

A B2B MARKETPLACE PLATFORM POWERED BY THE BLOCKCHAIN PROOF-OF-EXPERTISE — DISTRIBUTED TRUST PROTOCOL

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♠ OPPORTY**

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1. ABSTRACT

This white paper describes a blockchain-powered business relationships ecosystem, consisting of Proof-of-Expertise (PoE) protocol and a B2B platform for business transactions. The PoE protocol, along with Opporty's business scoring system, can be implemented to third-party applications and platforms in order to facilitate transactions and build trust among counterparties doing business. At the same time, the B2B platform is a one-of-a-kind ecosystem that empowers businesses with the benefits of blockchain technology.

Opporty ensures transparency and security, standardizes procedures, and creates an environment of cooperation that instills trust between counterparties. The platform simplifies and secures business interactions through an offer/request ecosystem, support of decentralized escrow and smart contracts, and the implementation of an innovative, PoE-empowered business scoring system that makes third-party verification and validation processes available to all participants.

Combining the benefits of an on-demand economy and blockchain technology, Opporty introduces a blockchain-powered marketplace for B2B and B2C commerce. The platform enables new models of social and commercial engagement, simplifying lead generation and providing opportunities for business owners to build a professional reputation through its knowledge-sharing system.

Opporty is a fusion of a tokenized crypto-enabled platform and a blockchain protocol. Using Opporty Tokens, users can choose to conduct business transactions within the platform, utilize the advantages of blockchain enabled functions, pay for platform services, and benefit from Opporty's PoE protocol.

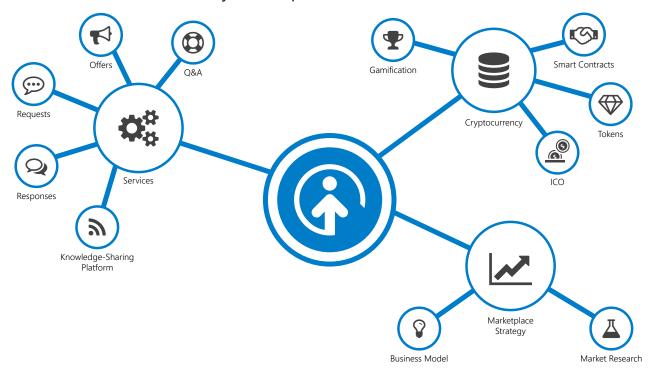
Opporty's crypto functionality is powered by Ethereum, a blockchain-distributed computing platform, and by Opporty's PoE protocol built on top of its blockchain.

Powered by PoE protocol, Opporty intends to build trust in business transactions. Using its functionality will prove beneficial to corporations in cross border and domestic transactions and government procurement departments. Domestic customers will be empowered by the ability to check the rating of providers engaging in B2B and B2C transactions.

Opporty's business scoring system is powered by PoE protocol, which collects and analyzes transaction metadata in order to assign specific, niche-focused business scores to providers, on and off the Opporty marketplace.

Blockchain-based gamification is a fundamental element of Opporty's ecosystem. Users can choose to purchase and earn cryptocurrency (OPP tokens) to access a variety of services on the Opporty platform. Users are rewarded with OPP tokens for their contributions to community development.

OPP tokens enable the Proof-of-Expertise protocol, allowing for transactions between providers on and off the platform, and are used as rewards for completing specific activities aimed at community development.



2. MISSION STATEMENT

Our ultimate goal is to create a business toolset that enables companies and providers to conduct business based on established standards in a trustworthy environment, and allows for the development and implementation of PoE-empowered platforms onto third-party applications. We strive to make Opporty a global business marketplace and an expertise validation provider on the blockchain, with a solution that establishes and grows trusted business relationships globally. We aspire to become the primary source of distributed trust among the business community by implementing Proof-

of-Expertise protocol, and by providing a risk-free environment for doing business through decentralized escrow and smart contracts.

3. VISION

Our vision is to revolutionize the way businesses and providers conduct business. Utilizing blockchain, we aim to develop a business relationships ecosystem that establishes trust and security, and grows business relationships globally. By introducing a B2B platform on top of Proof-of-Expertise protocol, we envision a world where transactions are validated on the blockchain, providers are assigned a business score through the business scoring system, and companies utilize Opporty's combined PoE and B2B platform to develop third-party applications.

3.1. WHY DO WE NEED BLOCKCHAIN?

Blockchain gives the Opporty platform robust functionality and ensures transparency. It enables Opporty's PoE protocol and its B2B platform for business transactions. Blockchain is at the core of Opporty's conditional business scoring system, where it is used to collect, store, and analyze meta transactions data for efficient validation of provider expertise. Blockchain-related functionality allows for rewards for participation (gamification) with Opporty tokens, smart contracts, decentralized escrow and dispute resolution.

3.2. WHY DO WE NEED OUR OWN TOKENS?

Opporty Tokens (OPP tokens) are a unique feature of the Opporty platform. Tokens are fundamental in enabling the PoE protocol, business scoring system, and specific features of the B2B platform for business transactions. Using tokens, users can be rewarded for creating content for Opporty's decentralized knowledge database, and for other behaviors aimed at the community growth and development. With no oversight by a central administration, the Opporty ecosystem is expected to grow

organically and attract more users. OPP tokens can be used to pay the community for additional services, such as ads and promotions, and to conduct business with the help of decentralized escrow.

4. PROBLEM

Counterparties doing business cannot generally validate the trustworthiness and reputation of one another. In an effort to learn about a specific business before a transaction is made, business owners and providers mostly rely on web searches and reviews available online. However, according to Gartner, up to 15% of available reviews are paid for by the companies themselves. (Over 20% of reviews at Yelp are fake, according to Harvard Business School study.) Thus, any potential business transaction suffers from lack of trust by default, which stagnates business development, and leads to operational mistakes and the loss of actual and potential revenue.

Opporty efficiently resolves this issue by introducing a secure B2B platform for business transactions, empowered by PoE protocol and its conditional business scoring system. It validates the expertise and reputation of providers on and off the platform, allowing businesses and consumers to enjoy confidence in their decisions.

