 competences as required and applied at the ICT workplace, using a common reference language for competences, skills, knowledge and capability levels that can be understood across Europe and internationally.

The e-CF is the result of 10 years continuous development and commitment by the European ICT sector.

As the first sector-specific and workplace oriented implementation of the European Qualifications Framework (EQF), the e-CF was created for application by ICT services in public and private organisations, ICT professionals, managers and HR departments, vocational education, higher education and other training, assessment and accreditation bodies, social partners, professional associations, market analysts and policy makers.

The certified skill will be accessible only to people or entities with permissions to do so. Grants to access and validate the data being managed by the job seeker and enforced by Fiduxa.

Corporate Recruiters and Head Hunters will be able to verify candidate skills or experiences provided by the job seeker through accessing the immutable ledger and will be able to cross-check the entity or person who certified the specific skill.

Aside from our general proposition to job seekers and corporations, our product plan will include working in specific verticals where there is a high demand for accurate and reliable documentation. Two of our advisors already cover the technology/security world and healthcare. The latter is a good example where the Fiduxa platform will be highly disruptive as the documentation is complex and highly critical. Other verticals will include highly structured professions such as physical security, engineering, energy, banking, legal and other professions.

Fiduxa, taking experience from public-driven rating systems (analogous to an automated and distributed credit scoring) will also run its own Artificial Intelligence based process, built specifically to rate the certification entities and professionals in order to reduce interest-driven certifications.

Fueling the adoption and usage of Fiduxa is the crypto currency micro payment for data included in the platform. Multiple observers have observed that this new paradigm is applicable to trust. For example, Wired has asked the question "How much should we pay to trust one another?" (https://www.wired.com/story/how-the-blockchain-is-redefining-trust).

Lastly, Fiduxa will create a secure integration ecosystem for corporations, governments and certification authorities to provide a digital bridge between individuals, companies and countries.

CUSTOMER MAP

The following scheme describes the ecosystem of the application based on the customer interests and corporate drivers that are the main factors of success in the acceptance of the service by the players.
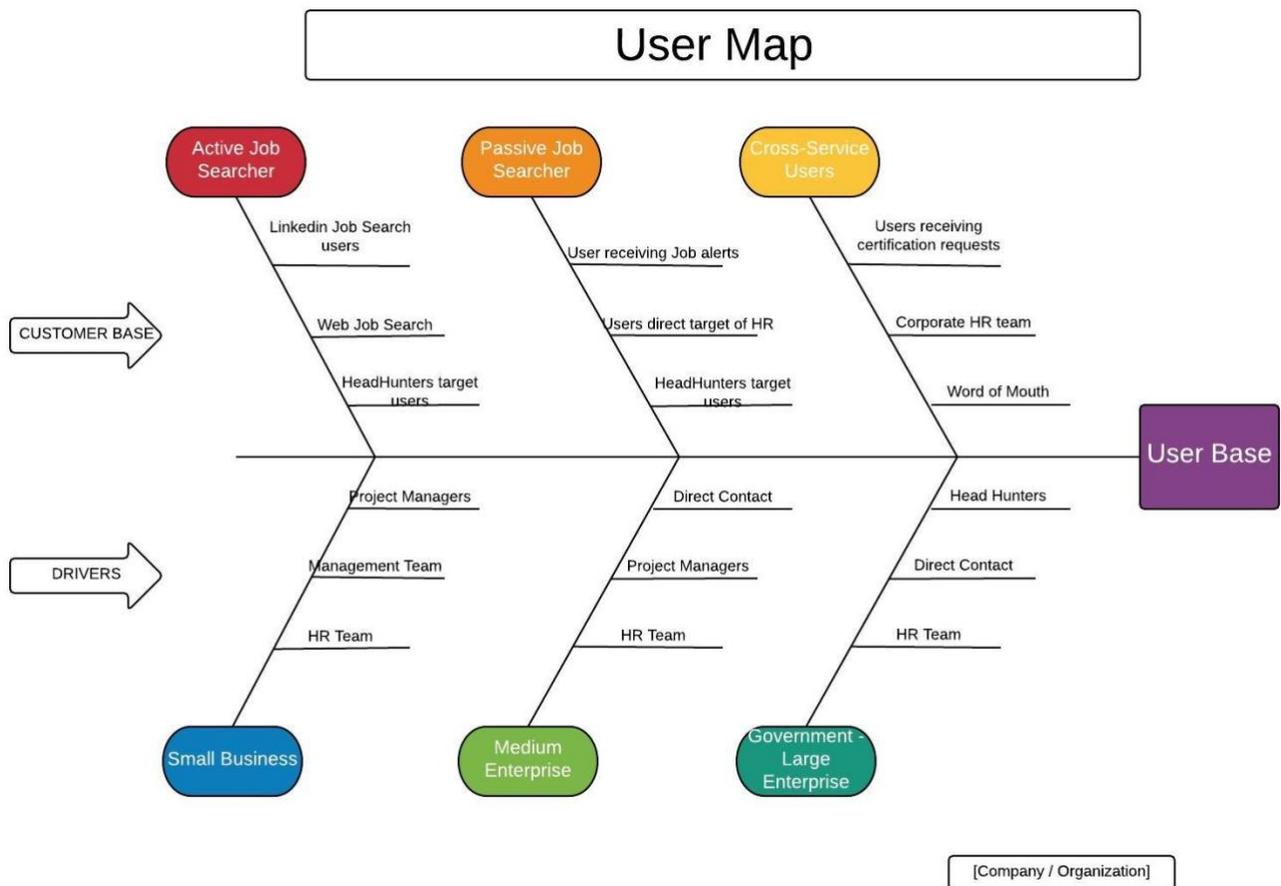
PERSONA BENEFITS

