

Cleaned_Participant 40 and TE Study

Fri, May 19, 2023 3:01PM • 55:35

SUMMARY KEYWORDS

token, primitives, people, protocol, design, question, frameworks, staking, requires, process, research, working, engineering, circulating, components, coordination, idea, blockchain, ai, engineers

SPEAKERS

Participant 40, Nathalia Scherer

Nathalia Scherer 00:00

Participant 40 03:47

So I've been always interested in large scale policies at the government level that's put up systems to direct energy of its population or its capital towards purposes where I talk purposes and utilize variety of financing ways to do so. And during university my main area of research was around these government policies around developments. But for very common reasons, I was very dissuaded for from exploring that path. And looking for venues where impact can be much more intuitive to experimental and tried out. It's smaller scales that can also be frameworks for larger expanding to larger scale. But it didn't have to didn't exist in my life until I found myself with a very random occurrence in a room with \$ Michael Zargham\$ and four or five other people in a classroom in New York, where I was exposed to it eight hours a day, non stop discussions around blockchain when those were just emerging the fibers defy somewhere didn't even begin and yeah, that's room conversation. Made me kind of decide to change all of the decisions I took about my life. For the foreseeable year, I took a gap year from the university to fully focus on learning blockchain kind of changed all of my kind of career plans and started exploring what is possible here? And yeah, one of the first things that caught my interest was the tokens themselves the ability to kind of create a symbolic object that can hold a variety of meanings and values defined for a specific purpose, specific system or specific community. And this design space, really interested me the first projects that I also started kind of working with should revolve around the previous topics of my interest, which were, you know, a commons. So I started with that \$name\$ before that was like \$name\$. When I was doing research around start coordination. And yeah, in in the \$name\$. It was the first time I was introduced to this Commons idea of being able to have institutions that allow communities to regulate each other without needing to resort to a kind of higher authority and be able to sustain the systems that are much more in line with the local cultures. And being inspired from these models, and having a somehow finding ways to apply them as digital communities that have a totally different set of demographic structure and Network section was a really interesting challenge. And in the same time, I was doing research during in \$name\$ and also working with small projects with collabs on sites participating in the hackathons. etc. And during the \$name\$ the resource times, I was really kind of fascinated by this idea of somehow enabling coordination beyond peer to peer on blockchain. And it was about the \$name\$ Dow that didn't like find its destination well in the market, but it was that you know, from peer to peer to end to end or an organization organization coordination requires a complete different infrastructure than let's say, like multi-sigs and escrows. And that can be great for kind of scale and coordination systems on blockchain, which was a research initiative that \$name\$ and \$name\$ led together and from that research proposal inverter emerged as proof, speculative idea around facilitating long term continuous funding for open source research and development projects without requiring multi SIG structuring of multiple funders. And somehow easing coordination and automating much of the processes that cripple this coordination from processes. And me and \$ Alp Ergin\$ will also be met in during the \$name\$ times this so I kind of take this idea and started playing with it. And then we kind of formed an initial group of people who were interested in tackling this idea, and we found some grant funding to sustain people who wants to contribute. And yeah, for the past eight, nine months, slowly I kind of stripped away all of my belongings to other DAO projects and been focusing on \$name\$ ever since. And, yeah, I'm now co founder of\$ name\$. I'm responsible for our protocol architecture for our products and our tokenomics sector. I'm mainly involved in research and development of new use cases that use our architecture and build modules to kind of repurpose a lot of the existing technologies that we have in space, but also enable new use cases. Yeah, hopefully, give some context. A bit long, but

Nathalia Scherer 10:58

yeah, what a journey and so yes, of coordination. Themed involvement with combined with token systems. And I'm wondering for you so now we're gonna dive into the definitions. And yeah, I wonder for you, what is token engineering? How would you define it?

Participant 40 11:36

Token engineering for me is methodology is methodology templates that are creating methodology templates that allow people to easily create tokens for either their system, their community or a specific purpose, but being able to approach the

creation process of it through certain methodologies that allow you to cover a variety of components that are necessary to consider for token engineering around issuance to defining tokens purposes, defining tokens capabilities, defining its access points, to its whole like governance design process. Yeah, so it has multiple components. Tokens must increase. I think there should be more and more tokens in the world, but also that creating a token is a very delicate process. And actually creating these frameworks and making the power of creating tokens accessible, I think is a big task of token engineers.

