

DAO Engine for B2C/C2C platforms

Introduction of the technology & Introduction of the decentralized freelance platform

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Abstract

With the influx of blockchain technology, new possibilities are opening up today, which hitherto seemed unsolvable. Key features such as transparency and decentralization make it possible to solve the world's problems, in almost all sectors. Busy DAO is a technology project dedicated to bringing disruptive technology to global e-commerce. At first, it will be used to create a fully decentralized platform in the freelance sector. Millions of people work as freelancers around the world, the number has also increased due to the COVID-19 pandemic, but the key problems are mainly centralization, low-quality offers, fraudulent offers (spam), and fees. Busy DAO brings a decentralized platform for freelancers based on blockchain, where there will be no fees or central management, but users will be part of an ecosystem – and will benefit from it.



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1. Introduction

Busy DAO is a decentralized and distributed engine for e-commerce platforms. We are developing a decentralized platform for freelancers, but the engine will be available to everyone who will see an advantage in it through smart contracts. We have been developing this engine since Q1 2020 when the idea was born. The technology includes solutions that utilize blockchain utility staking, antispam, smart contract, etc.

As blockchain is a much-discussed topic globally, large international companies are starting to implement it in their business processes, whether private, hybrid, or public.

The e-commerce market is one of the largest industries that still suffers from imperfections that can hurt the users who use them the most. Especially the freelance sector does not offer any decentralized platform. Millions of people work worldwide as freelancers, centralized and managed platforms are often overcrowded with low-quality offers – there is spam, and the user really cannot tell at first what is a good offer and what is not. Furthermore, if the offer is attained, which is subsequently completed, but not according to the expectation, the users will still pay a fee to the platform. Moreover, the user still loses valuable time if even the service is not accepted.

There are two types of platforms on the market:

- First is where users have to pay for a membership that allows them to offer or obtain services from other freelance users.
- Second is where, although the membership fee is not charged, a fee is paid for each completed transaction.

An important factor in freelance is the fact of the ongoing global pandemic COVID-19. Most companies worldwide, which did not declare bankruptcy in the first two waves, barely survive during these difficult times. Some of them had to lay off their capable and talented employees where some of them moved to the freelance sector, and they have to compete to offer their services. Many companies on these platforms are looking for freelancers who can do a particular job or service for the company without obligations associated with a full-time or part-time employee. All the above led to the increase in problems on the freelance platforms – many offers among which is hard to find quality service.

Busy DAO is coming to the e-commerce market with a revolutionary solution, which brings decentralized technology based on blockchain that will be connected to the decentralized freelance platform. There will be no central point of control that would take any fees on the platform, as the platform will work as a fully decentralized ecosystem. As the user will be a vital part of the ecosystem and influence the growth of the platform, making it an important element of the operation itself, he will have opportunities that he cannot found anywhere else.



Busy DAO uses several interconnected solutions and thus forms a complex model, in which the use of blockchain, proof of stake consensus, and coin tethered automated platform is the basis.

The project aims to create a global decentralized and exclusive platform that will compete with the current centralized giants with exclusivity, quality of services offered, and benefits associated with decentralization. Another advantage will be the easy application of this model to any other e-commerce area using smart contracts.



2. Problems in freelance

Although Busy DAO technology can be used in a variety of e-commerce platforms, Busy DAO is focusing on the freelance sector at first as there are many problems that it can eliminate and potentially make life easier for millions of people.

The most demanding problem on the current platforms is either local or global approach, but both are centralized. In the first case, users have to pay for an expensive membership; in the second case is a free registration, but the expensive fee is paid for every transaction made.

Mainly simple registration characterizes these platforms, which is usually free, and where the fee for using the platform is charged as a commission from individual transactions. That is why the platform may not care if it has 90% of inactive or low-quality users, because there is still some potential income. It is as if one successful user pays for placement on the platform and unsuccessful users are there just to be the artificial competitors. Also, it is known that the high number of users has a very positive effect on equity investors, who cannot effectively focus on user quality, so they focus on quantitative numbers.

From the above, it is clear that no one is forcing these platforms to change their strategy and approach the users differently. Indeed, this would mean admitting that their business model is not perfect, which logically is not a simple position for centralized companies valued by stock investors by billions of dollars. It is also predictable that any hesitation could cause an irreversible decline in the value of the company, which, of course, no one will risk.

2.1. Prices

Prices on the platforms are often completely random, regardless of the quality of the service provided. There are certainly some quality services on these platforms, but such a service will probably keep its price very low to be competitive with unqualified advertisers in its field. Unfortunately, unqualified advertisers very often reduce the price because the quality of their services is very low, which leads to significant degradation of the market environment. And it only brings additional problems.