JOB SEEKER (JS/I)

Job seekers or more generically individuals could expect benefits from Fiduxa including:

1. Increased trust when their Curriculum Vitae or Resume (CV) is checked for Job profiling.
2. Increased trust when their CV is matched to Job Requests or Descriptions.
3. Earn tokens for contributing their data.
4. Increased evaluation level from a Hiring Company Recruiter or Head Hunter vs other job seekers.
5. Increased visibility when Recruiters or Head Hunters perform job searches, for example flagging CVs and experiences as "Verified".
6. Reduce the gap of terminology differences due to normalized matching techniques
7. Reduce costs of certification, attestation of certifications for job applications, as well as related hiring and official processes.
8. Reduce time and complexity for the "paper work" related to international moves.

CORPORATE RECRUITERS / HEADHUNTERS (REC/HH)

Corporate Recruiters and Head Hunters could expect benefits from Fiduxa including:

1. Ensure information provided is trustful.
2. Ability to exactly match required skills with job applicant profile through skill normalization.
3. Communicate easily and securely with certificating entities and professionals for direct feedback on attesting certifications.
4. Reduce the significant costs of background verification.
5. Automate hiring and onboarding through permanent paperless documents and crypto token payment automation.
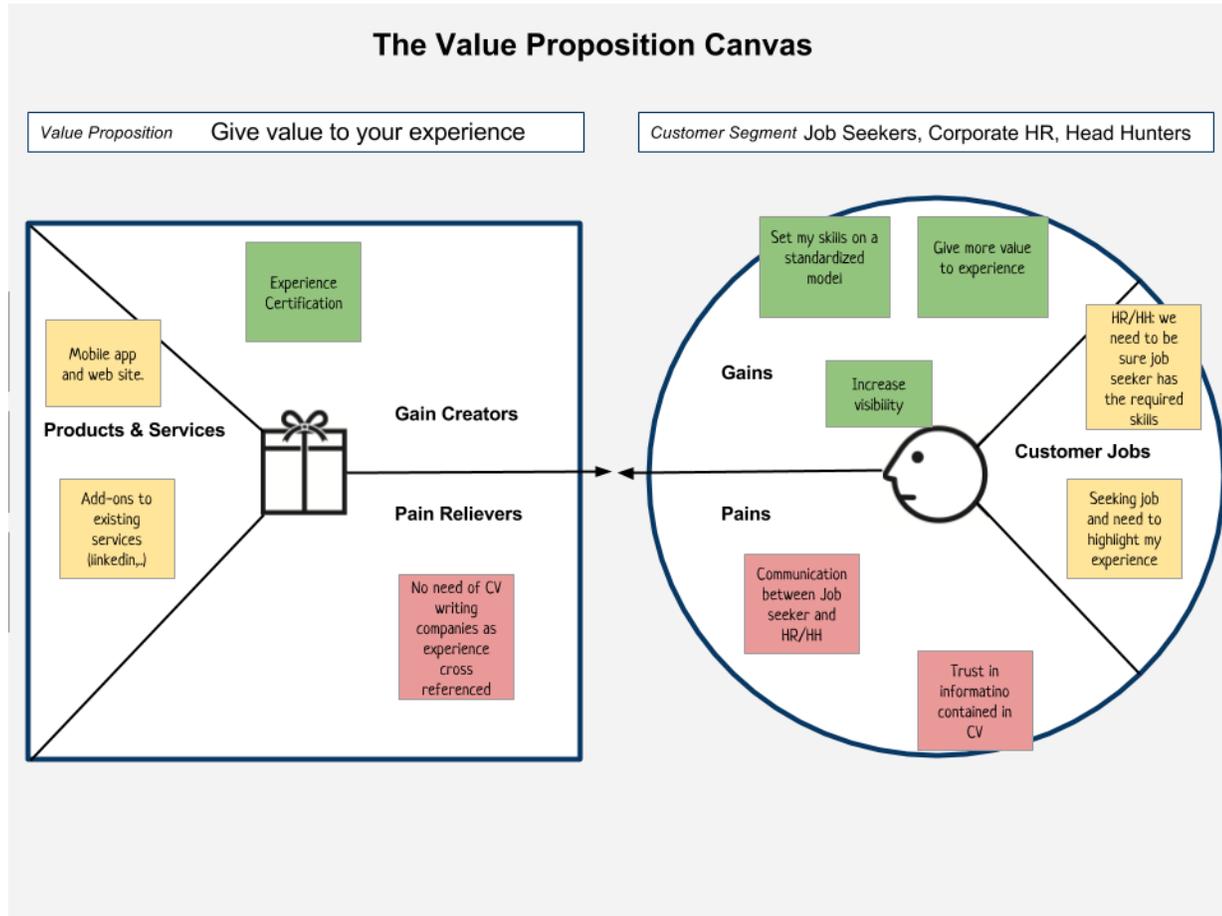6. Use a certified skills marketplace

