TECHNOLOGY PAPER

Table of Contents

1. Sponsorship Tokenization

We propose a Net Sponsorship Asset (NSA) as a unit that sponsors are willing to pay for in sponsorship business. This unit is backed by sponsee's audience/clients attention. Sponsorship assets are desirable for sponsors to be purchased as they can feature anything sponsors may wish (logos or branding in its simplest implementation). Sponsorship assets are to be defined broadly and can imply both physical object (banners, stands, musical pieces and their likes) and virtual opportunities (getting mentioned in an online app or website, playing a sponsored video, mentioning sponsor in an introductory talk). The opacity of sponsorship industry, the presence of multiple legal hurdles and its high transactional costs entail significant rise of complexity involved in small and medium-sized business entering this industry. We propose sponsorship tokenization as a solution to many of these challenges. Business that is in need of sponsorship financing can use dAegis to issue his own custom DAE-backed tokens and sell them to sponsors. The act of buying those custom tokens will constitute the sponsorship process.

1.1 How sponsorship tokenization works?

Businesses interested in receiving sponsorship funding will use dAegis **to issue their own custom crypto tokens – custom Signature Tokens**. In order for Signature Tokens to have consistent and concrete value, they will be backed by our DAE tokens in a certain proportion. It means that it's impossible to purchase any custom Signature Token without prior purchasing of DAE tokens and converting them to target Signature Tokens. Sponsees are free to issues as many custom tokens as it may be deemed financially necessary and can burn redundant tokens or issue additional portion of them any time. However, there may be specific settings associated with a sponsorship offering that would prohibit sponsees from collecting more money that it was originally intended. These Signature Tokens will further be sold to sponsors for opportunities to promote their brands during the sponsored event. Thus, by emitting own sponsorship tokens, businesses-sponsees create many intersecting virtual sponsorship economics.

After issuing Signature Tokens, sponsees shall list as many sponsorship assets they have as possible, and assign a finite price denominated in Signature Tokens to each of them. Each sponsorship asset will have a detailed description, location, attention score and other properties stipulated to draw sponsors' attention. Sponsorship Offering begins! Then, sponsees can specify the way they'd like this offering to be carried out – whether it should raise prearranged hard cap and terminate automatically, or it should run indefinitely, or it should run in a form of auction.

Below see a brief description of how sponsorship deals are conducted:

1) Let's assume there is a *Blockchain & Co blockchain exhibition* that is willing to attract sponsorship financing. After having examined its financial needs and checked the price of DAE tokens, sponsee will issue a certain number of custom tokens with a ticker of *BLK-DAE*,

backed by DAE. *BLK-DAE are Signature Tokens*. Signature Tokens can be distinguished from other tokens by *–DAE postfix*.

2) Sponsee lists his sponsorship assets. Since it's an exhibition, each stand, banner, coffee break table, leaflet can be tokenized. Each newly tokenized asset will be assigned a BLK-DAE denominated price. It's essential for sponsee to list many various sponsorship assets, as they could bring more sponsors on board.

3) As soon as BLK-DAE tokens become available for purchasing on dAegis platform, they can be bought by sponsors.

4) Each sponsee receives an appointed manager-arbitrator. He/she will be selected randomly among a geographically distributed range of sponsored experts. The manager will personally be controlling the sponsorship deals flow and can be asked any question pertaining to dAegis platform capabilities, as well as disputes resolution.

5) Sponsors are browsing sponsorship opportunities, focusing on their own preferences (which could be location-based or event-specific), and eventually do discover something that suits them well. They study the details of sponsorship assets they've chosen. Thanks to information regarding sponsorship assets being stored in a distributed ledger, it is verified and guaranteed. Sponsors can find other sponsors' reviews about each sponsorship asset and make a final decision. If the value received by sponsors in exchange for their money is perceived to be good enough, sponsors will buy signature BLK-DAE tokens, thus starting the sponsorship process.
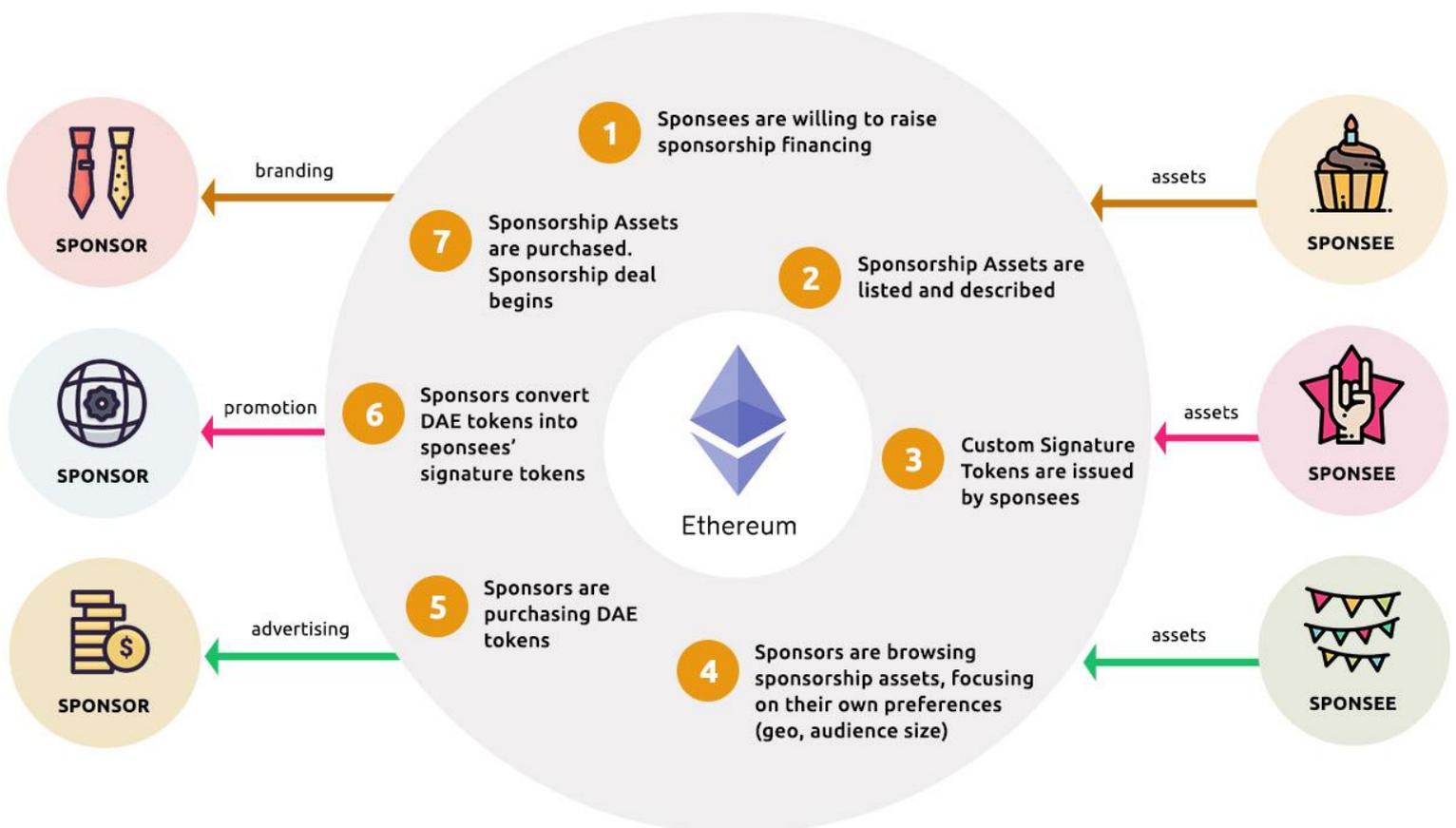
From a technical perspective, sponsorship process is built as follows:

1) The moment sponsee decides to issue custom signature BLK-DAE tokens, smart-contract is born in Ethereum network. This smart-contract will regulate all the operations pertaining to this particular custom token. It also indicates total number of BLK-DAE tokens in circulation, their ticker, their value ratio to underlying DAE tokens, and would link to each sponsorship asset subsequently created by sponsee. The BLK-DAE smart contract will also specify the state of custom tokens – they can be just issued with no collateral backing it (IOU) or already bought by sponsors.
In our current example, newly issued BLK-DAE tokens are simple IOUs.

2) Each sponsorship asset created and listed by sponsee will be stored on Ethereum chain and linked back in original BLK-DAE tokens smart-contract.

3) When sponsors decide to purchase a sponsorship asset for a certain price in BLK-DAE tokens, sponsors must buy DAE tokens first, and then convert them to BLK-DAE tokens. Sponsor and sponsee negotiate the expected process of sponsorship deal and agree on certain milestones, upon reaching which a prearranged part of total funding will be released to sponsee. As soon as conversion is done, DAE tokens get locked in a BLK-DAE smart contract, and can only be released to sponsees when sponsors believe a required milestone is reached.