On the other hand, there can be seen several low quality, and even more so, often fraudulent offers, which set the price high to create the impression of a quality offer. They often do this by presenting a plagiarized portfolio.



2.2. Competition

One of the main problems on the freelance platforms is that high and quality adequately evaluated offer has a disproportionate amount of cheap and very often fraudulent competition on the platforms. Unfortunately, to such an extent that the end customer does not even have a chance to register. And once he registers, it is very difficult to distinguish a quality offer from low-quality and even overpriced offers. In addition, the whole problem is compounded by the fact that it is not possible to use external links on the freelance platform (which makes it impossible to find any external references) because they are very often locked. This leads to the fact that the user himself is locked together with them on the freelance platform.

2.3. User rating

Under this term is hidden one of the last rescue points for the end customer, and it should help to recognize the quality of the offer. However, the star-based rating system, which is supported on the current freelance platforms, often fails in its purpose.

Our research shows the basic points of why this is the case:

a) The star-based rating system is not fair

This means that a good and quality offer, which is only on the freelance platform for a short time, is at a great disadvantage compared to a lower quality offer because, for example, this lower quality offer can be on the freelance platform for a longer time.

b) Every customer has different expectations

Logically, it happens that a customer with lower expectations positively evaluates services that would be difficult for demanding clients to obtain. And this, of course, can be reflected in the number of evaluations, which can be misleading for someone and thus can create a false impression of "proven quality" in demanding clients.

c) Customers may also rate inaccurately and unreliably against their complexity

But it also happens that the customer evaluates only purely out of solidarity when the customer is simply sorry to give a bad rating to the person who tried but unfortunately did not deliver the product according to the customer's expectations and ideas. This situation again creates the impression of a better offer than is in reality. Which, of course, again confuses other customers.



2.4. Spam

Since access to the platform is free, spam on the platform is almost a cost-free affair, and users, often with fake accounts, overwhelm the freelance platform. It often happens that one user owns multiple accounts that they overflow even more and create confusion between offers. Then there is spam, which floods individual users with misleading and fake offers, making it nearly impossible to use the platform correctly and effectively.

2.5. Fees

Platforms are often represented as free platforms. However, the opposite is true. These platforms claim high percentages of each order placed on the platform. Therefore, a successful advertiser often pays large amounts of these "percentages of sales", which reduces the utility of these platforms. For the above reason, the quality freelancer is not interested in staying on these platforms anymore. And as the service price would be increased by this, the platform fee would be significantly above the market value, making it less competitive. Again, that makes space for low-quality offers and advertisers who are willing to offer low-quality services but at the lowest costs.

2.6. User-experience

The end-user usually spends a lot of time on the freelance platforms to find the exact offer for their needs and requirements, in terms of both the quality and the price.

As the offers are not very structured and not well arranged, the searching user is often forced to try several of them before finding a product or service that meets the needs. Due to the complexity of the complaint and the skepticism to fine-tune the final service with the seller, it also happens that the client pays for the service several times to several sellers. This, of course, leads to the overcharge of goods or services, several times then if he ordered it from an advertiser with a quality product and service.

It is hard to effectively match customers' demands with the best offers as the existing freelance platforms have not been conceptually designed for this yet. The decentralized Busy DAO solution gives the space to the best offers and eliminates bad, inactive, and possible spam offers. It can potentially save the user time and money.

It is hence an opportunity for people who have little or no trust in each other to create records in a completely secure way through blockchain – without any intermediary. The fully decentralized Busy DAO platform will have no central administrator, so there will be no central authority – its users will be in a position of the service. This means that each user can verify transactions or, for example, monitor those who verify a transaction



in a given blockchain. Besides, each such user contributes to the overall decentralization of the system.

Thanks to blockchain technology, it is finally possible to create truly transparent and decentralized platforms.



3. Busy DAO solution

The Busy DAO technology brings a comprehensive decentralized solution based on blockchain, to which the Busy DAO decentralized freelance platform will be connected. The technological solution consists of several layers, where the most important are:

- utility staking which is the basic building block of the whole platform and which will enable the cost-free operation of the ecosystem;
- online wallet which will work in the Busy DAO platform environment;
- offline wallet which will work as a computer program.

