Gyber is an experiment in the field of cryptography, computer science, sociology, and economics aimed at creating a corporation.

Gybernet is a private network of the community, where the necessary functionality for the activities of the experiment participants will be deployed.

Gyber Token is a utility token of the community, necessary for interaction within the private network.

Gyber Community Token is a platform management token, the main tool for decision-making within the experiment. It is also used by the community as a means of evaluating work on projects within the experiment. To participate in management, the holder of the management tokens' wallet must be active, and wallet activity is verified by a special algorithm when admitted to voting and signing a proposal.

Macroeconomic Dao is a transparent system of interaction and decision-making based on proven Solidity smart contracts.

**The goals of the Gyber Experiment**

The goal is to create a mechanism for direct socio-economic interaction that belongs to all participants, allowing the concentration of public and financial resources to realize even the most ambitious, global projects and manage them. The economic potential of implemented projects is used for more effective implementation of subsequent projects.

**Gyber Social Platform**

To meet the communication needs of the Gyber Experiment at the initial stage, the main functionality of the Gyber Social Platform will be implemented first - a social network owned by all users, managed by them through DAO and expandable by users through a GitHub repository.

From a user's perspective, the initial platform model has the basic functions of a social network, such as text and voice chats, hosting and sharing videos and other types of files. All functions presented on the platform are implemented in accordance with the ethics and philosophy of the Gybernaty community, which guarantees users safety and control over their data while allowing for complete account encryption on the client side or encryption on the server using the client's public key.

In addition to the basic functions, the platform allows users to create projects for implementation within the experiment, becoming its implementer.

A user can propose a ready-made project or just an idea and together with the community, develop it into a real project.

**About data**

When designing and implementing the social platform, the emphasis was primarily on data security and confidentiality of their storage. The platform has several levels of data protection to choose from in the initial architecture stage.

The data is processed by a special algorithm that allows for encryption at different levels to provide almost absolute security for the client.

The platform stores all voluminous data in the IPFS network, where nodes are deployed within the experiment to provide additional content pinning for users.

**Arсhitecture**

The platform is designed as an open scalable structure with various input and output points for data with multiple cores. Each user can write their own code module (which can be included in a node and offered to interested parties) or design a new feature to be implemented in the real production.

The management of the code structure is carried out through GitHub repositories under community management. Anyone can create their own part and distribute it among all interested parties.

**Distribution**

The modular architecture we are creating is a network of nodes with virtual machines installed on them, containing a set of microservice containers. Each node can be supplemented with any existing modules or any required modules can be written and integrated into the build of a specific node.

The platform practically does not store data on its servers. All massive user data is uploaded to the IPFS network in open or encrypted form, and users have several levels of protection when encrypting their files. To maintain access to unpopular files in the IPFS network, the platform provides a pinning service, which is a network of IPFS nodes running in containers on the main nodes of the Gybernet network.

The network also has a virtual machine that combines the power of all nodes currently working.

**Encryption**

The platform provides three levels of user data protection, and even the weakest level ensures optimal protection of user data.

User data can be fully encrypted on the client side, providing 100% control over the data for the user.

Only some data is encrypted on the client side, and the rest of the data is transmitted to the server for encryption using the key specified by the user.

The automatic default mode configures the data protection algorithm.

The platform is built in such a way that users can control their data and have confidential access to it.

Also, the main principle of the platform is community scalability, as it is an open source platform that anyone can add to, and the community can support a particular add-on module and distribute it across the Gybernet network.

**Stack**

At the network stack level, the network is a multilingual cross-platform pipeline cluster managed by a community of experiment participants.

Each node consists of isolated cores communicating with each other to distribute work received from users of the Gyber Social Platform. Each core is responsible for its layer of processes.

Initially, development of the main core module is carried out in Java. The auxiliary core module is developed in Dart. And several cores in Go and C++ are in the design stage.

Each core has its own auxiliary infrastructure, also launched in isolation in separate containers.

As part of the experiment, parallel development of modules and cores is used to determine the best stack for solving certain tasks and to ensure maximum flexibility in the long-term development of the platform architecture.