4) Having released all BLK-DAE tokens to sponsee, each sponsor should confirm its satisfaction with the job performed by sponsee. If there are any conflicts or misunderstandings, parties are welcome to solve them with the help of arbitrators.

By acquiring sponsorship assets in dAegis, sponsees get an opportunity to flexibly regulate the amount of money released to sponsees. Depending on the progress and/or efficiency that sponsee delivers, sponsor may wish to allocate bigger or smaller chunks of total funding.
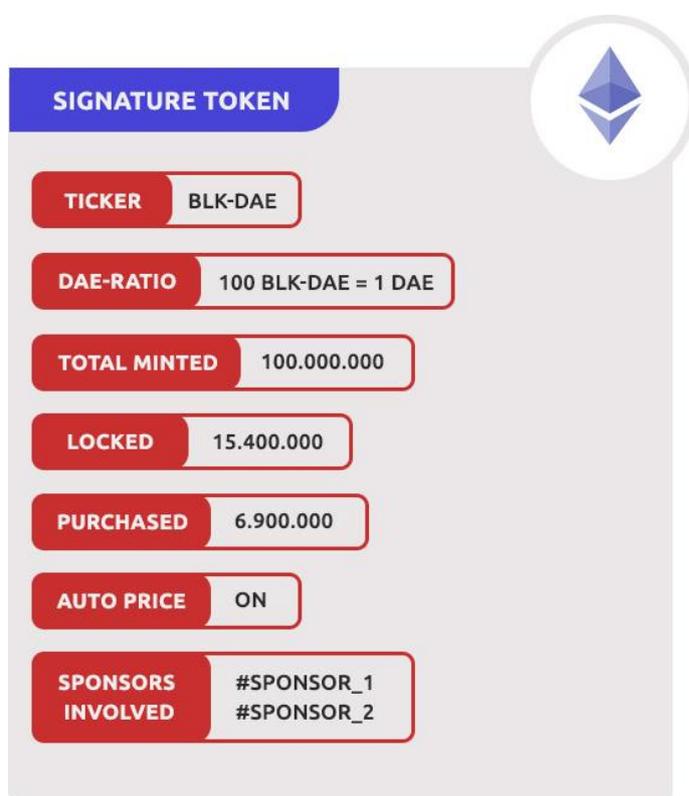
Locking DAE tokens up in escrow not only renders deals transparent, but also improves DAE tokens economy.

1.2   Sponsorship assets on blockchain

Each **Net Sponsorship Asset** that has ever been created by sponsee is stored in Ethereum network. Immutable ledger will also store the information pertaining to all the manipulations that have ever been done with this particular asset, including:

- The price for which it's been sold to sponsors previously
- What sponsors did purchase this asset
- Reviews and recommendations left be previous sponsors (if any)
- Asset's performance, described in both textual way and in ROI that was delivered to previous sponsors (subject to sponsors' submission).
- Other sponsors who are involved in the sponsorship of this asset right now
- The information on intellectual property rights, its holders and licenses

Favoring blockchain for storing sponsorships-related information over traditional databases gives the following advantages:

- Fault tolerance due to decentralized nature of blockchain
- Improved security of data

This makes the industry of sponsorship dramatically transparent. Any potential sponsors is free to examine each asset's history, know the price that was paid for it before, and make an independent decision based on real facts.

1.3   Ample opportunities for sponsorship

- **Flexible sponsorship possibilities**

Sponsorship is a mutual value exchange. It is consumers' attention that is important to sponsors, and the funding that is important to sponsees. Sponsees, after managing their business for quite some time, tend to understand the particular qualities of their audience. They understand that while one sponsors may not be interested in sponsoring the whole event, three or four sponsors can easily buy it all in chunks most relevant to them. Sponsees love the idea of being able to sell discrete portions of their sponsorship facilities to different sponsors. This increases the flexibility of sponsees in terms of how much sponsors they could attract, and eventually maximizes total

proceeds sponsees can expect. Sponsors are not made equal and tend to have varying tastes, necessities and peculiarities. By creating as many categories of tokenized sponsorship opportunities as possible, sponsees become significantly more likely to cater to needs of each particular sponsor. With tokenized sponsorship assets, it takes the same time to purchase the whole event sponsorship opportunity as it takes to buy event's crew T-Shirts ads opportunity.

- **A chance to interest many sponsors simultaneously**

Traditionally, sponsorship financing implies limited number of sponsors engaged in sponsoring each particular sponsee. That happens because of the necessity to conduct a thorough due diligence and cover legal risks, which takes precious time resources and lowers the sponsorship funding received in the end of the day. Sponsorship tokenization solves this problem. Sponsees now can freely sell their sponsorship assets to a number of sponsors at the same time. Those sponsors who are not interested in covering the whole sponsee funding needs can consider buying a few sponsorship assets that best suit their target audiences' requirements. Sponsees in their turn source larger sponsorship financing than it would be possible without tokenization, and reduce their financial and time overhead.

- **Simplification of sponsorship procedures**

By listing tokenized sponsorship assets on dAegis platform, sponsees automatically offer them to hundreds and thousands of potential sponsors. There is no need of manual search of sponsors and exhausting deals conclusion. Moreover, there is no need to keep track of which sponsorship assets have already been booked by sponsors, and which have not. This is tracked automatically and guaranteed to be true by smart-contracts.

- **Secondary market opportunities**

Although we do encourage free market relationships between sponsors and sponsees within dAegis, sponsees have a right to sell a certain discounted part of their custom signature tokens to large intermediaries that will act as resellers. Resellers will sell these tokens to end sponsors for a higher price. For resellers this represents an opportunity to purchase sponsorship assets structured in tranches by properties that are most important to them.

- **SME gains access to sponsorship market**

There have always been a segregation of businesses admitted to join the sponsorship market. The segregation has mostly been predicated on the size of business and the extent to which it's known by media and consumers. Insufficient public awareness or small audience size of an event would hamper its pursuit of sponsorship financing. But now with sponsorship tokenization it's easier than ever for every business to list its sponsorship assets and start attracting sponsors.

Owing to the introduction of sponsorship tokenization, dAegis will enable users with drastically new sponsorship approaches.

Sourcing sponsorship capital from own customers

Sponsees can move beyond offering of traditional sponsorship assets. They are free to source sponsorship financing from not only other businesses and brands, but also from their own clients, while offering certain right, discounts and benefits in return. Contemporary art exhibition that is held 5 times annually can receive sponsorship funding from its visitors (customers) by selling Signature Tokens to them. These Signature Tokens should empower purchasers with substantial benefits – 1-year free of charge exhibition access, for example. This not only helps sponsees to receive additional funding, but also ensures a high audience attendance and engagement that clearly increases sponsors' interest towards the sponsee. Still, we realize it's traditional brands who will account for an overwhelming majority of sponsorship funding received by sponsees within dAegis.

Various forms of sponsorship campaigns management

There are various ways of receiving sponsorship financing at the discretion of sponsees:

1) **Traditional sponsorship sourcing.** May be limited by hard cap, once reached, further signature tokens offering is ceased.
2) **Go big or go home.** Sponsee receives sponsorship funding only after collecting the required sum within a certain period of time. If the required funding level is not reached, purchased signature tokens are returned back to would-be sponsors.
3) **Dutch Auction.** Conducting auction among sponsors helps sponsees to determine a final price for each of sponsorship assets concerned.

Sponsorship assets tokenization significantly lower industry's entry barriers. There is no more need in direct communication with every single brand-sponsor. With a couple of mouse clicks, every business can put its sponsorship assets up for sale.

Intellectual property rights and trademarks management

Legal challenges associated with sponsees sourcing sponsorship money from multiple sponsors simultaneously are a serious hurdle for sponsees aiming to increase their sponsorship proceeds. One of the most prominent legal challenges is the requirement to pass a thorough due diligence, which includes trademarks and copyrights analysis, checking intellectual property ownership and protection, and making sure there is no infringements associated with the company.

dAegis has a goal of unifying the sponsorship market by providing sponsors and sponsees with a single platform allowing for sponsorship campaigns management, including its legal procedures. Ethereum blockchain will store the intellectual property information and the

temporary rights on it that each sponsor will be endowed with when engaging into sponsoring this sponsee. This obviates the need for manual legal background checks and saves a lot of time and energy.

Attracting sponsorship capital backed by future sponsorship assets

dAegis can be used by business that is currently short of sponsorship assets that could be sold to sponsors, but seeks to attract sponsorship funding in order to build these very sponsorship assets in the nearest future. This is a true revolution in the way business can source investment for future projects development. In other words, tomorrow's sponsees can attract capital from sponsors way before it has sponsorship assets to be sold to them, and then use the money to create a unique event full of sponsor's ads. This creates wide opportunities for mid-sized businesses that aim to raise capital and have a well-thought business plan in mind.