Nathalia Scherer 13:12

And what would you say that is unique about token engineering, and it may be solving that other fields or not?

Participant 40 13:22

Because it usually combines currency and capital with also governance, so tokens have as a circulating units have much more variety of powers. than any kind of financial assets most of the people are used to interact with. So if I want to buy a stock, I buy a stock and I'm just exposed to the company's performance if I want to transact I buy a currency. If I want to participate in governance, I go what's in my, you know, like, everything is compartmentalized in complex socio economic world, but somehow tokens embedded in themselves, much less insulated functions. And they have much more, they give their holders much more power to kind of influence the organization in multiple fronts.

Nathalia Scherer 14:43

Yeah, and speaking of multiple fronts, and the whole, we look at the spectrum of people working in token engineering and we also in the study, we want to map and explore the different tasks and processes that people are saying in their work. So I wonder in your daily routine, if you could share a little bit more about typical tasks, processes, tools that you use.

Participant 40 15:15

So I have researched quite a bit on these like extinct frameworks. There is a really nice process that \$tokenomics DAO\$ has created, which I enjoy they they have like a formidable templates that allows you to walk through the you know, initial set of questions that every token design has to ask, you know, stakeholder definition, etc. But what I really liked doing is approaching first mapping the protocol, mapping the interaction points, mapping, stakeholders and the stakeholders interact with protocol, which stages and then taking the subjects like the agents and the system components, both as subjects. So every everything that is interacting is alive, and trying to look at it from a desire economic perspective. So asking like, Okay, this entity or this subject, what do they want? And trying to kind of expand that question that's asked to stakeholders into system comes as well. So rather than saying okay, as a system, what I want to incentivize saying, Okay, what do I want to incentivize for individual stakeholders, and not even asking that but okay, what does this individual stakeholder want to achieve by interacting with this protocol and then whatever component they're interacting with also asking the same question for that component. And doing a mapping exercise around that. I'm also just looking at Yeah, and then understanding if what part is actually related to my protocols capabilities. So both parties excuse technology question, what part is incentivization question. And then, also, by looking at then after dissecting these incentive questions, trying to ask okay, what do they need to be incentivized to do so? And then trying to find exact mechanisms, which can be done staking. Slashing rewards, access, reputation fees. But I wouldn't argue that this is a framework that is the best, but somehow I ended up in this. We also have a model with \$Jim\$ from \$Co labs\$ that we call chakra nomics. So trying to analyze token from chakra perspectives, but these are just fantasies that keep us you know, engaged with working on it.

Nathalia Scherer 19:05

Nice. Thank you. Very well, I've read it and also, I'm wondering, because there's, there's a lot of areas of knowledge involved in that process. So I'm wondering which areas of knowledge you consider essential for the token engineering field.

Participant 40 19:31

So, um, I don't have technical backgrounds, which kind of limits my approach. But what is really important is also to be able to like designing a system, okay, it's so good endeavor, but also, understanding the system requires simulating it. And I think a token something that I find missing for myself is being able to put into either there was this app that allows you to kind of simulate flows or being able to kind of simulate based on kind of number random number generations, like \$CAD CAD\$ does. And being able to understand system behavior during design process is something that I don't have a technical expertise in and I find liking lots. And, but the initial process, I don't think requires so much technical knowledge. It requires, as I said, like an easy to follow templates or set of questions that go for whoever, you know, whoever knows about the project they're involved in and knows this information can ask for. And also during the incentive design process, it requires a lot of ecosystem knowledge, ecosystem knowledge, meaning staking mechanisms, let's say okay, what are different ways taking mechanisms has worked, what are different ways it didn't work? What are inspirational kinds of use cases? So being able to kind of also collect this ongoing like mechanism experimentations in the ecosystem, and somehow using that as an inspiration for how you approach questions is very important. And am I following up well from your question or Okay. Also to know to know what is possible beyond simple methods, I think it's a very missing one. And it's not just a technology problem. It's more like a protocol problem as well. So we have a variety of mechanisms, let's say like bonding curves, right? These are very interesting. tokenomics primitives that are super inaccessible to most of the projects that want to utilize them. And these have like architectural challenges in their protocol, which is what we are exploring with [Emirates] right now, for example. That's limited adoption, or limit their kind of customization to fit a specific needs. Staking contracts for example,