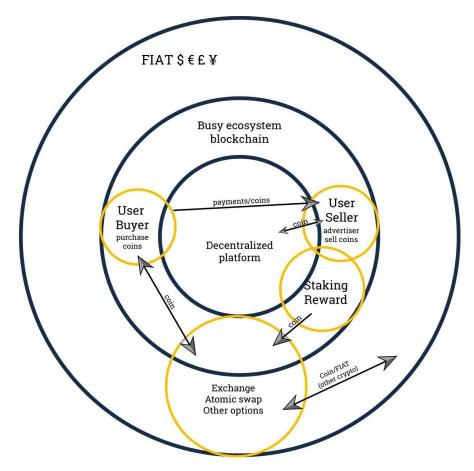


Figure 1: Busy DAO ecosystem

3.1.1. Token/Coin

The ERC-20 token is in Busy DAO considered as one of the temporary supporting parts of the whole ecosystem. During the token offering and the development period, the ERC-20 token will be used due to its reliable properties and already established adoption. However, as the more advanced blockchain will be required, a mainnet swap will be performed and all ERC-20 tokens will be swapped in a ratio of 1:1 to the Busy DAO mainnet coins. The specific use of the coin is that it will occupy the slot and the ratio of the coin to the slot is given by the development phase of the system (for more see section 3.2.3.). For example, with 1,000 coins, a slot of size "1" will be occupied. This ensures that the coin will have 100% usability throughout the system. Thus, it will offer real benefits for each holder.

Of course, the coin will also function as the main payment currency on the platform. Users will be able to purchase quality services for coins and as freelancers, they will also receive a reward for their services in coins. Thanks to the use of the coin (respectively demand), its value will also increase. Thus, the number of coins that users have in staking will increase the value of the staking reward. Users will be therefore positively motivated and interested in the development of a freelance platform. Given that they will have a share in coins, they will be motivated to use the coins as a form of payment.

3.1.2. Wallet

In Busy DAO, the cryptocurrency wallet will be a virtual and a software solution that will store public and/or private keys for creating transactions and it will be also used to sign and encrypt information. By signing is meant, for example, the implementation of a smart contract notary between two users or sending a message on the platform. The more active users in the system, the more dynamic the platform will be.

Offline

The offline wallet will be implemented through a computer program that the users will have installed on theirs secured clients. The offline wallet will provide an extra layer of security for the wallet against theft and misuse. The offline wallet will contain all the essential functions for working with the Busy DAO cryptocurrency, for example, creating a wallet, sending transactions, receiving transactions, creating/removing a staking address, and so on. The user will be also able to have an online wallet in which both addresses can be linked. With this, it will be possible to expand/take up a slot on the platform. This way, the user will hold the coins directly, which will provide another layer of safety.

Online

The online wallet will be implemented through a blockchain that will work with the Busy DAO decentralized platform. All functions of the online wallet, such as creating and sending transactions, staking, etc., will be implemented after sending the request from the platform to the blockchain, which will process the request and return the required data. If the user will want to use both wallets, it will be possible to link the



offline wallet to the platform in "read-only" mode, which means that it will be possible to check the offline wallet's balance in the online wallet, while using the staking addresses from the offline wallet to expand/take up the slot on the platform.

3.1.3. Utility staking

Utility staking is considered to be one of the main engines of the Busy DAO technology and Busy DAO platform, allowing users to occupy slots, and thus the user will actively participate in the development of the entire ecosystem and platform. To ensure that there will be always enough coins throughout the ecosystem, the staking reward in the blockchain will be set to 33% p.a.¹ from each staking address so that each user will participate in an increasing number of coins. And that is why inflation will not occur at the expense of the user. On the contrary, the user will be rewarded with newly created coins, which he will be able to either use on the platform or sell on exchange and thus will help to ensure sufficient liquidity in the ecosystem.

In the Busy DAO solution, staking will be used for three critical activities:

- the first activity will be the visibility and size of the slot as such on the platform,
- the second activity will be the calculated staking reward, and
- the third activity will be the verification of transactions themselves (proof of stake).

Staking is a solution using staking wallets and addresses. The staking limit will be set in each life-cycle phase (more in section 3.2.5.). The limit will indicate the minimum number of coins required for staking. Therefore, if the staking limit will be set to 1,000 coins and there will be only 900 coins in the staking address, no staking reward will be obtained in this case, nor will the staking address count to the slot size. The second alternative is that there will be 3,000 coins in the staking (although the staking limit will be 1,000), and in this case, the staking reward and the slot size will be calculated only 1x (i.e., only from 1,000 coins). To receive three times more coins from the staking reward and increase the slot, you will need to have three staking addresses, each with a minimum of 1,000 coins.

