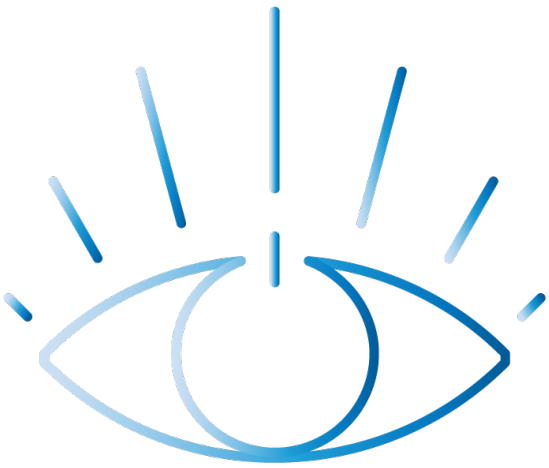
Investments Cashbox
WHITE PAPER



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The Idea

Based on our ideas about the world, we came to the conclusion that the current state of things that has developed in the world scientific community does not correspond to the real state in the fundamental understanding of the issue. There are many directions in science that are not recognized because of the ideological short-sightedness of the bureaucratic apparatus, in whose ranks the lion's share of academicians is integrated. This imbalance predisposes to a negative coincidence of circumstances, within the whole global civilization, which entails a set of very obvious consequences.

This, first of all, degradation of the foundations of the world outlook, when within the framework of the generally accepted methodology the community rushes into the jungle of distortions, due to the incompleteness of fundamental ideas, delegating inversions and creating a false information environment into which society is submerged. This has a particularly destructive effect in the era of the pervasiveness of fundamental technological solutions, many of the principles of which are difficult to explain today to scientists burdened with degrees.

Otherwise, the situation is in the midst of those researchers who are not burdened with prejudices based on the dogmas of official science and who are in every way trying to expand the horizons of ideas based on unrecognized theories, enthusiastic communities try to implement many different, alternative ideas on their own. Somewhere they are successful, somewhere not, but for a more practical implementation, it is necessary to bring such a slice of activity to a higher level, betraying the results of their work to publicity.

Given the quality of the development of social processes and the scale of the development of tools for organizational principles[1], we are trying to use the principle of ICO as a mechanism for attracting investments - to create on its basis the newest platform for self-organization of participants in the process of their research activities, which will consist of a constantly growing "bush" of algorithmic interactions. This will be described in detail in this White Paper.

1 More information about our views in this area can be found in our work under the title "Source Code" by downloading it from our website - https://passionarity.org/source_code/

Goals

Any idea carries in itself a set of different possibilities, expressed in a matrix of possible states of its development. Taking this into account, it is necessary to determine the section of directions that must be followed to achieve, for each of them, very concrete results.

Priorities should reflect the worldview, fundamental views that need to be structured in a hierarchical order, where the highest priority will be that goal that will reflect the basic function of our project and in descending order describe those goals that have less priority, but nevertheless bearing the feasibility in the process of their succession.

Thus, it is possible to describe a certain vector of goals, which will be a list of the wishes of the community of the organization. Applied to ours, it looks like this:

1. Development of the Open Source Worldview;
2. Consolidation in the minds of the inhabitants of the planet of the understanding that their life and the quality of their existence in this world depends only on themselves and no one will make for them a reality corresponding to their dreams, until people themselves start working on themselves, participating in process of collective self-organization. Since we are already living in an era of absolute opportunities;
3. The popularization of those branches of science that do not find proper response in the ranks of the global bureaucracy;
4. Creation of a stable, decentralized, network structure, in which each participant realizes his responsibility to civilization. Network structure of a responsible and efficient partnership;
5. Implementation of those technological solutions that are capable of bringing the global civilization to a new level of development;
6. Increase the level of complexity of the social system as a whole;
7. Development of the ideology of Open Source Hardware;

These points are enough to give to third-party observers an opinion on the possibility of alternative development of society on a global scale.

Principles

We create on the basis of ICO a platform that will facilitate the self-organization of participants in the process of their research activities. We will use "Smart Contracts" Ethereum, where the contract of the ERC20 standard will be accepted as a basis. The platform will be a strictly prescribed, organizational algorithm of interaction and a wrapper around the base contract.

The base contract for the ERC20 standard, with additions, will be the core of the platform, some of the functions will be covered by the possibility of calling from the third-party contracts, which will represent its covers, the bulk of which will be registered on the kernel side. Due to this algorithmic changes in the field of self-organization can be made through migration from previous contracts that make up the cover into contracts of a new type.

We are innovators in the field of creating such a platform, accordingly, we take into account that the idea of its creation will in the future be adopted for the creation of other communities with a strictly deterministic algorithm of participants self-organization.

At the time of the initial sales launch, it will be enough to register on the Blockchain side of Ethereum the base contract ERC20 with our additions, while the cover will be located on the Passionarity repository in Github[2].

In this section, we will talk about those moments that need to be prescribed by the program code and the logic on the side of the contract.