According to the US Small Business Administration, only 20% of new businesses survive beyond the first year of operation. They fail to compete against established companies, attract early adopters and scale up their businesses to start driving profits. They lack an established reputation and the trust of consumers, forcing them to:

- Offer high-quality services at competitive rates (which frequently means having to operate at a deficit from the beginning)
- Minimize back-and-forth negotiations when requesting services from others
- Cut expenditures by improving business performance and reducing the need for intermediaries
- Create a constant stream of leads by appealing directly to targeted audiences
- Take advantage of the digital economy and cutting-edge technologies to survive when crisis hits

The problem is that only a small percentage of small businesses can do all those

things and survive. This is especially the case with service companies.

There are multiple e-commerce platforms that can guarantee the delivery and quality of ordered products, but there is no platform that can guarantee the quality of services provided. As a result, customers often do not trust new businesses on the market.

Opporty seeks to solve the problem of trust between parties doing service business, where until now, disputes could only be resolved in Civil Courts. We offer a quick and effective alternative to this practice — decentralized escrow provided by verified experts.

By offering blockchain-powered smart contracts and a decentralized escrow system, Opporty puts client-contractor relations on the blockchain. The platform, with the help of its Expert community, ensures transparency and security, standardizes procedures, and creates an environment of cooperation that instills trust between parties.

4.1. CUSTOMER SIDE

When customers need to order a service they:

- Research service providers on search engines
- · Search for companies that provide the required service in directories and listings
- Access lead generation platforms to appeal directly to prospective providers
- Reach out to friends and relatives to ask for advice

However, this approach suffers from multiple disadvantages:



Search results favor companies that command large budgets. Small business might not have the funds to optimize their sites for search engines, launch paid ad campaigns, or get featured in the media. Corporations benefit from large marketing budgets, and frequently users are led to corporate websites when searching for a required service. However, the business models of corporations prioritize corporate clients, and they are not inclined to work with small businesses. Therefore, small business owners often avoid a search engine's first page, but researching pages

displayed deeper in search is not a smart solution either. A small business buried in an overcrowded market offers only one of many options to choose from, making the search for service providers fairly inefficient.



Directories and listings are afflicted with similar issues. Although companies and service providers can be listed in many ways by use of filters, ratings and reviews (which are frequently manipulated), the order in which they are listed is critical. Corporate accounts are better rated and command a plethora of positive reviews. Yet their aim is to attract corporate clients, not small businesses. Therefore, small business owners spend time reaching out to them with little chance of a positive outcome. Meanwhile, companies listed at the bottom who are in need of orders from small businesses remain unnoticed.



Lead generation platforms increase the cost of leads. Although lead-gen sites allow for free request submissions, paid requests — leads to prospective clients — are their main source of income. Thus, the conversion cost for final vendors grows disproportionately. Additionally, many customers are just checking prices, and every lead is contested by several vendors. As a result, customers end up with the same companies they would have found themselves on search engines.



Referrals from friends and family may be the best option. Unfortunately, in many cases they have zero experience with the type of service a particular business needs. Moreover, they may reside in another neighborhood or state and know nothing about service providers in the targeted area.

Since appealing to search engines, directories and lead-gen platforms provides no guarantee of finding the right service provider, small businesses are faced with the ongoing problem of locating high-quality service providers. Therefore, small business owners have to:



Order an initial consultation for which they will most likely have to pay.



Do their own research and spend valuable time evaluating the pros and cons of every company before making a final choice.



Research communities where prospective service providers share their advice. This takes time, a scarce resource for most small business owners, adding to the total cost of the deal. Sometimes the "best deal" is not all that great when you factor in the time spent looking for it.

4.2. PROVIDER SIDE

Service providers face challenges in building a solid base of customers. If they fail to build trust and attract prospects, they will suffer adverse financial issues and eventually go out of business. Creating a conversion funnel takes an enormous amount of effort and skill:



Launching and running a business is an uphill struggle. It takes only a few hours to register a company, but learning to manage it is a complex task. Business owners have to coin a business model, implement management procedures, and approach the market from a digital marketing perspective.



Exposing a business and its services to the community is complicated. A business owner must engage in networking (contact influencers, participate in events, etc.) and reach out to respected media (send pitches and produce lots of content). Unless they manage to get their businesses noticed, they will fail to appeal to prospects.



Reaching the target audience takes time (assuming limited funds to run paid ad campaigns). Appealing to prospects is problematic. Consumers have multiple service providers to choose from, and business owners have to catch their attention through SEO, content, authority management, and other means.



Conversions are not guaranteed. Although small businesses might succeed in driving users and leads, chances are they will fail to convert them. Costefficient conversions are hard to master, as this process depends entirely on a business's ability to produce content, drive users to landing pages, and demonstrate a prospect's importance to the bottom line.



Therefore, service providers often choose to:



Invest in SEO and PPC to secure SERPs



Register with lead generation platforms to access a curated stream of leads (provided they resign themselves to a higher cost of leads and accept that corporations have advantages to offer stronger bids)



Create a network of clients and influencers who vouch for their business (provided they are able to participate in multiple events and command a unique perspective on their services; otherwise, they will fail to get noticed by industry gurus)



Create profiles in directories and listings that appeal to a wider range of customers (these profiles are displayed below top-rated, well-reviewed accounts)



Reach out to professional and local communities (this takes time, effort and luck)



4.3. OPPORTY FOR CUSTOMERS AND SERVICE PROVIDERS

Opporty offers both companies in need of services and providers of needed services an efficient way to find each other and solve their marketing-related problems. Utilizing the best features of lead-gen platforms, Opporty elevates its business model to a new level.



Genuine digital reputation. For any potential business transaction, we resolve the problems of trust and business worthiness through our Proof-of-Expertise protocol and unique business scoring system, built on the Opporty blockchain. Opporty aims to become a global business platform and an expertise validation provider on the Blockchain.



