What are their pain points?

A lot of people are interested in using blockchain solutions for stakeholders, payments, and governance. However, there are several hurdles that make it difficult for them to take the first step. There are some problems that are inherent to blockchain:

- The idea of an immutable ledger is powerful, but it's also frightening when mistakes can't be quickly corrected. In the case of smart contract development, there is always a probability of bugs introduced into the code. As such, software needs to be easily upgradable, and there should be a bug bounty mechanism in place to incentivize finding and fixing bugs.

- Subjectivity in smart contract breaches. With every smart contract, you can encode many of the possible breaches of contract. However, there are also more subjective cases, especially in complex relationships. There should be a legal conflict-resolution oriented approach to solve these issues.

- Lack of `global maturity perception` of blockchain technology. The tech has been tested for about 10 years, but common people tend to distrust new technologies.

- Lack of developers and field experts.

In some cases and with disadvantaged groups (like refugees or dissidents) the KYC (Know Your Client) policies could be difficult to verify and may lead to difficulties in joining some DAOs.

Also, we should address a good way to determine if a newly created DAO is ethical, sustainable (helps in any way in, at least, one of the Sustainable Development Goals) and it isn't malicious in order to prevent cheating.

What is your product's value proposition?

commūnitās is targeting the lack of individually tacke economic, social and climate change issues creating a DAO platform where users come together to propose initiatives to help overcome local and global issues:

- DAO platforms are decentralized, easy to create and non hierarchical. Organizations that can be spun up instantly, can't be shut down by governments, because DAOs are resistant to internet censorship. Thus, DAO organizations allow small groups of people to collaborate effectively.

- Promotes the creation of organizations such as cooperatives and associations, that could work towards achieving the [UN Sustainable Goals 2030].

- Connects people with similar issues and interests, on a local and global scale, in order to reach a common and scalable solution that could sustainably, economically and socially benefit the community.

- The use of blockchain technology allows to suppress bureaucracy difficulties during the organization creation. Notary services and registers as well. Therefore, through blockchain, communities could archive compatibility and tamper-proof.

- Promotes crowdfunding & pool money together to reach common goals, the platform itself could generate more income with ‘compound interest’ concept by using the Compound.finance protocol.

What is your distribution and go-to-market strategy? Who can you partner with?

To guarantee that even people without access to a smartphone could participate have a voice through public computers, the decentralized platform is going to be available on-line as a website and a mobile Dapp.

On a technical level we would partner with Aragon DAO, a Swiss non-profit entity created in 2016 to disintermediate the creation and maintenance of organizations in order to give equal access to governance and collaboration, no matter their age, gender, or race. (See project roadmap for further details).

As the app brings communities together in order to face social, economic and climate change challenges, we would start our market strategy by Europe. In particular because there's a proven high citizen awareness towards climate crisis and sustainability. European countries lead globally on the SDGs -but still none are on track to achieve the Goals by 2030-, and moreover because traditionally there's already a huge network of cooperatives, associations and foundations.

The market implementation is going to start by those European countries with a widely tradition of cooperativism, associationism or neighbouring. The strategy is to directly partner with organizations in the third sector group (ej: neighbours associations, consume cooperatives, NGOs) that already exist.

So that, our targeted early-adopters would be existing communities. They could decentralize and test their already-working-structure to create DAO projects to complete their goals and boost their initiative to reach higher audiences.

These community users could help us get feedback, modify the product according to their needs and pivot if it's necessary, before reaching the main public. While directly targeting groups of people, it could also indirectly help us with so called "word-of-mouth" marketing.

After completing the first phase of the go-to-market strategy, the second step would be to capture Millennials users with a powerful marketing campaign, since they are the most experimental customers and they stand out for their technology use. By this time, it is important to have finished and on-going projects by mainstream or known organizations on the platform that could acreditate the platform reputation. From this point we are going to target the Z Generation, Gen Xen and Baby Boomers.

Once the platform is going to be implemented in Europe, the worldwide go-to-market strategy would be to reach English speaking markets (EUA, Canada, Australia, New Zealand, South Africa and India) and Central and South America, using the same strategy and phases.

Lastely, we would implement the technology in other developing markets and underdeveloped countries considering a high number of partnerships with UN, Amnesty International, NGOs and Foundations (ej Barça Foundation). We are considering as well, to implement this platform amongst refugees communities.

What are the risks associated with your solution?