Full Decentralization

The platform will be exclusively decentralized, that is, at the pre-sales stage, decentralized application (Dapp) mechanisms will be used. We believe that due to the fact that the platform should work decentralized, with the use and understanding of each participant - all the advantages of this approach, then it makes no sense at the initial stage to deploy a centralized system for selling tokens. All previous pre-sale models, with their usual user registration and authorization on the service side - to launch our pre-sales, we hope, will be exhausted by understanding the principles and advantages of decentralization by people from the Ethereum community, as well as from those we will attract to the community thanks to our platform.[3]

The same point can be attributed to the fact that as the platform develops, we will strive in every possible way to bring it into the mode of full automation, when, as events are processed from the users, on the side of the contract, the time ranges of the following competitions will be automatically assigned, assign amounts for withdrawal from the platform, etc. Full decentralization is the ultimate goal of the platform, if we talk about it as a self-developing system and will be much more effective if it works autonomously.

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2 https://github.com/passionarity/cashbox

3 At the end of this white paper, we will describe a process through which you can master Dapp technology at the user level. This will be enough for a full-fledged use of the platform at all stages of its life cycle.

Beneficiaries

We, as a non-profit organization, will not own the entire amount of attracted funds (ETH), but assign only that part that will contribute to covering our operating expenses (server rental, rental of premises, staff salaries, etc.) and deploying the platform. The maximum amount that we can assign to the our account side of our organization is the volume of no more than 7% of all attracted funds. We also assign the right to generate to own possession tokens of no more than 5% of all generated tokens in the pre-sale period.

All other funds will work entirely on Cashbox, and throughout the life cycle be on the side of the "Investments Cashbox" contract. This suggests that all the remaining, attracted funds will work for the development of research activities of those participants who will be active in this area.

Thanks to this principle, it is possible to establish intensive activity in the development and popularization of science by the efforts of researchers, since the principle of their self-organization will depend only on their personal activity in attracting investments from the Cashbox, and not from any hierarchical structure.

The absence of Token Creation Cap

We will not lay the upper limit of generated tokens. The more we raise funds, the more money will be spent on investing in real projects and the more projects can be implemented. Taking into account the principle of the platform and taking into account the fact that at some stage in the life cycle of Cashbox there will be complete devastation, the absence of an upper limit will delay the beginning of the process of issuing new tokens[4].

Minimum Boundary of Attracted Funds (Token Creation Min)

Considering that the "Investments Cashbox" created by us will be a public mechanism for self-organization and taking into account the fact that there are a lot of unrecognized ideas in the world that need to be implemented thanks to our platform, it would be foolish to collect insignificant amount of cryptocurrency and try to implement it ideas into life on their basis. We will not be able to do it because of the lack of funds raised. Therefore, due to the fact that the algorithm is rigidly registered and all possible allocations of funds are taken into account at an early stage of development, the minimum limit of attracted funds will have to be set at 100,000 (one hundred thousand) ETH.

Token identifier and value

Within the framework of our project of the "People's Research Center" we solve a complex of various tasks providing effective methods for their solution. It is in our interests to think through everything to the smallest detail, this also applies to things like identifiers. Given the name of our organization, the identifier suggests itself is PSY (PSY-Token) from the word **P**as**S**ionarit**Y**.

1 PSY-Token has the same number of decimal places as 1 ETH, ie 18, or 1 PSY is

4 This is written below.

1000000000000000000 PSY "cents".

Timing and Pre-Sale Stages

The campaign will last 8 weeks, which will be divided into several stages, within each of which will operate its bonus system for active investors.

Stages

Each ETH entered into the contract will generate 10,000 PSY-Tokens.

1 ETH = 10000 PSY

However, we plan to launch a campaign where the first, active investors will receive bonuses:

- The first 2 weeks of sales: 30% bonus (1 ETH = 13000 PSY)
- Second 2 weeks of sales: Bonus 15% (1 ETH = 11500 PSY)
- Third 2 weeks of sales: Bonus 5% (1 ETH = 10500 PSY)
- Last 2 weeks: 1 ETH = 10000 PSY

Types of Platform Accounts

When modeling the voting system, it is necessary to take into account a number of factors that may negatively affect the efficiency of the self-organization algorithm. The most crucial and the most narrow point of the entire platform is the protection of the system of distribution and collection of votes from spam. To reduce the impact of robots on the promotion of minor projects and the devaluation of projects of higher significance. We believe that to solve this problem it is necessary to implement different types of accounts, namely:

1. Holders of tokens, traders;
2. Holders of tokens + participants in the process of giving votes;
3. Active participants;
4. Accounts with raised funds;

Now let's describe each of the account types in detail.

Holders of tokens, traders

This is the type of accounts whose owners do not take part in the life of the platform, but entirely either just own tokens, for the purpose of further selling them, or actively trade them on stock exchanges. Their activity affects only the current exchange rate of PSY-Token.

It should be noted that in order to increase the value of the PSY-Tokens generated by the platform, we will need to create an infrastructure on top of their generation system in order to try to provide the market to the owners in the future. This point is described in the section below.

Holders of tokens + participants in the process of giving votes

This is the type of accounts that, due to the ownership of assets, provide the owner with the right to vote in the future system of distribution of investments from the Cashbox.

