Best Practices for Collaborative Economy Platforms

— P2Pvalue Guidelines —

Samer Hassan
Primavera De Filippi
Benjamin Loveluck

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 610961

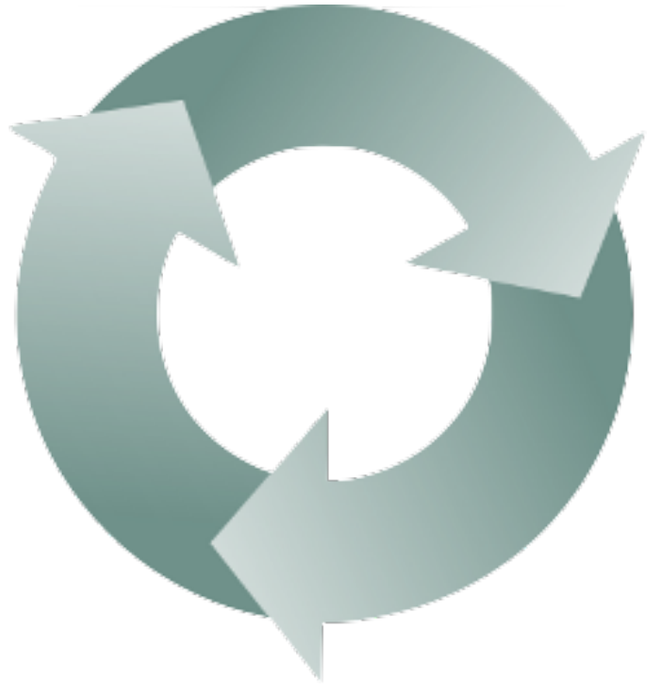
http://www.p2pvalue.eu

Introduction

- The result of extensive research undertaken by the P2Pvalue project (2013-2016, http://www.p2pvalue.eu)
- **Objective**: provide a set of "**best practices**" regarding the digitally-enhanced social, technical and legal organisation of **commons-oriented collaboration**
  - **Value metrics, reputation & rewards**
  - **Governance & participation**
  - **Privacy, licensing & forking**

Lean process

- General **principles and guidelines** were established to inform design and development of the P2Pvalue platform **Teem** and its underlying decentralized architecture **SwellRT**
- These were then **tested** to:
  - Ensure **validity** with real user needs
  - Flesh out more specific **value propositions and features** for collaborative communities
- The **lean process** involves:
  - **Ongoing** feedback and fine-tuning
  - Combining both **bottom-up** empirical work and **top-down** agenda of promoting autonomy