The function is shown in Figure 8, where the staking limit is set to 1,000 coins (i.e., a minimum of 1,000 coins in the staking address (SA) is required to obtain a staking reward). In the example, there are two SAs, each with 1,000 coins; as a result, the user

¹ Staking reward is set to 32.7–33.2% p.a. Staking reward is affected by the holding time of the coins, i.e., the time for which the user holds the coins. Each year does not have exactly the same time periods, so staking reward can vary within the given deviations.



receives approximately 660 coins (2 x 33% of 1,000 coins). The total amount of coins that will be earned can be counted with a general equation (330 coins = 33% of 1,000 coins) multiplied by the number of active staking addresses.



Figure 2: Example - staking reward

3.2. Platform

The freelance platform will be built on the Busy DAO unique blockchain-based technology and charge-free solution which will make every user a vital part of the platform's decentralized ecosystem. Each user of the platform will be able to occupy space on the platform through utility staking and profit from staking with a fixed reward of 33% p.a.

This unique solution will provide fair conditions in the decentralized ecosystem and an innovative economic model to reduce poor quality and spam offers and deliver the best experience for everybody. Every e-commerce platform will be able to use this model thanks to the Busy DAO smart contract distribution.

The Busy DAO platform will be based on the concept: one user account will be just one online wallet. Each user can have only one slot with different sizes, which will increase or decrease according to the number of active staking addresses. To display the slot, the user will need to have at least one staking address meeting the staking limit. If the user will have a lot of coins in his wallet but no in staking, the slot will not be displayed, and the staking reward will not be counted.

Each user will choose in which category and region to place the slot. If a suitable category will not be available, it will be possible to create it. Slots will be sorted by their sizes, i.e., from the largest to the smallest. On the home page, all slots will be displayed across all categories also by the size of the slots.

After logging in, the user will be able to modify his slot and the corresponding page with the offer according to his requirements. The user page will have an in-built page-builder,

which will give the user ability to modify the appearance, colors, elements, text, and other properties of the page in a user-friendly form.

Busy							
2					2		
	•						
				2			2

Figure 3: Preview of platform's slots

As it will be a fully decentralized platform, there will be no central authority to approve or control the content of individual slots, but this does not mean that the platform will be unintelligent, e.g., will not limit it. The platform will be connected to its own AI (Artificial Intelligence), which will automatically verify the content according to the entered texts and images, and will evaluate whether it will not match any forbidden words and patterns. Typically, it will be pornography, illegal activities (drugs, weapons, black market, etc.), and globally established and prohibited services.

3.2.1. Technical details

The Busy DAO platform will be fully decentralized, there will be no central authority to manage data, interfere with user accounts, or gather any fees on the platform. Nobody will have a central interest to manipulate any part of the platform; the platform will be completely in hands of its users.

Its network settings will work on the same principle, when, like blockchain, the platform will be placed on a large number of nodes, where the loss or attack of one of them will not cause the platform to malfunction. Depending on the access, the user will be connected to the node with the lowest response time. The same will work with the



connection between that node and the BusyXChain blockchain, all in a secured connection.

As there will be at least thousands of nodes worldwide, it is necessary to keep all the nodes synchronized. That is why there will be configured a two minutes "freeze" window. It means that once the user creates any transaction, it will not be possible to create another within the next 2 minutes (it is a period during which all nodes worldwide will be synchronized). Therefore, it will not be possible to perform a double transaction or any kind of forgery during the period when the data on the connected node will not be up-to-date.

3.2.2. Anti-spam tool

The anti-spam tool will be implemented on the platform by Busy DAO coin – the coin will behave as a message carrier. If a user will send a message to another user, one coin will be transferred to the recipient (together with the message), so for the sender, this will mean executing a transaction of one coin. If the recipient will reply to the message, one coin will be transferred back to the original sender's wallet.

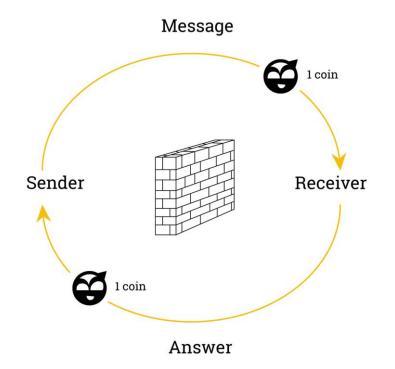


Figure 4: Platform - sending message principle

Therefore, if there will be a conversation between two users, there will be no messaging expense for those users. It is like throwing a ball with a message over a wall. In this case, the ball will be the carrier of the message – Busy DAO coin.