Secondary market of sponsorship assets

We believe that creation of ecosystem allowing for free trading of sponsorship assets will give rise to a whole variety of sponsorship derivatives – secondary sponsorship products that would be sold to intermediaries in greater scale. Here are a few sponsorship opportunities that we envision to stem from sponsorship assets' secondary market:
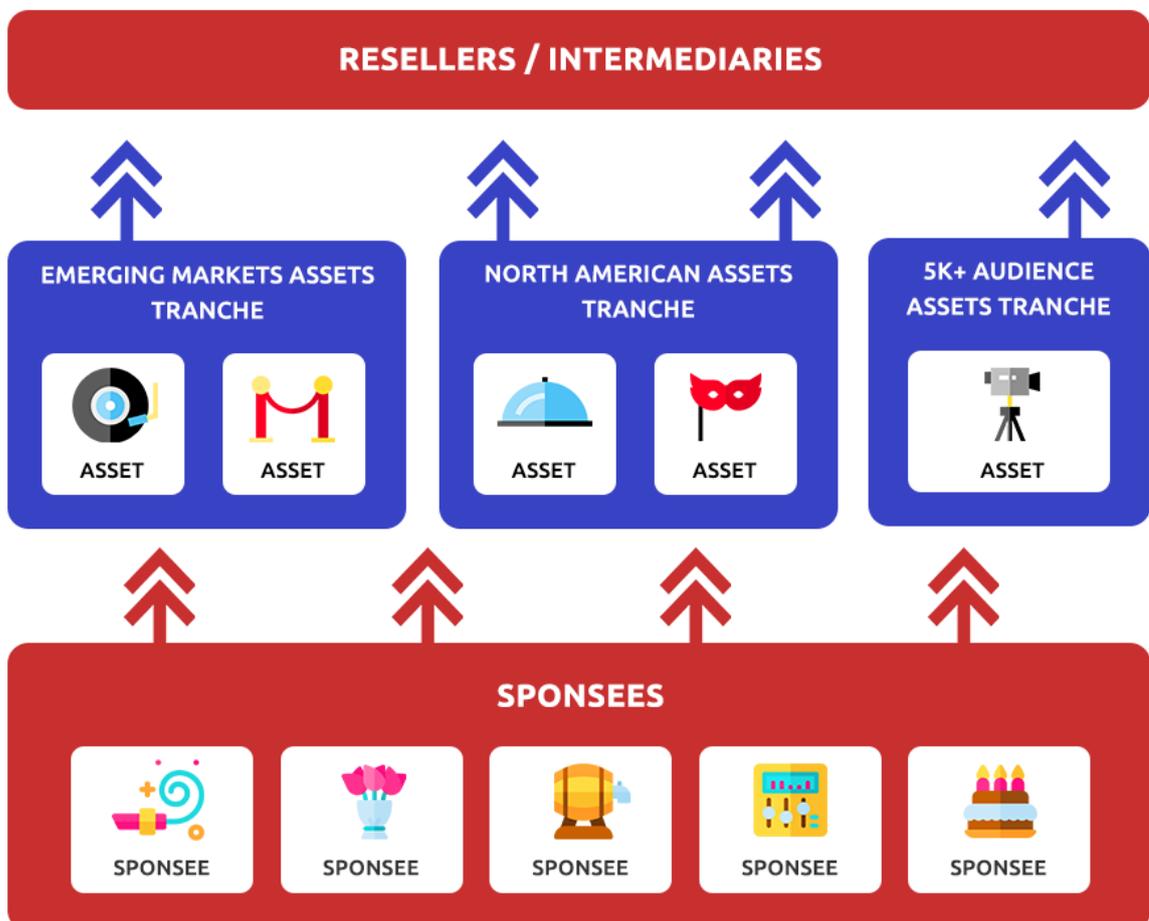
1) Purchasing sponsorship assets represented at dAegis in tranches structured by a wide range of factors: physical or virtual sponsorship assets, geographical location, sponsees genres and business type, sponsees' audience size, etc.
2) Sponsee might be able to emit debt obligations collateralized by sponsorship cash inflows. Note, however, that emittance of any sort of sponsees' obligations is out of the scope of dAegis's business. We only suggest one more possible scenario for utilizing sponsorship assets listed at dAegis.

1.4 Supporting sponsorship assets price

Since custom Signature Tokens released by sponsees will be backed by DAE tokens, their value will be tied to DAE value too. Thus, effective fiat value of collected sponsorship financing (of total Signature Tokens sold) could end up being noticeably smaller or larger than originally desired. We suggest to solve this issue by creating a mechanism that automatically tracks current underlying DAE tokens price and adjusts the exchange ratio of Signature Token to DAE tokens to reflect price movements. The target sponsorship assets' price can be tied to any other liquid asset, fiat currency or cryptocurrency. **Adjustment of effective sponsorship assets price will be achieved by manipulation of exchange ratio of some particular signature token to DAE.**

Let's assume that sponsee, having issued its RND-DAE tokens, is offering sponsors an opportunity to get featured on a banner for *USD 15.000*. Suppose that RND-DAE tokens are issued with *100:1 RND-DAE to DAE ratio*. Assuming DAE price to be of 1 DAE = 1 USD in the beginning, the effective price of the sponsorship asset put up to sale by sponsee equals to 1.500.000 RND-DAE.

Suppose, there has been a week since the beginning of this sponsorship asset's offering, and DAE price changed to *1 DAE = 0.9 USD*. This means that RND-DAE to DAE exchange ratio should be changed to reflect the price swing and will automatically be reduced *to 90:1*. The asset's price in Signature Tokens will not change and will still equal to *1.500.000 RND-DAE*.

It's important to note that sponsors, having bought DAE tokens, have liberty to purchase any other custom Signature Token emitted by various sponsee. This globalizes the process of sponsorship and eliminates the need for sponsors to conclude individual contracts with every sponsee. Moreover, we're convinced that as more and more sponsorship assets will be listed and turned over at dAegis, there will be a rising demand for exchanging Signature Tokens between sponsees as a payment for services rendered. This is where the utility of custom signature tokens would merge with their value.

2.0   Proof-of-client-eligibility

We do not discriminate companies willing to participate in sponsorship activities. We do not care about their profits and size. However, this does not prevent up from a careful examination of every company's activity, its financial results and public image before letting it join our platform. This checking mechanism is called "*proof-of-client-eligibility*".

- **Analysis of information provided by the prospective client itself on presence of questionable details and misleading information.**

  At this stage, we may discover nuances that will require an additional discussion
- **Financial audit of the company by one of the reliable financial institutions.**
  The report is stored in the blockchain and will be automatically linked to each subsequent sponsorship deal.
  In some cases, we require access to the API of the bank, where the company has an account, in order to track the flow of finances in real time and detect potentially fraudulent activity.

  Facts and figures instantly shed light on the real state of the business.
- **Studying the company's public image for controversial and / or undesirable events and other incidents**. Particular attention is paid to the intensity of the brand's or event's coverage in the press.

  The presence of scandals or, conversely, positive stories can have a serious impact on the future sponsorship relationships. All the information collected during the research is stored in our immutable ledger and can be conveniently obtained by some potential partner when requested.
- **Analysis of previous sponsorship deals.**

  It helps to prevent conflicts of interest and, as a consequence, litigations.

$$\text{proof-of-client-eligibility} = (Info, FinAudit, PublicImage, PrevDeals)$$

In addition, at the analysis stage, each customer will be assigned a so-called "**dAegis Score**". It will not influence future sponsorship deals and costs of services. It is employed solely as an indicator of the client's level of experience in terms of previous sponsorship deals implementation. The **dAegis Score** is calculated by taking into account the time period (in years) during which the client has already been engaged in sponsorship activities, the amount of money already spent while sponsoring somebody (or received, if we are talking about an event), and the level of publicity of past transactions.

$$dAegisScore = t_{timeSponsoring} + \log_3 {S_{moneySpent}}/{100.000} + P_{publicity} * N_{deals}$$

3.0   Collaboration with our experts

Preparation for sponsoring requires deep and meaningful cooperation between a wide network of specialists of different professional skills. We are absolutely sure that the employment of hundreds of highly paid specialists in a variety of spheres is ineffective, to say the least. In our opinion, the truly adequate agency should be primarily an arbiter, a kind of invisible hand across the market of sponsorships, which regulates processes and arrangements.

We are going to solve this problem by gradual introduction of independent professionals of a multitude of skills, distributed across the world, covering different regions and cultures. The introduction of experts is to be held smoothly: we are expecting at least 320 experts who had mastered the most demanded skills to join our platform by the end of 2018. By 2020, this figure may grow to 1400 people. We call these specialists our *experts.* Our experts will be incentivized to collaborate with us for several reasons – and salary is not the most important one among them. Experts are free to regulate the amount of money they are willing to charge for their services, but are strongly recommended to set the prices not higher than the market average. Moreover, our experts will always be interested in showing themselves on the most advantageous side possible, since they will have a chance then to start working personally with some client, which would definitely result in receiving higher compensation. Also, all the interactions between our clients are stored in blockchain, which enables would-be customers to evaluate past experiences of certain experts and decide whether to work with them.