Self-regulation. With built-in escrow functionality and the support of smart contracts, Opporty guarantees that every conflict between customers and service providers is resolved in an unbiased, professional manner. Opporty's selected team of independent experts (known as escrow arbitrators) create standard rules for common services. Initially, escrow arbitrators will be selected by Opporty administrators. As the Opporty professional community matures, judges will be chosen by the community itself (based on pre-approved voting rules). Only the best-rated experts will be allowed to become judges in the escrow process.



Quality Protection. Opporty is the first platform to offer decentralized escrow provided by real experts, along with legally enforceable electronic agreements that can be executed automatically with the help of Oracles. Escrow procedure ensures that every customer receives the highest level of service. When a problem arises, it is resolved by a carefully selected group of escrow arbitrators.



Community of Experts. Once a company or individual service provider is registered, they become an integral part of Opporty's community, which allows them to increase awareness and exposure, and build trust and authority among targeted audiences. Opporty enables businesses to facilitate purchases and sales, maximize lead-gen efficiency and establish themselves as experts. With the help of Proof-of-Expertise protocol, Opporty's ecosystem is able to distinguish the genuine gurus of any niche.



Free responses to user requests. Once a provider is registered on Opporty, they acquire a monthly number of free responses. This allows recently registered users to compete with our established loyal customers. When a provider's free responses expire, they are able to purchase more with fiat, or with tokens earned by completing rewarding activities on the Opporty platform.



Renewable rating. Opporty's ranking system is flexible. A user's ranking is influenced not only by stars, but also by their activities on the platform. Thus, recently registered users can quickly move their profiles up in rank by contributing to our knowledge-sharing system. By regularly refreshing ratings, the Opporty team creates fair conditions for every user.



Rewards for activities. Users are encouraged to contribute content through Opporty's built-in gamification and rewards systems. Active contributors can increase their rating in Opporty search, and can be nominated to become judging and voting members of the Opporty community, called escrow arbitrators or "standard designers" (provided their expertise in their field of endeavor meets community expectations).



Live business ecosystem. Opporty is not just another marketplace. Opporty is a decentralized platform with digital democracy on board, providing creative freedom that stimulates robust growth. Imagine Wikipedia meets Alibaba!



Multiple user interfaces. There are multiple ways to interact with Opporty's platform - via web, mobile app or by chatbot. We use the best UI/UX practices to attract users and make their lives easier!

5. OPPORTY

Opporty.com is a service-focused, blockchain-powered marketplace, utilizing the benefits of Proof-of-Expertise protocol. It offers unique lead generation and marketing opportunities to small and medium sized companies, targeting B2B and B2C sectors.

The platform's key advantages include:



Outstanding customer protection through decentralized escrow (PoE), which guarantees the ability to sell without a well-established reputation



An escrow voting board selected with the help of Proof-of-Expertise that operates on digital democracy principles. Experts who join Opporty's selected team of judges increase their exposure and awareness about their brands



Blockchain technology that enables smart contracts, offering a financially viable alternative to arbitration in civil courts



A token rewards system that incentivizes users to participate in the growth and development of the Opporty ecosystem by contributing content to Opporty's knowledge-sharing platform, thereby building their reputation, and earning tokens



Opporty cryptocurrency (OPP tokens) that can be used to purchase advertising, pay for and list services, and purchase offers



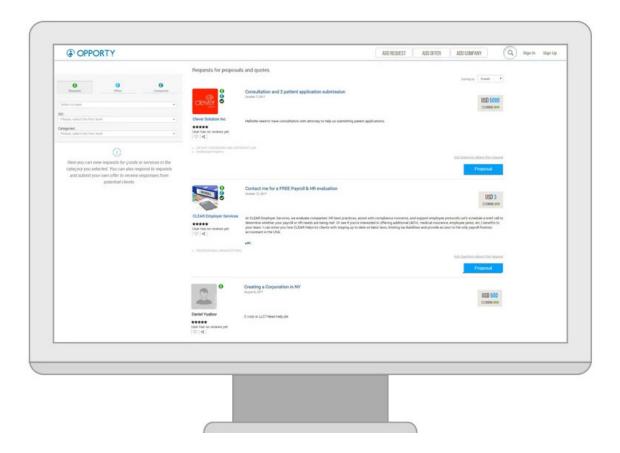
Exposure to targeted audiences through content



Low initial costs of lead conversion

Opporty's unique advantages are made possible through a unique business ecosystem that combines a user-friendly service marketplace with the power of blockchain, making for smart contracts, decentralized escrow, and self-governed communities that adhere to digital democracy principles. Opporty users can submit requests, create offers, leave responses, and contribute content in the most convenient digitized manner. Tokens are created to incentivize user activities that contribute to the development of the platform. OPP can be used to conduct transactions within the system, pay for Opporty's listing and advertising services, and access decentralized escrow and Proof-of-Expertise protocol.

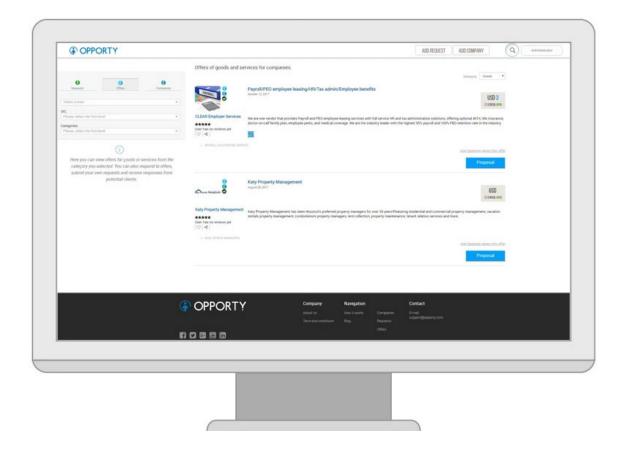
5.1. REQUESTS



A request is a posted message created by a company, service provider or individual user. Each request targets a particular audience in a particular area, in order to solicit proposals from vendors. A user who submits a request can compare all collected proposals and choose the one with the best terms.

Requests resolve problems of trust and lack of exposure for recently registered businesses and service providers. Initially, they can respond to requests with competitive-term offers in order to build a reputation. All newly registered users are granted access to an unlimited number of requests, ensuring fair competition with previously registered users.