To reduce the risks from possible spam in the distribution of votes, certain types of conditions will be introduced for this type of accounts, which will have to be satisfied. Given that for one unit of ETH the investor receives tens of thousands of PSY tokens, it would be prudent to give the right to vote not to all holders who own the minimum amount, for example - 1 PSY, but to introduce an acceptable barrier below which the owner does not have the opportunity participate in the voting system. This approach has rational explanations, given that the project is designed for a revolutionary approach in the allocation of investments, which, ideally, will be allocated to revolutionary research, it is likely to "spam" the project with the activity of the multiplied accounts. Accordingly, we need to come up with a mechanism that would limit this possibility of spam.

To solve this problem, we introduce a restriction on possession, in the amount of at least a certain number of tokens, which will depend on the market value. With less possession, the holder will not have the opportunity to vote for a particular research project-idea. But this is not a cause for concern, if he did not have time to buy tokens on time and is willing to be an active participant in the development of projects, then for these participants a third type of accounts is provided - active participants. But we will return to this type a little later.

There is one additional restriction that is not so categorical, but it needs to be satisfied, which is much simpler than buying additional PSY tokens. This is registration on the side of the contract as a participant in the process of giving votes. To do this, it will be enough to send an argument through our decentralized application to the contract, which would give it such an opportunity and register an account on the side of the contract, as an active participant.

When distributing tokens between market participants, each active participant must himself ensure that the number of tokens remaining after the transaction assigned to his accounts address corresponds to the minimum border. Otherwise, the active account is reset.

What is this for? In order to separate traders from active participants of platform. Since the number of active participants will affect the voting system. The more restrictions, the cleaner the process of analyzing activity.

Satisfying these two basic requirements, the participant will have the opportunity to have the right to register on the side of the contract a project that will participate in the competition.

Now go to the third type of accounts.

Active participants

This category of accounts, in addition to the issue of spam, solve tactical and organizational issues.

The matter is that not every future participant of the platform will be ready to join the process of self-organization at the pre-sale stage. Therefore, in order to resolve the issue of

their further activation, not excluding the issue of spam from our model, it is necessary to give them the opportunity to participate on the basis of registering their personal Ethereum accounts on the side of the contract.

Returning to the question with spam, we will mark the moments by which this question can be solved by modeling the type of accounts "Active Participants". This is primarily a membership fee, which is paid to the side of the contract when registering the activity by the user himself. If you make a small membership fee in the model, it is obvious that there may be a problem with spambots, if you make the contribution too large, there will be no activity in registering participants. The platform needs real people with the lowest coefficient of duplication of accounts. Therefore, solving this problem, we are considering the option of adding a variable to the model, which is periodically reassigned by the administration of the project, or by assigning a constant in USD, on the basis of which the amount of the ETH inserted will be automatically converted[5]. Thanks to this, it will be possible to change the level of the fee, depending on the fluctuation in the rate of the cryptocurrency.

Denote the main points that are solved by this approach:

1. Moves to the future moment of absolute exhaustion of Cashbox;
2. Partially solution with the issue of duplicated accounts;
3. The question with the accounts of the members of the organization, who will be active in the development of projects and ideas;

Due to this type of accounts it will be possible to register research projects on the side of the contract, as well as to vote, preferring certain ideas.

All contributions to the contract as a membership fee ***will work for Cashbox benefit*** *and participate in the development of researchers' projects on a basic principle, supplementing the funds that were raised at the pre-sale stage.*

At the development stage, we do not undertake to designate the size of the membership fee, since by the time the platform is launched, there will be a lot of changes in the crypto-currency market.

If a participant has tokens in addition to the membership fee paid, the transfer will only affect the deactivation of his account if the border on the platform side has risen.

Accounts with raised funds

This is the type of accounts that attracted money from the Cashbox in any amount over zero. This account type has special privileges. Such as:

1. The inability to deactivate the account when you redistribute tokens in any of the cases we considered.
2. The possibility of registering contracts on the basis of Agents of tokens Migration, through which it will be possible to translate tokens into superstructure contracts with the aim of deploying the infrastructure and expanding the capabilities of the "bush" of algorithmic interactions.

5 Methods such as fiatcontract (https://fiatcontract.com/).

This type of accounts can be divided into two groups, the attitude to which will be determined by the stage in the life cycle of the Cashbox. We will return to this point a little later.

Limits of possession of tokens and membership fees

In order to increase the value of tokens in the market at the initial stage of the formation of the primary branch of the "bush" of algorithmic interactions, we provide for the need to identify the difference in the cost of participation when using two of the methods, the minimum limit of possession of tokens and the membership fee. Membership fees will be set at 5% higher, in the equivalent of USD, relative to the minimum limit of possession of the tokens.

Donate

It is likely that there may be situations when the person wishing to connect to the platform will want to make a donation, or by making a donation to delay the depletion of the contract from "Ether" (ETH). To do this, we have an opportunity to contribute donates to the contract, using a special function. Due to this, if the amount of the donation meets the requirements of the minimum allowable amount for registering oneself as an active participant, the sender will be activated on the side of the contract as such. The whole amount will go to the development of projects in the future and will be permanently fixed on the contract side.

In the event that the account was not activated before the donates deposit, each newly added amount will be assigned to it and at the moment of reaching the total limit - the account will automatically switch to an active one.

