Product Manager Responses

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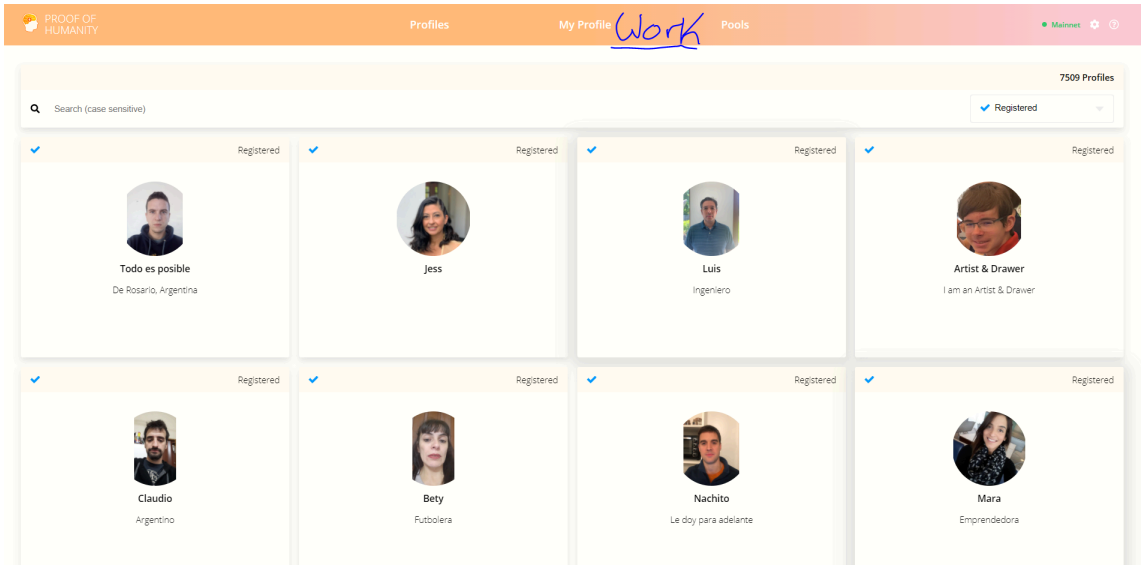
[Link to Figma Product Collaboration Canvas]

A. No-code use case -

I base my No-code use case on a user-persona already registered on Proof of Humanity, who is already receiving $UBI and wants to either spend it in a productive way or earn more of it.

My assumption for No-code means that all functionality of a tool works out-of-the-box without much development effort required, although there will always be some kind of effort needed to make an integration to Proof of Humanity meaningful.



Screenshot with Work tab to mimic the new module

My idea is to add a ***Work*** tab to the Proof of Humanity app where it links to a tool such as Notion to browse/create jobs where any PoH user can earn/pay in $UBI. Notion would be our no-code tool to proto-type a jobs board (alike to Upwork's) allowing us to create a job catalog and would serve as an excuse for humans to use their $UBIs to pay for services rendered. The idea is to create new ways to use $UBI such as paying for services or goods rendered. In the short-term, this gives us enough user feedback to be able to plan a proper Dapp for the long term or scrap the idea if it does not get any traction.

Being a freelancer myself, I know employers want freelancers who can verify that they are working independently from any agency or company. Notion can help us replicate a

job board which in theory is connected to PoH's registry allowing employers to verify their humanity right away.

User Pains	User Gains
Earning in Crypto is not easy, current platforms do not allow it	Increase the worker's reputation on Ethereum
Finding other people that would accept crypto ($UBI specifically) is hard	ERC-20 token which can be swapped to any stablecoin and fiat eventually easily since the wallet was already set up on PoH registration
Contract disputes between employer and freelancer are always cumbersome	Earn crypto is the future
Fair arbitration and appeal process is a centralized affair	Opens up new way to invest more on human.money vault

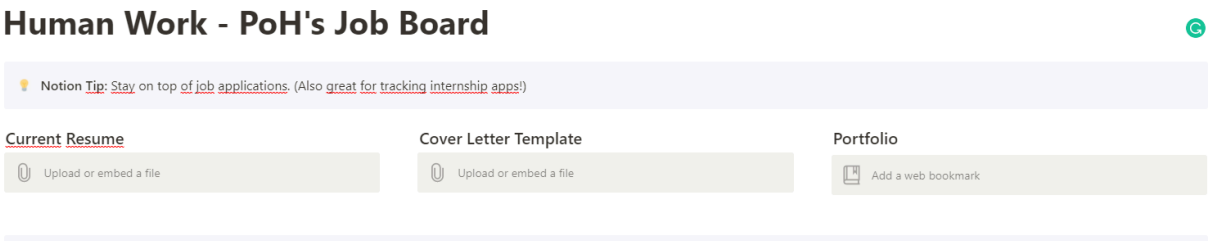
Using Notion would allow Proof of Humanity to scaffold a jobs board proto-type to give $UBI a new use-case: freelance currency. Every human registered in Proof of Humanity is looking for a way to spend their $UBIs and what better way than to pay someone a hard day's work than an ERC-20 token.