GOVERNMENTS

While not direct customers of the platform, governments gain benefits such as:

1. Create a dynamic job market through increased use of digital services to process official employment requirements.
2. Reduce friction for employees and companies.
3. Increase economic activity.

VALUE MAP

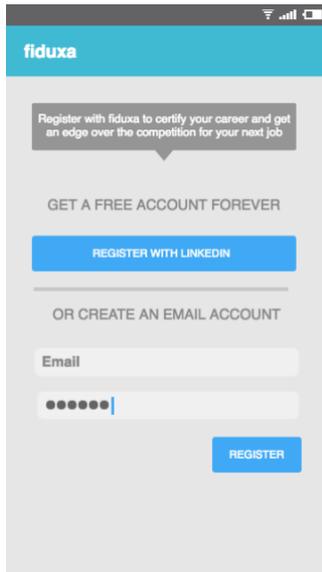Value for the given persona can be summarized as:

The Value Proposition Canvas

| Value Proposition | Give value to your experience | | Customer Segment | Job Seekers, Corporate HR, Head Hunters |

Value Proposition Give value to your experience

Customer Segment Job Seekers, Corporate HR, Head Hunters

Products & Services
- Mobile app and web site.
- Experience Certification
- Add-ons to existing services (linkedin,..)

Gain Creators

Pain Relievers
- No need of CV writing companies as experience cross referenced

Gains
- Set my skills on a standardized model
- Give more value to experience
- Increase visibility

Customer Jobs
- HR/HH: we need to be sure job seeker has the required skills
- Seeking job and need to highlight my experience

Pains
- Communication between Job seeker and HR/HH
- Trust in informatino contained in CV

