Hypercerts
for Regenerative Cryptoeconomics

Evan Miyazono, Ph.D.
Head of Network Goods, Protocol Labs
Section 1

just

Yesterday, people did things

^
Yesterday, people just did stuff:

People make stuff
People buy/fork/mod/steal stuff
“Seen” and “unseen” impact
Yesterday, people just did stuff:

People make stuff
People buy/fork/mod/steal stuff
“Seen” and “unseen” impact

**externality** (noun) -
an indirect cost or benefit to an uninvolved third party that arises as an effect of another party's (or parties') activity
Costs: construction
Revenue: parking
Positive externalities: (?)

Negative externalities: absorbs heat, poor runoff

Costs: water, etc
Revenue: apples
Positive externalities: $O_2$, $\text{CO}_2$
Negative externalities: (chemical treatments?)

**externality** (noun) -

an indirect cost or benefit
to an uninvolved third party
that arises as an effect
of another party's (or parties') activity

<table>
<thead>
<tr>
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<th>Rival</th>
<th>Non-Rival</th>
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<tbody>
<tr>
<td><strong>Excludable</strong></td>
<td>Private</td>
<td>Toll</td>
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<tr>
<td><strong>Non-Excludable</strong></td>
<td>Commons</td>
<td>Public</td>
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</tbody>
</table>
Costs: construction
Revenue: parking
Positive externalities: (?)

Negative externalities: absorbs heat, poor runoff

Costs: water, etc
Revenue: apples
Positive externalities: \( O_2 \), rainfall absorption
Negative externalities: (chemical treatments?)

Also just a simplified model
Yesterday, people just did things

You could try to account for all the impact (externalities) at all times...

Or you could account for the actions (work) at any time
Today, people can track actions
We have **Hypercerts** (noun) -

- a specific, interoperable data layer

- to account for actions

- that are expected to have positive impact

Analogous to equity interest in a non-profit enterprise

Today, people can track actions
We have **Hypercerts** (noun) - a specific, interoperable data layer to account for actions that are expected to have positive impact.

**Data fields:**
- Set of contributors
- Scope of work
- Time of work
- Scope of impact
- Time of impact
- Rights
We have **Hypercerts** *(noun)* -

a specific, interoperable data layer to **account** for actions

that are expected to have positive impact
Pilot app

http://pilot.hypercerts.xyz/

Atomic merge-and-split

- Initial state: $Y_i$ are existing hypercerts
- Owners propose alternative split $Z_i$ of the same region
- Required: $\sum Y_i = \sum Z_i$

Funding the Commons

June 24th, 2022

Hypercerts: on-chain primitives for impact markets

David Balymple, Protocol Labs
Pilot app

Live on the Goerli testnet

Backend is an ERC-3525

https://github.com/Network-Goods/hypercerts-protocol
Tomorrow, people will coordinate in new ways
We’ll start with new funding programs:

Like a bounty/prize, but...
- pledge to award the team and anyone who supported them
- in a proportion that was previously agreed upon
Tomorrow, people will coordinate in new ways

We’ll start with new funding programs:

All the de-risking + causal impact of prospective funding
All the hindsight of retrospective funding
Tomorrow, people will coordinate in new ways

They’ll cascade in time
Tomorrow, people will coordinate in new ways

They’ll overlap in scope
Tomorrow, people will coordinate in new ways

They’ll generalize

- Teams
- Activities
- Grants (pay & pray)
- Simple decision
- Hypercerts
Tomorrow, people will coordinate in new ways

They’ll generalize

- **Funding object**
  - Teams
  - Activities

- **Types of funding**
  - Grants (pay & pray)

- **Decision mechanism**
  - Simple decision

- **Data layer**
  - Hypercerts
Tomorrow, people will coordinate in new ways

They’ll generalize

- Teams
- Activities
- Outputs
- Outcomes
- Impact

- Grants (pay & pray)

- Simple decision

- Hypercerts

- Funding object
- Types of funding
- Decision mechanism
- Data layer
Tomorrow, people will coordinate in new ways

They’ll generalize

- **Funding object**
  - Teams
  - Activities
  - Outputs
  - Outcomes
  - Impact

- **Types of funding**
  - Grants (pay & pray)
  - Bounties (committed payment)
  - Retrospective evaluation (uncommitted, but predictable payment)

- **Decision mechanism**
  - Simple decision

- **Data layer**
  - Hypercerts
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Funding mechanism

- Funding object
  - Teams
  - Activities
  - Outputs
  - Outcomes
  - Impact

Types of funding

- Grants (pay & pray)
- Bounties (committed payment)
- Retrospective evaluation (uncommitted, but predictable payment)

Decision mechanism

- Simple decision
- S-process
- Auction
- QV / QF

Data layer

- Hypercerts
Here’s the timeline.

2023 - Q1
Security audit of smart contract, compliance checks, and mainnet launch
Expect hackathons, program recruitment, integration with Gitcoin, etc.
Upcoming capabilities: Merge+split; evaluation

2023 - Q3
Estimated $50M allocated via in Hypercerts
(we’re not taking fees; there’s no business model in sight)

beyond
The world has a new revolutionary coordination system.
Acknowledgements:

I.e. people doing the real work

Network Funding Team

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Alex Thiel

RaidGuild

SuperModular.xyz
  - Kevin Owocki
  - Octavian Todirut

PL + Juan for support
Join us!

Evan Miyazono
Head of Network Goods, Protocol Labs
evan@protocol.ai

Do you want to help implement this?
Do you want to build front-ends for this?

Funding the Commons:
Lisbon, Oct 26, Convento
fundingthecommons.io
commons@protocol.ai
@FundingCommons

Do you want to discuss this and other coordination systems?

Hypercerts:
hypercerts.xyz
(tg linked)
hypercerts@protocol.ai