This is a difference from the function through which the membership fee is paid, which must be no less than the established limit. Then, as the function of donates predisposes to the consistent introduction of funds for the contract and in different numbers.

Registration of projects

Every active researcher, when registering a project on the side of the contract, will need to take into account a lot of points, the main part of which we will describe below. In this section, we will indicate the moment associated with the registration of the project.

This will be a data entry form on the decentralized application side, or a function at the contract level. In this form, you will need to enter the following data:

1. The amount of attracted funds in dollar equivalent for the first place[6];
2. The amount of attracted funds in dollar equivalent for the second place;
    - Not more than 70% of the amount attracted for the 1 st place;

6 Again, we need to take into account the fact that the process of selecting projects will take some time, after which, from the moment of registration, the price for 1 ETH can drastically change. Therefore, we will need to use third-party conversion tools, such as fiatcontract (https://fiatcontract.com/), or, by that time, created, new.

3. The amount of attracted funds in the dollar equivalent for the third place;
    - Not more than 50% of the amount attracted for 1 st place;

When registering these items on the side of the contract, to the project will be assigned a personal number. The first point will be necessary and it is unchanged, and regardless of the stage in the life cycle of the contract. It is unchanged in the sense that the amount of attracted funds will be assigned in the dollar equivalent, whereas the volume will be determined by the researcher himself. The following two will be possible only at the second stage in the life cycle of the "Investments Cashbox" contract.

We deliberately do not bring in the upper limit of the funds raised and give this moment to the project participants who, on the one hand, will have to take into account the aspirations of the voting participants, and on the other - to save common funds *from the distribution of which the future of civilization will depend.*

Each account can register only one project for the contest.

Limit for the total number of projects

The array of data will have an 8-bit limit on the size of the array, that is, the number of projects should not exceed 255. Moreover, the limit is laid by the variable assigned by the platform wizard and at the initial stage will have a value of 100 projects. Limitation will depend on the availability of content, ie, each project must be approved by the master.

Approval of projects

This is the restriction that protects an array of projects from spam and only one condition is to be approved for approval - the content that describes the project. Upon approval, the project is entered into the array and the entry is limited to only the limit of the assigned variable.

The life cycle of the "Investments Cashbox" contract

Thanks to the embedded principle of migration from a logically obsolete contract to a more advanced type contract, the principles of a long-playing system are laid on the platform, which we will describe in this part of the White Paper.

Conditionally, the life cycle can be divided into 3 stages:

1. Period of preliminary sales;
2. The period before the depletion of the Cashbox;
3. The period of incomplete satisfaction / the period of absolute depletion of the Cashbox;
4. Transition to a new economic paradigm;

If the pre-sale period has already been considered and it will not differ from any principles of participation of the project at the ICO, and the second stage is partially registered above, then the third stage should be described separately, especially since it has its own elements of possible overflow from the third to the second. The last stage will be mentioned

later.

Given the difference in the principles of investment allocation, each of the last two will be assigned its own time boundaries for self-organization processes.

Given these features, we will supplement the second stage with the following points.

The period before the depletion of the Cashbox

This is the period when there is a real "Ether" (ETH) in the Cashbox, which is introduced, both at the stage of preliminary sales of PSY-Tokens, and in the process of making membership fees. Within this cycle, the exact amount converted from USD to ETH, which was designated by those researchers whose project most suits the needs of the community, is deduced on the market.

At the moment when the quantity of "Ether" on the side of the contact does not meet the expectations of the researchers, but some funds on the contractual side will still remain, the contract will be transferred to the quality of the new phase. Considering that at this stage there is a distribution of investments among the top 3 players from the list of researchers who successfully carried out the campaign, in case the Cashbox is unable to satisfy all of them, the platform also moves to the next stage where other principles will work.

Stages of the competition in the period before the depletion of the Cashbox

Each stage will last 6 months, where the first 5 will be filled with research projects, and in the last, sixth month - the registration of projects will be completed and the process of giving out votes will be launched, after which the investments from Cashbox will be distributed.

The conclusion will be made by the investor himself, due to the fact that on the side of the contract, the purse he has registered will be assigned the amount of funds assigned to him converted from USD to ETH at the end of the competition.

It is necessary to set a delay period between the competitions, which will be a period of 60 days (8 weeks). Due to this, it will be possible to adjust the algorithm of self-organization and make improvements based on the available experience.

The period of incomplete satisfaction / the period of absolute depletion of the Cashbox

Conditionally, the phase of the "period of incomplete satisfaction" will always take place after the transition to the last stage in the life cycle of the contract, because thanks to the connection of new participants, the Cashbox will be replenished. Therefore, it can be designated last and permanent. Nevertheless, there may be situations when either at the stage of registration of the research project, through membership fees, the Cashbox will be replenished with "Ether" to satisfactory saturation in relation to a particular project, or at the stage of distribution of investments from Cashbox and at the end of the next competition. At one of these moments, the stage will shift from the third to the second, and this will be a special case, since the amount involved will be set strictly individually and if the Cashbox will satisfy all three groups of participants, then emissions will not be made and the stage will

conditionally become the 2nd of the life cycle of the contract.