On the other hand, if there will be a spammer on the platform who will multicast the same message to multiple users, it will be really expensive as he will be only sending his coins to the users as a result. The question is how will the end-user find out or recognize that it is spam?

The platform will have indicators to help the user. The first will be the so-called "trust indicator". Before the user will send the message to the other user, the indicator will be displayed, which will show the trust of the other user based on the algorithm – it will be a combination of a number of sent messages, a number of answered messages, and a number of received messages. Another indicator will be the evaluation of the offer itself after the completed implementation and confirmation by the end-user.

3.2.3. Slots

A slot will be a place on the platform where the user will present his offer. The slot will be directly connected to a specific wallet address, which means that due to staking, a specific slot will be occupied. The slot will not be purchased, its size (and therefore the location among other offers) will be defined by the number of user's full staking addresses, i.e., the number of staking addresses that will have the number of coins more or equal to the staking limit.

If there will be only one staking address meeting the staking limit for a given wallet, the slot of size "1" will be visible on the platform (unless the user intentionally hides it). If there will be two or more staking addresses in the wallet meeting the staking limit, the slot will be called a multislot.

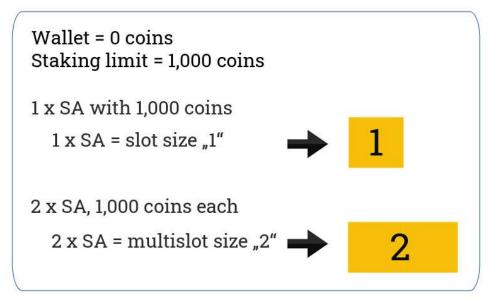


Figure 5: Platform - slot size based on number of staking addresses (SA)



The individual slots will therefore have different sizes – the size will be calculated based on an algorithm that will work with the number of active staking addresses. The algorithm will, especially in the next life-cycle stages (see section 3.2.5.), work with a logarithmic increase in size, in which it will logarithmically take into account the largest and smallest slots, from which it will subsequently create a plot ratio based on a predefined maximum shape. As a result, the slots will be sorted on the platform in a "mosaic" shape sorted by the largest slots within the category or region.

3.2.4. Limit of slots

A slot limit is a term that will refer to space on the platform, which will be expressed by the sum of the sizes of all slots. The size of the slots will be limited and can increase or decrease according to the number of staking addresses. With this enlargement and reduction, the platform will not be able to ensure the size of new or existing slots in the longer term. However, the larger the slot, the higher it will be displayed among the other offers, and at the same time, thanks to its size, it will be seen better.

Because there will be only a limited number of slots on the platform, the supply will decrease with the decreasing number of free slots, which can increase the price of the slot tethered coins, assuming the same demand.

These rising prices of slots and tethered coins can economically motivate low-quality advertisers to withdraw from staking, sell their coins and free up space on the platform to more qualified advertisers.

If the space designated for the slots will be 100% saturated, the platform and blockchain will automatically move to the next life-cycle phase.

3.2.5. Lifecycle phases

For Busy DAO technology to achieve decentralized behavior and apply the inflationary/deflationary model, the platform and blockchain must have mechanisms in place that will work in both parts at the same time and must be considered in the initial phase of development.

As the number of slots on the platform will be limited, they will fill up over time, making it impossible for new and existing users to fill new slots or expand existing slots. The whole system will automatically respond to this by moving to the next life-cycle phase, where the number of existing slots on the platform will be doubled (x 2) and at the same time, the staking limit will be reduced by 50% (/ 2).

Each user will have a "new" slot available for free, which they will be able to fill with half the coins than in the previous phase (since the staking limit has been reduced by

Ø

50%), and this will tend some quality advertisers to sell their coins from staking addresses. The sale of the coins will free up space for better and stronger quality bidders, who, on the other hand, will expand their place on the platform, bringing the quality offer to the forefront and the low-quality one moves lower and downward in a natural and nonviolent way based on real economic motivation.

Phases

The whole system will have a certain number of development phases defined when, for example, in phase 9 there will be a total of 7.68 million slots on the platform, the limit for staking will be 3.90625 and the approximate value of the coin will be \$25.6*. The first phase will be named "Phase 1", the second phase "Phase 2", etc.

