

lab10 - Support #57

EventHorizon 2017

18.02.2017 10:01 - didi

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:		Estimated time:	0.00 hour

Description

This is a recap of <http://eventhorizon2017.com>

Dinner: I wasn't in a very communicative mood, thus my conversation was limited to discussing decentralized insurance with Tom. See follow up below (Etherisc).

Event: The whole presentation and opening were pretty bombastic, imo very well designed. See [Ouverture](#).



Ewald Hesse (Grid Singularity) presented the event as an effort to bring together industry leaders and discuss what needs to be done.

He repeatedly stressed that it will be a long way, technology isn't yet there.

A core question is the right governance model. There was a demo about how the envisioned system would work on 3 big screens in the upper floor. It's somehow like a fractal. Autonomous agents, but repeating the pattern on higher levels (e.g. single devices like a fridge, street level, district level).

Each entity has its wallet and strategy. The prices are the signals which ultimately balance the network from the bottom up. I could talk to Erwin Smole.

He said the "old whitepaper" should be available on the Internet. So far I didn't find it, except [this abstract about worldmeter.io](#). They say that whitepaper triggered an invitation to [MIT Media lab](#).

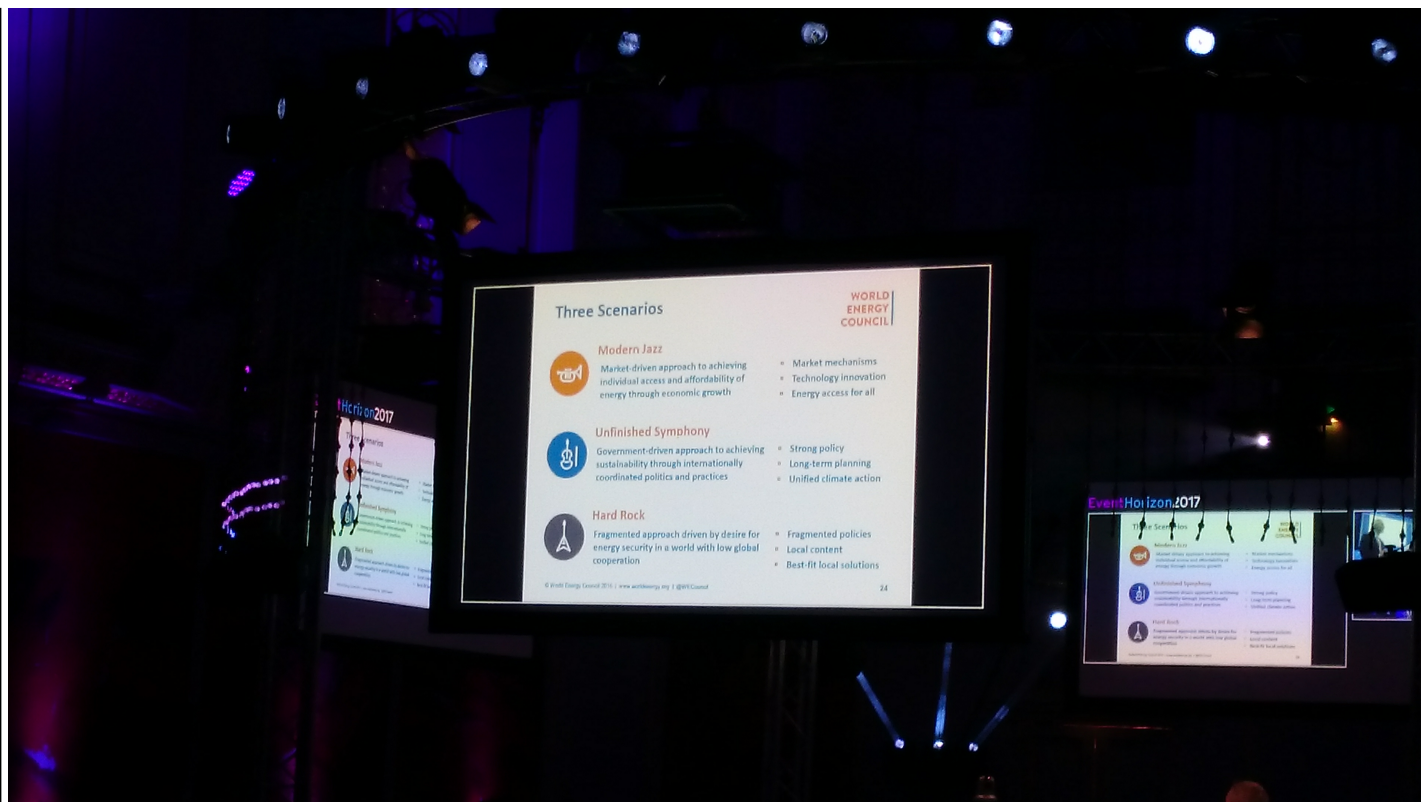
Supposedly a new Whitepaper is coming up. He also mentioned the Polkadot whitepaper although I didn't ask, showing that it's closely related to GS.