If Cashbox can satisfy only one or two researchers with their projects, then those for whom do not have enough Ether at the side of Cashbox – will drop out from the list.

If the Cashbox is unable to satisfy even one participant entirely, then at this stage new tokens will be created. In spite of this, the researcher, at the stage of project registration, will also register the desired amount in dollar equivalent.

Issue will be made based on the arithmetic of the current account status and will be performed under the following conditions:

1. *Issueing PSY-Tokens in three stages*. This moment will allow only a part of the funds to be introduced to the market, in stages, without destroying the exchange price for tokens, and thanks to this principle it is possible that by the time of the next issue, the Cashbox will have amounts to satisfy the demand without using an issue mechanism;
    - The first stage - immediately after the end of the competition in the amount of 35% of the total amount when calculating in USD, but with the specified emission conditions (see point 2);
    - The second stage - in 6 months after the end of the competition in the amount of 35% of the total amount when calculating in USD, but with the specified emission conditions (see point 2);
    - The third stage is 12 months after the end of the competition in the amount of 30% of the total amount when calculating in USD, but with the specified emission conditions (see point 2);
2. Each of the emission stages will focus on the price for 1 PSY at the end of the competition in order to release to the market a reasonable number of newly issued tokens, ie[7]:
    - If the price for PSY-Token at the time of the next stage of emission is **lower** than the price for PSY-Token at the time of the end of the contest, then the quantity will be emitted at the price at the end of the competition;
    - If the price for PSY-Token at the time of the next stage of issue is **higher** than the price for PSY-Token at the time of the end of the competition, then the amount will be emitted at the current price;
3. If there is a balance on the Cashbox account in the ETH and they do not satisfy the withdrawals within the amount assigned by the researcher, the following principle will be fulfilled:
    - If the amount of funds on the side of the contract is able to cover **one stage of the emission**, some of which, in the form of a real one, remains in the account until the next issue period, then the funds are issued on a standard principle,

7 This moment is oriented no longer to researchers, but to the cryptocurrency market, since by focusing on researchers, it is possible to bring down the price for PSY-Token much more intensively, whereas with this approach, researchers will have the opportunity to get the attracted funds at a more reasonable rate, due to the stabilization mechanism determined by the price for the Token at the end of the competition.

with the only difference being that this stage will be covered by funds from the Cashbox. *This is the case when, by the time of the next stage of the issue, the required amount in the ETH may appear in the account, capable of meeting the expectations and without the use of an emission mechanism;*

- If the amount of funds on the side of the contract can cover **two stages of the emission**, some of which, in ETH, remains in the account until the last stage of the issue, then the withdrawal of funds for the two conditional stages can be carried out immediately after the end of the competition, and the last stage will be made according to the the same principle, ie after 12 months;
- At each stage of the emission, which will remain funds unable to satisfy the whole phase, simple subtraction arithmetic will be used, where "Ether" will be converted according to the current price for it and subtracted from the amount of PSY-Token determined by the above principle based on comparison Prices for 1 PSY at the time of the end of the competition and at the time of issue.

Stages of the competition within the last period in the life cycle of the Cashbox

At the moment of transition to the last stage, the time frames of the stages of the competition increase somewhat in time and it occurs irrevocably, and regardless of the flow of one period in the life cycle of Cashbox to the others (third to second and back) associated with the possible filling of an account satisfying one or another researcher (or a group of researchers) completely.

The contest period is 7 months, where in the first 6 projects will be registered, and the process of distribution of votes takes place at the last.

The delay from this stage will be 3 months.

The impact of this phase on accounts with raised funds

The account will not be able to register another project until it completes the withdrawal of the full amount for a period of 1 year, i.e. until the array with the contest identifiers is zeroed.

The principle of giving votes

Each participant who satisfies the requirements of the platform, from the start to the end of each contest, will have three chips with different denominations:

1. With a nominal value of 3 votes;
2. With a nominal value of 2 votes;
3. With a nominal value of 1 vote;

Each of which will need to be assigned to only one project. Thus, the priority of projects will be formed based on the understanding of each of the active participants. The researcher, who wants to give his votes, will not be able to vote for his project, but only for those who participate in the competition in parallel.

This principle will take place at any stage in the life cycle of the "Investments Cashbox" contract, with the only difference that at the last stage the priority of projects will not be taken into account in full, and emphasis will be placed on the minimum possible issuance of new tokens.

It is necessary to establish a minimum number of voted participants, so that the competition is consistent with all the conditions of a legitimate campaign. At the current stage, you can assign a critical mass in the amount of at least 70% of all registered participants, or at least 1000 accounts registered on the contract party in the form of participants with the right to vote. Those, this is the moment that is peculiar to be amended before the launch of the competition and taking into account the results at the pre-sale stage. However, if the condition of saturation of active participants with votes to the critical mass is not satisfied, the stage of distribution of votes increases until the moment of saturation. **This moment will be registered at the code level, when the necessary level of popularity of the project will be achieved.**

At the time of the vote, the statistics of the popularity of projects will be hidden and revealed after the end of the competition[8]. Each participant with a registered project will be able to see the position of own project in the rating and the number of votes cast, and at any time if it concerns the period of distribution of votes.