staking is one of the core tenets of incentivization. But ever since like three years, everyone is using the same staking contract, which is like a very simple time based issuance that doesn't tie into any kind of performance or success metric or any kind of metric like Northstar metric for an organization. So there's a lot of incentive primitives that have not been upgraded or evolved into emerging complexities or novelties that we want to explore. And I see that also has a big like token token, token engineer task as well, which is not only creating templates for getting an idea of a token, but also the primitives that can sustain capable functionings of a token, but also simple to deploy simple to customize.

Nathalia Scherer 24:14

And now let's dive a little more into challenges in this space. So could you share a little more about challenges you face? Worst token engineering

Participant 40 24:28

related to token? Yes. Lack of simulation tools. That's really one. And also, as I said, lack of interesting primitives, like AI for example. I can share documents that's after this call, maybe because when take a look, but it basically explores how we can think of issues of the token itself in a different way. Rather than a like linear token design where you know, you have a determined supply and then you say, Okay, you get this vest over this time, you get this vest over this time. This is what incentives how to kind of design tokenomics That is a lot more dynamic. The responsive to the evolution of the protocol itself. So how can the talk itself can evolve or react to changes or life that's happening on your protocol and with that research for example, we discovered that it's, it's there's no primitive that we can relate to. So we had to create our own perimeters. And now we are designing one right now. For dynamics staking rewards, for example, like no one has built dynamic, staking reward contracts its crazy. And this is a big challenge because you have after you want to go a bit more serious and complex. Complexity is not to suppress simplicity, complexities and just being able to hold much more capable logics in your system. You get stuck with existing contracts. And that means you cannot you need to build things from scratch. If you want to have a customized application of a token framework. And building a contract from scratch is super challenging. Because, yeah, there's a lot of security issues. There's a lot of developments, resource allocation problems. And also that it's super scary because what if you need to change something? So you to ground on a proper architecture? Yeah, so yeah, lack of architecture that allows us to use token components as modules. Oh, yes, I was just describing that. So, yes, primitives as standalone functionalities are components of a tokenomics system that come together to make a whole tokenomics system possible. So like staking, is one tokenomics primitive, right. Issuance methods is another tokenomics, primitive slashing allocations, streams. Liquidity, these are all like necessary components of tokenomics framework that can take a variety of like functions. But if they don't exist as primitives that you can actually like utilize, they make these design space inaccessible. So token engineers, because no one wants to sit and build complex token systems from scratch. If you don't have big budgets for it, so then you just go with a simple staking, okay, liquidity pool incentives. Okay. Snapshot wallets on governance, ask things and then we have a token. But yeah, once you want to decide that you want to go beyond that, you get faced with limitations of existing contracts. And solution is not to build things from scratch for only because that's not scalable. The solution is to build an architecture that can sustain a variety of functionalities and modules. So everything is plug and play, everything is upgradeable and composing that framework is a super easy process which is which means becomes accessible.

Nathalia Scherer 29:23

Thank you. Is there anything else you would want to add in terms of pressing needs for the token engineering field to address?

Participant 40 29:40

Yes, there needs to be more research outputs. I feel like I was just researching staking contracts like where I was taking contracts yesterday. And I couldn't come up with an article where it just listed me all the various ways staking is used to its use by protocols as an engagement methods. So somehow understand the design space for each components. I think is Miss. Yes No, I don't think I have anything else.

Nathalia Scherer 30:49

Thank you. And how about ethics? How would you describe the role of it in token engineering?

Participant 40 31:01

In what sense?