Life-cycle	Limit for staking	Number of slots on the	Value of the coin*
phase	[coins]	platform	
Phase 1	1,000	30,000	\$0.16
Phase 2	500	60,000	\$0.32
Phase 3	250	120,000	\$0.64
Phase 4	125	240,000	\$1.28
Phase 5	62.5	480,000	\$2.56
Phase 6	31.25	960,000	\$5.12
Phase 7	15.625	1,920,000	\$10.24
Phase 8	7.8125	3,840,000	\$20.48
Phase 9	3.90625	7,680,000	\$40.96

Table 1: Platform life-cycle phases

* Calculations of the value of the coin are based on a theoretical value and do not include the influence of the market, respectively supply and demand.

The transition of the phases

The transition to the next life-cycle phase will be performed automatically as soon as the total number of slots on the platform will be occupied, where the given number will be predefined both on the platform and in the blockchain. It is with the transition to the next life-cycle phase that there will be two automatic activities and one activity that can be performed by the user:

- 1) The number of slots on the platform will be doubled (x 2).
- 2) The staking limit will be reduced by 50% (/ 2).
- 3) The user gets the opportunity to double their slot size for free using existing coins in staking (compared to the inactive user).

In the case of the first two activities, it is still the same formula and value on the left and right sides of the equation.

Number of slots * Limit for staking = (Number of slots * 2) * (Limit for staking / 2)

For a specific example, let's substitute 30,000 for the number of slots and 1,000 for the staking limit. After moving to the next development phase, the number of slots will double (i.e., to 60,000) and the staking limit will be reduced by 50% (i.e., to 500).

30,000 * 1,000 = 30,000,000 (30,000 * 2 = 60,000) * (1,000 / 2 = 500) = 30,000,000 30,000,000 = 30,000,000

For the user to benefit from the transition to the next life-cycle phase, his action will be required. Since the staking limit will be reduced by 50%, the user will only need to have half of the coins in the current staking addresses for the slot to be displayed and to obtain a staking reward. Once the automatic transition will occur, the value of the coins in the staking addresses will not change automatically for the user, but his interaction will be required. The user will have to manually redistribute the coins from the original staking addresses to the new staking addresses to achieve the staking limit, thus gaining an advantage over inactive users who do not act. Respectively:

- 1) Will receive a larger slot (x 2) compared to the inactive users.
- 2) Will receive a bigger staking reward (x 2) compared to the inactive users.

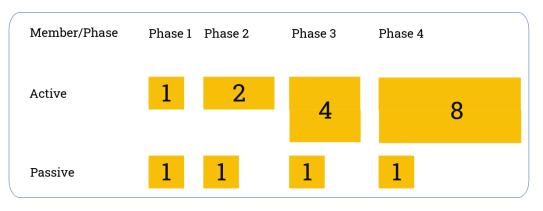


Figure 6: Life-cycle phases – the size of the slots based on the activity

Example of transition to life-cycle phase 2

For this example, consider the following parameters: staking limit 1,000 and 1 staking address with 1,000 coins (referred to as SA).



<u>Phase 1</u>

- Limit for staking = 1,000; 1 x SA with 1,000 coins.
- The user has a slot of size "1" = has just one staking address meeting the limit.
- The user obtains a staking reward of 330 coins = he has just one staking address meeting the limit, therefore 33% of 1,000 coins = 330 coins.

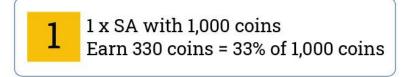


Figure 7: Life-cycle phases – example – phase 1

<u>Phase 2 – no action</u>

- Limit for staking = 500; 1x SA with 1,000 coins.
- The user still has a slot of size "1" = he still has only one staking address meeting the limit of 500.
- The user receives a staking reward of 165 coins = he still has only one staking address meeting the limit, but since the limit has been reduced by 50%, a reward of 33% is calculated only from 500 coins, i.e., 165 coins.
- <u>Result</u>: Unrealized staking reward from 500 coins in SA + reduction of the slot position compared to the users who did the action.



Figure 8: Life-cycle phases – example – phase 2 with no action

Phase 2 – action performed

- Limit for staking = 500; 2 x SA, 500 coins each.
- The user has a multislot of size "2" = now he has two staking addresses, which meet the staking limit 500.
- The user has maintained a staking reward of 330 coins = he has now two staking addresses meeting the limit, but since he transferred the 500 coins from the original to the new staking address, a reward of 2 x 33% of 500 coins is calculated, i.e., 330 coins.
- <u>Result</u> = 2x bigger staking reward and 2x larger slot compared to users who did not act.