Smole said the system is in active development, version 0.8 exists (of what? API?). Not yet open sourced, but can be shared if interested. He asked about BlockchainHub and if we have developers. Showed interest in involving us. They are already working with Brainbot and Parity.

Ulrike Huemer (CIO of Stadt Wien) mentioned that they plan to create a *Blockchain Hub*.

Mr. Frei (World Energy Council) focused on the challenge of climate change and growing demand.

He outlined 3 scenarios for the future: coordinated (though imperfect) effort, chaotic (Jazz like) coordination, non-cooperative competition



Vitalik (Ethereum Foundation) presented the observations he already made [here](#) (architectural, political, logical view). He mentioned two kinds of cost:

- The seen: (losses due to existing over-centralization)
- The unseen: (unrealized gains because people are afraid of upgrading to network-enabled technologies due to their present centralization)

What we might decentralize:

- Production of energy
- Distribution (ie making and maintaining wires)
- Source authentication (e.g. is this power green? Is it financing nasty dictators?)
- Market mechanism (ie allocation and incentivization)

Blockchain seem most well suited for markets, though we can also think about source authentication

Gavin Wood (Parity) first subtly promoted anarchy (my interpretation), noticed that openness is an innovation turbocharger. Then he introduced Polkadot.

Christoph Jentzsch (slock.it) presented their work. Slock.it sees itself as integrator, they don't want to do Hardware themselves. It's about machine to machine contracts and payments.

He proposed the nice notion of *Smart contracts are protocol extensions*.

Also talked about the DAO and how important (and hard and unsolved) decentralized governance is.

In our later conversation he told me that for revenue they're looking at revenue fees and/or gains to be made via trading when using stable coins for the services.

Heiko Hees (Brainbot) introduced Raiden, also showed the IOT demo.

I later talked to Ulrich Petri, which is a dev at brainbot.

He was engaged as an explainer of a Grid Singularity Demo dashboard which showed their close relation.

They're sub-contracted by GS (since few months).

Raiden was started because a Thai company (don't remember the name) wanted it for a use case they had.

He mentioned issues with a crypto lib (secp256?) they're having at the moment.

Couldn't give me too many details about Raiden since not personally involved in Raiden dev (he worked on the Python Ethereum client though).

Also mentioned that there will be a "trusted network" feature which allows parties trusting each other pooling channel funds. See [Trustlines](#). Implements the original Ripple IOU idea.

P2P routing is already implemented. It currently uses a different network id then Ethereum, because the Eth clients don't yet check application id, thus using the same net would result in a lot of spamming.

He couldn't tell me if/how Ether can be used in channels (since it's not an ERC-20 token (yet)). That's supposedly gonna change, see

EIP 101.

Brainbot did search applications before Blockchain.

Ewald showed a slide stating that AI eats APIs eat Software eat the world (extending the "Software eats the world" meme).

Energy Web Foundation

Seems to be a cooperative effort of Rocky Mountain institute (see [Blog announcement](#) and Grid Singularity.

Wants to be something like the W3C is for the Web.

energy_web_biz_model

Central theme: economies of scale are inverting to diseconomies of scale, thus decentralization is needed.

EVs will heavily impact the grid.

Value should be shifting to the customer, utilities should focus on cooperation instead of competition. Not doing that will lead to high opportunity cost.

A following poll ("at which state are you?") to the audience concluded that ~50% of attendants are "convinced of the impact, trying to figure out use case and need to focus my company".

The foundation plans to go public in December 2018 (est.).

The afternoon panels of day one were difficult to follow to me, because I couldn't really grasp much substance.

First there was a panel about **investment** opportunities and strategies.

It was repeatedly stressed that a long investment timeframe (which nowadays seems to be 8-10 years) is needed, together with a clear exit scenario.

Some missed clear use cases and tech roadmaps.

At some point it was shown that in the US the investment volumen in Blockchain tech is about 6x that of Europe.

The schedule (seed, series A, B) seems to be quicker then usual for Blockchain projects.

Funding often takes place via utility, vendors.

Concrete data of economic value / metrics coming up now.

Then was a panel about regulation, moderated by **Erwin Smole**.

Seemed to be mostly empty political talk to me (not only, but most).

Afterwards we went to the [Meetup](#) (Vitalik, Ralph, a Microsoft sales guy with good comms skills and me), giving a short visit to the House of Nakamoto on the way there.