Nathalia Scherer 31:06

How do you see a role for ethics within the practice of token engineering? And yeah,

Participant 40 31:16

so tokens always come with an inherent conflict. class conflict, let's say where there is always this question of is the token there for the team and investors to cash out into community right. But ethics of I guess an ethical consideration, there is the how to balance the desires of different stakeholder groups for while also, you know, rotating everything around the long term success of the protocol and that requires a lot of honesty and trade offs. So these trade offs are very important to highlight. There's always been a lot of issues around hidden promises to investors or the ethnicity of governance that's usually come because of like legal problems. You know, you want to show that you are decentralized but that Snapshot is just like a

theater for you. And especially for refi as well. Nature comes a stakeholder so what you incentivize, I guess, like we're external stakeholders that you might want to include or ignore during your design. process is important. Allocation of tokens to write off stakeholder groups is a big ethical question, because there is also consideration of what contribution deserves ownership what contribution doesn't deserve ownership. And something that we are considering internally for example, if people that received salary should get the same amount of tokens as the people who didn't receive salary and growth without expecting one. Yes, also. Decentralization I think is maturing in terms of how we want to understand and conceptualize realizing. And now I think we already passed the, you know, the narrative of the Dow and we are much more mindful around the process of decentralization. Yes, a lot of transparency. I guess they all lead up to their level of transparency. But also Yes, honestly facing the trade offs involved in a token design process. And yes, so I guess these are what comes to my mind.

Nathalia Scherer 35:05

beliefs on how to increase diversity and inclusivity within

Participant 40 35:11

Yes, making accessible tooling, frameworks and playable tools so that I can create their first feel that it is like everyone has the power to create the token is just make it very simple to show that it was a great thing that they are simulation for example, I think it was amazing. Just to build that you can parameterize and deploy now you have a market. Right? So how do we bring that to like all the components of tokenomics is something to really like play things like Lego and see some simulated results. Then I can learn you know, I need to be scared of the process.

Nathalia Scherer 36:18

So, well, what do you what would you say are the incentives to be a [precondition] and that you've seen people receive or participating in the field?

Participant 40 36:29

Yeah. It's not Yeah. For example, we will have to pay for working with someone that understands simulations. So this expertise is still I think, a very valuable one. incentivise I think for Yeah, I think this the model of advisory is very lucrative, like tokenomics advisory and research and reporting on certain metrics, building metrics, dashboards around existing. I've talked about already deployed tokens, but being able to make sense of the system, I think is very desirable attribute of token engineers. We, if, you know, if we were to kind of start working with a token engineer or two today, I think you would pay like you would allocate the budgets of maximum like \$5,000 where we will be doing the bulk of the work but they will be accessing their advisory simulation capabilities and putting the system into math but 5k would be like really good. token engineer onboard what to have on board. I think it will range from 2 to 5k depending on one two people and we have talked with top token engineers and on that price change. Time 50 hours a month. So 60 to hundreds dollars per hour. Yes, I also believe that token engineers should be incentivized with the tokens that they create but they of course deserve to get paid in Fiat as well. But I find it dishonest to work with I get an offer from talking engineer where some of the compensation that they ask is more than the token allocation that they ask and yes, like Token is, is such it's like, I think birthing life to a digital soul. So it's a very scary, delicate and vulnerable process. It requires a lot of trust, a lot of confidence, a lot of feedback and a lot of careful thinking. And and someone that helps you get through that. I think is very important because yeah, I think it's like a very secret very scary thing and yes, I think there is a function therefore talking to engineers as well. So if someone is not really 100% sure that they are tokenomics experts, they will definitely want to bring in one token engineer there to do some check and you know, at these audits, the token design service Yes. I think auditing is also big components, system audits basically, and not like contract audit, but just be playing the devil's advocate for whatever design that you make.

Nathalia Scherer 41:25

Thank you. Look at the future and ask you, what do you wish for the future of token engineering, and also how you see the fields in the next three years?

Participant 40 41:42

Yes. I want to see, top engineers can build token primitives as modules on \$name\$ That's definitely my dream. I want to see token token ohmic primitives expand from the frameworks that have not evolved since the defi summer. I want new primitives. And I want these primitives to be easily configurable and playable by the people. I want to talk creating a token to feel like a game. And I want this to show the people like all of the world that we can create our own symbolic value, symbols of value that can hold actual value. Yes, and I really also see that tokens are going to be very more dynamic in how their issue distributed, circulating and that requires also rethinking of the whole ownership distribution models. Token allocation models from linear time to dynamic time. I would like to call it emergent tokenomics. And there is a lot of knowledge to be transferred from layer one tokenomics layer on blockchain tokenomics into community, defi whatever tokenomics. Yes, I want to see more experiments with tokens but somehow we need to have an infrastructure that we can rely on

Nathalia Scherer 44:05

and do you have any thoughts on the relationship of AI and the practice of token engineering?

