



**BLOCKCHAINS
FOR SOCIAL GOOD**

EIC HORIZON
prize

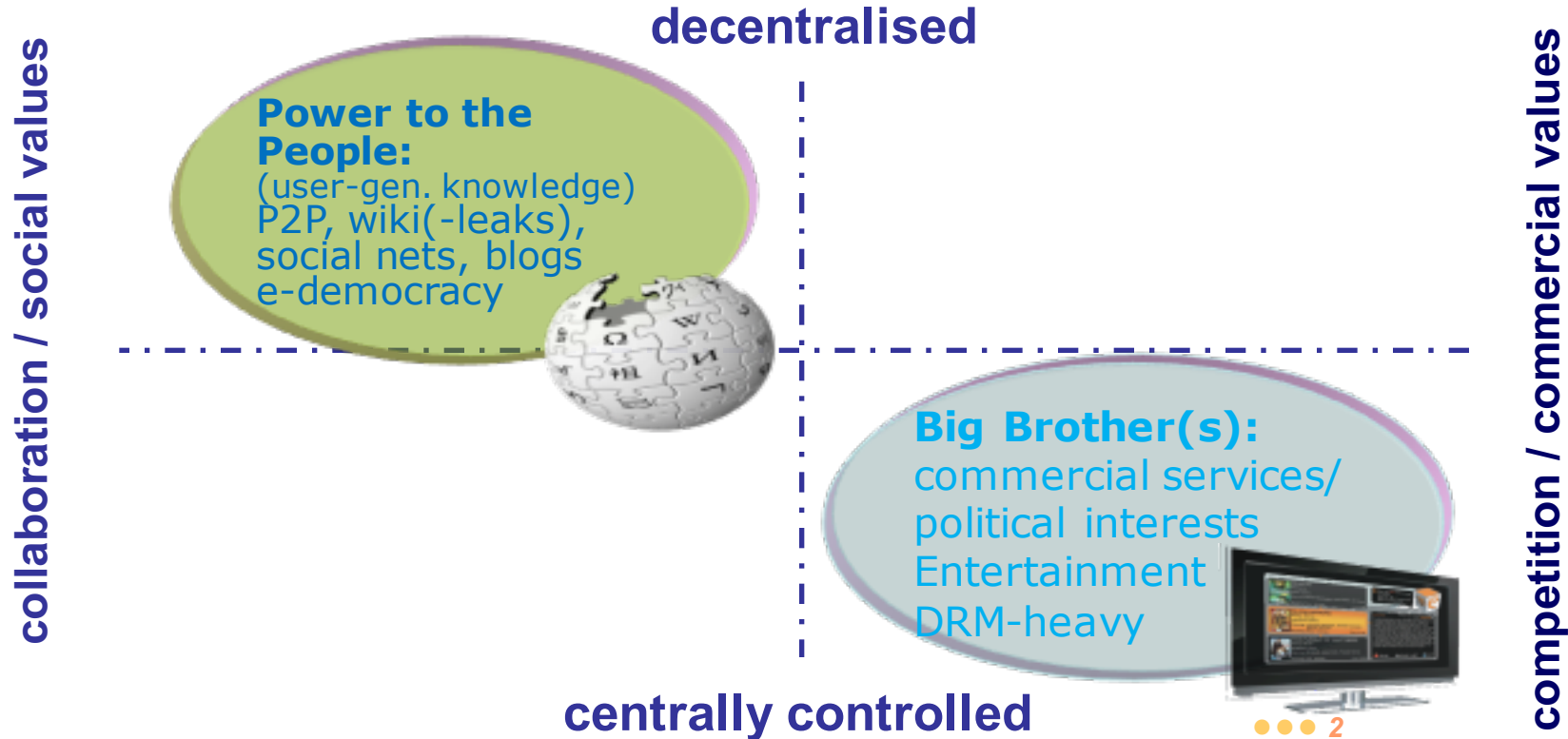
Blockchains for Social Good

Fabrizio Sestini
DG CONNECT E3
Next-Generation Internet

* The personal views expressed in this presentation do not engage the position of the European Commission

Future Internet dimensions (in 2010)

(Oxford Internet Institute Study on Technological, Social and Economic aspects of FI
http://cordis.europa.eu/fp7/ict/fire/docs/tafi-final-report_en.pdf)

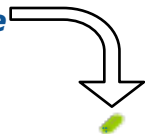


... and today?