8 This is a provisional moment, because thanks to the principles of organization of Blockchain technology - all the information that relates to the category of metadata is public and can be traced back to the elementary analysis of the data entered into the contract and at any time.

Self-Organization Algorithm

This section will describe the main points of the principles of self-organization, lying on top of the logic of building a contact "Investments Cashbox", which we described above. It will reflect those points that will need to be taken into account when promoting the project, as well as the moments describing the infrastructure as a whole.

Beneficiaries from the implementation of projects

This is unambiguous, at least - the emerging community, and as a maximum - all progressive humanity. Those, maintenance of the task of long-term self-employment of the researcher in front of the community is not worthwhile, but the task of developing the idea of Open Source Hardware is worthwhile, that is, after the project is completed, it will be necessary to provide real work and source documents for public review and open access.

The solution of the problem of long-term self-employment can be solved within the framework of the possibility of forming an infrastructure around the system of generating tokens.

Infrastructure around the tokens generation system

This is a key issue related to the system of generating and popularizing tokens on the market, without the solution of which it is impossible to consolidate the value of the project in the minds of investors. At the same time, it is more difficult than one can imagine, since the project is aimed at solving large-scale, fundamental issues with its principled attitudes that are not highly specialized and will not always represent, ultimately, systems for the production of a particular end-use product, thanks to which it would be possible to set up a sales system at the expense of tokens, which are in the possession of investors. Nevertheless, the question requires a solution and some representations must be given already at the initial stage and when the idea is put into practice. It should also be noted that this is the moment that has some of the greatest prospects within the whole project and if at this stage it is not fully described, then in the active phase of the platform development it will be possible to develop this moment by the entire community, expanding the horizon of opportunities.

Considering that we model a sociodynamic system that organizes the activity of participants in the fundamental field of development of science, which has its own, hard-to-capitalize niche in the market, it can be considered **as the basis for further systems of self-organization**. What does it mean?

This means exactly that thanks to the PSY-Token generated by our platform, both at the pre-sale stage and at the last stage in the life cycle of the "Investments Cashbox" contract, financial instruments are created that can be used as a multilevel mechanism for attracting investments, creating on the basis of them new "Cashbox's", or the systems on top of ours. How can it look like?

To consider one of the options - it is necessary to model the life cycle of the development of a project idea, of a researcher, which, conditionally, can be divided into several stages:

1. Popularization of the project idea;
2. Winning the competition;
3. Realization of ideas;
4. Demonstration of the prototype and source documents;
5. Mass introduction of the realized idea into reality;

The fifth stage will not always be able or should be realized by the efforts of the developer himself, since the platform is aimed at serving the interests of the community, and not only self-employment of the popularizer of his ideas. So, what prevents PSY-holders from joining forces to bring funds to the level of a new contract that will attract investments in ETH to their side, in exchange for PSY - at a fixed or market value? With the aim to create on the basis of attracted funds one or another, a new system of self-organization, in its own strictly individual algorithm, which could, among other things, solve the problem from the fifth stage in the life cycle of the development of the project idea. Each of the depositors could participate by contributing their share in the new project. Whereas the released funds to a new level would be able to contribute to the development of another self-organization and within the framework of another algorithm, or to participate in the algorithm of a downstream, superstructure project, increasing in its value in the market.

Thanks to this approach, there is no need to oversaturate the market with many different types of tokens generated within the framework of **add-on** platforms, or they can be generated only on the basis of fundamental projects **that solve the basic, worldview tasks of the new civilization paradigm**.

Simply and fully speaking, **the researchers themselves can model the infrastructure around the tokens generation system, combining efforts with the token holders**, on their own initiative, which, with each new, superstructure level, will involve a very concrete slice of their physical and creative, or whose then there was no other activity. For this, on the side of the base platform contract, the function responsible for distributing the tokens between the participants will need to have characteristics that meet this quality.

The example above is one of the options for implementing the infrastructure around the token generation system. Then, in fact, in the future, the variants can be a variety of different systems of use, which will depend entirely on the form and purpose of the projects that we can, at this stage, only guess.

You can also take into account the fact that at some stage of the development of the platform, projects will appear, the lion's share of which the developers realized with their own resources and means. Participation in the project they can take on the basis of infrastructure development over their own operating time to actively develop the idea of a decentralized economy, which will entail the appointment of an additional cost for PSY-Token.

Summing up this fundamentally perspective topic, we can mark the moment that, due to migration systems based on actual developments, it is possible to build a new parallel economy expanding the "bush" of algorithmic interactions, or realizing the last stage in the life cycle of the CashBox system, i.e., the transition to a new one economic paradigm. If you want, this approach will help to form a new type of bank with its own credit money, which is emitted for specific and fundamental

tasks. Within the framework of the Passionarity project, it is possible to create one of the variants of a cluster of algorithmic interactions that solves a global problem that unites people within the entire planet for a planetary economy. The name of this project I2BALANCE[9] and the CashBox project solves the task of the preparatory stage in its framework.

Content

Content should contain a complete overview of the idea and principles of the subject matter, given that it is necessary to take into account the moment of constructing the text in a more popular presentation in order to attract people who may not own the topic at all, but on whose voice the success of the project will depend.

