Kiez DAO: P2P Tool Sharing

Mobile-friendly marketplace that lets you profit by sharing your tools with your community

By DEORA EARTH

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Introduction

Whether we like it or not, the sharing economy is here to stay. What we mean by sharing economy is an arrangement in which we don't need to buy the items we need, but can instead resort to renting them. Obviously, renting is an ancient concept but the novel change we see in recent years is that renting stops being something reserved for enterprises or professionals (e.g. car rentals) and turns into a part-time activity that everyone can engage in with help of appropriate software (e.g. renting out a single room using AirBnB).

Depending on the outlook we can see sharing economies as opportunities or as threats. On the positive side, sharing instead of buying has the potential to make communities stronger, promote responsible consumption and reduce the consumption of needlessly manufactured products in excess. On the negative side, a sharing economy (often coupled with gig-economy) can result in exploitation, furthering divides between those affluent enough to own and those forced to rent items. We can also see conflicts as people compete to access scarce rival goods (e.g. AirBnB raising prices of apartment rent in many cities).

Being aware of advantages and disadvantages we see this moment as a great opportunity to create a tool-rental (or more broadly tool-sharing) platform that allows citizens to benefit from renting out the tools that they do not need to use frequently. An illustrative example might be a lawnmower that sits in one's garage unused, for most of the time.

We believe that if designed properly, the proposed service is aligned with sustainable development **Goal 11: Sustainable cities and communities** in relation to two associated targets:

- *To reduce the adverse environmental impact of cities by investing in renewable energy, **managing scarce resources**, and improving waste and recycling systems.*
- *Support **positive economic, social and environmental links** between urban, peri-urban and rural areas by strengthening national and regional development planning*

Sustainable and Resilient Communities

We start with the assumption that exchange of goods and services inside the community is a simple and profitable way of strengthening community bonds. By giving the community members the ability to conduct profitable business exchanges with each other we strengthen local economies and create a sustainable model to lift impoverished communities and vulnerable individuals out of poverty.

When put in this context, renting and sharing economy in general might feel like a controversial take as it seems to mainly benefit those who own items, over those who would be forced (due to economic pressure as they cannot afford buying) to rent them. We try to keep those issues in mind to design the system in a manner that is beneficial to users (helps them make money) without exploiting anyone in the process.

KiezDAO: P2P Tool Sharing marketplace

KiezDAO is supposed to be a mobile-friendly blockchain-backed application that lets end-users earn money by renting items, our value proposition being: ***"Let users make or save money, by easily and safely sharing tools within their local community"***. One paragraph explanation of intent and benefits of our platform is as follows:

KiezDAO is a peer to peer marketplace constructed to enable tool-sharing between the neighbours. Sharing can result in various risks, so our design encourages borrowers to pay small amounts of money to lenders in return for providing them with the needed tools. All transactions within the system are secured by smart contracts, with intent to make the marketplace transparent, auditable and tamper-proof. We believe that a properly engineered Sharing Marketplace can be a strong contender for a project with significant social impact.

Business

Problem and Solution

Before we embarked on the adventure of building an application for tool-sharing we identified the pain points that make sharing a chore. In theory, most of us probably have at least one unneeded item or tool that they would be willing to share with neighbours, either for free or for profit, yet for some reasons we are not doing so. Why is that? Possible problems or pain points associated with sharing (especially without software to support us) are as such:

- **No records,** so it might be hard to prove anything and seek justice if we notice that our tool was damaged or stolen during the rental.
- **Lack of trust** as we are unwilling to do business with strangers, unless we can somehow decide if they are trustworthy or not.
- **Risk of financial loss** if I am renting something valuable and it can always get destroyed or stolen.
- **Risk of theft** if criminals learn that I am an owner of valuable items (that I advertise on sharing marketplace) and somehow manage to track where I live.
- **Lack of incentives** if someone told me there exists a scheme that allows me to profit from sharing what I own, I would be more interested than if I was expected to do it for free.