European
Commission

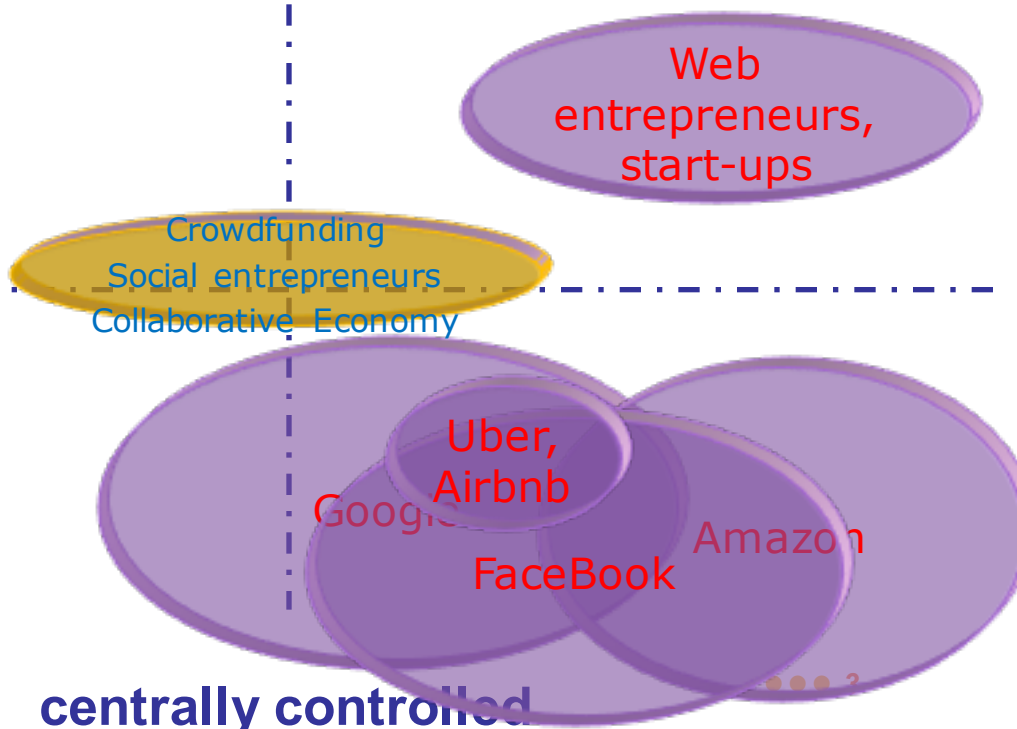
decentralised

Power to the People



collaboration / social values

competition / commercial values



centrally controlled

Why decentralisation?

Centralised	Decentralised
One choice	Multiple choices
Monopoly	Network neutrality
Proprietary solutions	Open standards, open source
Clouds	Community networks
Monitoring	Privacy
Artificial Intelligence	Collective Intelligence
Asymmetric data flows	Decentralised data governance

the goal: creating a decentralised innovation ecosystem

- **Open to new entrants and open innovation:**

Low entry barrier to access big data
privacy-by-design business models

- **Open to new services: allowing more SMEs and social enterprises to implement social innovation**

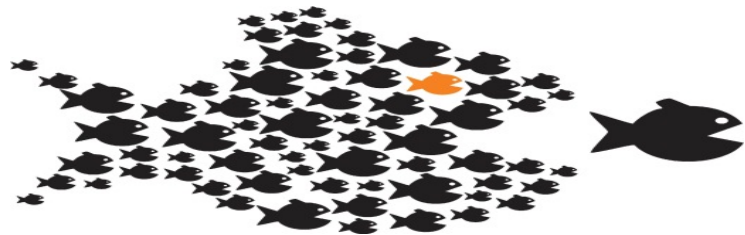
for collaborative public services
collaborative economy
collaborative making
participatory consumption
environmental action
citizen science
open policy making and open democracy



*"Individually, we are one drop.
Together, we are an ocean."
Ryunosuke Satoro*



CAPS - Collective Awareness Platforms for Sustainability and Social Innovation



Creating awareness of sustainability challenges - and of bottom-up collaborative solutions

Harnessing network effects and collective intelligence

Developing solutions with real communities of citizens

Supporting new economic models beyond GDP

Based on open data, open source and open hardware participatory innovation paradigms

Requiring participation of at least two non-ICT partners

Appealing to new grassroots actors: social entrepreneurs, students, hackers, civil society organisations