Anyone can write modules for the platform however they like, but for inclusion in the node and connection to the network, it must pass a special test algorithm that checks its compatibility with the network and the presence of the necessary functionality to ensure node operation. There is also an aspect of trust in a specific node based on the activity and connections of its owner within the experiment.

The community must trust each node, which we call Proof of Community.

Management of the production version of the platform and the current state of the source code is done through the GitHub repository and is controlled by the developer community.

As part of the experiment, parallel development of modules and cores is applied to determine the best stack for solving specific tasks and to ensure maximum flexibility in the long-term development of the platform architecture.

Anyone can write modules for the platform as they please, but for inclusion in the node and connection to the network, it must pass a special test algorithm that checks its compatibility with the network and the presence of the necessary functionality to ensure the node's operation. There is also an aspect of trust in a specific node based on the activity and connections of its owner within the experiment.

The community must trust each node, which we call Proof of Community.

Production version control of the platform and the current state of the source code is done through a GitHub repository and is controlled by the developer community.

**Management and protection**

The goal of the experiment is to create a community-driven platform, and for this purpose, the experiment organizers have created secure smart contracts in Solidity language, based on the proven OppenZeppelin library for implementing management tokens and experiment utility tokens. They have also developed TheMacroeconomicDAO contract to ensure a reliable and transparent decision-making mechanism during the experiment.

During the design of the contracts, we used current models and modern solutions to make our safe basic contract structure as expandable and integrable as possible.

After deployment, the contract's source code can only be changed by the developer community through the DAO contract voting mechanism.

The platform's source code is available via a GitHub repository, and all important decisions within the experiment are made through the proposal and voting mechanisms of the DAO contract.

The Gybernet network's virtual machine also obeys commands from the blockchain.

Based on the blockchain, we intend to provide the highest level of transparency and security for the platform's operations and ensure that the experiment has a maximally open and reliable space for activity.

**Tokenomics**

There are two completely different tokens on the platform:

Gyber Token - a utility token required for interacting with the platform.

Gyber Community Token - a governance token required for managing the experiment, making collective decisions, and changing and expanding the platform.

During the experiment, a large portion of all existing tokens will be distributed among four categories of holders: the community of developers, experiment participants, large investors and funds, and participants in the open market.

**In addition, a reserve fund will be created as part of the project to optimize the deployment processes of the experiment.**

* 30% of the total management tokens
* 15% of the total utility tokens
* 30% of the total management tokens
* 10% of the total utility tokens
* 10% of the total management tokens
* 25% of the total utility tokens
* 10% of the total management tokens
* 20% of the total utility tokens

**The basic mechanics of the experiment**

It all starts with an idea...

Each participant in the experiment can propose an idea or project.

After the idea or project is proposed, it immediately enters the discussion phase, where the idea becomes a project, and the project is clarified, supplemented, and gains implementers.

**Implementers.**

Each person who proposes a project is considered the main implementer and can sign up as many implementers as desired for the project.

If the main implementer does not have enough reputation to implement a large-scale project, additional implementers may be required.

In addition, additional implementers may be useful to the project as a social, financial, or economic resource for project implementation.

**Project phases.**

Projects in the experiment have four phases:

This is the phase in which anyone can participate in the discussion of the project. During the discussion period, the project is specified, qualitatively formulated, analytical work is carried out, necessary documents are prepared, and the circle of implementers may be expanded to move to the next phase.

At this stage, anyone can invest in a specific project and become its super-client, while the project creators can gather funds for its implementation. The beginning of the accumulation phase implies that the project has detailed documentation including all necessary economic and business calculations, as well as a project roadmap and full technical documentation.

At this stage, the project creators use accumulated funds to implement the specific project in accordance with the prepared documentation and project roadmap.

This is the stage at which the project is implemented and functions by offering its products to three categories of clients.

Client statuses: In the experiment, there are three client statuses:

External clients: Clients who are not participating in the experiment can purchase products from all available implemented projects using fiat currency.

Special clients: All Gyber token holders are special clients for all projects. The special client status implies a special discount of at least 30% on any project's product when paying with Gyber tokens.

Super clients: All holders of specific project's internal tokens are super partners of that project. The super partner status implies a super discount of at least 60% on the specific project's product when paying with internal project tokens.

