

# AMA CHAT WITH JOSEPH LUBIN

JANUARY 4TH, 2018

## ETHDENVER-HACKATHON SLACK CHANNEL

**Q: Why are hackathons important to the future of Ethereum?**

A: They are gathering points/events for lots of interested, passionate, talented pioneers to learn, interact, do, build and forms important bonds with one another. For instance the Waterloo event was large and epic. The number of lifelong friendships and projects that were formed there will probably ramify powerfully on the ecosystem.

**Q: Ethereum has a foundation and consensys, how important is a "steering committee" to a protocols success given we are all fans of decentralization?**

A: I think the work that the foundation is doing is great and important. The research side, driven by Vitalik is doing well. The business side – which should be much more open – needs reformation and this is underway both internally as well as being driven by lots of external actors that care about the project. From the start we wanted to move towards decentralization and this is happening, but it does take a ton of iterative work.

**Q: Hey Joe. Thanks for showing up and supporting these hackathons! Can you give some thoughts on the importance of ERC721 moving forward in the token economy?**

A: My pleasure. Token standards have proven very important to broad adoption and activity in the ecosystem. ERC20 did great things, but is very limited. Many use cases need to be explored iterated and standardized over time. Non-fungible tokens is a great use case that will drive lots of innovation.

**Q: What would you consider your biggest goal for 2018 for Ethereum?**

A: There are so many goals. Scalability is probably most important and the work is proceeding on many fronts. There are obvious fronts like PoS, sharding, state channels and plasma, but I think big wins will be made this year by projects architecting themselves for current constraints. This is the way scalability of platforms has evolved for decades.

**Q: ConsenSys Academy seems really promising. Do you see ways Colorado could help scale that in our state?**

A: If you have a specific need, send me or John Paller or Kirk Dameron a message and we can route it to Academy if/as appropriate and have a discussion.

**Q: Here you poo poo 'digital representations of analog forms', are we all doing this where we are building/optimizing store of value (scarcity) over medium of exchange (abundance)?**

A: Different philosophical issue, I think. Digital representation of balances in bank accounts is a convenience in a more efficient system than previous, but doesn't fundamentally change the nature of the money or the rule by which it is governed and can be used.

**Q: If 100-500 passionate developers/designers arrived at your doorsteps tomorrow. What would you have them build?**

A: We would have a discussion about what they want to build and what they are best suited to succeed at.

**Q: Can ethereum foundation continue to scale in a decentralized way? A lot of us have been struck by how development is in silos and that might be a consequence of the decentralized nature of what's now a rather large organization.**

A: I hope and expect that we will see a much more open process this year with so many more people getting involved and better mechanisms for communication. It has been a handful of teams and I think that's going to explode in terms of participation both by teams and individuals.

**Q: How do you see Ethereum transitioning from 2.0 w/ MetaMask to 3.0 to mainstream consumer adoption? Pure-play apps or new browsers like Blockstack, Brave, etc?**

A: Meta Mascara is one mechanism. Web 3 browsers would be another. We have a project that has quite a different architecture for an Ethereum client with some foundations on IPFS – this will also involve some MetaMask mechanism.

**Q: Decentralized technologies eventually become centralized; true? if so, accept this or design immune system to maintain equitable distribution of power?**

A: I think it is cyclical and continually evolving hopefully towards improvement. Where lots of value exists well resourced groups will endeavor to capture it. If too much gets captured or if better ways of architecting are developed, there will be a swing again towards decentralization. Ideally the Web 3 technologies – trusted transactions and automated agreements on Ethereum, decentralized storage, bandwidth, communications, and heavy compute, will enable a broad web 3 architecture that is much harder to capture.

**Q: I'm thrilled you'll be coming out to the ETHDenver.com hackathon. In addition to throwing a great hackathon, what do you think us Colorado organizers can do to put Colorado on the map along with NYC and SF in the blockchain space?**

A: I'm not sure Kev (Kevin Owocki of Gitcoin), but we can brainstorm.