OVERVIEW OF HOW FIDUXA WORKS

EXAMPLE USER JOURNEYS

PERSONA 1: Job Seeker/Individual

The simplest way to see how Fiduxa will work for a job seeker is to view a mock-up design of the application that is in development. Here we see a simple journey of a job seeker using their LinkedIn data to be certified on the blockchain and the options that will be available to them. Shama is our user for this exercise:
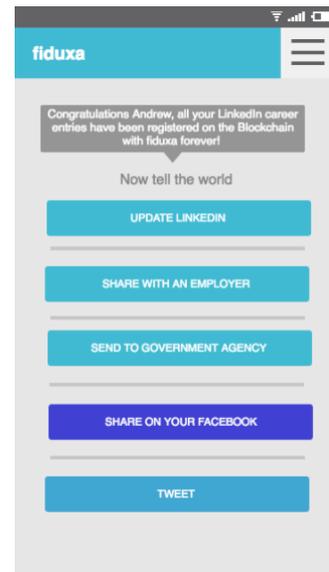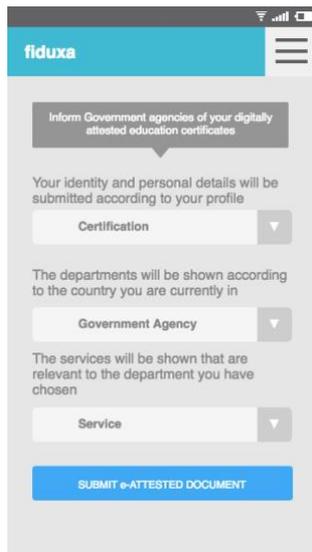
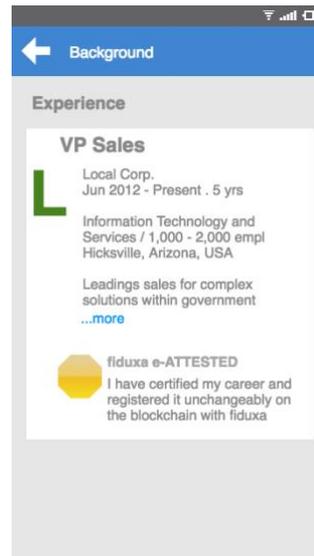Shama logs in with her LinkedIn   >   Shama chooses the details to eAttest >   Shama takes and action >
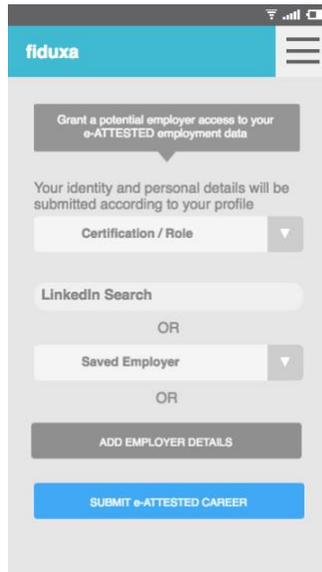
Shama sends eAttested document   >   Shama also publishes her eAttestations >

FEATURE HIGH LEVEL REQUIREMENTS

The high level featured requirements are based on the identified user roles which have been incorporated into the designed architecture.

These requirements include the following macro-areas:

1. User Identification
2. Company identification
3. Role Identification
4. Experience tracking and verification
5. Experience certification
6. Key certification Authorities identification
7. Integration with existing profile management systems (LinkedIn, etc.)
8. Adoption Incentivization through a platform crypto token

ADOPTION & THE FIDUXA FDU TOKEN

The FDU token will act as a spur to adoption and retention loyalty program, providing bonuses of tokens for repeated and additional activities.

The FDU Token will serve multiple purposes:

1. While Silver and Gold certifications are free for the JS/I, Platinum Certification requires a fee to be paid to CP/E, this fee will be paid in FDU
2. Access to certified data by a REC/HH is free when such data are shared by the owner (JS/I) while REC/HH will have to pay in FDU to access data based on custom searches based on skillset requirements
3. Gold Certificators will provide their service for free, nevertheless whenever their certification is used successfully by a REC/HH to select a candidate, they will earn FDU tokens as share of the amount paid by the REC/HH for the search performed

Therefore the FDU token will be used as **'Competencies Currency'** to express value of the whole process.

The FDU token will be the principle method of exchange when transactions occur within the Fiduxa application. It will be traded on relevant exchanges for other crypto currencies and fiat currencies, as well as having a custom gateway run exclusively for Fiduxa, especially in transactions including governments.

Incentivization and Gameification

The FDU token will incentivize adoption and usage of the application. For example, making it profitable to run more certifications, data downloads and verifications. This will be in association with gameification, level based progressive level reward system. The initial set of levels will be Silver, Gold and Platinum, described below.