2 x SA, each with 500 coins Earn 330 coins = 2 x 33% of 500 coins => 2x bigger slot + 2x bigger staking reward*

Figure 9: Life-cycle phases – example – phase 2 with action

* Compared to the inactive users

<u>Comparison</u>

Phase	Number of staking addresses	Number of coins in SA [coins]	Staking limit [coins]	Size of slot	Staking reward [coins]
1.	1	1,000	1,000	1	330
2. – no action	1	1,000	500	1	165
2. – action	2	500	500	2	330
		500			

Table 2: Comparison of actions during the transition of the phases

Taking into account the preceding paragraphs and the comparison Table 2 above, the principle of "eliminating" inactive users is clear now – if the user will not act, he will still have the same slot size as before (but lose 50% of the size compared to the others who acted) and staking reward will be reduced by 50%. This will move the slot to a lower position and make it less visible. The example above was used for its simplicity with only one staking address, however, with the analogy that the user will have 8 staking addresses and transition to the next phase, we are already talking about more significant impacts – slot size from size "8" to "16". And in case of non-action, loss of 50% staking reward (from the original "2,640" coins to "1,320" coins). The inactive user will continue to receive staking reward, but since the staking limit will be reduced by 50%, he will also receive only 50% of the value from staking. This will not in any way affect the original balance of the coins on the account – the user will not lose his coins, only the future reward will be reduced.

Over time, this will almost completely eliminate the inactive users, both in terms of visibility on the platform and in terms of receiving a staking reward. The inactive user will not be beneficial to the ecosystem and will therefore not be rewarded.

On the other side, if the inactive user will become active again, he will have the possibility to receive his full position on the platform.



3.2.6. Smart contract notary

The Busy DAO platform will be fully decentralized, so there will be no central authority to resolve any disputes between two users. The solution to this problem will be a smart contract notary. The smart contract notary will operate on the principle of a virtual notary, which will release the blocked amount of coins for the service after confirmation of the completion by both parties.

The principle of the notary will consist of few automatic steps of the system and manual confirmation of both users:

- 1. The user asking for the service will write to the offering user.
- 2. If the conversation will conclude that realization will take a place, both parties will sign a transaction for an electronic smart contract notary with their wallets.
- 3. The virtual notary will block the number of coins for the service from this buyer.
- 4. If the service is realized to the satisfaction of both parties, both parties must confirm the service and the coins will be released to the service provider.

Apart from the notary, there will be a forum on the platform where users will be able to discuss, help each other with experiences, etc.



3.3. Token economy

The total distribution of tokens from the initial number of 255,000,000 is visible on Figure 19. After Mainnet, minting will be applied and additional coins will be mintable exclusively for a staking reward distribution.

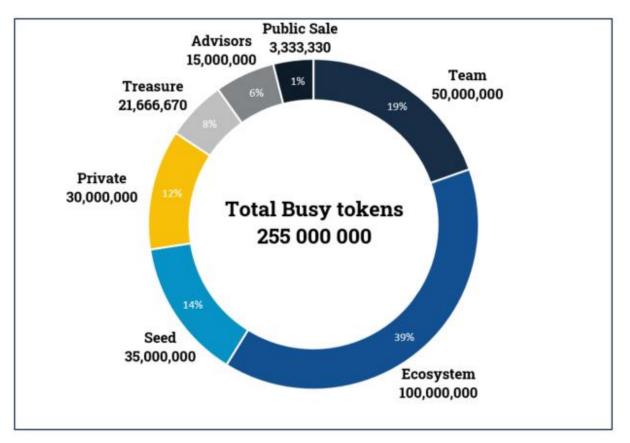


Figure 10: Token economy

From the seven components of the initial token supply, five will be locked and set to vesting. It means that it will not be possible to release the entire amount of tokens at once, but over time. One of them will be immediately distributed to the community in the form of a token offering.

The token release is set as follows:

- seed the release of 15% immediately and the rest linear for 12 months,
- private the release of 20% immediately and the rest linear for 12 months,
- advisors linear release for 24 months,
- ecosystem lock till mainnet, then vote by Governance,
- team tokens locked for 12 months and then linear release for 12 months.

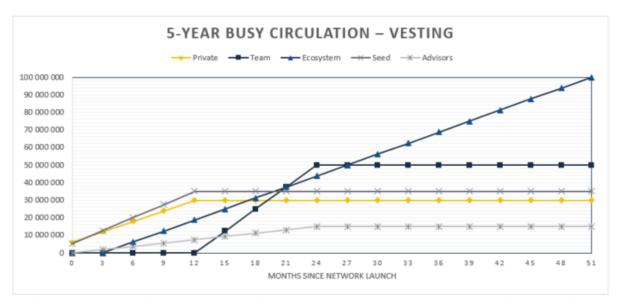


Figure 11: Vesting

3.4. Roadmap

2020 – Q1: Idea

The idea was born as a result of chaos, spam, preference of quantity over quality, and overpressure on the current freelance e-commerce platforms. To develop unique blockchain technology inseparable tethered with the platform to bring better solutions to e-commerce platforms, especially in freelance businesses.