5.2. OFFERS



An offer is a message posted on Opporty's marketplace by a business owner. Every offer functions as a niche-oriented proposal for companies in the industry. The aim of offers is to appeal to companies who might be interested in a particular service.

Once a company is registered, it receives a monthly package of free offers. When they expire, a company can choose to purchase additional offers, or earn them through rewarding activities, like contributing content to Opporty's knowledge-sharing system.

If a service provider fails to meet the terms described in the initial offer, the case will be scrutinized by escrow arbitrators. Service providers are expected to comply with the terms provided in the original offer.

In instances where both parties utilize a blockchain-powered smart contract, arising issues are resolved based on the assumption that every executed smart contract is legally binding and self-authenticating. Thus, pre-approved contract standards are used to establish the smart contract's enforceability. Escrow procedure may also be initiated when necessary.

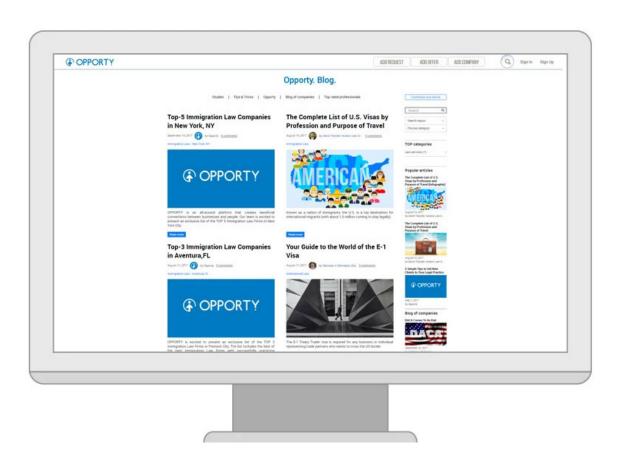


5.3. RESPONSES

A response is a comment-type message that is attached to offers and requests. Responses are replies to concrete offers and requests, describing the particular terms of participation. A response to a particular request features the details of a vendor's offer.

Responses are limited in number. The moment a company or a service provider registers on Opporty, they receive a monthly package of free responses. Once their free responses expire, users may opt to either purchase or earn additional responses.

5.4. KNOWLEDGE-SHARING SYSTEM



Opporty's knowledge-sharing system consists of two major components: the blog and Q&A.

Opporty's blog ensures that every user is able to share their ideas and experiences, educating other Opporty members. Users — be they companies, service providers or individuals — can launch their own blogs to contribute content, giving them an opportunity to expose themselves to the community and establish themselves as experts.

All activities on Opporty's blog are rewarded with tokens. Whether users post in-depth articles or leave useful comments, they are rewarded with cryptocurrency.

The highest-rated contributors become eligible to participate on Opporty's team of experts. By becoming escrow arbitrators, they collaborate to establish rules for conducting a particular business, and to create terms and standards for providing particular services, backed by smart contracts. Regular contribution of content to the blog is the shortest path to gaining a solid reputation within the community and finding new clients on Opporty.

Opporty's Q&A platform aims to meet the needs of users who want to find answers to specific, niche-focused questions. Every Opporty user is in a position to post questions and provide answers to these questions. Answers are rewarded with tokens.

Answers are curated and monitored by Opporty's subject experts. They may comment on answers or delete them entirely if they do not comply with Opporty's terms of use, or if they provide misleading information.

6. OPPORTY MARKETPLACE

6.1. MARKETPLACE MODEL

As a service marketplace, Opporty fosters a business-friendly environment for small and mid-sized companies who request or offer niche-specific services (filing tax reports, registering trademarks, registering companies, preparing contracts, preparing and filing income tax returns, etc.). Users can list their services and target specific

industries in particular areas. In this sense, Opporty is similar to lead-gen platforms. Meanwhile, Opporty's blockchain allows for massive service standardization, quality protection, and cost reduction. Owing to the support of the smart contracts, Opporty administrators and experts are in a position to implement a decentralized escrow procedure which entails:

- Selection of services prone to standardization
- Development of standardized contract terms
- Approval by community experts
- Launch of smart contracts on Ethereum blockchain

Opporty marketplace enables two types of service listings:

- Requests/offers with individual contract terms
- Requests/offers with contracts executed on the blockchain and protected by escrow

Escrow-protected requests and offers receive priority in Opporty listings and are displayed above blockchain-free requests and offers.

Opporty's Ethereum-powered blockchain allows for full-scale use of cryptocurrency (OPP tokens). Users can either earn tokens by completing specific actions or purchase them with fiat currency. Uses for Opporty tokens include the following:

- Purchase of Opporty services
- Payment for services provided by other Opporty users
- Ordering of advertising services and priority listing
- Conversion of tokens to fiat currency

6.1.1. MARKETPLACE STANDARDS

The Opporty team strongly believes that established rules and standards are the cornerstones of business success. For this reason, we have partially abandoned the traditional service marketplace model and are progressing with the implementation of smart contracts and decentralized escrow.

By implementing standardized procedures, companies enable themselves to make faster decisions, reduce spending, increase productivity, and provide their clients with better service quality. The standardized approach is cherished by corporations and Uber-of-X companies for one obvious reason: It Works!

Opporty ensures that small business owners enjoy the benefits of standardization by binding blockchain to on-demand. It allows for self-governed, decentralized communities that develop and establish their own business standards, and play by their own rules.

Industry experts who establish rules and standards are selected by their communities; however, should a community fail to select experts, the Opporty team will assist in the process. The community members will be free to modify or approve any changes to standards for providing a specific service.

6.2. ESCROW

Escrow is an integral part of Opporty's business-friendly ecosystem. It will be introduced in two steps:

- While the community of experts is limited, Opporty administrators will reach out to influencers and encourage them to become escrow members.
- As the Opporty platform grows, the team will empower users to vote for and become escrow members on their own.