> As mentioned above in Section 5.2 that stipulates DAE token utilization possibilities, **the use of DAE as a means of payment within the dAegis network enables our clients to get compensated for up to 25% of the sum of the services rendered by the experts. This is a major factor in maximizing the utility of DAE.**

dAegis platform applies a fixed *Expert Payment Fee of 10%* to money received by experts within dAegis network. This fee is mostly used for discount provision purposes. The details of our business processes are available in Section 7.

Here are just a few reasons why the creation of a decentralized network of experts will be beneficial both for us from a financial point of view and for clients from a qualitative point of view:

- **Making the process less expensive.**
  Obviously, different seasons differ in their saturation with sponsorship contracts and activities to sponsor. Our decentralized skilled experts look like a freelance exchange. Indeed, we employ contractual workers. When we have work to do – they work. When there is no work – we don't pay anything, and our experts are busy doing what they want to, for example, doing their main business or honing their professional skills. However, we are planning to introduce *dAegis Experts API* that would provide our experts with a

job even when there is a lack of available orders coming from dAegis clients. Read more in Section 5.5.3.

- **The absence of clients' selection criteria.**
  We do not refuse to accept small- and medium-sized businesses. On the contrary, due to automation and scale, this category of clients is expected to become the most prosperous and profitable to dAegis. For dAegis, the size of potential contract does not matter. We will charge our fixed commission.

- **Our system is easy to scale.**
  The involvement of new experts is almost automatic. Our customers – brands or events – submit their request for specific services using our website. Experts can see the requests and decide whether they are ready to participate. Customers who need services determine the compensation for some piece of work. These customers get prompted with the price to assign to some piece of work. Prices are formed automatically by our system based on the current situation on the market. If the demand for experts becomes noticeably higher than supply, which can occur during major sports or other events of worldwide scale taking place, new experts will be attracted by higher pay proposed.

- **Our system is transparent and objective.**
  Many sponsorship transactions today are not advertised. The lack of openness of the market hampers the industry growth. Instead of a beneficial to everybody exchange of experiences, many players prefer to carry out their deals in shadow. Deprived of actual organized information about what is happening in the sponsorship industry, businesses that are wishing to enter the market are forced to believe in the statements made by sponsorship intermediaries. These statements tend to be biased and eventually lead to incorrect conclusions and bigger than required expenses.

  dAegis offers its customers an opportunity to instantly view the whole picture and not let greedy agencies and other intermediaries deceive them.

- **Obvious benefits for our clients.**
  Our clients are entitled to obtain quality services at an incomparably lower price because of reasons cited above.

  We can rightly consider this model to be the future of not only the sponsorship industry, but any other major centralized field of business involving collaboration with a multitude of different specialists.

3.1 Proof-of-expert-eligibility

Before any person - physical or legal - can execute certain work and get paid for it, he\she must complete the registration process or, as we call it, *onboarding. Onboarding* consists of several steps:

- **The expert applies for participation in the system.** He\she must provide his\her personal data and attach documents that prove his\her identity. The would-be expert is also obliged to provide documentary evidences of his\her belonging to the specific professional group of his\her interest. The expert must show some facts that can confirm his\her experience. For the designer, this can be previous layouts and templates, completed orders, active profiles in online professional communities such as Behance and Dribbble.
  We are also positive about experts who do not have work experience. They may be yesterday's students or people who took a ride in a horizontal social elevator and currently are mastering new skills.
- **The distributed network of our existing experts conducts due diligence of the candidate.** They analyze his\her experience, study past work and express their opinion by voting. If the experience is absent, the candidate is given a test task. Only those network members who have experience in this or related fields and those who are not busy with any task at the moment can participate in a candidate's evaluation.
- **Based on the results of voting, a decision is made whether to let this expert to join our network.**

This mechanism is automated and is called *proof-of-expert-eligibility*. Each step of this protocol is specified in the blockchain, which guarantees transparency and reliability of the involved experts.

$$\text{proof-of-expert-eligibility} = (Apply, DueDiligence, Join)$$

3.2 Proof-of-expert-availability

Our decentralized system records any changes in experts' work status and flags whether they are currently occupied. As soon as a new order appears in the system, the client immediately receives a list of people ready to start working.

This is the *proof-of-expert-availability*.

3.3 dAegis Experts API

We expect at least 70% of experts to be engaged in some work at any random point in time. Nevertheless, we want to endow our experts with the opportunity to decide themselves when to work, and when not to work. Due to the fact that we cannot guarantee 100% of expert's free time to be occupied with orders coming from within our system, we decided to create a public API that will allow outside customers to hire our experts during the periods of lack of available work.

In this context, we can think of our platform as of a freelance exchange. Our decision to allow experts to be hired by outer people will by no means substitute or prevent experts from completing the orders coming from dAegis clients first of all. The sole intention of implementing the public API is to promote maximum employment possible across our experts.

In our opinion, this is an extremely promising step, which will not only give experts more choice, but will also expose DAE tokens to new audience, as our experts will only be eligible to be paid in DAE. We expect that third-party customers will be motivated to contact our experts for the reasons of predictably high-end results, the presence of decentralized control and pleasantly surprising prices.

Of course, experts are highly discouraged to do any third-party job when there is a job present inside the dAegis network that came from our sponsors and events. Doing this repetitively will guarantee expert's exclusion from our network.

All the details concerning the third-party work execution will also be stored in our blockchain storage. Secure transactions and dispute resolution, however, will be carried out without relying on decentralized voting and will require participation of the dAegis administration.

The presence of the public *dAegis Experts API* will allow existing centralized freelance exchanges like *UpWork, Freelancer.com, Truelancer* and others to instantly access our free experts, offer them work and provide a two-way linking between their own demand-side and our supply-side. Future decentralized exchanges will be able to take advantage of additional functions of our API, including the joint use of our secure blockchain storage and the combination of voting power to make cooperative decisions

Please see **Appendix B** to find out more info on the main methods used through the API.

Do not confuse the dAegis Experts API with the dAegis SDK, which enables developers to create software solutions that may implement innovative functions based on the core possibilities offered by the dAegis network. The dAegis SDK will be described separately.

3.4   Proof-of-work-quality

The protocol *proof-of-work-quality* holds an important position in dAegis. This protocol was specifically designed to assess the quality of work done by a particular expert.

Clients of dAegis - both sponsors and events willing to be sponsored – rely on our distributed experts to do some work. Given that the typical sponsorship deal requires tens and sometimes hundreds of employed experts, a mechanism that would guarantee decent work results quality becomes extremely important.

Below is an informal description of its implementation:

- The dAegis client has some work for an expert to do. For the sake of description simplification, let's imagine that the job is *to conduct a study of the baby food market in order to identify major sponsorship deals, both active and completed*.

- As soon as the expert starts to work, all the related information gets stored in our blockchain - the safe transaction commences. According to the protocol of *proof-of-work-quality*, the fact about the beginning of a safe transaction is also added to another branch of our internal blockchain responsible for controlling the quality of experts' work.

- As the work progresses, the contractor provides the employer with information about the progress. Each piece of information is appended to the blockchain. The employer at this stage can either wait for the total completion of the work, or use the mechanism of *dAegis Work Verification*, which is described later in this section.

- As soon as the work is completed and the expert is ready to finish his\her contractual relationship with the employer, the *proof-of-work-*quality protocol must be exercised to make sure the work was done appropriately. The employer will rely on *dAegis Work Verification*.

What is *dAegis Work Verification*? In many respects, it is similar to the process of decentralized disputes resolution *dAegis Safe TroubleShooting*. Similarly, our system will rely on the distributed voting of other experts.

1. There is a special feature inside the dAegis network, which allows other experts – those who did not take part in the job execution – to seamlessly evaluate the quality of certain completed orders. Thanks to the immutable ledger in place, all types of data concerning temporary employment contract execution will be easily and securely accessible when needed. No falsification is possible.

2. The system automatically selects experts from the same and close professional fields to assess the quality of the work done. Evaluation does not take much time and in fact constitutes a simple voting on whether the expectations of the employer meet the promises and actual results achieved by an expert.

    Third-party experts are motivated to vote, because this earns them additional remuneration. Moreover, in the dAegis network, each expert has a confidence index (*dAegis Trust Index*), whose aim is to reliably reflect the level of expert's skills in his\her professional field. This index increases when the expert's opinion on the quality of the third-party work performed coincides with the employer's expectations, leading to both parties satisfaction.

    The voting of experts should not and will never be based on subjective personal factors such as affection or disdain that may be caused by the tastes of the voter. The voters will be clearly instructed on prohibition for their voting to demonstrate their personal satisfaction with the work done. On the contrary, voting must confirm the correspondence between employer's expectations and reality.