If the experiment is successful, then more investment can be proposed to the DAO to forge a Web 3 Freelance Dapp, integrating Kleros for disputes and any other ideas from the community.

What are the benefits of using Notion as opposed to other no-code tools?

- Different ways to visualize large amount of data (job posts in our case). With Notion you can switch between Gallery, Table or any other specific view from the beginning. Users browsing casually for jobs will find this easy to use.
- Notion provides really powerful filtering and sorting capabilities, allowing any user to filter out jobs by property i.e. *Department, Location*, or by creating a filter formula to get more granular i.e. *Find -> Jobs -> where Name Contains Marketing*.
- Its free to get started which is the perfect tool to boot-strap out ***Work*** experiment

The Human Work board could allow anyone to upload Resumes, Cover Letters and Portfolio to allow the community to approach it any way the'd like.



B. KPI - Key Performance Indicators

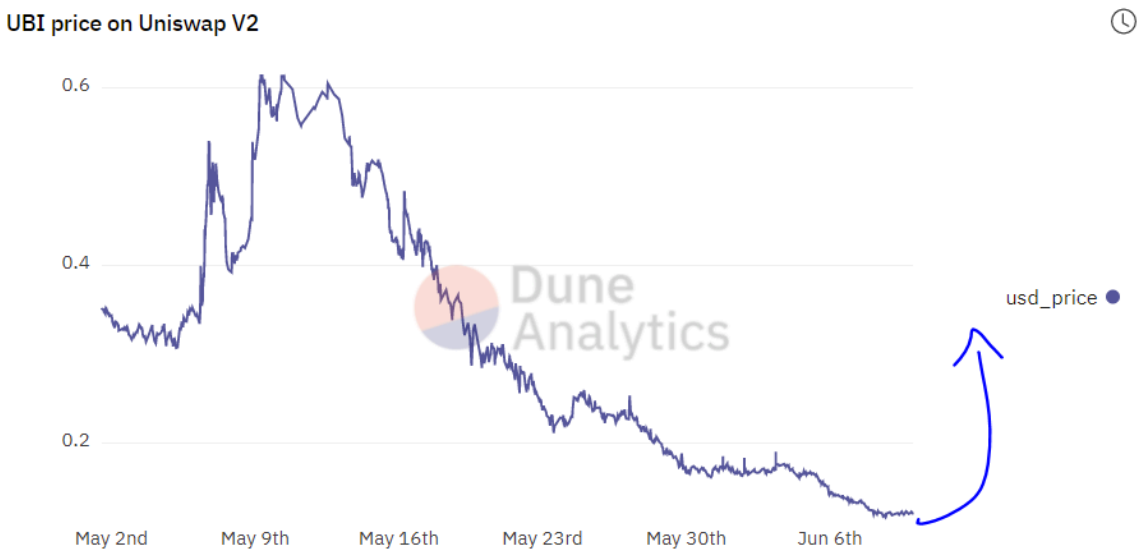
Engagement Indicators - these indicators gauge the level of engagement from humans registering on Proof of Humanity.

1. *Vouches per human* - This KPI is the most obvious indicator of engagement since it marks the level of commitment to expanding Proof of Humanity. Humans who are just curious will only sign-up and watch from a distance (maybe be forced to vouch once if they signed up through the Telegram group), but someone that sees the value in the registry and $UBI, will want to spread the gospel and make sure more humans keep registering successfully to achieve a strong network effect. Since the registry is being spread via word-of-mouth marketing, vouches per Human tells the product manager how strong some individuals feel about the project and can be a great way to incentivize these highly-engaged users. The more vouches an individual gives the more they will be willing to try new initiatives and spread marketing campaigns voluntarily.
   Estimation:
   My guess of where this KPI is right now is between 1 and 2 vouches for every human registered in PoH. The reason being that most humans will just register and be content earning their $UBI, which puts them at 0 vouches going forward. Then we have the founders and people in the community who are highly engaged, which I estimate have an **average of 10 vouches** under their belts, but I would consider them outliers skewing the average KPI up.
2. *Days between Profile submitted vs successfully registered* - This KPI is a lagging indicator because it doesn't clearly tell us what might be a reason for the number going up or down, but it is a good gauge to see the difficulty of new users registering to PoH. Many times in the middle of the process users cannot finish registration - could be due to high gas fees, lost interest, no vouchers available just to name a few.
   Estimation:
   My guess right now is that this KPI is fairly healthy as most humans going through the registration process usually find the way of completing the registration, that is why **I estimate that this KPI falls between 10 - 15 days**. By focusing on this KPI, and breaking it down into the steps that each new user has to go through to be registered on PoH, the Product Manager can identify the individual step that causes the most pain on new users and address it by tweaking parameters or having a work-around. This KPI should be monitored on a quarterly basis to get enough data to have significant results that point towards an improvement.