Separately, by looking at existing software tools that aid sharing and renting, we found that it often suffers from the following shortcomings:

- **Bad user experience**, if it is unpleasant and unintuitive I wouldn't be using that software no matter what. It is very hard to quantify what makes for good UX.
- **Can't match supply with demand** if I can't find what I need on the marketplace, what is the point of browsing it? Likewise, why advertise tools for rent, if there is no one interested in renting them?

- **Trying to be "everything for everyone"** on a wide platform I am likely to run into the supply/demand problem. If I was a person interested in renting e.g. Virtual Reality gear, my first place to look would be a dedicated niche marketplace devoted to Virtual Reality equipment so that I am more likely to find what I need.
- **Risk of losing items higher than profits** a bit similar to problems with crowd-lending and other P2P schemes. If the platform isn't able to mitigate the risks somehow, I can end up losing money as the items I rent out are stolen or destroyed.

Keeping those problems in mind, we have identified the features and functional requirements that KiezDAO needs to focus on:

- **Reputation System** to combat Lack of Trust by allowing users to quickly judge potential business partners by checking their track record (e.g. if they can be trusted to return rented items in undamaged condition).
- **Immutable Leger** to keep track of items so that we have iron-clad proof that a given rental agreement had indeed occurred at specified time in the past (Proof of Existence).
- **Privacy by design** to make it harder for thieves to locate our users and find out what they own. This is possible, but non-trivial to achieve on a platform using a public blockchain.
- **Fair business model** so that those who share are compensated for the risk, and those who are borrowing items can rent them in a fair non-exploitative manner.
- **Dispute Resolution** to receive compensation for loss once things go wrong. While we concentrate on the *"happy path"* we need to provide users with recourse if something goes wrong beyond *"sort it out by yourself"*.

Potential

After examining our own preconceptions we looked at data related to the sharing\rental market. Learning what we could from publicly available reports and snippets we decided to highlight out three pieces of information:

- Projected Market size in 2022: **$239.79** billion[1]
- Compound annual growth rate **9.4%**

[1] "Consumer Goods And General Rental Centers"

- **28%** of global consumers are willing to share or rent their electronic devices for a fee.

On the basis of collected information the market can be seen as a promising opportunity. Even if we ignore the current size of the market, **28%** figure means **one global consumer in three** can potentially make use of KiezDAO or similar peer to peer rental solution making the space full of unrealized potential. Due to fast growth and popularity of sharing it seems like a great target for emerging ventures with both for-profit and non-profit focus. It remains to be seen as to how COVID-19 pandemic would influence those projections in the nearest future although we may speculate that restrictions in travel and commerce might make people more willing to rent goods from their local community as buying them from overseas might become significantly harder.

Competition

In the process of researching our competition we have found a number of startups working on Peer2Peer rental marketplaces. We have decided to ignore the well-known examples (AirBnB) and focus on more obscure platforms, that specifically decided to use Blockchain or focus specifically on tool sharing so that we can compare and contrast our approaches.

To summarize our findings, platforms that are more niche seem to be faring better than platforms that try to cater to a wide audience, although obviously we cannot easily generalize what we learned by looking at a few companies to apply to the entire market.

Business Model

Modeling Requirements

To make sure we are creating software that can be used by general audience and isn't just a toy project made by developers for developers we have decided to focus our initial efforts on a very specific and narrow category of target user. We contacted a community of houseboat dwellers that live on an artificial island constructed of connected boats located on one of the lakes of Berlin. They were very enthusiastic about our project, and provided us with invaluable advice. We discuss this in more detail inside our video presentation.

Assumptions

In this section we outline the most important assumptions regarding our current view of the market and the product itself. At the end of each paragraph we strive to provide short rationale as to how we expect to test if our initial assumptions actually hold true:

Validation Going back to competitive analysis, we noticed that while "traditional" sharing economy marketplaces have many success stories like e.g. AirBnB or Uber, same cannot be said for blockchain-backed platforms. While we can only speculate, looking at existing competition, we concur that failures result either from unfocused marketing or bad user experience.