3. As the voting ends, the adequacy of the work performed becomes obvious. If the consensus is convinced of the not good enough quality of the result, then the claims can be immediately presented to the contractor directly, without losing the employer's time.

$$\text{proof-of-work-quality} = \big(Apply, Evaluate, Approve[S_{SponsyConsensus}]\big)\%$$

In order to find the job worthy, an expert must receive at least $[S_{SponsyConsensus}]$ supporting votes. By default, this variable is 80%. dAegis reserves the right to change this value as it accumulates experience and understandings.

3.5   dAegis Work Tracker

It is predictably important for dAegis clients to track the work of experts. In order to keep the ears open, customers need a convenient software solution that will allow them to watch the real-time performance of the expert they are paying to do their job perfectly.

We are developing a convenient solution that will prove to be useful for both sponsors and events that need to get some work done by experts. We call it the *dAegis Work Tracker*.

Key features include:

- **Tracking the current activity of an expert.**
  This is implemented by automatically capturing screenshots of the expert's computer screen. The expert is warned a minute before the screenshot is done.
  Of course, such an opportunity is only possible in case the work being performed is a digital one. Happily, most of the work done today is digital.

- **Monitoring what exactly an expert spends his\her work time on**.

This is made possible by tracking the windows opened by the expert on his\her working computer, as well as natural language processing of the titles of launched applications and browser tabs.

As a result, the customer receives an easy-to-analyze dashboard featuring graphs and diagrams showing the efficiency of each expert hired by him.

- **Connecting to expert's web camera**

- **Track visited websites, opened applications and other activities**

- **Possibility for the expert to provide an employer with a timeline with comments on the kind of work he\she was doing in a specific point of time.**

- **Convenient interface for safe communication between dAegis client and the expert and files exchange.**

The users of our network will definitely enjoy the ability to instantly receive work progress. A user-friendly interface that will be designed to simultaneously monitor the work of numerous experts, will allow sponsors and events to make right decisions fast. Experts are certain to be pleased as well, since the existence of such an automated work status sharing eliminates the need for them to regularly manually report the progress.

All information collected through *the dAegis Work Tracker* is automatically added to the distributed storage. In case of conflicts emergence in the future, this data will relied upon as a definitely truthful source of deal's details. It will be used in decentralizing disputes settlements under the *dAegis Safe TroubleShooting* mechanism and an assessment of quality of performed work under the *proof-of-work-quality* protocol. It is important to note that the software described above will be provided by default to all dAegis customers and does not imply an additional fee.

3.6   Some experts examples

Below we are taking a closer look at the main types of experts that cooperate with us. You can see in detail the tasks they are going to work on and the compensation they will receive. For a complete list of required professions, **see Appendix A** at the end of this WP.

- **Lawyers**
  The need for lawyers during contracting and in maintaining of all activities related to sponsorship was discussed and proved in Section4.4. History is full of bright examples of terrible jobs done by lawyers, Consider, for example, the case of MasterCard and FIFA. Even such large organizations did not manage to avoid lengthy and wearing litigations. It is evidently better to invest in bringing the best in kind attorneys now, than to waste time and money during tedious discussions in court. That is precisely why we employ the best of the best. At the moment, we have already negotiated contracts with several large and well-

known legal offices, which have long and impeccable reputations in the field of sponsorship maintenance.

The duties of lawyers will include, among others:

- ✓ Thorough contracts examination, registration of rights to trademarks and property, if applicable
- ✓ Prevention of potential conflicts
- ✓ In case of litigations, lawyers must protect the interests of clients
- ✓ Participation in negotiations with clients. The negotiations and talks will be carried out via the Internet. If a lawyer is unable to attend a conference at a certain time, there will always be a video footage of the discussion at his\her disposal.

As you know, there is a place for situations, in which lawyers agree upfront about additional collaborations with a specific transaction's party. This leads to loss of lawyer's neutrality and eventually undermines the integrity of the contract. That is not the case in dAegis.

Thanks to presence of a network of independent lawyers with an unmodifiable system of verified blockchain-based reviews, such situations are impossible inside our platform.

- **Specialists in Public Relations**

  Not all clients that we are going to work with are expected to be so large-scale and well advertised that they will not require promotion. In fact, we forecast significant expenses in the field of relations with the press. And unlike ordinary intermediaries, which the market is used to, we will present a unique solution.

  Our experts, specializing in Public Relations (PR) will be employees of this very press!

  Instead of spending time on painfully lengthy negotiations with this or that publisher on publishing some material or press-release, which usually ends-up showing the direction to the paid services department, we will enable a distributed network of journalists, both full-time and contractual (so-called contributors), to choose materials to publish themselves. **They will choose stories about brands and events that intersect with their audience interests most accurately, thus bringing value to readers and to journalists.**

  Moreover, dAegis's clients don't have to waste time looking for journalists to publish their stories. The journalists will come themselves, as soon as they see a tempting offer in a special section of our platform.

  This scheme is clear to be beneficial for each side of an equation: for both journalists and our clients.

4.0 Token holders voting on appropriateness of potential sponsorship cooperation

Given the propensity of consumers to associate sponsors with the event they promote, it is important for companies to select events that are appropriate with their product or corporate image. Therefore, before signing up, the company should check out how the show is perceived in relation to future potential customers. Today, almost nobody conducts polls among independent people in order to determine the affinity between a company's brand and an event's image.

> **In dAegis**, putting a potential sponsorship deal between sponsor and sponsee to a vote for token holders is a mandatory step in concluding a sponsorship contract. This, as we believe, is our biggest advantage, as a decentralized agency, over a typical centralized one. Involvement of people who are not connected with the sponsorship industry in voting on the expediency of the potential transaction allows abstracting from traditional indicators and factors used for making a decision about sponsoring the event.
> **It allows to look at the transaction through the eyes of an end-consumer – by the way, that very person who constitutes a part of target audience of the sponsorship deal.**

As a result, our customers receive an easy-to-read list of independent people's opinions. The voting process will be simplified to the maximum extent possible. When registering on our platform, token holders ought to indicate their interests. This choice will impact further targeting of people who may be interested in voting about a specific sponsorship deal.

In the event of insufficiency of people with required interests on our platform, we will find independent people outside of our dAegis network and carry out voting among them. The money spent on attracting people will be regarded as our own expenses.

It is solely up to Sponsor and Sponsee to specify the exact rewards that token holders receive after providing their opinions. The exact terms of receiving certain benefits for voting may vary from deal to deal and only depend on decisions made by sponsorship deal's beneficiaries. Simple voting may, and most likely will not constitute a sufficient action for token holders to receive any benefits.

The crowd's opinions will never be an exclusive reason of sponsorship-related decisions and actions. Token holders' actions should only be viewed as recommendations and advice. It's up to Sponsor and Sponsee to decide on to which extent their advice should be followed.

The table below gives a glimpse of the actions that may be rewarded during the process of expression opinions regarding the sponsorship deal.

Action	Reward
Taking part in the voting process (providing the necessary structured documents)	Varies
Potential transaction, which one has voted on, becomes real	Varies
Commission from the sponsored sum(*)	0,375% - 1.125% (varies)

(*) Commissions from the sponsored sum depends on type of event being sponsored. For more details, see Section 7.

5.0 Security of transactions

Transparency and security are the main benefits that are brought by a properly implemented decentralized blockchain system. The security of transactions is of paramount importance in the conduct of any mutual settlements between strangers. An essential characteristic of dAegis, which is the decentralization of the network of experts, entails a large number of payment transactions.

We have developed an automatic mechanism for concluding contracts and guaranteeing timely payments - *dAegis Safe Deal*, which makes transactions safe by default. The core advantage of *dAegis Safe Deal* lies in a distributed ledger, which stores the information about the contract, the time of its conclusion, the parties involved and any auxiliary data. **This mechanism will be an obligatory part of any agreement concluded in our network.** Thanks to this, we can provide our clients with an ever-desired predictability and reliability, so important in the world of sponsorship, which is overloaded with financial flows.

Below is a brief description of the way a typical secure transaction operates:

- **Drawing up a contract between two or more parties**.
  The contract includes not only text, but also any other audiovisual information. The contract must contain references to the persons who participated in its designing and other parties somehow linked to it.

  For example, if there is a contract for the provision of product design services, then the contract archive can be bundled with the contract, photos of previous works, plans and other forward-looking statements.

  All communications between parties are attached to the contract as well.
- **All materials are archived.**
  The resulting archive is hashed. The archive is stored in a decentralized immutable blockchain network.
- **Any further activities** related to the concluded contract including but not limited to exchange of information regarding the process of execution of the contract**, are appended to the blockchain** with a mandatory address pointing to a specific place in the blockchain where the contract is stored.
- **Payments are made similarly.** The anonymous fact of payment is sure to become a part of a public blockchain. In addition, the fact of payment indicates the satisfaction of all parties with the work performed and automatically confirms the successful closing of the contract.
  Otherwise, payment is not made.