I found out that **Vitalik** living as Nomad since a while. Currently formally resident in Singapore, where he's also in close contact with the Status guys. He talked with various central banks about Blockchain (Singapore, Canada, China, others I don't remember).

There's no contact with the RChain team. He didn't have to say much about Polkadot, doesn't seem to be involved. He seems to be an uncomplicated guy, often focused on his phone (Reddit & Co).

In the meetup, Vitalik punched the DAO guy and later gave an outlook regarding expected Ethereum development. Next focus are the Metropolis hard fork (needed to avoid Ice Age), Casper PoS and zk-snark integration (only marginally affects the protocol / EVM), most of it doable on smart contract level.

Stephan (etherisc) talk me they are currently busy with funding, looking for devs. Various projects and cooperations ongoing. Also a cooperation with a university (?) regarding an algorithm for organizing human damage assessment (5 of 9, binary).

They didn't yet have time to integrate with Status, but are looking into it. He mentioned an XHR issue.

He believes in the multi token model, has good hopes in the Ethereum community remaining value based and brought up the idea of minting coins on risk.

Also told me Santander is supposedly working on an €-token.

The introduction of the startup brought up the following aspects:

At the core of an offer needs to be a *cost center* or *profit opportunity*

Supply chain and Billing are typical areas.

Path to commerce needs to be clear.

Who's the customer and how to get to it?

NRGcoin creates tokens based on green energy production. The developed so called gateway devices which measure production and mint accordingly. He afterwards explained me that they can combine this with AI/heuristics for validation (authentication), e.g. cross referencing the data with local weather at the time. Optionally DSOs can authenticate claims via smart meter readings (they can be incentivised to do so. The coin reflects kWh. It's not for p2p/currency trading, but for energy trading. Utility as a service. 1 coin can buy 1 kWh or green (only!) energy. Thus he said it's limited to markets with comparable price niveau. Meaning there can basically be no global NRGcoin market.

Seems not much interested in incorporating or business aspects in general. Academic perspective. Open to collaboration.

*[Daisee](#) is an open design program for people who consider Energy as a Common(s). Also self described as *decentralized lab.

Quotes:

We are not a startup

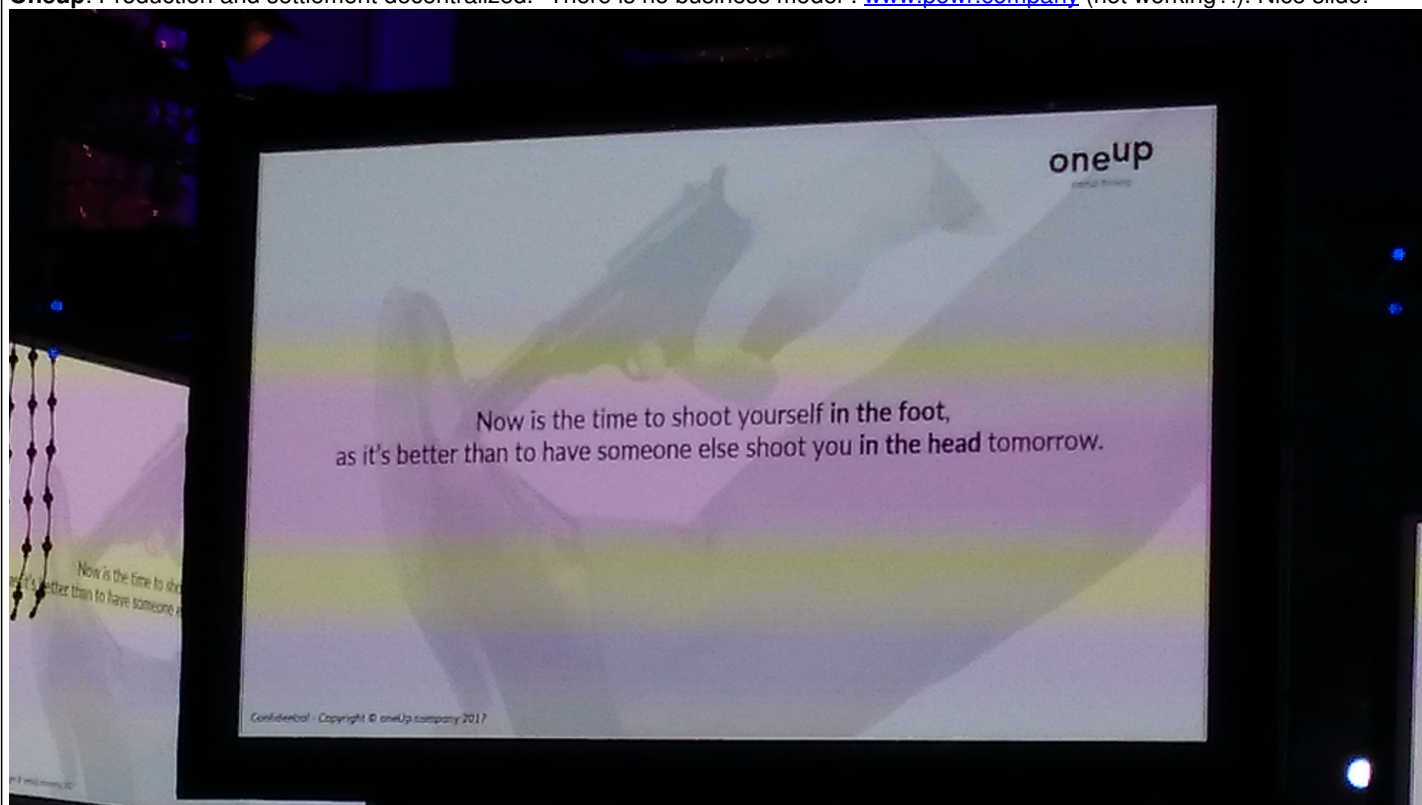
We mix orgs

We hybridize tech

We produce commons
Don't want *users*, but *engaged doers*.

Ledger has *Hardware oracles* (for authenticating produced energy) with secure MCU.

Oneup: Production and settlement decentralized. "There is no business model". www.powr.company (not working?!). Nice slide:



Consensys focused on Identity, showed a uPort demo (with Gnosis demo App).

Electron stressed that collaborative trading is needed in order to avoid lost opportunities.

[Adpteve\(freeel.io\)](http://Adpteve(freeel.io)) provides an *AI-aided energy app*. Learns from usage patterns, suggests improvements.

Solarchange Like frequent flyer for energy.

Netanel Rubin (Vaultra) did basically the same [talk as on 33c3](#), explaining that currently installed smart meters often suffered from serious security flaws. The audience seemed quite impressed.

In the following panel it was discussed how to solve this problem.

EVUs lack economic incentive to do proper security, as e.g. more expensive Hardware (secure elements...) may be needed to handle strong encryption. This was seen as analogous to the *IoT fiasco*. A possible solution could be clear liability definitions (e.g. who's liable if a device stops working because of a DOS attack?). As positive example they mentioned the banking system, where issuers of cards are liable for fraud because of technical weaknesses.

In general, current smart meters lack string auth and id. They're not ready for an open ecosystem.

It's also a problem if those teams having previously worked on analog meters are responsible, as they are not competent for the challenges in the digital sphere.

The regulator is also to blame. Often tenders don't really consider security, except maybe of commonplace statements like *state of the art security*.

In Germany the government tries to elaborate detailed security requirements. That may lead to good security, but bad extendability / unreadiness for future innovation like micro grid applications of the resulting devices.

A proposal supported by all panelists was to do a shared effort, involving e.g. the European network of cyber security, for elaborating recommendations - instead of the governments doing that themselves.

It was also stated that in Europe the situation so far isn't as bad as in the US.

In UK and another country I don't remember it's also problematic because they have smart home interfaces.

The Blockchain was considered to be helpful, because interacting with it implies at least some security features, e.g. PKI support.

Also, there seemed to be a consensus that decentralization would mitigate the problem.

The **final event** was introduced by Ed as *consensus by rhythm*. It was a show of 4 drummers (I'd guess inspired by the [Blue Man Group](#)), at the end also involving the audience.

Conclusion

The stated goal (by Ed) of *planting a seed* was probably achieved. The event was well organized and I guess quite impressive for most.

What surprised me that - except of the visual demo - Grid Singularity themselves didn't really show or tell anything about their system. The startups presenting weren't really related to the GS system as far as I could tell. It was all about getting consensus on the vision.

The focus of GS is basically community and mindset building. Which may be a sensible approach in this industry.

Despite not having shown anything tangible, it seems credible that serious technical work is taking place in the background.

Some personal thoughts I collected along the way:

There often seems to be a conflict between business mindset and the nature of Blockchain.

At some point a *startup pitcher* stated: "There is no business model".

Yet, it was an event with a lot of business and investment people.

The [GS ouverture](#) did well hinting at *social revolution*, *point of no return*, *disrupt yourself* etc. There was a lot of promotion of cooperation instead of competition.

GS seems to bet on the ability of existing players to evolve.

This is a very interesting experiment.

History

#1 - 18.02.2017 10:01 - didi

- Description updated

#2 - 18.02.2017 23:30 - didi

- Description updated

#3 - 18.02.2017 23:31 - didi

- Description updated

Files

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shoot_foot.JPG	1.03 MB	16.02.2017	didi