We attempt to avoid the first pitfall (platform being too generic "trying to be everything-for-everyone") by focusing on very small pilot community and listening closely to their needs. The approach does not scale well but having created MVPs for different communities we could tailor the solution to their needs.

B2C We are starting with clear Business-to-Customer (B2C) focus mainly because for pilot solution it is easier to bring individuals on-board as opposed to enterprises. Depending on the level of interest in Business to business (B2B) solution, we may consider trying to extend the idea of KiezDAO so that it can serve enterprises as well, but at the moment it is not our main focus. We plan to track KPIs outlined in the business section, to see if pivot to (B2C) might be worthwile due to insufficent interest in (B2B) solution.

Supply/Demand We are well, aware that starting a 2-sided marketplace of any sort is no easy feat as we need to match supply side (people willing to rent tools) with demand side (those willing to borrow). To achieve this in pilot community should be trivial, but to scale and market to people we don't know, we would need to find a way to leverage network effects (e.g. affiliate program to encourage users to grow KiezDAO).

Transfers of Value

Value proposition of KiezDAO is simply t*o **"Let users make or save money, by easily and safely sharing tools with local community"**.* The assumption hidden in this sentence is that KiezDAO offers superior safety and superior user experience thanks to use of smart contracts that automate major parts of renting such as collection of collateral or transferring money from borrower to lender. Everything that lenders needs to do to benefit form KiezDAO is to register his tool on the platform, wait for prospective borrower and sign rental agreement by clicking a single button. Afterwards he can sit back and relax watching the money (cryptocurrency or tokens) arrive on his KiezDAO account. To better showcase this scenario we have prepared a demonstration video of KiezDAO fronend prototype. As added value, smart-contracts offer greater security to user as he does not need to trust us to remain honest in our role of platform operators as money is held by smart contracts and not us directly. To sum up, in our system value flows from borrowers to lenders and that fact informs our design of revenue model.

Revenue and Sustainability

Donations and grants only go so far, so key concern for KiezDAO is to find a sustainable revenue source that will allow the organization to operate without compromising its potential to fulfill its mission. In that regard, capturing revenue in form of a small **commission** charged on each transfer of value between borrower and lender seems like the most reasonable option *(e.g. Alan is renting a hydraulic press to Bob for 100$ a day and KiezDAO takes $5 cut from that)*

Obviously, the model starts to work once sufficient scale is achieved, so before that one can try to resort to other options, like offering bespoke development to add custom features to KiezDAO or providing local craftsmen/tradesmen with opportunity to advertise their services

inside the application for a fee. Application devoted to rental of tools seems like a good place to promote relevant services as a person looking for paint-roller to paint some walls might be relived to find a skilled person willing to paint said walls on their behalf.

Having identified revenue source, the second concern we should address is how to spend the funds acquired. Possible costs in order of importance could include development, marketing and maintaining very-minimal IT-infrastructure.

In order to reach our business objectives of reaching sufficient scale to be able to sustain organization from comissions we plan to partner with existing organizations. Our primary target for possible partnerships are NGOs and groups centered around responsible consumption and production such as various “Zero Waste” communities. That is because the goal their goals (reducing waste) is aligned with benefits of the platform we are offering (promoting reuse of tools). Since infrastructure cost of operating our platform should be quite low (thanks to decentralized architecture) we can easily afford to subsidize the pilot communities so that they can participate in KiezDAO without incurring any substantial costs.

Technology

Actual workings of the application are very simple. The application is composed of Web3.0 enabled frontend (that users will interact with) and a smart-contract part responsible for business-logic that lives on a blockchain such as Ethereum network or Celo. Each user has an account that holds certain balance of tokens representing value. In the simplest implementation we envision using stablecoins like DAI or Celo-Dollar in this role to make sure that users are protected from price fluctuations of cryptocurrencies. In addition to value tokens, users have the right to mint NonFungibleTokens representing tools or other items that can be rented.