2020 – Q2: Team meets

We managed to find the best experts in their fields and this established an irreplaceable team of passionate blockchain enthusiasts and developers who shifted the Busy DAO project from the idea to reality.

2020 – Q3: Early development, Smart chain

The team invented and designed the basic sophisticated elements of the technology and all mechanisms were properly tested and evaluated. The technology was proved as fully functional, scalable, and to be used worldwide.

2020 – Q4: Company found, White paper, ERC-20 token

Company Busy Technology, s. r. o., was founded to associate founders and a team of developers in a legal structure.

The technology's aspects and details were written and a white paper was created.

ERC-20 token was chosen due to reliable properties, already established adoption to support early development of the community and project's ecosystem. It will be swapped in a ratio of 1:1 by our own mainnet coins later used as the main currency on the platform.

2021 – Q1: Private Sale

The Private Sale was implemented to achieve a strategic partnership that will significantly support the development of the project.

2021 – Q2: Public Sale

The Public Sale is chosen for its decentralized property and overall adoption to support ecosystem and community development.

2021 – Q3: Prototype

The first prototype of the platform will be created to identify and integrate more advanced and detailed features of the solution.

2021 – Q4: Community Testing, Kubernetes channel, Bug bounty program

Kubernetes will be configured to set the final channel structure of the BusyDAO Testnet. Bug bounty program will start together with Community Testing.

2022 – Q1: Desktop wallet release, Desktop wallet testing, Chaincode security testing

The desktop wallet will be released together with community testing.

BusyDAO chaincode security testing will be performed by a specialized blockchain auditing company or Penetration Company.

2022 – Q2: BusyDAO chaincode audit, Kubernetes deploy

BusyDAO chaincode will be audited by a specialized company CyStack.

BusyDAO chaincode will be deployed on the final Kubernetes network used for the mainnet. All security testings, including penetration tests, will be done on the Kubernetes.

2022 – Q3: BusyDAO chaincode security testing v2, Community Testing v2

The whole Busy DAO engine community testing V2 will be released. Advances security testing, including penetration tests will take a place.

2022 – Q4: BusyDAO chaincode penetration testing



BusyDAO chaincode is preparing for the mainnet. One more white-box penetration test will take a place.

2023 – Q1: Mainnet, Token swap, Platform alpha, Staking

Mainnet will be launched, and the ERC-20 swap to \$BUSY coins will be available, including also the staking option.

The platform will be released in the public alpha version. It will create a wallet interface with the BusyDAO chaincode.

2023 – Q2: Mobile app, Platform public beta

The Busy DAO mobile application will be designed, created, and introduced to the world for greater adoption.

Beta version of the platform will be launched for early adopters, testers, and feedback from our community.

2023 – Q3: Platform ready for mainstream adoption

Thanks to the implementation of the mainstream options tethered with blockchain solutions and extensive decentralization of the platform, platform and technology will be fully prepared for global mainstream adoption and will be able to compete with current platforms and technologies.



4. Conclusion

This white paper describes the principle and functionality of Busy DAO technology and ecosystem. Busy DAO brings a decentralized solution to the e-commerce industry based on a blockchain technology.

At first, The Busy DAO is going to focus on the freelance sector in e-commerce as there are many problems it can solve. The decentralized freelance platform will be build based on the unique Busy DAO engine and the platform will be connected to the blockchain, which will be an indispensable part of it. Moreover, with its transparency and unique tools, the platform will be more trustworthy and secure than current solutions.

The platform will provide a decentralized ecosystem for everyone who will be looking for quality offers and services. There will be no central authority to manage, control, or collect fees; the users themselves will be part of the whole ecosystem. Thanks to utility staking, every freelancer will have an opportunity to present his products on the slot and will receive a 33% staking reward. The size of the slot and the final amount of staking reward will depend only on the user, according to the number of active staking addresses. It will be also possible to withdraw and eventually sell the coins on Exchange and provide additional liquidity to the ecosystem.

In addition, there will be more functions on the platform, for example, an anti-spam tool, where the coin will be in a role of a message carrier, and a smart contract notary, which will protect both parties.

The Busy DAO solution will be distributable to everyone who will see an advantage in the technology through smart contracts.



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