

# Primalbase: Distributed Workspace for Tech Community

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**Abstract.** Building upon the well-established business model of shared workspaces, the Primalbase project transforms traditional office rental into a new-generation community-based ecosystem where one can share, sell or rent out high-quality office spaces using Ethereum and Waves-based digital tokens. Primalbase tokens not only serve a practical function, but also have actual inherent value based on a real physical product: it is this that makes Primalbase stand out from other projects utilizing crypto tokens. The conception of the project and its core elements are outlined in this paper.

## 1. Introduction

Real estate is one of the most conservative areas of the economy, while Blockchain is considered a disruptive and novel technology. Nevertheless, combining these seemingly incompatible elements has proved extremely fruitful — a salient example being WeWork.

The foundation of most co-working projects is the concept of creating a shared infrastructure with a global community. The advantages of this business model over the management practices of large corporations, with their rigid internal regulations and strict hierarchy, are quite apparent. This is especially true for young technological start-ups, who are increasingly rejecting the traditional office set up in favour of co-working environments. This format has gained much traction: according to 2017 Global Coworking Survey, the number of new coworking projects has roughly doubled since 2011, and the number of their residents is estimated at 1.2 million (see also fig. 1).

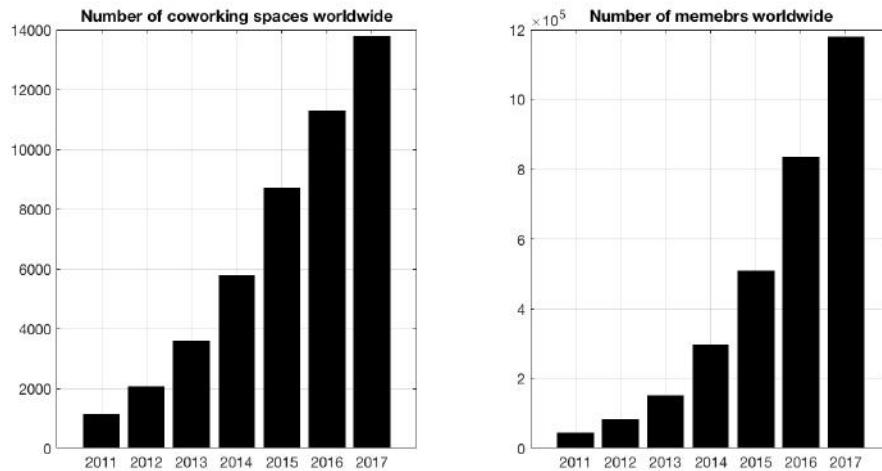


Fig. 1: Basic coworking spaces statistics, from Global Coworking survey 2017

The number of successful co-working projects – most notably WeWork, Spaces and Second Home – evidences the vitality and potential of this business model. According to [1], «... *the creative hub is more than the sum of its parts. It offers creative micro businesses the chance to aggregate with others in order to access crucial resources such as tools, specialist services, or inspiration to help develop projects and businesses. Hubs represent a collective approach to coping with uncertain social, cultural and economic environments and processes of creativity and innovation ... Our research shows that creative hubs can produce a wide range of impacts including start-up ventures, jobs, new products and services, future investment (public and commercial), talent development, regional talent retention, informal education and engagement, training, urban regeneration, research and development, new networks, innovative models of organization, quality of life enhancements and resilience*».

We believe that the use of crypto-tokens will both benefit and enhance this model: it was this notion that inspired the creation of this project. Through the use of a single-payment crypto-token membership, the Primalbase project offers access to all-inclusive shared workspaces located in the world's leading tech hubs. It's scalable, fast to set up, and flexible in terms of timing and the size of the team.

The rest of the paper is organized as follows. The first section will outline the basic concept of the project and summarize its core components. The second section is devoted to explaining the token system: their purpose, the pricing mechanism and the transfer of ownership. The rules of the initial coin offering (ICO) campaign will also be charted in this section. The legal aspects and limitations associated with this project will be discussed in the final sections. Appendix A provides a summary of the stack of Blockchain technologies that will play a key role in the operation of the project. The accompanying software architecture is schematically described in Appendix B.