We will have to face tech/blockchain common risks, like security, and especially the ones regarding the nature of the decentralized autonomous organizations `DAOs'. Let's explore them:

Digital Jurisdiction

Countries have jurisdiction over their citizens when it comes to courts of law, but in the "digital word", there's a lack of jurisdiction. Here's where **commūnitās** wants to help citizens, to archive, easily and fast, a way to establish a common reliable agreement that could be secured & tamper-proof, and equally binding as a real-world contract. This approach could create disputes and unwanted situations, that we should address with the help of legal experts and prevent misuse from malicious parts. Our goal here is to define a good DAO's generator -in a technical aspect- that no-one could take advantage of.

To solve this issue, we plan to integrate the 'legal advisor' figure inside the platform. The role of these (3rd party) persons will be to read, validate & solve possible future issues with every user-generated DAO (called a *commūnis*) and they will be rewarded with tokens from the DAO generation. In a similar way that blockchain proof-of-stake system in the blockchain creates trust and secures the network, the `legal advisors` will be randomly picked based on their previous work: the better work, the better reward and more numbers of contracts they will be able to supervise. Consequently better projects will come up and we'll be able to protect the creators from being rejected due to legal insecurity from users.

Smart contract risks

Smart contracts can potentially encode complex business, financial, and legal arrangements on the blockchain, and could result in the risk associated with the one-to-one mapping of these arrangements from the physical to the digital framework.

Malicious users

Malicious users are part of any system or solution. blockchain is no different. They can impact the blockchain network by controlling a particular aspect of it. The risks are real, and it is up to the developers to ensure that malicious actors in no condition can take control of the network resources or the consensus method.

Generating returns

To generate returns for supporters/investors/owners, DAOs will have to solve the same challenges that traditional organisations aim to solve and this should be written in the organization smart contract that rule the new DAO:

- Attract and allocate various forms of capital (talent, technology, money) to create new solutions and deploy them in the real world.

- Allocate the risk of failure — define who absorbs the risk if things don't work out as intended. Economic activity by definition has uncertain outcomes and this uncertainty has to be taken into account.
- Distribute rewards — define who reaps the benefits of success? How are these benefits distributed? What does success really mean?
- Design the evolutionary/scaling mechanism — organisation has to grow and adapt to the changing external conditions. It has to be able to attract more resources over time, by acquiring more talent, money and developing organisational structure that allows it to scale.

Risks of participating in a decentralized organization

- If someone loses the cryptographic private key, or someone steals it, he/she also loses access to the DAO and voting rights in it.
- The programming code of the DAO can have bugs which might be impossible to correct. As we know, the smart contract code is immutable. These bugs can result in anything, from money loss to unexpected liability incurment.
- Public blockchain networks (like Ethereum or Bitcoin) aren't controlled by any single party. Their evolution can go in an unexpected direction, resulting in DAO disruption.
- Most useful decentralized organizations need access to data outside of the blockchain. This data can be provided by automatic or semiautomatic centralized oracle mechanisms. To disrupt the operation of that DAO, it's easiest to target the oracles it depends on.
- The algorithm can't go beyond what it was programmed for. Hence, it can make biased or plainly bad decisions if you don't account for every reasonable fact and circumstance. A DAO should be structured so that there's always a human factor involved that can take back or stop automatic decisions.
- Parties (cooperating decentralized organizations) might not be explicitly defined in the smart contract. In case of a dispute not covered by the code (and without an automatic arbitrator) it might be difficult to resolve it in the traditional legal system.

What is the impact of your solution?
How will it be measured?

This is a worldwide scalable project, so we are aiming really high. We are taking into consideration different kinds of societies, genders, sexual orientations, contexts, incomes, religious back-grounds, etc. We are targeting global issues related to social, economic and climate change issues, to give local solutions on a global scale. Our goal is to foster the creation of communities and organizations, simplify bureaucracy and suppress intermediaries in order to create initiatives that contribute towards achieving the UN Sustainable Goals 2030.

We are going to measure its viability and success of the platform by measuring different KPI's like:

- Revenue of the platform (MRR)
- Number of DAO's created in the platform
- Total amount of $ allocated (combining all DAO's)
- Number of people involved in the platform
- Number of people per DAO
- Number of active users & active polls
- Amount of money pooled
- Number of downloads of the app
- Traffic in the platform (average time spent in the website, returning users, etc.)
- Number of on-going and finalized projects.
- Number of disputes/resolutions
- Total amount of sponsored DAOs

Define the technical specifications and development roadmap

Our first approach with this project was to build all the necessary components to build a DAO creator framework to let users create what we call a `commūnitā`: a new cooperative organization in a easy way, through different purpose templates, for instance, a template for creating a consumers' co-operative.