Strategic indicators - this indicator reinforces the strategy decided by the founders and the new PM/developer team. As described in my Figma canvas, the strategy starts with building with Ethereum legos to leverage functions from other protocols and smart contracts.

1. *UBI Hodlers* - There is a Dune Analytics dashboard with this KPI already available, this number is the key leading indicator in the quest of giving $UBI more value and if we can find ways of giving $UBI hodlers more reasons to hodl, this increases the project's runway to experiment new things in chances of explosive growth.
   Estimation:
   At the time of writing, there are 6418 humans receiving $UBI at a price of 0.12 USD (as per Twitter bot - Daily UBI Bot). Based on $UBI's price on Uniswap V2 (screenshot below) we see that value has been going down marking a strong SELL pressure due to the lack of use cases and long-term perspective.
   I estimate that **only ~5% of all users could be considered Hodlers** because only founders and highly-engaged members are willing to hodl long-term. There is no strategic hedge to hold (or use) $UBI right now. That is why the UBIDAI yvault is an instrumental piece in my view, to increase the buy pressure and give PoH humans a reason to Hodl.

   Going forward the KPI would be more accurate if the time parameter to define a *$UBI Hodler* is at least to hold it +6 months - which is the deadline to renew a PoH profile. That would give the Product Manager a good insight into the intentions of PoH users. With a hefty amount of $UBI in their wallet (~744 $UBI), any human can swap them and use them somewhere else, we have to give them a better reason to hold that token for years.



C. Technical or Scientific Knowledge

Link to Technical questions:
https://docs.google.com/document/d/1YrQlyXLmEAvN1haFR37psVbmOLy-GOVFKINR1W9c6xQ/edit#

Proof of Work (PoW)

PoW is a decentralized consensus mechanism that requires members of a network to expend effort solving an arbitrary mathematical puzzle to prevent anybody from gaming the system (Frankenfeld 2021). These members are also called miners and the more miners join the network the higher the amount of energy required to crack the arbitrary mathematical puzzle. As of mid-May electricity demand for bitcoin is hovering around 143 terawatt-hours.

Proof of Stake (PoS)

In this consensus mechanism the miners from PoW are replaced by validators, responsible for the same things: ordering transactions and creating new blocks so that all nodes can agree on the state of the network. PoS comes with considerable improvements to energy consumption (99% less energy), lower barrier of entries that allows anyone with sufficient capital and knowledge to set up their own node which offers stronger support for shard chains (Ethereum.org)

Proof of Authority (PoA)

Proof of Authority (PoA) is a reputation-based consensus algorithm that provides a practical and efficient solution for blockchains (especially private ones). The term was coined by Ethereum co-founder and former technical specialist Gavin Wood in 2017. (Rousey 2019) This type of consensus mechanism puts a person's reputation on the line, thus pushing him to do the right thing and assemble the right block and confirm its validity. It's drawback is different from PoW and PoS - which prioritize decentralization over scalability. PoA sacrifices decentralization to get an energy-efficient solution.

Proof of History (PoH)

A proof for verifying order and passage of time between events. PoH is used to encode trustless passage of time into a ledger - an append only data structure. When used alongside a consensus algorithm such as Proof of Work (PoW) or Proof of Stake (PoS), PoH can reduce messaging overhead in a Byzantine Fault Tolerant replicated state machine, resulting inn sub-second finality times. (Yakovenko v0.8.13) That is an excerpt from the Solana whitepaper, explaining how their consensus mechanism extremely reduces settlement time to make transactions fast and cheap. Yakovenko goes on to

describe how their PoH mechanism in combination with PoRep (Proof of Replication) to keep the ledger safe.

D. Deepfake apocalypse scenario

a) The most practical mitigation that I can think of is to trigger a new vouching chain with upgraded security parameters such as solving a random test to prove humanity. This would bring great burden to the humans registered as they go through hoops to keep their PoH registration intact but would shake off fake identities and give us the opportunity to test better video registration protocols.

b) Graph analysis could be leveraged here to display each node (human) and edge (vouching relation) that has been associated to a known perpetrator to study the way the hackers built their profiles, which data they chose to disclose - name, location, extra information in description field, creating meta-data that could help us identify potential perpetrators into the future. A machine-learning algorithm would have to be created to include all these meta-data and flag profiles that have potential to be deep-fakes (see Sybil score mock-up below). Unfortunately, this would only help us retroactively.

c)
https://docs.google.com/document/d/1f2OE_KonNJl71WCfS34lhIg5jyeGFprQv3pZQ7GngQM/edit?usp=sharing

d) Attached below are a couple of screenshots, the first to the left is displaying a new Sybil score on each profile which could show the risk of being a fake account, on the right screenshot we can see that if a user hovers over the badge icon, we can get more info into what makes that specific profile dangerous. The scores and observations are example but looking at that actual profile we can see that it is clearly a fake profile or the user erroneously uploaded the wrong profile image and video.
https://app.proofofhumanity.id/profile/0x0631581c7824ddeebc8d288e38ebded3c0ac1226
I have added this mock-up to the Figma link at the beginning of this document.