## 2. Concept

The project will be executed in two main stages. The first stage is the establishment of five shared workspaces in the following strategic locations: Amsterdam, Berlin, London, New York and Singapore. Strategic in that, each is regarded as one of the most beneficial cities for tech entrepreneurs. These spaces will be up to 2000 square meters in size. The locations of future Primalbase workspaces will be decided by the vote of the Primalbase token holders (see also paragraph 2.2).

A system of dividing the infrastructure into rentable offices (based on classic, standard real estate relations) and non-rentable co-working spaces reserved only for Primalbase community members (based on crypto-economic relations), will ensure efficiency and profitability of Primalbase business model. Non-members can obtain temporary membership and access to co-working spaces through the renting of tokens from Primalbase community members.

Although ultimately, the underlying profit of Primalbase will be made through the renting of office space to companies, project teams, startups, branch offices, etc. This will cover the operating expenses of the property management company.

The cryptocurrency token Primalbase (PBT) is built on the WAVES platform and is compatible with Ethereum protocols (cf. appendix B). There is a proof-of-concept up and running in Amsterdam, which is already receiving endorsements from prominent international tech entrepreneurs who have become members of Primalbase's growing community. In accordance with the business model outlined above, the Amsterdam unit provides shared workspaces to the current members of the Primalbase community.

To develop and run more Primalbase units we need to collect funds that will cover start-up costs, the operating expenses of the Property Management Company, as well as capital expenditures (building the offices with shared workspaces in selected locations). To accomplish this task, the ICO procedure is necessary.

The funds collected through ICO will allow us to begin the creation of Primalbase infrastructures, adjust the first five units to the level of cost recovery, and ultimately produce the revenue to be re-invested in building the next locations. The value of the tokens will surge as the demand continues to rise.

Additionally, the tokenization of our shared workspaces provides us with a unique opportunity to establish a pool of committed community members, tenants, landlords and opinion leaders, who we can rely on in the future stages of the project's development.

### 3. Token system

#### 3.1 Purpose and functionality

There are 3 main reasons for adopting the token system:

- It is a means of raising enough money to develop the project. Well-implemented crowd sales, with carefully defined objectives and guarantees, are one the best ways to both generate capital and to build a community that has a stake in its success.
- The token represents a simple universal measure of the value of renting membership from community members, the rising number of Primalbase locations, efficiency of the shared workspaces model, and operating profitability of the company.
- The tokens can be considered as an investment instrument because its market value can significantly change as the project develops.

To expand on that last point — opening hubs in new locations should lead to an increase in our community membership, which in turn will allow us to establish and secure new partnership agreements. The operating profit will also grow, as its source is not the turnover of the tokens themselves, but the classical real estate business model of subletting office space. This financial flow will enable us to open several new hubs, which will lead to a further increase in the price of the tokens — if only because each token will give access to an ever-increasing office infrastructure. This process is depicted schematically on the figure below.

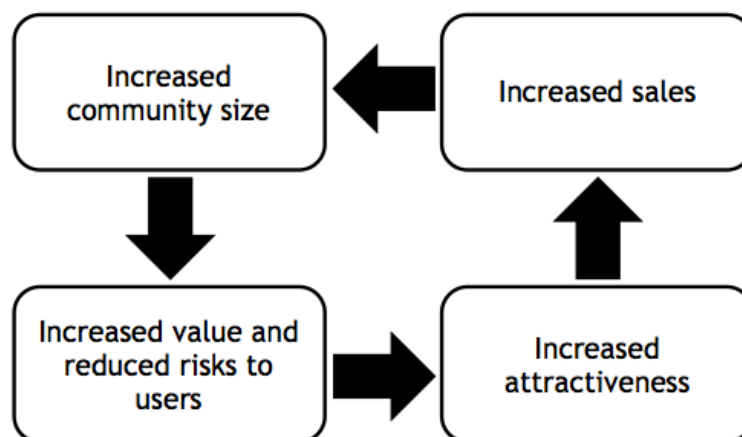


Fig. 2: Diagram of token market price mechanics

We emphasize that the Primalbase team cannot guarantee a monotonic increase in the price of tokens and is not responsible for the possible losses associated with such speculative use of tokens. Access to all Primalbase hubs services and functionality is guaranteed unconditionally on the current market price of a token.