In case of a disputable situation – incorrect payment or unfulfilled contract – unsatisfied parties of the deal can open a public decentralized dispute. The process of disputes settlements is discussed in the next section.

6.0 Decentralized disputes settlement

The security of ongoing transactions does not exclude the need for a mechanism in place to effectively solve emerging problems. Because of a typical sponsorship deal requiring multiple parties involved, some misunderstandings are likely to occur.

We are proud to introduce our algorithm of decentralized dispute resolution called *dAegis Safe TroubleShooting*. Its existence is possible thanks to the presence of every detail, even the seemingly insignificant one, in our distributed immutable ledger, as described in the previous section. Such a detailed log of all events makes it possible to track the cause of the conflict without relying on the reasoning of any party and taking into account only the proven facts that took place during the contract negotiation and resolution.

Below is the description of the algorithm.

1. One of the parties in the transaction, not satisfied with its outcome - the prosecutor – may choose to open a dispute. When initiating a dispute, the prosecutor must specify the amount that he\she intends to recover.

2. A new dispute is immediately added to the immutable system of disputes within our network. It will require a certain number of third-party arbitrators - those people who did not participate in the transaction, but serve an expert role inside dAegis – to vote on the dispute. It is worth noting that only experts who are competent in the dispute's key issue or related issues do have a right to participate in the voting process. The number of arbitrators required will depend on several factors, such as the amount of time that the parties to the conflict have already spent in the system, the recovery amount and the existence of previous disputes and their outcomes.

$$N_{arbitres} = \frac{1}{t_{spentInSystem}} * S_{accountsRecovery} * \frac{1}{M_{previousDsiputes}}$$

The same applies to the reward the arbitrator is entitled to as a voter. It is manually set up by the conflict parties. The lower the proposed reward the less incentivized decent and experienced arbitrators will feel about taking part in voting. The dAegis system itself will propose an average rate of reward.

3. All arbitrators are notified of their participation in the resolution of the dispute. The arbitrator has the right to refrain from participation - in this case the system will choose other experts for a substitution. If the number of available arbitrators is insufficient, the system will either offer to wait for the emergence of new available experts who can take the position of an arbitrator, or increase the reward.

4. The arbitrators begin a decentralized vote on the dispute. Thanks to all the contract-related data, including all supporting documents, being stored in the blockchain, it is easy for the arbitrators to track the sequence of actions and make an adequate decision.

The fact of the arbitrator's access to the materials of the transaction of other some other party automatically forces the arbitrator into a non-disclosure agreement signed between the arbitrator and this party.

The parties to the conflict, of course, can take an active part in the discussion, citing their arguments and comments.

5. The guilty party is selected according to the voting results. He\she becomes responsible for fulfilling the terms of the contract for monetary compensation in the event of the latter's inability to do so. The rewards for arbitrators are also up to be paid by the violator. The guilty party is given 21 days to compensate the entire amounts due.
6. The injured party will not have to wait for 21 days to get his\her money back, but will receive the necessary funds immediately thanks to the special purpose fund *dAegis Disputes Fund*. Once the guilty party pays all expenses, the fund will be replenished

dAegis Safe TroubleShooting
$$= (DisputeOpen, ExpertsEligible[N_{experts}], Voting, DisputeResolution)$$

7.0   dAegis Community

The process of token holders voting on the appropriateness of sponsorship deals is only one of the steps towards the creation of the **dAegis Community**. This is an ecosystem that will unite not only companies directly involved in sponsoring activities but also people interested in the ability to independently influence large partnerships today – those very partnerships that the whole world will hear about tomorrow. Building a platform for sponsorship deals from scratch, we lay the foundation for the creation of an international community of experts and motivated people united by common interests in the sponsorships field.

DAE tokens in this context play the role of a **membership card**, which gives access to exclusive materials, conferences and meetings both between owners of DAE, and with representatives of events and brands that will use our platform.

We plan to create many opportunities that will allow our token holders to appreciate the advantages of owning DAE. Just look at some of them:

- **Access to exclusive materials and events.**
  Activities and brands that use our platform will be able to organize unique events in cooperation with dAegis representatives. These events will be available only to our token holders. They will have a rare opportunity to personally communicate with top executives of major brands and to receive unforgettable gifts and emotions.
- **Opportunity to propose future sponsorship partnerships.**
  Only the end user, voting with his\her dollar and attention, can give competent advice on a partnership between certain companies**. At the same time, we do not limit our token holders' ability to vote on the submitted potential future sponsorship deals**. On the contrary, we will allow the token holders themselves to tell the whole world about their promising ideas and receive a decent reward.
- **Enjoy limited offers from events**
  Get a free ticket for a bold festival? No problems. Get access to the VIP rooms and services? Show your DAE!

dAegis Community will be equally beneficial both to its physical participants (access to events) and to the online community. We will create a portal where everyone will get the right to vote.

Users of the dAegis Community will make their own decisions about new opportunities that they will enjoy. **Thus, the role of the DAE token is not limited to payment and discount capabilities, but also encompasses a membership function by letting the token act as a ticket that provides access to secret opportunities.**

8.0   Technical component of the platform

The days of a sponsor only looking for a contract signage have gone. Marketing executives are being challenged more and more by their company executives to prove the ROI and ROO of company sponsorship spending. Companies want tangible results, as budgets are further scrutinized each year. Sponsorship salespeople (clubs, leagues, venues, events) are frustrated more than ever. Sponsor companies are aspiring to take partnerships further, to integrate products or services into agreements and to customize property content so that brands feel immersed in the relationship.

Obviously, managing complex sponsorship deals is essentially impossible without having a good multifunctional software solution.

Companies today increasingly rely on the use of technical solutions for doing almost all sorts of tasks. These tasks include the negotiations, monitoring the progress or work, accessing financial instruments and much more. Below you can see key technical features clients will have at their disposal on our platform.

- **Effective measurement of Return On Investments (ROI)**
  As discussed in Chapter 4.3, the measurement of the financial return is absolutely necessary. Unfortunately, even today, with the overwhelming volume of information revolving all around, the measurement of efficiency of sponsorship campaigns leaves much to be desired. This is the opinion of almost all of surveyed marketers (for details refer to the graph in the same chapter).
  We at dAegis offer sponsors all possible sources of data:

  1. **Internet Of Things (IoT).**
     Despite serious advances in this sphere of technology over the past decade, and regular mentions in the media, the Internet Of Things mostly remains merely a beautiful term. We, in our turn, went much farther and are now proud to offer our clients such smart sources of structured and useful data as **video surveillance cameras, microphones, automatic visitor counters and other smart things**. Data from all the connected devices will automatically flock to the control panel and will be available for examination by sponsors after making a couple of clicks. And not only in real time, but as a recorded footage. This will save much time on manually asking event organizers about details and results of the event.

     The **artificial intelligence system** (AI system) currently devised by our software developers, will allow to minimize time spent conducting an evaluation of audio-visual

data. For example, our technology will automatically detect the presence of such significant events as laughter, applause (and their extent) and other customizable triggers in audio recording.

Making use of Bluetooth beacons and WI-FI tracking will allow real-time tracking of the movements of the visitors across the territory of the event.

2. **Social media feeds and news feeds.** Sponsors no longer need to spend precious time on a manual search for mentions of a brand or an event across the whole Internet. The sponsors will be provided with automatically collected and downloaded information. This will be brought to life through the use, among others, of Google News and Google Alert.
   Moreover, such traditional tools as the number of likes and shares under posts published on social media websites will also be easily accessible. **Sponsors now can easily calculate the exact audience reach.**

3. **Comparison of financial results with costs of sponsorship.** Because data on previous sponsorship transactions is stored with the help of blockchain technology, sponsors will have an opportunity to analyze the results of the campaigns not only immediately after it finishes, but also will be able to track subsequent growth of mentions in the press and social networks.

> All the information that might be necessary to a sponsor, is placed in a single convenient online interface. The advantages of using dAegis in terms of saved time and funds are evident.

- **Using blockchain for secure and decentralized storage of information**
  Thanks to blockchain being used in the very core of our network, clients can rely on proper representation of all the facts and interactions previously done and saved on our platform. **Falsification of the results of a campaign, deceitful interpretation of contracts and facts will finally become impossible.** Read more about our blockchain use cases in the Section 5.11.1.

> Uneven distribution of information has always been a source of conflicts in terms of both economy and relations between people.
> **All parties – members of our platform – will always be treated equally.**

8.1 Blockchain applications

Blockchain is a decentralized technology that allows for effective and trusted storage of data and protects the data from illicit replacement by one of the users. The Ethereum technology is based on blockchain, but imposes an additional layer of capabilities called smart contracts. Smart contracts are contracts written in a programming language that are executed not by the will of any authorized person, but upon the occurrence of certain events specified in the code. Smart contracts are quite powerful tools for instant conclusion of similar contracts between thousands of distributed parties. This saves a lot of resources: as simple as the thousands of sheets of paper and as comprehensive as the labor force that used to manually perform non-intellectual and time-consuming work.