Rental agreements, which form cornerstone of the application, are smart contracts that allow for controlled transfer of value tokens from borrower to lender. For as long as rental agreement is active, money would be periodically siphoned from borrowers account so that it can be claimed by the lender. To encourage borrower to keep sufficient account balance to cover the rent, at start of rental agreement borrower would be asked to lock some funds as security deposit. If borrower fails to pay rent on time, deposit would be forfeited and given to lender to compensate him for the lapsed payments. On the other hand, if borrower does pay the rent on time, deposit would be returned to the borrower once lender terminates the rental agreement after having received the item back.

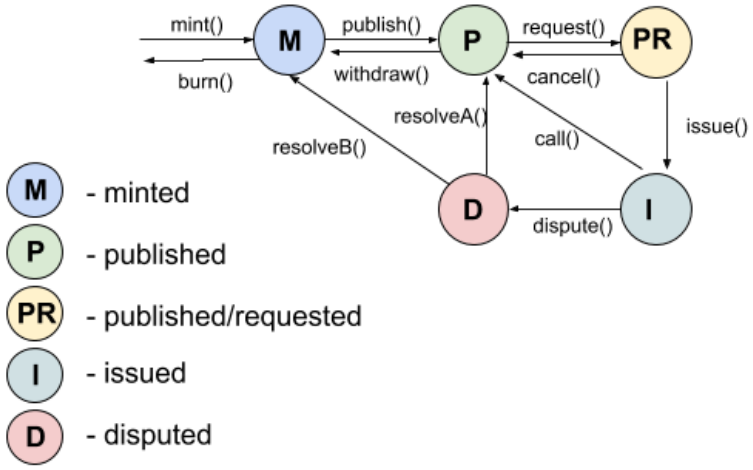
We foresee that most of the initial rentals on the platform would be low-value items so things would proceed smoothly 95% of the time. Yet, for the remaining 5% of rentals that end in a dispute, it is important to leave users with some recourse. If circumstances are serious (e.g. *someone was injured after operating rented lawn-mover and claims he was given faulty device*) the members can settle the disagreement using the legal system. For petty disagreements however we really want to provide users with a system that enables community to mediate such disagreements and compensate those who might suffer a loss due to negligence or malice of other party.

Main technical challenge that we did not address during the scope of hackathon is to develop the platform in a manner that safeguards **privacy** of the user (e.g. via coin-mixing or ring-signatures) while operating on public blockchain. At this moment each transfer of tools and value is publicly visible, which can make our users potential target for bad actors like thieves looking to steal expensive tools.

Prototype Contracts and role of Celo

To jumpstart the development we have created an initial **KiezDAO Manager** contract that is responsible for handling rental agreements. While engineering the contract we have designed a finite state machine showcasing all possible states that a rental agreement may have. The contract allows user to publish a new tool (represented as an ERC721 compliant token) on a blockchain and change states of rental agreement related to a given tool.

KiezDAO Manager Contract - Final State Machine:



We have configured the prototype so that it can be deployed on Celo network. Furthermore we are assuming that the token used for value transfers governed by rental agreements would be cUSD which makes it possible to protect our users from price fluctuations of ETH. Since Celo supports both cUSD and cGold it might be beneficial to let users decide which of the two currencies they would like to use inside their contracts.

While at the moment, our technical prototype remains backend-only we like the functionality that allows users to link the phone number with actual public key (address) on Celo network. Thanks to that feature, we may be able to provide good user experience as sending money to phone number is more intuitive for end users than sending money to an ethereum address (not to mention how much easier it is to remember a phone number over actual address).