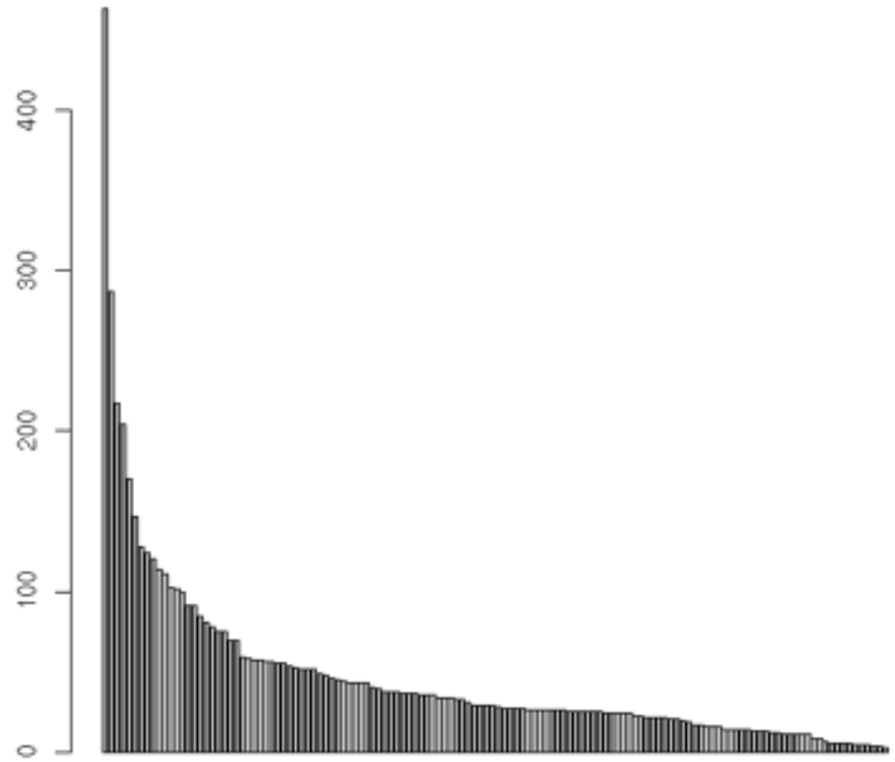
An ongoing collaborative effort

- **Ethnographic research** (UNIMI)
- **Software testing** (UCM)
- **Data collection and analysis** (UAB)
- **Surveys** (P2PF and UAB)
- **Techno-legal analysis** (CNRS)

Value Metrics, Reputation & Rewards

Incentives for participation

- Straightforward **registration, identification and permission** system
- **Public presentation of profiles**
- Clear **identification of tasks and priorities**
- **Filtering system** (e.g. by classifying contributions using tagging/hashtags)
- Easily accessible **public discussion spaces** (e.g. chatrooms, BB-style forums, Q&A sites such as Reddit or Quora)
- **Search features** for people and content (by hashtag, skills etc.)
- Easy **integration of 3rd party** communication tools/social media already in use



Roles

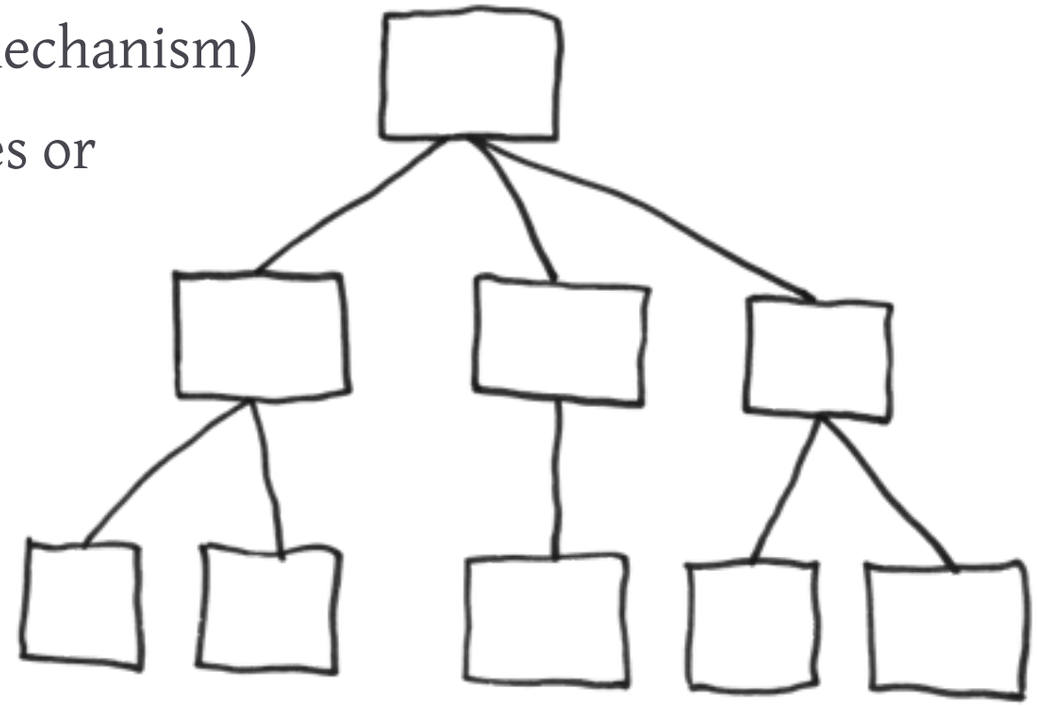
- '**Endorsements**' or maybe even a mentoring system for newcomers
- **Social capital indicators**, displaying bonding, bridging; strong and weak nodes within the community
- **Dynamic role allocation**, assigned to people based on their contribution / activities
- Formal system of **task delegation** for sharing responsibilities within a community