With regards to the FDU token there will be 3 (three) PERSONAS:

 PERSONA 1: Job Seeker/Individual (JS/I)

 PERSONA 2: Certifying Person or Entity (CP/E)

 PERSONA 3: Recruiter/Head-Hunter (REC/HH)

When a Job seeker will certify its experience, he will be able to request 3 certification types:

1. Self Certification (Silver Certification): in this case JS/I will self-certify its experience. Such experience will be saved immutably within Fiduxa blockchain and therefore the REC/HH will be guaranteed that the skill has not been customized to fit the required job profile
2. Social Certification (Gold Certification): in this case JS/I will invite colleagues, clients or suppliers that have worked with him during the period he developed that skill to certify the quality of the work performed. Such experience and every certification will be saved immutably within Fiduxa blockchain together with an overall score and therefore the REC/HH will be able to explore ratings given by the third party certificators.
3. Professional Certification (Platinum Certification): in this case JS/I will request Fiduxa to assign the task to verify his skills by one of the trusted certificators/entities (CP/E). This experience and the given certification will be saved immutably within Fiduxa blockchain and therefore the REC/HH will be able to verify rating and evaluation given by the CP/E
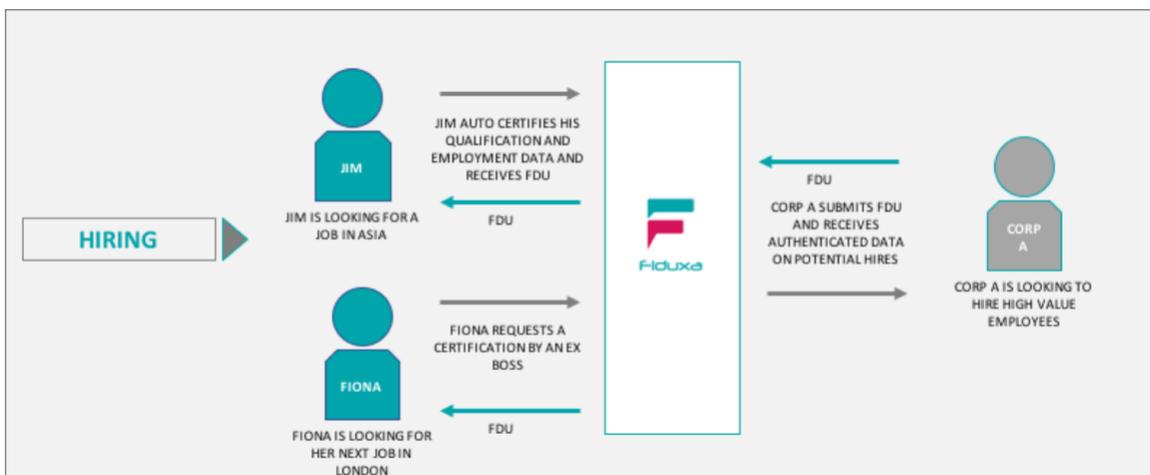
Job Seekers/Individuals will be able to share a specific experience or the whole CV with REC/HH that will have access to the given information through Fiduxa website. At the same time REC/HH will be given chance to rate the skill or certificators.

To become a certified CP/E a selection process will have to be completed by the candidate person/entity: this process involves for CPs to have proven skills and to be active 'free' certificators in case of Gold Certification requests.

Certificators that will have top-rating for a given number of certified skills and time will be entitled to become Platinum Certificators. HH will be able to become Platinum Certificators based on an ad-hoc selection made by Fiduxa selection team.

FDU will also have multiple further uses:

- University incentive schemes
- Attestation of qualifications, especially in verticals with complex certification documentation such as:
    - Healthcare
    - Legal profession
    - Financial professions
    - Security and military organizations
    - Engineering
    - Airlines

An example of how attestation will work is:
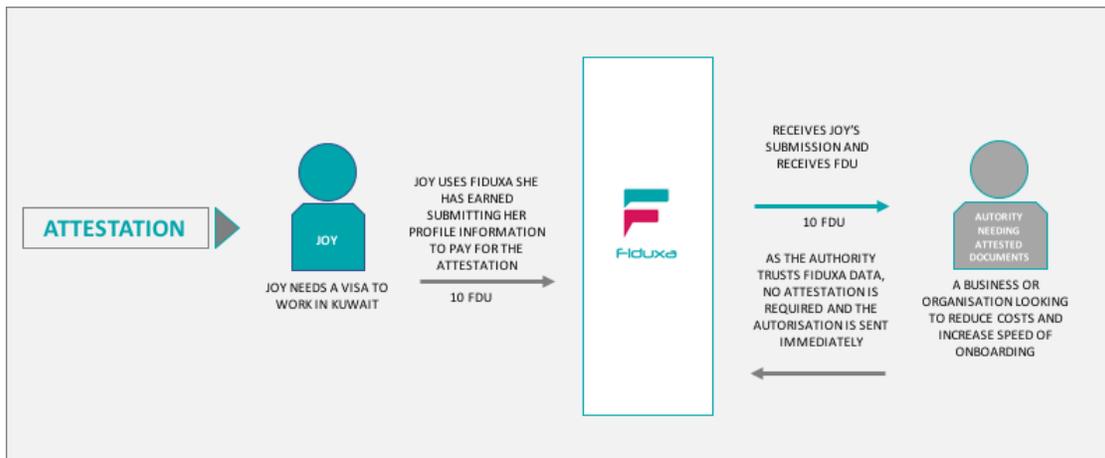
- Payment of certification services of third party organizations
- Blockchain interfaces for official documentation
- Marketplace for highly skilled occupations