This means build the entire ecosystem that will run our DAO's, with at least this different components/modules:

- Messaging Subsystem
- Permission Subsystem
- Money Flow Subsystem
- Project Management Subsystem
- Reputation Subsystem
- Out-of-the-box DAO Schemes
- Web app client
- Mobile app client

List 1 – DAO architecture components

This would be a long & technically difficult project, because as we exposed in the '*Problems & Risks*' sections, the project must be very secure and reliable, and this takes time and costs money. Also, as we saw, finding blockchain developers is hard and expensive.

To solve all of these problems and blocks, we will take advantage of the open-source community and after researching it and studying our case, needs and explore different projects, we find our perfect match: *Aragon Project*.

Aragon

You might think of Aragon as a platform for building decentralized applications. Its architecture consists of the Aragon OS, Aragon.js, Aragon Core, Aragon UI and Aragon Network. Aragon OS is a smart contract framework. Thanks to its upgradeability, you can easily evolve the code, if needed. Also, permissions can be distributed across certain roles for better management of the system.

Aragon.js is a JavaScript library that can interact with the smart contracts from the OS via Web 3.0. Aragon OS is accessed via a web console, called Aragon Core. Aragon UI is a React.js-based framework allowing users to build their own Aragon Apps with consistent controls. These apps use Aragon OS and can be accessed through the user interface (UI) of Aragon Core.

All this is built on top of Ethereum & IPFS, hence the whole system is completely decentralized. In short, Aragon gives you the foundation to deploy your own DAO on the blockchain.

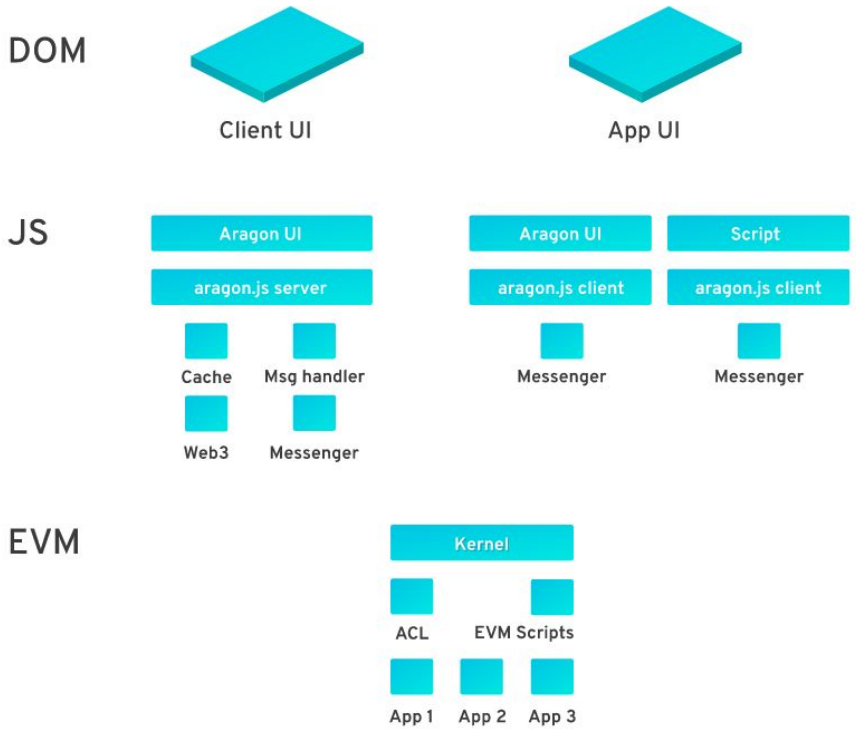

Image 1 - Aragon Project Architecture

Aragon provides a full end-to-end framework to build DAOs. By building our project on top of the Aragon Project, we archive a lot of benefits, like:

- Big (active) community
- Long time developing the platform (+5 years)

- Improve security issues (one of the principals risks) by using a tested, trusted software
- Build on top of an entire ecosystem
- Save lot of money and time by using the work of lot of experts & developers

By using the Aragon project as a starting point, we could re-think all the different components (*List 1*) that we should build, and adapt it to our current needs:

- Messaging Subsystem
- Permission Subsystem
- Money Flow Subsystem
- Project Management Subsystem
- Storage Subsystem
- Reputation Subsystem

List 2 – Subsystem already part of Aragon

This way, we will have to focus on the `commūnitās` interface (website & mobile app). We will have to tackle how to integrate it with Aragon project, how to connect with the current blockchain tools -like MetaMask-. Moreover, we will develop the DAO templates that will make it easier for users to use as a blueprint to start generating their own `commūnitā` (cooperative organization).

- Out-of-the-box DAO Schemes
- Web app client
- Mobile app client
- Web3 connection, MetaMask & Wallet Integration
- Legal agents & issues
- Governance
- User Profiles
- Payments, tips, recurring payments, subscriptions, etc.