Considering that we work in two language systems, the issue of languages should be given a special place.

Languages

Considering that we are working for an audience divided into two main language systems - Russian and English, it will be necessary to take into account these points in the formation of content.

On the side of the service, it will be necessary to fix the introductory content in the two languages indicated above, so that an outside observer has the opportunity to evaluate it knowing one of the languages we have taken as a basis. The content should be translated professionally not verbatim bureaucratic translation, but the language with the tact in mind when constructing sentences and with the interflow of words in the text.

Thanks to this, each participant in the contest will have a better chance of capturing the attention of each third-party observer, which will positively affect the progress of his ideas and the development of the platform as a whole.

Given that it will be useful to create educational videos somewhere, for promotion it will be necessary, and quite enough, to fill the chapter with titles in the language of parallel meaning. Or, if the subject does not contain the background language of the languages included in the project, as the main languages, then prepare the translation in the form of titles on both, because the service functions of YouTube can do it qualitatively and quickly.

Content categories

The content will need to be divided into categories, thanks to which it will be possible to provide a systematic view of the project to audience. They should look like this:

1. Project name;
2. Description of the project;
    - Description in text form;
    - Video presentation;

9 https://passionarity.org/i2balance

- Primary project achievements;
- Participants of the project;
- What are the advantages of the project?
- What kind of acquisitions, improvements will be available to people;

3. Where will the funds allocated from Cashbox go;
   - Equipment, material, facilities, staff, etc;
4. Time frame in the form of a detailed description of the action plan;
   - With the ideal development of events;
   - In the worst case scenario;
     - What difficulties can arise. Clear description, by points;
     - Identify the moment when the impossibility of the idea's realization will be revealed (if there are several such moments, then a description for each of them);
     - What signs should be reflected to identify this point;
     - Return of the rest of ETH back to the Cashbox. Determine the amount that will need to be spent up to this point.
5. Try to simulate and imagine a possible, superstructure infrastructure on top of the token generation system for this particular project. This is all the more important, if the project is already largely implemented and it remains only to establish an infrastructure for the production and marketing of products.

Decentralized applications. Đapps

We will not describe all possible methods of using decentralized applications, but only try to present the basic and the most simple for the end user. It should also be noted that the infrastructure is only evolving and many things will have to be done "by hands", i.e., in the worst of cases, by entering commands. But this can be avoided, at the initial stage, if you use applications that do not require the installation of a series of programs that you need to use to interact with Blockchain Ethereum.

First, there is a bit of theory to indicate which level we represent and which level you need to master.

Blockchain Ethereum is a database that concentrates on the side of all users spreading on the principle of P2P (peer-to-peer), i.e. if someone downloaded content from the Internet using torrent trackers, he knows that by getting one or another movie, program, music - we at the same time transfer it to others, or rather the part that is already available on our disc locally and as long as this film is on our computer, and as long as it is running torrent client.

The same is true with Ethereum, the only difference is that it looks like an endless "series", which is constantly increasing in size and in order for the database to be "Up-to-Date", the client must constantly run on your computer. Conventional synchronization practically does not consume computing resources of the computer, but only memory of the hard drive, the volume of which must be thought in advance. The disk for a couple of terabytes will be quite enough and with a margin of several years in advance.

If external drives are used, then you need to use USB3.0 port, since the read / write speed is a critical moment and the higher the parameters, the less likely that there will be problems with synchronization.

Now about the levels on which the final applications are built:

1. Mathematical crypto-construction Ethereum;
2. Ethereum Clients;
3. Blocks. Database;
4. Interfaces Web3.0;
5. Decentralized applications. Đapp;

Decentralization is when on the user's side there are all five levels with variable significance relative to the 5th, since providing a set of software codes, the fifth level can be on the side of one or another site in the network, however, nevertheless, run on the user side.

Now a few words about each.

Mathematical crypto-construction Ethereum

This is the construction that is expressed in the logic of the Blockchain Ethereum itself.

The end user does not need to know what is going on at this level. It is there and the Ethereum developers community is working on this level.

A mathematical construction can be written in any convenient programming language and in the final version its looks like an Ethereum client.

Ethereum Clients

The Ethereum client is the interface that represents a set of tools for working with the Ethereum network. It can be expressed both in the form of console execution (go-ethereum), when all operations are performed by entering commands, and in the form of a more or less implemented user interface (parity), which allows the user to make transactions, start mining of "Ether" etc.

As a rule, when the client starts, the client immediately starts updating the database, i.e. uploading the chain of blocks to your computer. Therefore, you need to immediately decide on where these blocks will be located, so as not to full fill in the spaces that are necessary for the operation of your operating system.

Blocks. Database

This is where everything is stored. Those, the database is a set of interrelated information, this set is all that value, which is provided by the most complicated calculations that are provided by the so-called "Miners" which mining, or creating new blocks.

Cryptocurrency, this is not the whole value of the Ethereum Blockchain, it represents only a small fraction of all possible technology data and is the building tool of the entire network. Not having an ETH on the account, it is impossible to make transactions, register contracts and make changes on their side. Those, "Ether" is the solution that allows everyone to build their own personal structure of bricks, which is fixed on the side of the Blockchain Ethereum.