Components

Apart from the core functionality we have discussed before, there is a host of problems that we need to solve in order to present a satisfactory solution. The problems being:

- **Identity**
- **Reputation**
- **Dispute Resolution**
- **Collateral**

To start with, we need to have an **identity solution** to prevent fraud committed under guise of fake identity or co-called sybil-attacks (i.e. one user creating many accounts to gain extra votes in 1-vote-per-person scenario, or obtain some other advantage). Traditional way to solve identity problem used by existing business is to introduce know-your-customer procedures, often with help of an external company. This is a certainly a viable path, yet to start with we would like to attempt to approach the problem using community-verification mechanism that was presented by members of our team during *Diffusion Hackaton 2019*. The system we created leverages a very simple rule - to be admitted into an organization (register as KiezDAO user) you need to have two existing members vouch for you. What is novel is that said members "stake" a certain amount of reputation (in a context of KiezDAO reputation is used to determine if someone is trustworthy) in order to admit the new member. If the new member misbehaves the members responsible for his admision can be tracked. Such method can enable one to trace who is responsible for introducing fake identities or sock-puppet accounts into a system.

Having devised identity solution, our next goal is to create **reputation system**. Purpose of reputation system is to allow for fast value judgements *("Is this person generally trustworthy?")* to let users of KiezDAO decide if they want to rent expensive or valuable tool to a lender they do not personally know. Reputation would be tracked on the blockchain (so it is both auditable and hard to tamper with) and calculated on the basis of track record of an individual inside KiezDAO. As one can imagine positive reputation would be given in return for rentals in which items were returned in good condition, while negative reputation would be given for destroying tools or other acts that may harm the other side of the rental agreement. Accumulated reputation would be displayed as number of stars ranging from 0 to 5 shown inside user profile to make this very easy for end users to understand.

Dispute Resolution is another critical component. Lack of dispute resolution mechanism has been identified by us as one of the obstacles against renting items in general. It is inevitable that tools can be misplaced, stolen, destroyed or that two users may become dissatisfied during a rental agreement due to other circumstances. For such occasions (and to prevent fraud), we need an "appeal" mechanism. The problem with solving disputes is that as platform developers we don't know background of the dispute as well as local community does. Therefore it seems prudent to offload the task of mediating such disputes on community itself.

For disputes of serious proportions (good of significant value, injury etc.) the users would be of course well-advised to resolve the dispute using actual legal system of a country they are residing in. The role of our system is not to replace a real court but to provide a way to settle petty disagreements and compensate potential financial loss that may arise if someone lends a high-value item to a dishonest or negligent borrower. Our initial design is that disputes would be resolved by voting, possibly coupled with sortition so that your dispute is mediated by randomly selected group of fellow KiezDAO users that form your local community.

For dispute resolution to have any weight at all, it is required that one can do more than just declare which party was in the wrong. For that reason, we propose to give our community mediators power to oversee a shared fund that we call **collateral pool**. Collateral pool is filled with profits accrued by the platform (e.g. 3% of revenue goes to collateral pool) and can be used to compensate users for damages in rare cases where tools would be misplaced, damaged or destroyed.

Technical implementation of collateral pool could be a multi signature wallet or a DAO-like mechanism so that having achieved a consensus (via a mechanism such as majority vote) users can spend funds from collateral pool however they desire. An example idea of a community project suggested by our pilot-user Jacob is that *“We could use [common fund for] a small portable generator & some heavy power tools.”.*

Security and Threats

We would start security discussion by listing all possible negative scenarios that may happen while application is in use.

- **Injury/Liability** Customer can be injured when operating rented tool (e.g. lawnmower). Is there a way to prevent or at least minimize risk of such action occurring? Once it happens, how does one determine who is liable?
- **Fraud** Bane of all blockchain asset-management solutions. How do we make sure what happens on the blockchain reflects physical reality (e.g. owner insists on renting out a non-functional lawnmower as working).
- **Damage/Liability** Customer can damage or destroy the tool. How would owner be compensated? More generally, how to settle a dispute between tool owner and renter?
- **Privacy** Advertising that you own expensive tool can make you quite popular in DIY circles, but can also make you a target for thieves. How can tool-owners protect their privacy and assets?
- **Sharing Economy** On one hand it may seem we are helping those less affluent by letting them use tools they cannot afford. On the other we might be hurting them by furthering class divide as we let those who can afford the tools to profit from those who cannot. It would be good to keep this in mind, and use our platform to promote *free sharing* so that we don't turn our platform into something exploitative.