### 3.2 Token specification

One PBT token allows full access to the shared workspace at any Primalbase location for one person. In every office space, all the necessary services and amenities will be present and provided, such as broadband Internet access, digital printing, etc. The term of the token is unlimited and, therefore, does not expire. The fee itself is secured in a single payment. The number of tokens that can be purchased by the same holder is unlimited. In this case, the possession of 4 tokens permits the use of a private office, if one is available.

As noted above, current tokens holders can participate in the further development of the project: for example, to participate in the selection of future sites for new Primalbases, as decided by a general vote. Tokens are not bound to a person or company, and anyone who can certify their ownership of it can use it. That is, the token can be resold or leased on (see paragraph 2.3).

PBT tokens are divisible, i.e. their number need not be an integer. Fractional shares are introduced for the convenience of working with PBT as investment assets. The smallest fraction is 0.0001 PBT. It is worth noting that to access the services of the hub the holder must have at least one complete token.

We assume that all participants in the project will maintain a proper level of decorum, decency and ethical conduct. Therefore, the team reserves the right to revoke membership, and deny access to Primalbase hubs for gross or repeated violation of the rules of conduct. In this case, the current holder of the tokens can only sell them.

The total number of free-to-use tokens is limited to 1000. Another 250 tokens will be held in store for the social activities of the tech community, and will be at the disposal of members of the advisory board.

During the ICO, the payment can be made in any currency, both fiat and crypto; in the case of the latter, it will be possible to use third party conversion services like Kraken or Shapeshift. On the first day of ICO price of PBT will be equal to 3 Bitcoins (BTC), and from the second to the seventh day of ICO — to 4 BTC. Starting from the eighth day the cost of the token will be 5 BTC.

The funds raised during ICO stage will be kept in a multi-signature wallet supervised by three members of the Advisory board. Funds are transparent and will be spent according to the long-term strategic plan (see also sec. 4); an approximate breakdown of raised funds is depicted on fig. 3 below.

The ICO campaign will take place until the purchase of all 1000 tokens, but for no longer than 1 month. If, not all the tokens are sold by the end of this period, the unrealized balance will also be placed at the disposal of the board of directors. Operations with tokens (sale, leasing, etc.) will be allowed only after the end of the ICO campaign.

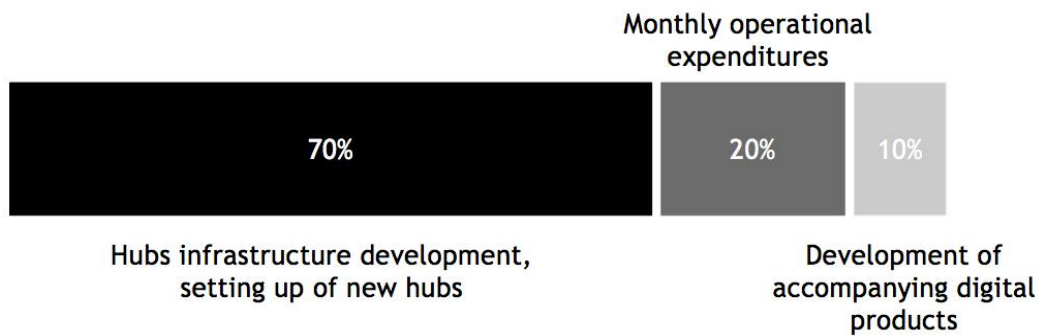


Fig. 3: Approximate breakdown of funds spending

As the project develops, part of the operating profit is expected to be spent on the purchase of a certain number of tokens. This will allow the reinvestment of revenue into the further development of the project — specifically, the opening of new hubs. Moreover, these measures will partly help preserve the liquidity of PBT tokens at a level sufficient to make them an attractive investment medium.