<http://ec.europa.eu/digital-single-market/en/collectiveawareness>

CAPS projects





➤ ***DEcentralised Citizens Owned Data Ecosystem***

- **Data sovereignty for citizens**
- *tools that **put individuals in control***
 - **of whether they keep their personal information private or share it for the common good**
 - **Developing a free and open source ecosystem of tools, validated in real life context**
 - **using decentralised algorithms based on blockchains**
 - **Creating robust open standards**
- *Involving*
 - **technological actors** (*P2P, blockchains and open source developers, open hardware manufacturers, experts in security, encryption*)
 - **civil society organisations** (*local communities, digital rights advocacies, artists, social scientists*)
 - **developers of the overlying social applications and systems** (*creative industries, SMEs, social entrepreneurs, software developers*)

*featured by **Financial Times** as "creating an alternative data ecosystem" and "redesigning the digital economy by enabling users to control their own data" – thanks to Blockchain.*

<http://decodeproject.eu/>

EIC Prize on "Blockchains for Social Good"

European
Commission

- *"To develop scalable, efficient and high-impact **decentralized solutions to social innovation challenges** leveraging Distributed Ledger Technology (DLTs), such as the one used in blockchains"*
- *"Targeting social innovations in which decentralized solutions based on DLTs have shown **clear benefits over conventional centralised platform solutions** "*
- ***5 awards of €1 Million each**, corresponding to different social application areas*
- *Deadline for registration of interest: 2 April 2019*
 - *at ec-bc4good-prize@ec.europa.eu*
- *Deadline to **submit** applications: **3 September 2019** at 17:00 CET*

- <https://youtu.be/IBzdmbV0Yug>

EIC Prize on "Blockchains for Social Good"

European
Commission

Application areas:

- a) demonstrating the **origin** of raw materials or products and supporting fair trade and the fair monetization of labour;
- b) allowing for a greater visibility of public spending and a greater **transparency** of administrative and production processes;
- c) participation in **democratic decision-making** by enabling accountability, rewarding of participation and/or anonymity;
- d) enabling the development of **decentralized social networks or clouds**, or of decentralized platforms for the collaborative economy;
- e) managing property, land registry or other **public records**;
- f) contributing to **financial inclusion**;
- g) **any other** area not listed above.

EIC Prize on "Blockchains for Social Good"

European
Commission

Open to any legal entities (i.e. natural or legal persons, including international organisations) or groups, worldwide:

- **Individuals**
- **Social entrepreneurs**
- **Civil society organisations**
- **Academia/research centers (in humanistic and life sciences)**
- **Creative industries**
- **Start-ups**
- **SMEs**

*Participants are required to release their source codes under an **Open Source Licence***

Award criteria:

European
Commission

- ❑ **Positive social impact:** both potential and already achieved (e.g. size of the community of users, TRL7 or more)
- ❑ **Decentralization and governance:** improvements in transparency (respecting privacy) compared to centralised solutions, based on **multidisciplinary** considerations across technological (computing, programming, etc.), social (sociology, psychology, art, etc.) and economic (innovation, new economic models, etc.) sciences
- ❑ **Usability, inclusiveness,** affordability, in order to **engage** and include citizens at large irrespective of their gender, background, financial capabilities or computer skills
- ❑ **Viability at large scale:** cost-efficiency (including energy consumption), scalability, security, sustainability
- ❑ **Clear added value for European citizens:** novelty, effectiveness compared to existing centralised solutions, other societal, environmental or economic aspects

Rules of contest for the EIC Prize on "Blockchains for Social Good"

European
Commission

In each application area, if there are more than 5 applications, there will be a **pre-selection** phase to select the best 5 applications to pass to jury review

The **jury** will have a **multidisciplinary composition**, including technological, social and economic competences

Criterion	Threshold	Maximum points
1. Positive social impact	3	6
1. Decentralisation and governance	4	6
1. Usability and inclusiveness	3	6
1. Viability at large scale	3	6
1. European added value	4	6
Overall Score	18 (overall threshold)	30

Page limit: **30 pages** (see template for Part B at https://ec.europa.eu/research/participants/data/ref/h2020/other/prizes/contest_at/h2020-prizes-at-bc-social-good_en.pdf)

Rules of contest for the EIC Prize on "Blockchains for Social Good"