Escrow ensures that users who sign smart contracts are guarded against poor quality services and can resolve arising issues in a professional, unbiased manner. Payment is fully or partially refunded to the client in cases of malpractice. However, if escrow judges vote against the client, payment will automatically be transferred to the service provider's account.

Therefore, escrow benefits all parties of the agreement:

 Escrow board members expose and establish themselves as experts and gain a favorable reputation. Every escrow board member receives a visually appealing badge that signifies recognition from the community.

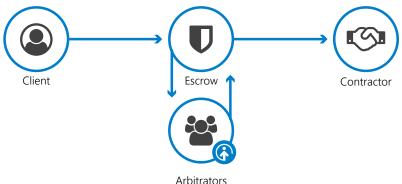
- Clients are given extra protection against poor quality service providers. As a rule, it is difficult to force a party to refund costs for services in a civil court dispute, but with Opporty's smart contracts and escrow in place, all conflicts are resolved conveniently for both parties.
- Service providers, even if recently registered, are able to find clients more easily. Because clients are under protection, they are more likely to pay for services provided by a company that has not yet established its reputation on Opporty.

Escrow members will be selected and voted for within each particular niche and category.

6.2.1. CENTRALIZED ESCROW

Opporty is the world's first service marketplace to feature decentralized escrow on the blockchain. However, it is crucial to differentiate between centralized and decentralized escrow.

Centralized escrow involves four parties: a Client, a Contractor, escrow, and escrow arbitrators (as shown in the image below).



In the event a Client is not satisfied with services provided by a Contractor, escrow procedure is initiated. Escrow arbitrators study the case and decide in favor of either a Client or a Contractor. At this stage, centralized and decentralized escrow do not differ from one another.

The fundamental difference lies in how escrow and arbitrators cooperate with each other. With a centralized model, a marketplace is pressed to hire industry experts who act as escrow arbitrators. This approach suffers several disadvantages:

- Generally, marketplaces and platforms that support escrow operate in multiple niches. Therefore, they face the problem of securing escrow Arbitrators who are knowledgeable in every niche, making the process complex and expensive.
- Escrow arbitrators are hired and paid by the platform. Their decision making is not fully independent. Evidence suggests that centralized escrow arbitrators are likely to rule cases in favor of clients, not contractors, since clients create value and pay the platform.

In light of these inherent deficiencies, centralized escrow may not always ensure a trustworthy level of security, transparency, and unprejudiced decision-making.

6.2.2. DECENTRALIZED ESCROW

Opporty's decentralized escrow (demonstrated below) varies from the centralized model. By educating users via the knowledge-sharing system and gaining ratings and reviews within the marketplace, any Opporty user can be selected as an Opporty escrow arbitrator and join the escrow board (instead of being hired directly by the platform's administration).



Opporty's escrow arbitrators are neither selected nor hired by Opporty's administration. The Opporty team will invite industry experts to become escrow arbitrators at the earliest stages of the marketplace's development. As Opporty's community grows, we will empower Opporty's users to select arbitrators.

Opporty escrow arbitrators are independent and unbiased by default. As they resolve escrow cases on the blockchain, no one can interfere. This establishes a climate of trust, security, and transparency, which fairly favors both Clients and Contractors. Escrow judges receive a fee for case rulings that is automatically transferred to their accounts.

6.2.2.1 TECHNICAL ASPECTS OF BUILDING DECENTRALIZED ESCROW

The following is an example how to utilize Ethereum blockchain to build decentralized escrow and is provided for illustrative purposes.

The functionality of decentralized escrow is rooted in the ability of Ethereum smart contracts to store ERC-20 tokens and Ether cryptocurrency, with its fundamental feature being the transfer and withdrawal of funds based on conditions encoded in the smart contract. Basically, decentralized escrow is a customized smart contract which can be deployed to Ethereum blockchain and processed in the EVM machine.

To develop specific tokens and smart contracts for decentralized escrow, Solidity compiler is used. The Solidity compiler generates a optimized opcode for Ethereum's virtual machine.

Truffle framework can be used to structurize and simplify Solidity development. The framework enables migration to the Ethereum network with minimal expense, and is able to run beta tests before deployment. TDD development allows the framework to fix errors at the earliest stages of development. To develop automated tests, Javascript libraries, Mocha and Chai, can be utilized.

The decentralized application is called "decentralized" because, once it is received through the content distribution system (e.g. Ethereum Swarm), it can be manipulated directly in Ethereum blockchain, which is running on many tens of thousand computers around the world.

6.3. PLATFORM DECENTRALIZATION

Opporty's platform decentralization functionality provides the core infrastructure that enables smart contracts and decentralized escrow. Owing to platform decentralization, users are able to independently select escrow members, and propose and vote for standardized rules for smart contracts. No procedure will be issued or controlled by a single entity.

Initially, Opporty administrators will invite experts. Researching targeted industries,

they will identify and select established experts and influencers. At this stage, administrators can intrude on the voting process to veto particular decisions in order to avoid anarchy.

As Opporty gains momentum, power and freedom of choice will be transferred to the community, meaning that Opporty users will be able to select escrow arbitrators on their own. However, minor curation on Opporty's part will still be allowed.

6.4. GAMIFICATION

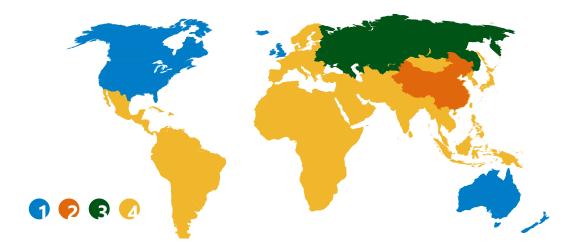
Oppporty is a gamified platform. A certain amount of tokens is issued for every activity. The highest-rated community contributors are awarded with badges of honor. They are also allowed to serve on Opporty's escrow board, which gives them voting power to approve rules and regulations through the smart contract ecosystem.