### 3.3 Token ownership

Primalbase members can rent or sell their tokens using the special technical feature of the underlying WAVES protocols. From a technical point of view, this means that ownership of any amount of PBT can be transferred, temporarily or permanently. These are peer-to-peer transactions; therefore, parties must agree on costs and payments between themselves.

The holder of the token is protected by his own Blockchain — the protocol works in such a way that the token cannot be transferred on but remains in the wallet of the rentee: in effect, the token is on a «temporary loan». The minimal duration that a token can be rented is 3 months, and there is no maximum period. A rental agreement may be terminated ahead of time by mutual decision of the parties or unilaterally. Formally, the WAVES platform does not allow the inclusion of specific leasing rules (i.e. the price, time, conditions, etc.) into the Blockchain, as there can be too many scenarios of interaction between users. However, within the leasing agreement between the parties, there are guarantees on the fulfillment of contractual obligations of all involved.

A token holder can sell as many tokens as they choose. However, any holder who has sold all their tokens, loses the right to access the co-working services provided. The innate features of Blockchain technologies make it impossible to restore the ownership of tokens if the holder has, for whatever reason, lost his private key. The responsibility to reliably store the private key is that of the token holder alone.

#### **4. Legal aspects and issues**

Due to the retrospective nature of regulatory action, our team can make no guarantees regarding the legality of the platform or launch of ICO campaign in any given jurisdiction. PBT tokens are not securities and do not hold any rights in the company. We must operate our business in accordance with the laws of relevant jurisdictions. As such, PBT tokens may not be immediately available in certain countries.

The advisory board protects investors' interests and provides the latter with all the necessary reportage. The investor relations are built in a way like that of IPO — based on quarterly investment reports.

All legal aspects of real estate transactions — including, but not limited to, the management and negotiation of rental contracts, the maintenance and surveillance of buildings, and tax payments — will be coordinated by a central management unit in the UK.

#### **5. Future development**

We intend to create larger scale and all-encompassing hubs at the most suitable locations. Developing on our original Primalbase concept, we will create more extensive all-inclusive venues with bars, restaurants, event spaces and other related facilities. A part of the profit made from these ventures will be distributed among token holders.

Based on business tasks and received feedback, we can enhance token functionality and add new features. The modular structure of chosen digital platform allows for further development and extension.

## **Appendix A. Blockchain technologies**

Ledgers have been at the heart of commerce since ancient times and are used to record many things, most commonly assets such as money and property. Blockchain technology relies on the concept of distributed digital ledgers, which are essentially asset databases that can be shared across a network of multiple sites or institutions. All participants within a network can have their own identical copy of the ledger. Any changes to the ledger are reflected in all copies within minutes, or in some cases, seconds.

Distributed ledgers are inherently harder to attack, compared to traditional centralized versions. Instead of a single database, there are multiple shared copies of the same database, so a cyber-attack would have to attack all the copies simultaneously to be successful. The technology is also resistant to unauthorized change or malicious tampering, as participants in the network would immediately spot a change to any part of the ledger. Furthermore, the method by which information is secured and updated means that participants can share data and be confident that all copies of the ledger at any one-time match each other.

Traditional ledgers achieve a level of privacy by limiting information access to the parties involved and a trusted third party. By contrast, a Blockchain system is transparent: all network participants can examine records in the ledger. Privacy can still be maintained, however, by breaking the flow of information in another place — keeping pseudonymous public keys, which correspond to the participants. The network can see that a transaction occurred, but uninvolved parties lack the information to link the transaction with specific identities.