Internal functioning: To transition the project to the accumulation phase, it is necessary to burn Gyber tokens at a rate of 0.1% of the required amount to implement the project.

The transition process involves the issuance of a limited amount of specific project's internal tokens for sale at a price of 1 BUSD.

The maximum amount to implement the project is also limited by the reputation of the creator or the overall reputation of creators of a particular project.

Participants earn reputation through active participation in the experiment, such as posting and discussing projects, participating in financing and implementation, and staking Gyber tokens.

There are no restrictions on assets obtained from the sale of a specific project's internal tokens.

Project creators can freely dispose of assets in accordance with the project's documentation and roadmap.

Assets obtained from the sale of wrapped tokens are unlocked in parts or in full with a simple signature of one or several creators of a particular project, which are determined at the time of project proposal and issuance of specific project's internal tokens.

**Staking**

Staking is a versatile tool within the project. It can be used to increase the reputation of participants and earn passive income.

As part of the experiment, there are two staking options:

Gyber Token = 0.00000000007% of the total revenue of all projects in Gyber tokens.

Internal project token = 10 / [total number of project tokens issued] % of the revenue of a specific project.

The minimum staking period is 1 year.

**Internal organization**

The community is built on the basis of personal and public interests of the participants.

Participants are verified through electronic signatures.

The maximum amount for project implementation is also limited by the reputation of the implementer or the overall reputation of implementers of one project.

All important decisions in projects are made based on voting by implementers through electronic signatures.

Each implementer is an active economic unit that can represent entire companies in the real sector of the economy or even a combination of organizations.

**Responsibility**

Each implementer is responsible primarily to the entire community for their reputation, and may be excluded from the experiment for unethical behavior.

The implementer also bears personal responsibility to other implementers of a specific project.

The roles and tasks of implementers within projects are determined by the implementers themselves, but the general goal of all implementers is to organize the project and ensure its functioning.

Assets obtained from the sale of wrapped tokens are unlocked in parts or in full with a simple signature of one or several implementers of a specific project, who are determined at the moment of project proposal and issuance of internal tokens of the specific project.

**Interaction procedure for participants**

A discussion group is created for each project where anyone interested can join. Private groups with a specific description can be created within the general group for discussion of the project, and participants are admitted to these private groups by the project implementers.

**Private groups**

This is the main form of organization of any work on the project within the experiment. They are used for discussion and specific work on the implementation of the project within the circle necessary for the specific task associated with the project.

The circle of participants in a specific private group is strictly limited to the participants required to solve a specific task.

Private groups can also be created within already existing private groups, which provides a more subtle interaction within a specific topic.

# The Macroeconomic Dao

**Ecosystem**

The Macroeconomic DAO is an ecosystem of decentralized autonomous organizations (DAOs) designed to implement specific projects, enterprises, events, decision-making processes, or other public actions proposed by the community of experiment participants and developers.

Social DAOs are used for decision-making within the community and organizing any public events or initiatives within the community. They do not deal with business ideas or external public projects. This can be as simple as voting on a proposal or collecting resources (both material and social) for conducting an internal event or charitable campaign.

The current state of the platform's code is maintained by the state of the main branch of the repository on GitHub, for making changes to which Code DAO voting is required. This provides decentralized management of the global code structure. All members of the developer community can be initiators of Code DAO.

Commercial DAOs represent a simple implementation of the concept of crowdfunding, where entrepreneurs and enthusiasts can propose an idea for a business or a real business plan for implementation with the help of investor funds. In turn, investors get the opportunity to consume the products of the implemented project on exclusive terms and the possibility of receiving a share of the profits of the implemented project.

Economic DAO is a completely new concept of organizing public financing, project management, and socio-economic interaction, allowing for the accumulation of social, financial, and economic resources for the most effective implementation of any relevant public projects and ideas.

**Internal organization of the community.**

Practical logic of organization and self-governance of users.

At the first level, the system represents a peer-to-peer structure consisting of all community users who have equal privileges and own equal parts of the shared active resource, which represents the collective creative and economic potential of the community.