Opporty Rewarding Activities and Rank-influencing Factors

Publish an offer	Number of response answers
Publish a request	Number of questions with positive ratings
Post a response (speed)	Best Opporty contributor
Post a response (quantity)	Best company blog contributor
First request	Pioneer article in the empty section
First offer	Most-liked question
First review	Most-liked answer
Best review	Filled-out profile (70%)
Number of posts in Opporty blog	Filled-out profile (80%)
Number of posts in company blog	Filled-out profile (90%)
Number of comments	Profile complete (100%)
Number of likes (posts)	Profile with positive rating
Number of likes (comments)	Number of users subscribed to the profile
Number of likes (answers)	Popularity in category
Number of questions (posted)	Popularity in particular area
Number of answers (replied)	Time spent online

Number of reviews posted	Amount paid
Number of reviews received	Paid subscription

6.5. LOCALIZATION



A US-based business, Opporty plans to target other developed and emerging markets. At the initial stage, Opporty will target the United States and other English-speaking countries: the UK, Canada, Australia, Ireland, New Zealand, etc.

The second stage will target China. Opporty envisions providing a frictionless experience to non-Chinese companies operating in the Chinese market, encouraging them to offer and provide services to an immense base of Chinese customers.

The third stage targets CIS countries: Russia, Kazakhstan, Ukraine, Belarus, etc. With over 250 million living in the CIS, Opporty strives to enable small business owners to fully enjoy the immense opportunities offered by Opporty's secure and transparent marketplace.

The fourth stage will reach out to other markets in Europe, Asia, Africa and South America, to build a multilingual community for entrepreneurs and individual service providers, a community that allows them to do business globally in an efficient and productive manner.

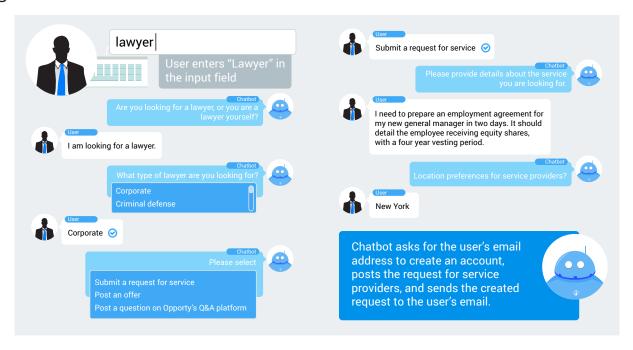
6.6. AI & CHATBOTS

Opporty aims to shrink the gap between technology and business. To do so, the Opporty strives to empower the marketplace with chatbots and advanced NLP algorithms to extract information from unstructured data.

Al-powered algorithms will analyze users' activities to suggest services and vendors. Algorithms will rank services based on predicted user preferences. This ensures the relevancy of suggested services and improves user experience on the platform.

Eventually, the Opporty team will look at Al-based contract analysis and suggestions. Al will be used to analyze the existing base of contract metadata to find and correct mistakes, and offer solutions.

Voice-enabled interfaces might be another interesting avenue for further development. For instance, by integrating Amazon Alexa, Google Home, users will be able to monitor progress and receive answers in a convenient hands-free manner.



6.7. TOKEN UTILIZATION

Opporty cryptocurrency is powered by Ethereum (ERC-20-standard cryptocurrency). The Opporty token is a universal currency on the platform, enabling both service providers and clients to utilize the platform's services. With OPP tokens, users are able to:

- Execute transactions between service providers and their clients within the system by their mutual agreement. Utilization of crypto-enabled tokens makes blockchain-enabled transactions possible between parties by their mutual agreement, in accordance with the current terms of law;
- Pay for Opporty platform-based services, such as priority listings;
- Utilize smart contracts available on the Opporty platform, including decentralized escrow;
- Use of Proof-of-Expertise Protocol.

Additionally, Opporty users are incentivized with tokens for their contributions to the platform's development. Every user can participate in various activities on the platform (such as contributing at the Knowledge sharing platform) and receive rewards for those activities.

7. BUSINESS MODEL

Service Provider — a marketplace, a client application of Proof-Of-Expertise.

Node — a blockchain network participant who stores or verifies transaction information.

All nodes are connected to one another, forming one single peer-to-peer network.

7.1. PROOF-OF-EXPERTISE (POE) PROTOCOL

The product of Opporty is its Proof-of-Expertise(PoE) protocol, which solves trust and sustainability between counterparties by storing business transactions data, including the quality of service received, on the blockchain. PoE protocol includes a combination of private & public chains, storing data about participants, transactions and transaction data, success metrics and other related data. It can be integrated to any service (which will run a node), such as a marketplace, social network, business identity platforms, procurement applications, yellow pages, etc. PoE creates a truly integrated and transparent ecosystem for businesses. Opporty intends to make PoE protocol publicly available, and foster a community around the project.

Use cases of Opporty's PoE protocol include:

- Domestic B2B & B2C transactions
- International cross-border transactions
- · Supply chain risk management

API on top of the PoE protocol allows for verification of counterparty trustworthiness for transactions, and enables interoperability with other blockchains and cryptocurrency protocols. This allows the Opporty platform to:

- Support B2B & B2C transactions using popular cryptocurrencies, such as ETH, BTC, etc.
- Implement integration with other blockchain-empowered platforms, such as identity providers, lending services, etc.

The PoE protocol is designed to empower users with the following features:

- Digital identity. Since business transactions cannot be anonymous, Opporty assigns
 a digital ID that enables identification of transaction counterparties without the
 need to reveal their identities to blockchain participants.
- Storing transaction metadata. The business transactions process implies that
 metadata about the transaction between counterparties should be present in
 transaction (e.g. Payment to Company A for shipment of a certain amount of pens
 to company B according to the contract A-895).
- Privacy for business transaction data. Transaction details are often subject of commercial secret. They should be private.
- Centralized and decentralized escrow mechanisms. In an untrustworthy environment, the use of escrow is a common practice, since it allows counterparties to resolve arising issues without filing claims to courts.
- Oracles. Automatic and semi-automatic oracles.

7.2. DECENTRALIZED MARKETPLACE AND TRUST PLATFORM

Opporty is creating a marketplace and trust platform that uses Proof-of-Expertise (PoE) protocol as its core foundation. The PoE protocol allows for development and

implementation of Opporty-like applications on third-party platforms. The features and functionality of the PoE protocol are described above.