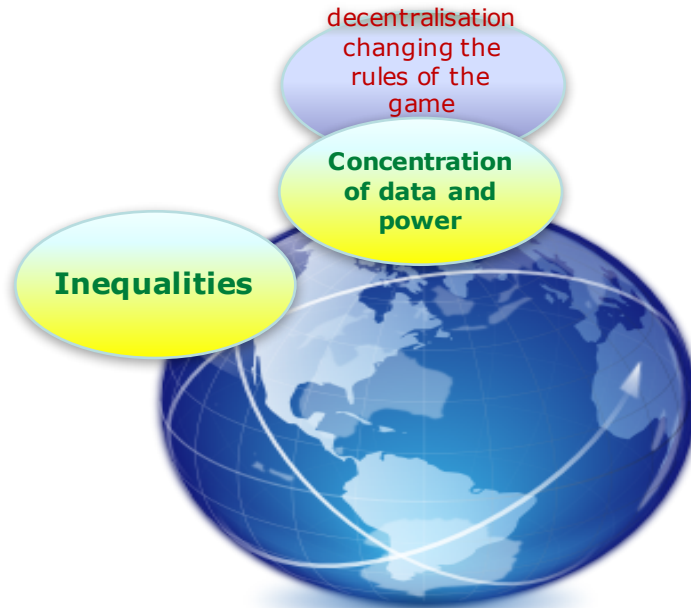
European
Commission

The **best 5 applications in each application area** will be invited as finalists to demonstrate and discuss their solution during a **hearing** with the jury

The finalists should be available to **demonstrate and discuss their applications during a public event** expected to take place in the last quarter of 2019 in Brussels

The prizes will be awarded (at latest in February 2020) to the **best 5 solutions which address different application areas** (each prize in a different area)

Next-generation Internet: trends and challenges



Trends
Challenges
Visions?

more digital = more inequality?



Next-generation Internet: trends and challenges

European
Commission

Trends
Challenges
Visions?

*Decentralised
Innovation
Ecosystems*

Openness
Open Data
Fair usage

decentralisation
changing the
rules of the
game

**Concentration
of data and
power**

Inequalities

**(need for)
Sustainability**

Circular
(Social)
Economy
Ethics

Digital divide

Inclusion
Ethics

**Artificial
Intelligence
IoT**

Transparency
Ethics

*New Economic models
beyond GDP
Incentives
Social entrepreneurship*

**Lack of
Privacy
Monitoring
Profiling**

**Innovation
(social vs.
technological)**

Level playing
field
network neutrality

Democratic
Participatory
Transparent

*Multidisciplinarity
Engaging citizens
New ethical priorities for ICT R&I*

NGI Open Internet initiative

Research areas open in 2018

- *a) **Privacy and trust enhancing technologies:** to help users achieve greater control when sharing their personal data*
- *b) **Decentralized data governance:** explore new distributed data management systems based on P2P and **Blockchains**, paying attention to ethical, legal and privacy issues*
- *c) **Discovery and identification technologies:** to access heterogeneous data sources, services, objects and sensors, devices, content, etc.*

Manifesto for Digital Social Innovation

sign at <https://www.dsimanifesto.eu>

1. Openness and Transparency

- **Mandate Open-Source, Promote Open Data, Sustain Open Knowledge**

2. Democracy and decentralization

- **Accelerate democracy projects, Showcase open democracy, Promote awareness**

3. Experiment and adopt

- **Bring together, Set technological priorities, Public adoption**

4. Digital skills and multi-disciplinarity

- **Promote digital skills, More ICT curricula, Incentives for multi-disciplinarity**

5. Sustainability

- **Shift funding governance (from lobbies to bottom-up), Methodology, Additional sources**

Thank You

European
Commission

"I'm still an optimist, but an optimist standing at the top of the hill with a nasty storm blowing in my face, hanging on to a fence.

We have to grit our teeth and hang on to the fence and not take it for granted that the web will lead us to wonderful things."

Sir Tim Berners-Lee, Nov. 2017

Digital Social Innovation (DSI), CAPS:

<https://ec.europa.eu/digital-single-market/en/collective-awareness>
fabrizio.sestini@ec.europa.eu

#EICHorizonPrize #BC4good [ec-bc4good-prize@ec.europa.eu](https://ec.europa.eu/research/eic/index.cfm?pg=prizes_blockchain)

https://ec.europa.eu/research/eic/index.cfm?pg=prizes_blockchain