Out of all concerns mentioned, it is important to note that **Privacy** (or lack of thereof) is also a frequently expressed concern that we became aware of while sending a survey to our potential pilot users. To give a direct quote form email correspondence: *""If somebody knows which tools I own, maybe they try to steal them or find another way to track my location and find out where I store my gadgets. This is not what I want."* Regarding potential bad actors, we have decided to split those in two categories:

- **Internal threats,** users seeking to commit fraud, exploit and otherwise harm others due to malice or boredom. The category is especially problematic if they find a way of exploiting the rules of the system without needing to explicitly break them.
- **External threats,** operating out of bounds of the system. Either hackers trying to steal money locked inside smart contracts, or thieves/burglars trying to rob our target users in a real world, on the basis of public or private information acquired from the platform (e.g. who has expensive tool with them right now).

To mitigate the risks we would be well advised to try to implement privacy protecting measures. To make sure we are actually doing it properly it would be prudent to ask third party company to conduct security audit of finished smart contracts as is often done in the space.

Validation

So that we may keep in touch with needs of the users, we strive to gather feedback on every level of development and incorporate one of the target users as advisor/product owner. Since “sharing platform for everyone” seems a bit too generic to find a subject matter expert in, we decided to focus on a very small sub-problem for our pilot implementation during the incubator. Namely, we have decided to tailor the solution to the needs of House-boat owners located on one of the lakes in Berlin.

In the context of future work, testing if MVP reflects needs of the user would be achieved by having short release cycles (or continuous development) so that we would be able to get immediate feedback if our target users like new features or not. Apart from technical considerations, we would make use of additional time after the incubator to gather the functional requirements for the software with help of surveys and questionnaires. During the incubator we have conducted a short informal email survey on difficulties associated with sharing, which has informed our development process and allowed us to enlist one of the members of pilot community Jacob, as an advisor to the team.

Impact and KPIs

We have decided to split our Key Performance Indicators (KPIs) into two separate categories. On one hand we would track **business metrics** to make sure our KiezDAO is both sustainable and popular enough to warrant further development. On the other hand, we would track **impact measures** to see if we are indeed bringing positive change to the world and the communities we intend to serve.

As per business metrics, first and foremost we would need to trace user activity on the platform with intent to encourage users to interact with the platform frequently. For that purpose we can rely on simple measures such regarding number of users (*daily number of active users*) as well as more complex measures of user engagement (*average number of rentals per user*). For a marketplace to work and grow one needs to put some effort into marketing, so while conducting PPC campaigns or other promotional actions we would be well advised to follow typical metrics used in such situations (*Return on Ad Spend*, *cost of user acquistion*) and set appropriate targets to make sure our efforts to acquire new users are both efficient and sustainable.

Regarding impact metrics, we strive for a product to have positive social and environmental impact so our KPIs should reflect that. The simplest conceivable measure could be to check total amount of rent that was collectively paid by all users of the platform. To achieve better insight, we could segment such measure by e.g. tool category (to see if some tool categories are more popular) or by community/demographic information voluntarily submitted by the users as it may be that different sub-groups of our users use KiezDAO platform with different levels of engagement. Since not everything can be easily quantified a periodic surveys and interviews to gauge user satisfaction with the product might also be conducted.