The dAegis system is saturated with relationships, deals and contracts between people scattered all around the world. In such a changing atmosphere, the possibility to automate many similar processes becomes extremely important when dealing with such complex conditions. Our ecosystem is largely built on the principles of sponsorship assets' tokenization and decentralized voting. Such an architecture of relationships enables us to reduce time and effort devoted to regulatory issues and ultimately get rid of a multitude of central mechanisms. It makes every transaction that is carried out within our network transparent, trackable and secure. Just like the way the Internet has disrupted traditional offline relations, we are disrupting the sponsorship market today by decentralizing decision-making and offering one-of-a-kind speed.

dAegis actively uses smart contracts to regulate financial, legal and communication activities.

- **Sponsorship Tokenization**
  Tokenization of sponsorship deals lies in the very heart of our business. Learn more about it in Section 5.2.
- **Work with experts**.
  dAegis offers its customers access to highly qualified experts from all over the globe. We rely on several independently developed protocols, such as *proof-of-work-quality*, *proof-of-expert-eligibility* and others to make the work fast and reliable.
- **Decision-making on future sponsorship deals**.
  Our token holders vote on whether to bring another sponsorship deal into life
- **Conclusion of legal contracts**
- **Safe transactions and disputes resolution.**
  Thanks to storing all the interactions of dAegis members in the immutable ledger, it is now very easy to track the sequence of actions and find the guilty party.
- **Makes transparent real information about dAegis members**.
  This will not allow you to be tricked by someone's misleading information and sign up for a non-performing deal. All the information, including financial statements and past transactions, is available for study before the start of cooperation.
- **Storage of reviews.**
  Feedback in general and reviews as a part of it is an integral part of making any serious decision, especially one associated with big money. Clients using our system will heavily

rely on the feedback left by previous clients about many things, for example, our experts, sponsors and sponsored events or people.

Indeed. Let's imagine a traditional agency. Let's assume that the sponsored event has not fulfilled the terms of the contract. In this case, the sponsor will certainly post an unflattering comment about this client. Organizers of the event, in turn, will be desperately willing to hush such an unpleasant accident up and will undertake attempts to persuade the agency not to tell future sponsors this dirty story. **The agency can easily agree, especially if some major and well-known event is involved.**

It is important to note that all the implemented and described features of dAegis are just the beginning of a long way, the road for which will be paved with strategic decisions made by our token holders. New software modules that will be developed in the future can also easily extend the technical architecture of dAegis.

8.1.1 Personal Data Security

Because of the fact that our business is directly connected with access and analysis of the vast amounts of personal information of dAegis network's members, we are forced to store some data for extended periods of time. Personal information includes, but is not limited to customer names, addresses, mobile numbers, KYC data, financial statements, tax returns and forward-looking statements. For obvious reasons, we cannot place such data in a public blockchain in an open readable format. We, however, can apply thorough encryption and provide persons concerned with the private key. This may become necessary when disputes resolution requires access to additional information.

The information about the permissions of every member of our network stipulating his\her ability to access certain encrypted information will also be public. This will not allow attackers to gain access to private data.

We guarantee the use of the highest standards of security in the centralized storage of personal information, as well as the development of reliable and safe ways for people to access it.

8.1.2 dAegis SDK

dAegis SDK is a set of programming libraries intended for various operating systems, which allows independent developers to devise their own software applications drawing on the core features of our kernel and consequently sell it on their own terms.

We will develop a web interface enabling our clients interactions with the network, as well as a mobile iOS application.

In order to always be open to new ideas and ever convenient interfaces for clients' access to our network, we want to motivate developers to build various browser extensions,

applications and widgets that would make it easier for sponsors and events to interact with the dAegis network. We will not only not limit or charge some fees for traffic coming from third-party applications, but will also share a certain fraction of our profits with developers. Exact fees to be announced later.

8.2   Our products

As parts of our decentralized platform for sponsorship, we will develop three products, each of which is aimed at one of the key categories of users of our network: sponsors, events and experts.

Our products:

- **dAegis Sponsors Console.**
  Designed for sponsors. Key features:
    - Features access to the news feed, social feed, data received from Internet of Things devices installed on the event's site
    - Allows for browsing sponsorship opportunities presented by sponsees
    - Allows for converting DAE tokens to custom Signature Tokens
    - Allows for examining the history of each particular sponsorship asset – its ROI, previous sponsorship purchases, reviews
- **dAegis Sponsees Console**.
  Designed for sponsees. Key features:
    - Specifying sponsee's tokenizable sponsorship assets. Everything starting from 10ftx10ft banner and finishing with logo on a hotel room's keycard. Setting up and adjusting prices of the assets. Easily manipulating them.
    - Issuing custom Signature Tokens, and making them available to be purchased by sponsors on dAegis.
    - Adjusting the requirements of sponsorship financing – specifying total money amount to be raised, organizing auctions, communicating with sponsors.
    - Promotion their sponsorship assets to the top of the list.
      Allows events to communicate with sponsors, study financial flows, publish reports on the work done, coordinate with the sponsors further actions. Just like in the sponsors' console, there is an opportunity to place an order with some job to get done by dAegis's network of experts.
- **dAegis Experts Console**.
  Designed for experts. Provides all the necessary functionality for effective communication with the employers. Enables exchange of necessary information, files, communication through either chat or voice, making safe transactions and settling disputes. The console's features are comparable with a freelance exchange.
- **dAegis Browse Interface**.

Allows everybody to study the sponsors and events presented on the platform, contact them by sending requests and put the potential partnership on a decentralized vote.

In order to become more familiar with the basic features our platform provides, you can register with your email and password - this will not require additional steps to make and data to enter.

> Important:
>
> **MVP, presented at the address above, is not a real and final product. The launch of the final product is possible only after the deployment of the network of nodes.**
>
> *Though consisting of multiple of real product features, this web app should only be perceived as a working proof-of-concept.*

The pictures below show a few of the main user interfaces of our platform. You can see both iOS app enabling you to find a partner on the go and a web interface as viewed from a laptop. Note please, that this is not a final version of the product, but only a demo version provided here with indicative purposes only.