BUILDING THE ECOSYSTEM

One of the key challenges with disrupting established business processes lies in building the ecosystem of adoption of the new methodology. Fiduxa is approaching this through multiple channels.

The built-in principle of payment for data is one area that will certainly encourage adoption, as is the trend with crypto token proposals. However, this is cannot work on its own. Therefore, the Fiduxa team will implement numerous channels that are aimed at gaining adoption to build the ecosystem, both from a large-scale partnership perspective and through consumer adoption.

In terms of large scale partnerships, the Fiduxa team is already engaged with universities, certification authorities, recruitment companies and HR departments to work on partnerships. This work will be one of the major tracks of the sales tasks. The team is in the process of closing deals and these will be announced soon.

On the consumer side, the Fiduxa team is very well endowed with digital talent and is going to market with an MVP already built for the first use case, certification. This will help build the user base and be a basis for the further use cases. The target is to bring users to companies with authenticated data.

Key to both approaches is a clear segmentation of important target groupings. We have already described universities, corporates, governments and highly value / complexity professions as essential targets. However, within this we are also specializing the verticals as healthcare, security, engineering, air transport and others where we see the highest possible value. Not that this limits the platform in any way and we have generic services for any industry as a base. It is merely a focus for building the ecosystem.

THE TOKEN

The FDU will be an ERC20 standard token on the Ethereum blockchain. The token will have a total issue of 100 million tokens, which will be offered at our ICO Crowdsale, with a portion being retained for advisors and team members. The distribution of funds raised from the ICO will be as follows:

- Technology
- Marketing
- Sales & Operations
- Advisors & Incentives
- Fees and Conversions

The FDU Tokens will be distributed thus:

- ICO investors - 80,000,000
- Operation Kickstart Pool - 10,000,000
- Team retention - 5,000,000
- Advisors&Incentives - 5,000,000

TIMELINE

The Fiduxa team is already on the road to executing on the program. The high level timeline is:

1 SEED ROUND
Completed on September 2017.

2 MPV Development
Completed on December 2017.

3 PRE-ICO
Starting Feb 2018 to March 2018

4 ICO
Starting March 2018 to May 2018

5 B2C Marketing
Launch: March 2018

6 B2B / B2G
Starting July 2018

7 Fiduxa V1.0 Live
Live from July 2018

8 Fiduxa Service Marketing
Starting July 2018

7 Fiduxa V1.5 Live
Live from Dec 2018 with skills marketplace

8 Fiduxa V 2.0 Live
Starting July 2019 with AI integration

THE FIDUXA TEAM

Andrew Rippon

The tech savvy business guy

Worked in internet technologies, consumer digital products and digital marketing for 20 years

Latest Role: Blockchain Practice Lead

Architect Smart Dubai Platform, VP at Fox Mobile, CTO at STC Intigral, Senior Manager at Vodafone Group, Founder MWAN.

Pietro Marchionni

The business savvy tech guy

22 years of experience in an international scope delivering technology innovation platforms and apps

Latest Role: Blockchain Architect

Committee Member in international blockchain standardization bodies: ISO TC 307 Blockchain and Distributed Ledger Technologies, ITU - Focus Group on Application of Distributed Ledger Technology, CEN-CENELEC Focus Group on Blockchain and Distributed Ledger Technologies.

Architect Smart Dubai Platform ID Enablers, MD & CIO at EnOn MENA, Group CTO at AMME FZ-LLC, Chief Architect at STC Intigral, Founder SmartU

Together we lead a team of techies and marketeers, benefiting from our expert advisors and investors.

Fiduxa People

Visit our website for the most updated list of our team and our advisors:

 http://www.fiduxa.com/index.php/team/

OWNERSHIP & COPYRIGHT

STATEMENT OF CONFIDENTIALITY & NON-DISCLOSURE