Roadmap and Plans

Long-term vision for KiezDAO is that we will start by building a community-oriented rental marketplace and once it achieves sufficient popularity, we would offer new functionalities like time-banking (renting services of local tradesmen instead of tools) and first-class support for budgeting and coordinating large-scale community projects. First order of business, however is

to make sure that tool-sharing functionality of KiezDAO is indeed developed enough to help us attract users and keep them engaged with our platform.

Current version of the roadmap has been published inside our pitch deck. The deadlines are purposefully kept vague to account for possible slippage and unforeseen events that may delay development. One example of such event that immediately comes to mind could be COVID-19 pandemic that we are having at the moment. Social distancing measures are obviously not going to last forever, but if situation does not improve one can always switch focus of KiezDAO to serve as rental marketplace for intangible goods and services (e.g. “One hour of 3D printer time”) to make it useful during this unusual times.

Our aim is to start by focusing on critical features to be able to launch the B2C focused version of the product in **Q4 of 2020**. Afterwards, by **Q2 of 2021** we would introduce features relevant to community governance so that we can market KiezDAO to actual organized communities seeking for a way to manage collective resources.

Aim of the previous steps was to create a set of independent communities in which each community would be running their own instance of KiezDAO tailored to their needs and liking. As last step of our roadmap in **2022** we could add features allowing us to turn a loose collection of such communities (companies/neighbourhoods/NGOs etc.) into actual network by providing them with tools to coordinate with each other on a purely voluntary basis. As an example you can imagine community hackerspace in Belin borrowing bulk quantity of tools from community hackerspace in Warsaw. Such large scale operation, can be coordinated, funded and managed inside KiezDAO interface.

At this stage, we would like to thank Tim Daubenschütz for providing us with his insights on dynamic pricing. At the moment prototype of kiezDAO assumes that tool-owner sets a fixed amount of rent (e.g.*”I would rent my lawnmower for 5$ a day”*) and prospective borrowers can then decide if they want to enter such agreement or not. It would be prudent to investigate if we could invert the dynamics and let prospective borrowers place bids on items that are in demand (*“If someone has a spare lawnmower I would pay 10$ to have it NOW!”*). In general, the economic side of the application warrants further work as we may consider replacing stablecoin with a proper locally oriented “community currency”.

Next Steps

While time and effort dedicated to the Decentralized Impact Incubator led by Blockchain For Social Impact Coalition allowed us to create vision of the product and lay the groundwork needed for its conception, there is still much work ahead of us. Most important non-technical task is to analyze the project and associated risks from legal standpoint. Most important technical task would be to construct a prototype rental market that operates on public blockchain *while being able to preserve privacy of its users*.

At the moment as DEORA team, we have enough resources and expertise to push the technical part of project further providing there is sufficient validation that the software is actually needed or desired by the target users. We plan to keep cooperating with our pilot users by which we mean the Houseboat owners, and we would use this occasion to extend our thanks to Jacob Steinbock who provided us with valuable insights regarding the prototype and was enlisted by us as an advisor to the project.

After the incubator, we may apply to similar programs like the upcoming Celo-camp in order to secure funds and expertise needed for further development of the product. The software like everything done by DEORA.EARTH is of course open-source so **anyone who wants to participate in development, is welcome to do so**. As a project serving public good built by Ethereum community we can also apply for follow-up funding in form of crowd-sourced Gitcoin grant once next round of grants opens.

To keep serving local communities and provide them with the legal and technological tools to grow stronger and more resilient, the Deora team is planning to provide services related reputation tracking and collaborative decision making. These new features will provide communities of different cultural and economical backgrounds the building blocks to emancipate themselves from the grip of corrupt governments, neoliberal ideas, and greedy neighbours.

An aspect of the Deora purpose is a collection of communities around the world in collective governance. A confederalism of communities with elected administrative councils, allowing local communities to exercise autonomous control over their assets, while linking to other communities via a network of confederal councils. Autonomous control over local assets will allow the stewardship and governance of ecosystems like lakes, rivers, marchlands and rainforests, which are so crucial for the **balance of our planet**.