We mainly described products featuring a visual user interface. A really serious activity happens on the backend.
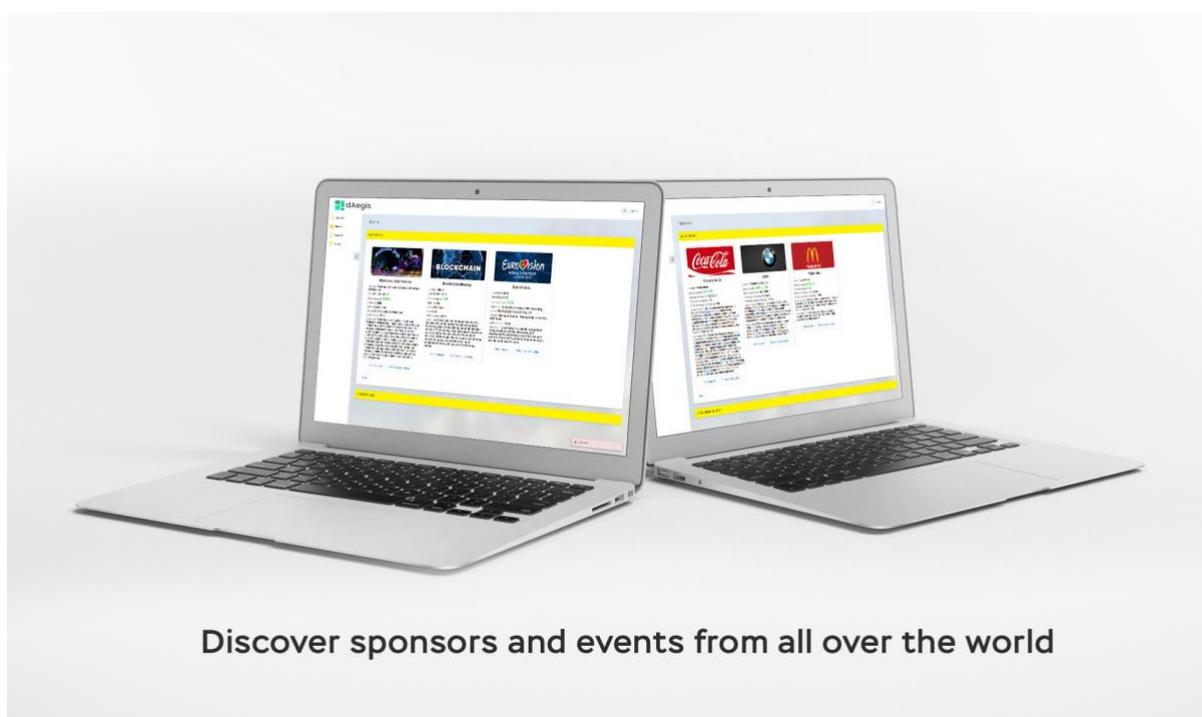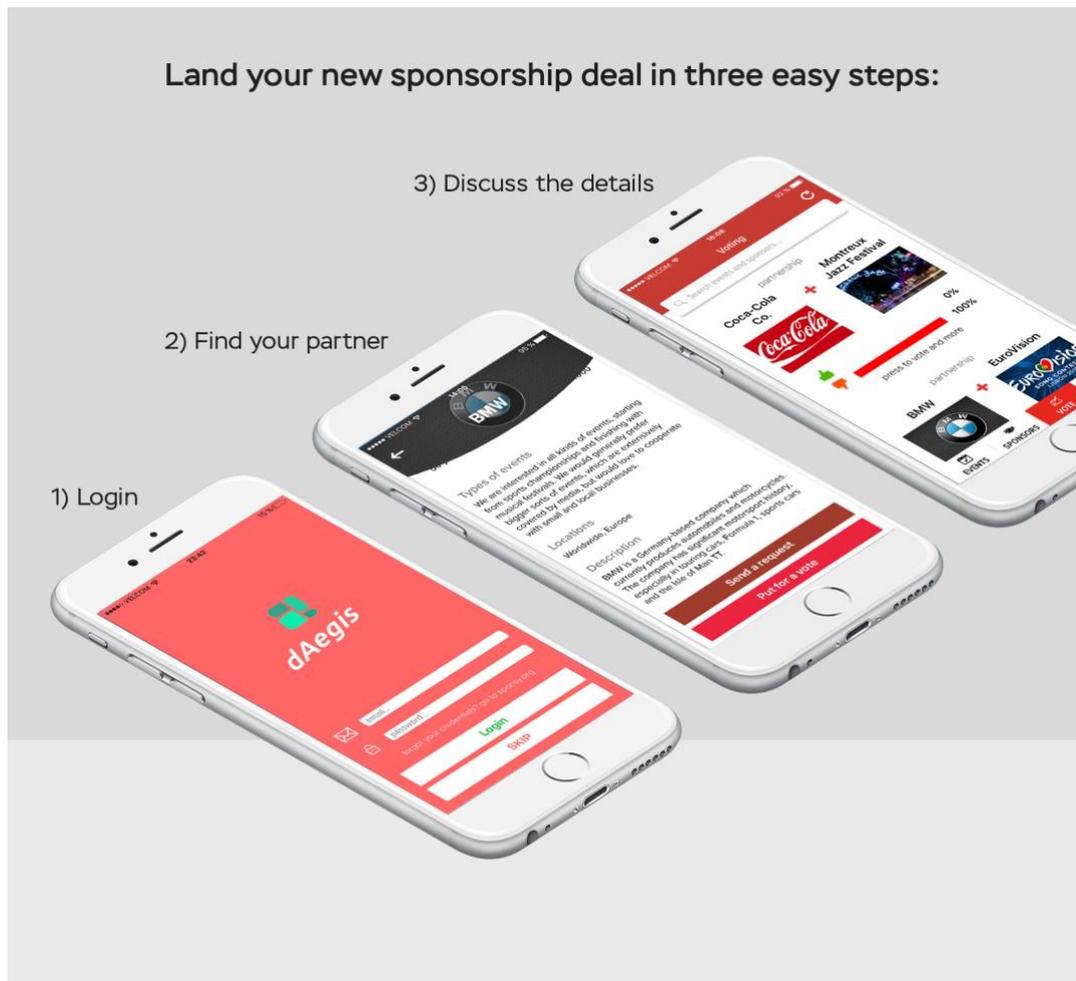
Appendix A

This table lists skills and professions that will be of a huge demand across our network. A brief description of their duties is given.

Mobile Software Developer	Development of mobile applications. Can create an exclusive application for an event with details on the timetable and territory navigation	**14%**
WebSoftwareDeveloper	Development of online interfaces. Creates promotional pages for events and landings for brands	**14%**
IT & Networking	Sets up networks and installs equipment in remote areas. Provides visitors of the event with communication channels	**19%**
ERP / CRM Software	Databases integration, visitors tracking	**18%**
Data Mining & Management	Sets up IoT devices and collects data coming from them for further analysis	**20%**
Machine Learning	Develops specific solutions for events to automate the services provided across the venue and to demonstrate new brand opportunities to visitors	**15-18%**
Data Visualization	Analysis of terabytes of collected data in order to create a colorful and comprehensible visual presentation that is a convenient way to demonstrate the sponsorship's outcomes	**19%**
Architecture	Creates unique designs for exhibitions and outdoor activities.	**23%**
Electrical Engineering	Develops and establishes engineering networks with different levels of complexity. Especially beneficial when organizing festivals remote from civilization and deploying mobile systems	**22%**
Product Design	Devises the product for demonstration purposes. Develops a test sample before mass production.	**25%**
Graphic Design	Creates a unique visual identity of a brand or event. Designs mock-ups of booklets, business cards, posters and other products.	**17%**
Video Production	Video content is a key information distribution channel today. Video experts help create a video recap of event, set up a live broadcast and shoot a lot of footage for social media	**11%**
Audio Production	A high-quality pure sound is a framework for any public event.	**19%**
Article & Blog Writing; Creative Writing	Writes articles for the media and corporate blogs. Fills up the website with content	**10%**

Translations	Translates materials into various languages. Useful for creating language-specific websites and establishing international events	**9%**
Contract Law	Concludes contracts between sponsor and sponsee	**11%**
Corporate Law	Studies company's activity and points to potentially dangerous regulations	**11%**
Intellectual Property Law	Sponsorship deals involve high risks of infringing some party's rights on its IP. Experts will help to protect dAegis clients from expensive litigations.	**11%**
Research Specialist	Market research, competitor analysis …	**20%**
Local Project Management	Monitors and controls certain aspects of the event	**21%**
Customer Service	Supports target audience of the sponsoring partnership, by both online, telephone and personal means	**25%**
Advertising	Sponsorship is largely based on comprehensive marketing activity. Ads experts can help in setting up digital advertising of all possible formats (display, programmatic, video, mobile, native) and developing outdoor ads on billboards, transport.	**20%**
SMM – Social Media Marketing	Manages social networks accounts, posts content, works with the community of subscribers	**23%**
Public Relations	PR experts will be employees of different media outlets. They will publish articles seamlessly referring to certain brand or event.	**9%**
Accounting	Financial statements preparation, billing. Thanks to a distributed nature of dAegis experts, you can easily find a professional with deep understanding of specific local regulations	**17%**
Financial Planning	Sponsoring events is a process full of financial flows. Experienced experts will plan the expenses and get the maximum possible added value.	**20%**

This list of experts is by no means exhaustive and includes only the main professions. A large number of new vacancies will appear as soon as dAegis starts working.

We would like to stress, that under no circumstances there will a situation in which the work of a single expert will immediately be viewed as a completed task. According to dAegis's smart contracts, the work will be anonymously evaluated by other experts in this category to ensure its quality.

Appendix B

The table below covers main methods of the dAegis Expert API, discussed in Section 5.5.3.

getAvailableExperts [**dAegisExpertType***type*, **int***bunchSize*, **int***pointer*]	Type of expert; The size of results sample; The last expert on the previous page to start from	The call will return an array of experts with requested and adjacent skills. The array will only contain references to various specialists	
getExpertDetails [**dAegisExpert***expert*]	Pointer to a specific expert	Returns a detailed description of the expert, including his\her experience, completed orders and reviews	
makeJobOffer [**dAegisExpert***expert*, **JobData***job*]	An expert who is offered a job; Job description. *Job description must correspond to the JobData protocol*	Calling this method will offer specific expert to do specific job. Calling a method does not guarantee the beginning of work – it will only start the communication	
establishChat [**dAegisExpert***expert*, **dAegisChannel***channel*]	An expert to initiate a dialogue with; The channel to carry out the communication through	The method allows you to start a dialogue with an expert through one of the following communication channels: audio-visual, text (chat), voice.	
sendPersonalData [**dAegisExpert***expert*, **dAegisData***data*, **bool** *secure*]	Expert to transfer data to Data itself; Flag to add an additional layer of encryption	The method allows you to send some data in a form of archive to an expert. It be used to transfer any information that accompanies the order. The security flag excludes the ability to initiate the transfer of data over an unprotected protocol (http: //)	
initiateDispute [**dAegisExpert***expert*, **dAegisJob***job*, **int***amountCollectible*]	A certain expert; Work that causes disagreement; The recovered amount	The method opens a dispute between the customer and the expert. It can only be called from a decentralized exchange that has our blockchain storage protocol implemented.	✅
startQualityVoting [**dAegisJob job**]	Work	The method initiates voting on the quality of the work performed according to the *of proof-of-work-quality* protocol.	✅