Participant 40 44:14

Yeah. I think that would require a lot of stripping down of emotions during tokenomics design. So, like you cannot assume, That you are interacting with humans. So the agents that hold your token and integrity of protocol can be AI's. That means you cannot rely on the narratives that you push on Twitter or you cannot rely on so much narrative that encapsulates the momentum and the token you really need. Carefully consider how governance is opened through token like what kind of reputation score is circulating in your ecosystem? How are the access points defined? So really, I think that's important. In the token, Creek tokenomics creation process. I guess AI also can be a tool for multi agent simulation. I'm not sure like somehow playing the stakeholders that you define as your targets for tokenomics group and defining these AIs to act in that way and somehow having a more lively simulation I mean, I'm already using AI when I like, when I'm designing tokenomics As I'm like, really asking questions for like research. But yes, it's limited actually, by really like database of \$GPT\$. So I can actually access all the information that I want to see. And after 2021 That's when things become more interesting, but the data goes on, only until then. And I guess if these tokenomics components acts as modules, that can easily be brought in together. There can be a way for AI to recommend you the right mechanism. Decisions like mechanism decisions for your design choices.

Nathalia Scherer 47:26

Well, our last question is about people. And I would love to hear it too. If you want to share people that you admire in the space, whose work you admire.

Participant 40 47:41

\$name\$ for sure, has been always there at critical leaps in my blockchain journey. [name] from \$name\$, who is my sensei, and taught me the way of made to approach any kind of design decisions, or design problems or games. Around Us. \$name\$ for always inspiring to turn designs into observable tests, and somehow like working on creating these tools that are accessible for people \$name\$ for really going very deep in monetary theory and not abstaining from the turning his radical ideas into practical network level systems and really ingraining his philosophies into the systems that he builds even though they work towards the disadvantage like [four corners to succeed, or Tom] has to go to zero as an example, which is like really respectful way to create I'm counting from token size on just for the context, let me think Also, yes, also \$name\$ for asking the question of how do we circulate love with tokens because, as I said, Now, it's my like, way to play with tokenomics design I need to have like, love and desire arose in different colors following desire is not always so pure, but desire design, but it was in a talk that she gave in Lisbon, I think she put that idea after the gracias economics. Her time in there, which takes me there with \$name\$ also, and \$name\$ for really trying to take tokens to create completely new form of currencies. And work on it's like real world adoption. Yes, and I guess to my country for showing that paper currencies like money is so meaningless and it can just evaporate in a day. So that we need to pay attention really to how we structure our ways of circulating value. And sort of \$Marcel Mauss\$, the author of the book, \$the gift\$ to show that with money, a lot more symbolic things can circulate than just the capital value, and that can influence and shape circulation and distribution of power around it. Yeah,

Nathalia Scherer 52:20

thank you and maybe I added here question about engineering as synonymous.

Participant 40 52:33

I see. No, I think token and token engineers are more like intermediaries nannies, doctors, engineers they they should be working towards reducing the need for them. But always being there to take care of things. So less dependency, but still trust and reliable to have their presence

Nathalia Scherer 53:29

Did you have any other questions? Add? No thank you. That's great. Was the report and yeah, thank you again for participating. Do you have any any questions or anything else you want to add?

Participant 40 53:56

Well, thank you for this session. It was great to talk about things. And yes, please do reach out anytime. And I'm also very curious about the output of this research. I also talked with Angela for I think she's doing a different interviews, said research streaming \$name\$ talk engineering and AI. It was also great. And I'm also very curious to hear how other people see us problems, especially on the mechanism, design space. It's a great initiative. And thanks for asking me also to participate and coming together to this call. You guys made my day. Nice to see you again. And hope to see you also in Europe maybe

Nathalia Scherer 55:05