**Q: As a software engineer working in a non-blockchain field, I've noticed lots of my peers starting to take serious interest in the blockchain space - specifically the Ethereum ecosystem. In your opinion, what is the most impactful way for developers new to blockchain and Ethereum to get involved?**

A: You just have to dive in, explore and figure out what resonates with you.

**Q: It seems to me that understanding growth and monetary economics is fundamental to the health and growth of Ethereum. Are there any initiatives to recruit economists and/or train developers that you are working on or promoting?**

A: Our (ConsenSys) Token Foundry group has a bunch of people that think about cryptoeconomics. Vitalik once remarked that he thinks of himself more as a (crypto)economist than a computer scientist. Yes, we are very interested in bringing in people for various projects that are domain experts and economist is one import type of domain expert.

**Q: How do you see the future of the Ethereum blockchain and IOT products?**

A: IOT has a ton of thinking to do on this front. Chronicled has done some interesting work wrt privacy (ZK-SNARKS). The tangle/DAG space is interesting but I have not yet seen anything really promising since the approach is currently very centralized in architecture and very immature.

**Q: Security culture is a big part of the cypherpunk/blockchain mentality. Convenience tends to be the preferred route for most consumers today. They seem somewhat at odds.**

1. Do we abstract away security problems for the general audience?  
2. Focus on education and training people to better understand the importance of self-reliance within the blockchain cryptocurrency?  
3. Treat both approaches as equally important?

A: #1 will be most important though #2 is good too. We can't expect the build of the human population to get up to speed any time soon. It will be up to solution providers to build securely and educate their customers. Importantly, if you are savvy, you should be enabled to take full control yourself – that is one of the exciting elements of open decentralized systems – unfettered access.

**Q: I'm wondering if you have any thoughts or know of anybody working on good solutions to the UX around gas and the fact that people can lose access to their wallets forever if they are not careful. I see these as 2 major hurdles to getting non technical user adoption. Some people may believe that holding their own private key is too much responsibility.**

A: Our uPort team has been building social recovery mechanisms that are very thoughtful. They enable one to designate friends/family, other agents like lawyers, even services to hold pieces of info that can enable recovery of keys. Work on enabling lots of services to share such secrets so that it is hard for them to collude is a next step.

**Q: With the recent announcements by EEA of new working groups (identity, energy and multi platform) I am curious if this aligns with the mission and objectives of Consensus Enterprise and if there will be a working relationship between Consensus and EEA?**

A: LOL. Highly aligned. We are strongly involved in many aspects of the EEA's work, and it is not just our Enterprise group. uPort identity, Viant supply chain, PegaSys protocol group and many others are involved.

**Q: What do you think is the marginal value add if we succeed in creating a crypto sandbox regulatory wise? Hopefully Colorado will be the zug of the US.**

A: Sandboxes are interesting mostly for financial applications. There is only so much a single state can do on this front. It may not be cost effective for a startup to have such narrow focus.

**Q: Can you talk a bit about successful strategies and/or lessons learned at #ETHWaterloo hackathon last October?**

A: I did not have a role in running the event though Mark Beylin (of Bounties/Gitcoin/ConsenSys) did. Two things stood out: It was incredibly efficiently run with a ton of very helpful volunteers enabling astonishing smoothness throughout, and there was no focus on prizes or winning, really. Prizes were not posted and nobody asked. Though there were 10 winners and they did receive prizes.

**Q: With the momentum that we're seeing in the entire blockchain space, are you seeing any headwinds from the government in the US and around the world and the traditional financial institutions? Or are they all typically open to what we're doing?**

A: Mostly great excitement about the possibilities of better systems, systems that protect consumers better and that enable regulators to have views and design rules that are real time prescriptive, and not forensic and reactive. Regulators are fortunately mostly taking a wait and see rather than heavy handed approach from what we have seen.