In 2009, Satoshi Nakamoto introduced Bitcoin [2], the first implementation of a protocol that enables the issuance of a digital bearer instrument without a trusted third party. This was achieved through the use of the ledger replication system i.e. Blockchain. Bitcoin solves the difficult problem of implementing decentralized digital cash, but its security model limits its efficiency and throughput: its design only supports a single native asset, and its virtual machine offers limited support to custom programs that determine asset movement, sometimes called smart contracts.

Ethereum, which launched in 2015, develops the concept of a Blockchain to a fully programmable state replication mechanism. While it includes a much more powerful programming language, it presents additional challenges for scalability and efficiency. Its general-purpose computation model makes it difficult for engineers to reason about security of their applications.

For further information interested readers are referred to surveys [3, 4] and monographs [5-8].



## Appendix B. Application architecture

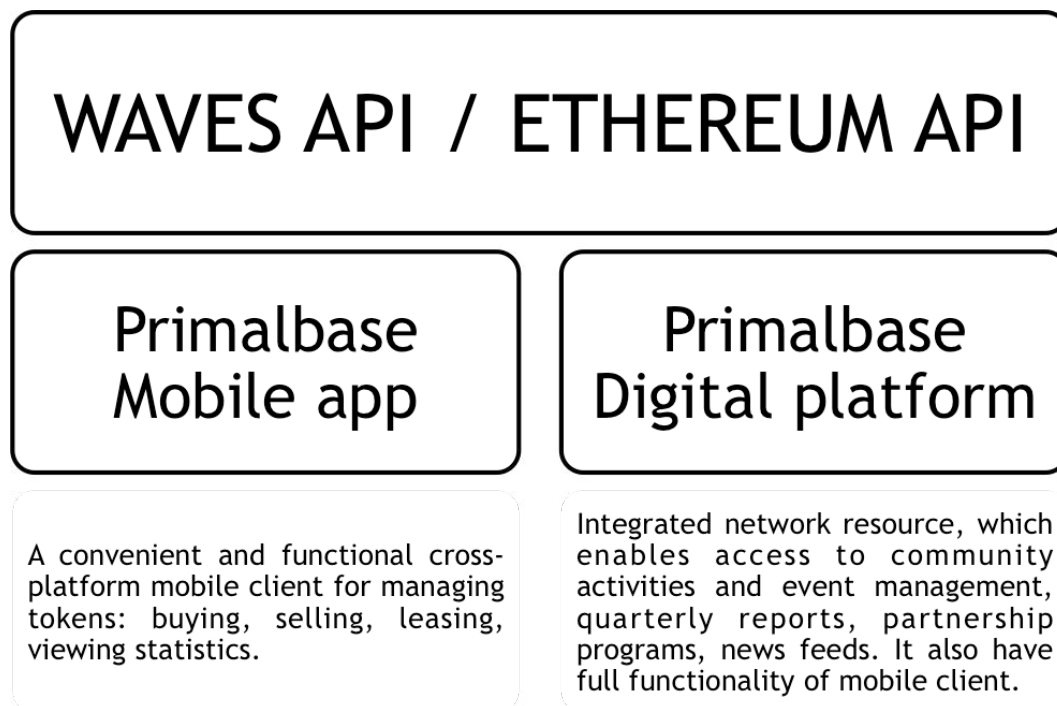


Fig. 4: Schematics of Primalbase applications infrastructure

WAVES protocols and routines constitute the core of Primalbase digital infrastructure and functionality. The advantages of using WAVES platform are: ease of custom token creation, low cost of operations, built-in decentralized exchange, and integrated work with fiat currencies. Most of the operations can be performed without leaving the WAVES wallet. WAVES platform is compatible and interoperable with Ethereum platform, as Ethereum is the renowned market leader and popularly used in crowd sales. We believe that in the future all the Blockchain systems will be combined into one ecosystem; therefore, the WAVES platform was chosen as the key element of Primalbase apps. WAVES is making great strides towards this goal, which will, naturally, increase accessibility and create new opportunities.

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