7.3. TECHNICAL SOLUTIONS

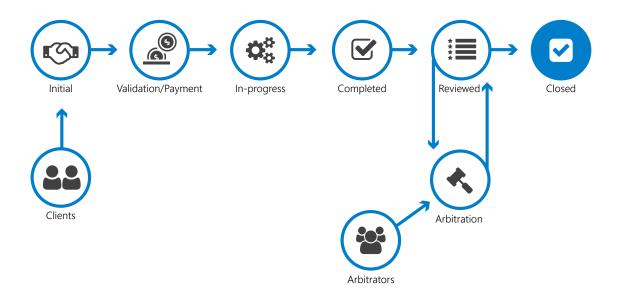
The logic of the Proof-of-Expertise is based on the concept of Ethereum smart contracts, and accordingly uses all the advantages of its infrastructure. Technically, the protocol is a series of Ethereum smart contract updates with references to external data storage (private blockchain) to facilitate deeper audits, arbitration and additional functionality. Proof-of-Expertise is designed to allow partial or total privacy of a transaction while keeping some of the important anonymous statistics public.

7.4. IDENTIFICATION AND REGISTRATION DATA

Identification — data that allows the identification of a client. Internet platforms have simplified user identification to the extreme that most of them only require a user's email address. In the blockchain world, the only important identification is the address of a user's wallet. Traditionally, identification for cross border transactions requires extensive information for purposes of security and KYC. We are solving this by storing identity and registration information in an encrypted form on PoE blockchain. When a transaction requires this information, it can be linked so that only trusted agents (like customs) have access to the information.

7.5. SMART CONTRACTS AND ERC-20 TOKEN

Proof-of-Expertise uses smart contracts to facilitate transactions between parties. Different types of smart contracts require different amounts of OPP tokens to be available in the client's wallet. When a contract is created, it goes through the following steps (note: not all steps are required for all contracts): Initial, Validation/Payment, Inprogress, Completed, Reviewed, Arbitration and Closed.



7.6. PRIVACY OF TRANSACTIONS

We aim to make privacy and identity protection fundamental features of PoE protocol. We intend to use linked identities with zero-knowledge proofs (similar to Zcash) to provide privacy with full verification of reputation.

7.7. PRIVATE BLOCKCHAIN ON "PLASMA" PROTOCOL

Plasma protocol, recently proposed, is an extension of Ethereum that allows for the creation of child blockchains, which are governed by a parent blockchain. These child chains can have different consensus rules, functionality and underlying base tokens. Such extensions naturally fit with Proof-of-Expertise, with OPP as the underlying token used for manipulation. Data can be transferred, manipulated and returned to the parent chain (Ethereum) without disclosure of the nature of underlying data, which we find a useful feature of Proof-Of-Expertise.

7.8. PROOF-OF-EXPERTISE REPUTATION SCORE

Based on transactions executed on the PoE blockchain and/or public oracles, we will provide an Opporty business score. Opporty's business score, or reputation score, can be assigned to providers on and off the Opporty marketplace. The score is calculated utilizing an adaptive machine learning algorithm that is based on multiple factors, including actual transaction data (e.g. industry, location, price, etc.). The score is

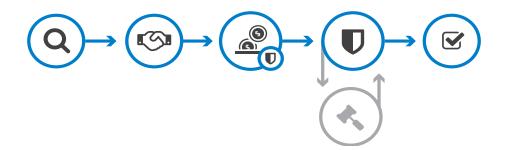
niche-specific and, using Opporty's API, can be integrated to third-party websites and applications.

7.9. USAGE EXAMPLES

All examples in this white paper are used only as demonstrative examples.

7.9.1. REAL ESTATE ATTORNEY REVIEW

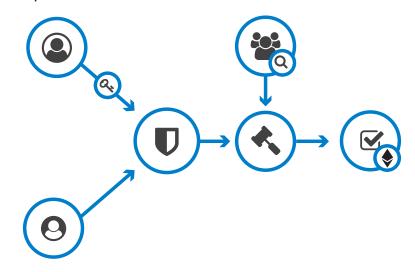
- A client searchers for providers and selects one, based on Opporty's business score and expertise in a particular area or type of property
- The client initiates communication and provides initial case information (like property information, etc.)
- The provider, using Opporty's smart contract templates, accepts the case and an initial handshake is recorded on the blockchain
- The client makes a pre-payment which will be held in escrow over a specified time frame
- Progress is made on the case and intermediate results are stored in private PoE blockchain, in encrypted format, so that only participants can decrypt it (no one, including Opporty, will have access to the information)
- The transaction is finalized when both parties are satisfied, and no feedback is needed; otherwise, an arbitration case is created



7.9.2. ARBITRATION

- One party of a transaction decrypts the information about the case from PoE blockchain and re-encrypts it with a newly generated key
- Arbiters are selected based on their Opporty score and business area, and the newly encrypted key is shared with them so they have access to the information

- Arbiters make decision on the case
- The decision is implemented via smart contract



8. MVP (Minimum Viable Product)

Opporty is in beta development, with MVP (Minimum Viable Product) already available for application and use. The moment Opporty's main ICO is completed and its network is launched, the following functionality will be available:

8.1. OFFERS

Companies will be able to create and log niche-specific offers on Opporty's marketplace. Using Opporty's listing system, they will appeal to registered users in order to collect responses and select the best options for cooperation with other companies and service providers.

8.2. REQUESTS

Companies and service providers will be able to create and log niche-specific requests on Opporty's marketplace. By requesting a service from pre-approved service providers and vendors, they will be able to receive and compare response-based quotes to select the best offer.

8.3. RESPONSES

Users will be able to attach responses to offers and requests logged into Opporty's marketplace. These comment-type messages will act as replies and feature details of a vendor's offer.

8.4. PRIMARY LISTING SERVICES AVAILABLE, PAID FOR IN OPP TOKENS

Opporty's built-in currency, OPP tokens, can be used to purchase Opporty's primary listing services, such as marketplace advertisements and primary placement. OPP can be used to purchase offers and requests as well. Transactions between registered users and Opporty will be enabled.