The main applied function of the community is efficient interaction aimed at implementing the interests, ideas, and projects of all users, increasing the community's shared active resource, and developing the community and its users.

Using the functionality of the expandable creative platform Gyber Social, users can safely communicate, share current information, propose ideas and projects for implementation, and collaboratively work on all stages of project implementation and management. The platform includes all the necessary functionality for exchanging news, communication, and collaborative project work, and its architecture is designed to ensure user data security and enable user control, both directly and through collective interaction.

The main method of user interaction is through shared spaces such as news, messages, ideas, and projects, which represent common thematic folders in which each user can create folders with content, thereby sharing news, messages, ideas, and projects with the community.

News, messages, discussions of ideas and projects added by users to shared spaces represent the main content which, in turn, can form its own internal directory tree, the access rights to which are determined by the administrators of the main content.

Internal directories of the main content are directly related to the subject of the main content and form its internal interactive environment for user interaction.

At the moment of adding the main content to any of the fields, a child directory is created in the root of the specific shared field, and the author becomes its director (main implementer) and can appoint administrators (additional implementers), groups, access rights, and change them. Additionally, each child directory in a specific field must have certain mandatory attributes and some additional ones, which are determined based on the thematic characteristics of each of the shared fields.

**The concept of socio-economic selection**

Main concepts:

**A new type of financial community** is a peer-to-peer community of people organized for efficient interaction with the goal of implementing their interesting ideas and projects through the collective capital of the participants, their promotion, and management through advanced information technologies and financial mechanisms.

**The social-investment circle** is an unlimited number of participants in a new type of financial community interested in the implementation of a specific idea and project.

**The active group (the core support)** is the optimal number of participants, from the social-investment circle, who actively participate in the implementation of a specific idea and project.

**The professional coordination group** is an auxiliary administrative resource of the new type of financial community hired for a fee from professionals, which can consist of both members and non-members of the community. The main task is professional support to ensure project activities of active groups.

**Social relevance** is a project parameter directly determined by the sufficiency of the number of participants in the social-investment circle to implement the project through the collective capital of the participants on the principle of minimal individual participation.

**The threshold of social relevance** is the ratio of the cost of implementing the project to the number of participants in the social-investment circle sufficient for its implementation through the collective capital of the participants on the principle of minimal individual participation in financing.

**Collective capital (of participants)** is the aggregate investment ability of participants interested in the implementation of a particular project.

**The principle of minimal individual participation (in financing)** is the principle whereby the total cost of implementing the project is evenly distributed among all financing participants, and the volume of individual participation in financing is determined by the minimum possible size, decreasing as the number of participants increases, until the project's relevance threshold is reached.

**Interaction.**

Properties of user spaces.

The main functional working area of the expandable creative platform is the project space. This is where community ideas are formed into projects, interesting projects are proposed for implementation, projects are discussed, and intellectual work on project implementation and management takes place.

The main concept of the project field is the idea-project-implementation model, which is a conveyor that takes in current ideas for collective implementation, forms concrete projects ready for implementation based on them, and implements them using the community's current resource, which is determined by the ratio of the community's overall active resource and the number of users interested in implementing a particular project.

After the initial formation of the project, it is discussed, and as interest in the project grows among the community, the Director assigns an active project group, which will primarily be responsible for the intellectual management of the project.

Project funding is based on the principle of minimal individual participation, which is described in detail in the community's concept list.

The main content in the general project space consists of a socio-investment circle consisting of users interested in implementing a particular project.

The circle may consist of users with different relationships to the project, such as an active group, a passive group, who may have their own internal gradations if necessary.

The final structure of the circle is individual and based on the internal qualities of the project and external implementation conditions. The main distinguishing quality of the socio-investment circle, after the final formation of a specific project, is the unconditional unity of its participants. The circle includes and consists exclusively of those users who are interested in implementing a particular project.

In the event of internal conflicts among the participants of the socio-investment circle, separate discussions are held in a special directory within the circle, where the main contradictions are identified with the aim of forming a single decision on project implementation that meets the interests of the overwhelming majority of participants. If this is not possible, the project can always be divided into several independent ones, and the most relevant one for implementation can be identified based on the principle of minimal individual participation in financing.