Database, this is the level with which the developers of "Smart Contracts" work in every way, that is, having an idea of logic, they build structures describing them with high-level code. This is what makes Blockchain the technology of the 21st century, because the logic of data storage goes to the cosmic level of reliability. You can corrupt the hard drive, but you can not corrupt the database and in case of problems with hardware, it always downloads again. Moreover, due to the fact that the logic of the construction of each of the bricks is described by a high-level program code, with the entire set of basic syntactic constructions - the database is also a sample of cosmic flexibility, which does not even lie close to the technologies common to all, such as SQL etc.

The database is a different level of data, which is characterized by the level of availability.

- Metadata;
- Public contract data;
- Private contract data;

The metadata includes data such as account state, number of transactions, transaction costs, etc. This is the level that is accessible to everyone and knowing the addressing or transaction keys, you can access the metadata of each transaction, or knowing the public key of the wallet, get information about the state of the account and all operations performed with it.[10]

Two other levels of data are laid by contract developers. And access to either of these two levels is possible only using special tools that are accessible through decentralized applications, which are usually written by them.

Interfaces Web3.0

Web3.0 is a technology for interacting with Blockchain Ethereum, through which the decentralized applications are connected to the Ethereum database on your computer.

Typically, this is the user interface, which simplifies the user interaction with the Blockchain data. Or, more simply, the browser of the decentralized network Ethereum.

It can be executed in different forms, as a separate application (Mist browser) and as an extension in your usual browser.

Decentralized applications. Đapp

A decentralized application is a program that allows you to access both the metadata of the Blockchain, as well as public or private contract data, and also with the help of it you can change the information on the side of the contract.

Those who write public "Smart Contracts" usually need to take care of writing an application to access it, so that through the usual forms of data entry, any user can manage the content of contracts, if such access is provided on the side of the code describing this contract.

For a regular user, this can be a site with its usual buttons, input fields, etc., but for full use of it, the user needs to take care that there he has everything necessary. Namely:

1. The Ethereum client was installed and running;
2. An up-to-date database block was reached;
3. A Web3.0 browser / Web3.0 extension was available;

Now everything in order.

Approach with centralized restrictions

First, let's look at an instrument that provides all three conditions by default and immediately out of the box. That is, by setting which we could access the decentralized application. The bottom line is that due to it it is not necessary to install the Ethereum client and wait for the current block, but immediately install the extension into the Chrome browser and enjoy the benefits of "decentralized" applications. Decentralized, in this case, is quoted, since decentralization with this approach is rather conditional, because thanks to this extension a Web3.0 jumper is provided on the side of our browser, but all the blocks created

10 Using tools such as: https://etherscan.io/

especially for us wallets or accounts are stored on servers of the company that this extension offers. That is, to manage wallets, in full, we can not, we only take into account that for this the "uncle" answers and we believe him.

It's about Metamask[11]. Clicking on the link, installing the extension and fulfilling all the conditions of registration, you can be satisfied with the benefits of such applications, or create an image of their work.[12]

If you systematically approach the question, then Metamask can be used as a temporary tool that can be used at that stage when the database is downloaded onto your memory using the client. Of course, for transactions, you need a balance on the account, so this tool can be used to make minor transactions when, for example, the platform is already running, and you need to register the project, or vote for a particular project idea.

Given that the generated tokens on the ICO can be transferred from the account to the account, you can make a one-time, large transaction, but given that the tokens in the future will be transferred to an account that will already be fixed on the side of your machine.

In general, Metamask is a very convenient tool, with the only proviso that everything that should be at our disposal is on the side of "uncle".

A complex approach

Now let's turn to those tools that currently provide the most convenient solutions.

Parity

This is the Ethereum client, which is characterized by the speed and availability of a user interface, through which you can manage wallets, make transactions and use decentralized applications. You can download it by clicking on the link (https://github.com/paritytech/parity/releases) and selecting the one suitable for your operating system.

The client runs a local server on your computer, which provides access to the user interface displayed in your browser, which is available at the local address: http://127.0.0.1:8180/#/

Mist

This is a full-fledged Web3.0 browser that can work as a client and download the blocks onto your machine. It can also be connected to the client that runs on your computer, which is more reasonable, since the question is about the download speed from scratch. To use the client is much more rational, and Mist can always be connected to it for surfing around the world of decentralized applications.

Download: https://github.com/ethereum/mist/releases

In order to connect it to the client, you need to execute the command:

\path\to\the\Mist\executable\file \path\to\.ipc\file\of\client

11 https://metamask.io/

12 It is important not to forget to save the generated phrase so that you can restore wallets after switching to another machine.

The executable Mist file, as a rule, is located in the installed programs directory, and the file with the .ipc extension in the user directory, where temporary application files are stored. A file with the .ipc extension is available only when the client is running.

In order that in the future there was no need to constantly enter the same command, it is enough in Windows to create a file with the extension .bat, where to register this command with one line and then, after a couple of clicks, execute this command with the mouse.

* * *

In general, having mastered these three approaches, you can feel more confident on the expanses of the Ethereum network and in the world of decentralized applications in particular. Using the search on the Internet, you can get useful information in any language, the volume of which increases constantly.