• Domains

List 3 – Modules/Components to develop

We plan that all new created organizations or `commünitäs`, will have all this features:

• Token distribution. Each DAO can issue and distribute its own native tokens to contributors of value, as valued by the organization. The issuance of native tokens enables the organization to create its own separate economy. The utility or benefit of the tokens can be anything that the agency decides about, such as entitling access to the DAO's product (we will call these utility tokens), or entitling a share of the agency's revenue (we will call those share tokens).

• Fund allocation. An organization can earn, or collect via its own-token sale, external tokens such as ETH, GEN or other DAO's tokens. It can keep them in reserve, and distribute them to third parties in exchange for a particular effort or contribution. This is somewhat analogous to an agency using its funds to compensate contributors, employees or other service providers.

• Reputation assignment. Each organization can assign reputation scores to its members. Reputation is a representation of one's professional credibility, and thus influence, within the organization. As opposed to traditional blockchain-based tokens, reputation is not transferable. It is awarded to or earned by specific members, according to their merits and contributions made to the organization. Since reputation is tied with decision-making power in the organization, more reputation should be allocated to those who the organization believes make the best decisions. However, in order not to lockup decision-making power over time, the organization might decide that reputation dissipates over time.

• Collective data curation. An organization can manage its own collective databases of objects, and maintain their curation. It can be the curation of articles, websites, organizations or anything else. The power of a shared database lies in its network effect; if everyone is looking at the same spot (because it's well-curated), then that spot is valuable (and monetizable too).

• A funding pool for proposals with compound interest.

• External activity. An agency can act within another agency as a single entity. For example, an agency can submit a proposal inside another agency (or DAO), and vote on others' proposals.

• Governance upgrade. Each organization can configure and update its own governance system. By approving or removing certain elements, the agency defines how it functions, what it can or cannot do, and what are the mechanisms for changing these governance schemes.

The platform will be designed to underpin an entire ecosystem of decentralized organizations — a community of interoperable DAOs, able to share interests, talent, ideas, and learnings with one another. DAOs will even be able to act as members of other DAOs, creating a fluid “DAO mesh” or “internet of work” in which collectives of collectives are commonplace, and in which any given individual might participate in dozens of different DAOs.

We plan to achieve all this features with the help of different modular parts, like:

• Payments: From salaries to gigs, and bounties to tips, payments can be denominated in Ether, DAI, or any ERC20 compatible token.

• Domains: Structure the DAO into teams, departments, circles, projects, or whatever is appropriate.

• Budgeting: Budgets can be allocated to manage funds via a given set of rules.

• Reputation: Reflecting who did what work, what skills they used, how valuable it was, and how well they did it.

• Permissions: Distribute authority over distinct aspects of business administration. Assign it to people, bots, or smart contracts.

• Revenue: Share revenue between a `commūnitās` members proportional to the value of their contribution.

• Disputes: Raise objections, resolve disagreements, and incentivize an organization to self regulate.

• Contract execution: A DAO may execute external smart contract calls, enabling plug and play governance for Ethereum protocols.

For all of this, our roadmap & development calendar would be the following, doing regular sprints and in an agile way.

Technical Roadmap:

• Design, plan & develop our MVP platform (web based) – 2 months

    • Website development- 1 week

    • Develop public & private `communitas` DAOs creation interface - 1 week

    • DAOs templates design - 1 week

    - Automated cryptocurrency payments – 3 days
    - $/£/€ payments with Stripe – 3 days
    - Define the reputation system – 4 days
    - Define the distributed authority – 2 days
    - Develop the dispute resolution and arbitration – 1 week
    - Develop a notifications system to surface information to the right people – 4 days
    - Integrate a rich analytics tool to understand a organization at a glance – 1 week
    - Develop the different domains (organization, teams, projects, etc.) - 1 week
- Define and run the different KPI metrics to grow the community – 5 days
- Develop a hybrid mobile app client to access to the platform – 1 month

With this approach, we will have a working MVP in about 1 month and then iterate by adding new functionalities (1 month more), while starting to grow our community, the marketing strategy and improving the whole system by agile development (quick, easy to adapt tasks).

After that, a huge list of `nice to have` features will be addressed, in parallel with the growth of the audience, active listening to our community and keep working in security & legal issues. A example of other features includes:

- Projects & initiatives social sharing
- Business sponsorships & collaborations portal
- Integrations with Coinbase, Metamask, Uniswap exchange
- NGO’s & real world organizations partnerships & sponsorship
- Pooling and Compound.Finance integration
- Legal agents reward system

Stay tuned for more to come!