8.5. MARKETPLACE WITH LISTED SERVICES FROM PROVIDERS AVAILABLE

OPP tokens can be used to pay companies and vendors for provided services, with transaction information (not transaction details) stored in their accounts at Opporty. Transactions between users will be enabled.

8.6. USER ACCOUNTS (With messaging, listings, and notifications)

Users will have access to functional accounts, and will be able to list their offers and requests at the Opporty marketplace, receive responses, send and receive messages, and receive notifications from Opporty's newsfeed.

8.7. KNOWLEDGE-SHARING PLATFORM

Users will be allowed to create and publish content (articles, infographics, press releases, question answers, etc.) from their own accounts on Opporty's knowledge-sharing platform. Their contributions will be rated and ranked by Opporty users to trigger built-in rewards for content-related activities.

8.8. GAMIFICATION

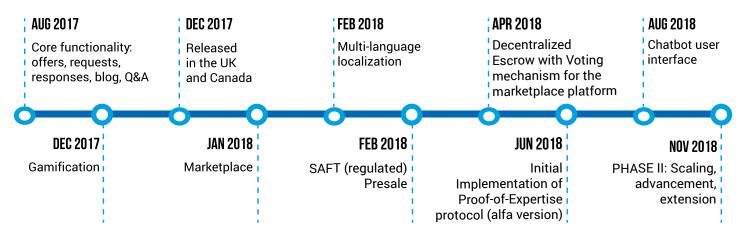
Opporty's gamification functionality will be enhanced to provide users with token-based rewards for activities at the marketplace and knowledge-sharing platform. The complete list of activities is available (here)

8.9. DECENTRALIZED ESCROW SMART CONTRACTS (Released on GitHub)

A blockchain-powered platform, Opporty will enable users to utilize decentralized escrow smart contracts once the network has launched. However, some elements of its account-based functionality may be missing. In that case, users will be encouraged to contact Opporty's administration, who will assist in setting up and activating a concrete decentralized escrow contract between the signing parties.

9. ROADMAP

9.1. PHASE I: Public Alpha



9.2. PHASE II: Scaling, advancement, extension

- · Implementation of staking organizational infrastructure
- In-depth, niche-oriented development of the Opporty platform
- · PoE development and integration to third-party applications
- · Integration and testing of AI and Chatbots on the Opporty platform

10. CONCLUSION

Opporty is a business relationships ecosystem on the blockchain, consisting of two layers: a Proof-of-Expertise protocol and a B2B platform for business transactions. The PoE protocol, empowered by Opporty's business scoring system, can be used in third-party applications to facilitate transactions and build trust among counterparties. The B2B platform provides a secure, immutable, and trustworthy ecosystem that empowers businesses with the benefits of blockchain technology.

Opporty features a marketplace and a knowledge-sharing system, with the support of smart contracts and decentralized escrow. The platform allows customers to find offers and requests, and enables providers to get their first orders by boosting clients' confidence through decentralized escrow.

The PoE protocol enables a conditional business scoring system that analyzes transaction metadata and assigns individual business scores to providers, on and off the Opporty marketplace. That is, Opporty business scores will be available not only on the Opporty platform but also on third-party platforms and applications. This combination allows Opporty to resolve the problem of lack of trust in business transactions.

Opporty's knowledge-sharing system enables users to educate their communities by sharing knowledge and expertise, thereby gaining exposure by building a more educated market. By increasing brand awareness and getting their content rated, they may be invited to join Opporty's escrow board, empowering them to establish rules of doing business and resolve arising conflicts.

The self-regulated, decentralized expert community, guided by the principles of digital democracy, will establish and approve standards for doing business in specific niches. The standards will be mutually beneficial to both service providers and customers.

Once transparent standards are established, they will simplify the process of starting a business or targeting new markets. The obvious advantages of blockchain technology will make for its broad adoption for B2B and B2C interactions within the service economy. Both parties can choose to be protected by escrow, which makes dispute resolution faster and less expensive than inefficient civil court proceedings.

11. CONTACTS

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References

Satoshi Nakamoto, "Bitcoin: A peer-to-peer electronic cash system," tech report, 2008 https://bitcoin.org/bitcoin.pdf

V. Buterin, "A next-generation smart contract and decentralized application platform," tech. rep., 2017 https://github.com/ethereum/wiki/wiki/White-Paper

Eli Ben-Sasson et al., "Zerocash: decentralized anonymous payments from Bitcoin", 2014 http://zerocash-project.org/media/pdf/zerocash-extended-20140518.pdf

Joseph Poon and Tadge Dryja. "Lightning Network". Mar 2015 https://lightning.network/lightning-network-paper.pdf

Vitalik Buterin, Joseph Poon, "Plasma: Scalable Autonomous Smart Contracts", 2017 http://plasma.jo/plasma.pdf

Nick Szabo, "Smart Contracts: Building Blocks for Digital Free Markets", 1996 http://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.wwh.net/smart_contracts_2.html

Alan Cohn, Travis West, and Chelsea Parker, "Smart After All: Blockchain, Smart Contracts, Parametric Insurance, and Smart Energy Grids", 2017

https://www.georgetownlawtechreview.org/smart-after-all-blockchain-smart-contracts-parametric-insurance-and-smart-energy-grids/GLTR-04-2017/

Max Raskin, "The Law and Legality of Smart Contracts", 2017 https://www.georgetownlawtechreview.org/the-law-and-legality-of-smart-contracts/GLTR-04-2017/

Alternative Dispute Resolution

https://en.wikipedia.org/wiki/Alternative_dispute_resolution

Gartner report, "The Consequences of Fake Fans, 'Likes' and Reviews on Social Networks" https://www.gartner.com/newsroom/id/2161315

Michael Luca, Georgios Zervas, "Fake It Till You Make It: Reputation, Competition, and Yelp Review Fraud," 2015 http://people.hbs.edu/mluca/fakeittillyoumakeit.pdf



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