Reputation & status

- **Participation metrics**
  - based on clearly documented **objective activity** metrics and indicators (posts published, ‘likes’ received etc.)
  - based on **subjective** metrics (requires qualitative evaluation by others, even if less precise and not easily comparable)
- Incentives for **evaluating the work of others** (e.g. providing reviews, rankings other’s contributions, behaviours, etc.), but also make sure that excessively negative evaluations are checked

Rewards & privileges

- **Dynamic meritocracy**
  - **Membership status** or 'badges' (e.g. Arduino medals)
  - Associated **privileges** according to level of achievement: admin rights, moderation powers, decision-making privileges etc.
- **Rewards system** adapted to the type of community
  - **Appreciation-based** systems (e.g. 'thanks' mechanism)
  - **Direct rewards** such as alternative currencies or transferrable credits or tokens
    – Note: to avoid the emergence of market logics, credits can be made to expire after a certain time and/or be made non-transferrable



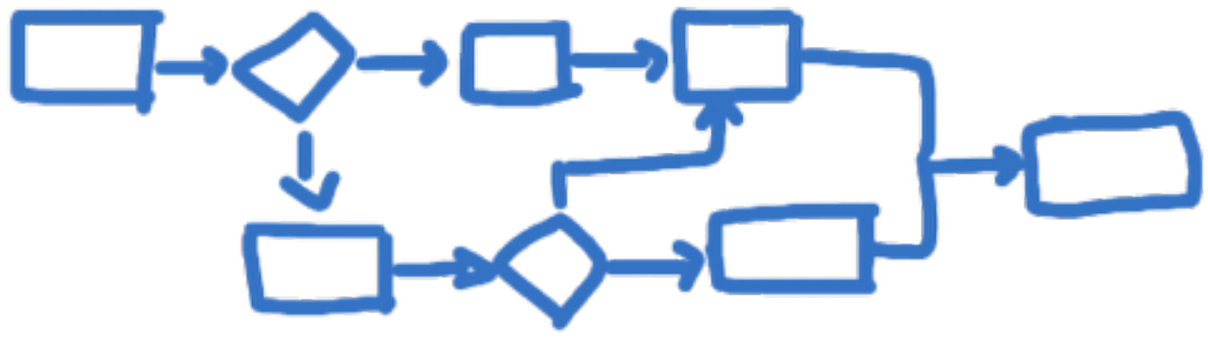
Governance & Participation

Governance structure

- **Explicit** governance structure
- Well-defined **needs and responsibilities**
  - Emerging according to level of involvement
  - Or following bottom-up assignment
- **Data visualisation** providing a clear picture of:
  - Different roles within the community
  - Power-law distribution of contributions to the community
  - Social mobility within the community

Decision-making

- **Transparency** in decision-making (e.g. by providing explicit ways to mark, broadcast and log decisions)
- **Deliberation tools** (e.g. Loomio) for assembly organisation, discussion forums, etc.
- **Decision-making tools**
  - Providing specific voting & balloting systems (e.g. Condorcet method) etc.
  - With various hierarchies of votes (actual voting, referendum, opinion polls etc.)
  - With possibilities for vote-delegation (e.g. liquid democracy)
  - Perhaps different weight to different members (e.g. based on their reputation)
- **Video conferencing** for taking part remotely in the decision- making process



Knowledge sharing

- **Data accessibility and portability**
- **Open access**
  - Share all user-generated content by default...
  - ...but allow for different degrees of permissions (from individual to group, community, and public domain level)
- **Explicit space compiling the list of decisions** taken by the community (e.g. statements, timeline, minutes-board etc.)
- **Extensive archiving** for reference purposes (debates and decisions, documentation, past versions of documents, video tutorials etc.)
- **Content taxonomies**
- **Full-text search**

Communication

- **User ‘dashboard’** aggregating information from different sources
- **Selective filtering** of information to keep different 'layers' of communication distinct
- **Granular notification settings**
- **Interoperable communication channels**
  — linking with popular social networks

Online vs. offline

- **Mobile version first** (especially in the case of offline scenarios)
- **Mechanism for easy digitization, storage and distribution** of documents or other content produced offline, for both the community itself and for the wider public
- **Account for contributions or simple participation in physical meetings**
  - e.g. through a check-in/check-out feature
  - e.g. using metrics, such as the number of events organised or contributed
- **Solution for resource allocation** (when physical resources are needed but scarce)
  - e.g. online calendar and reservation system

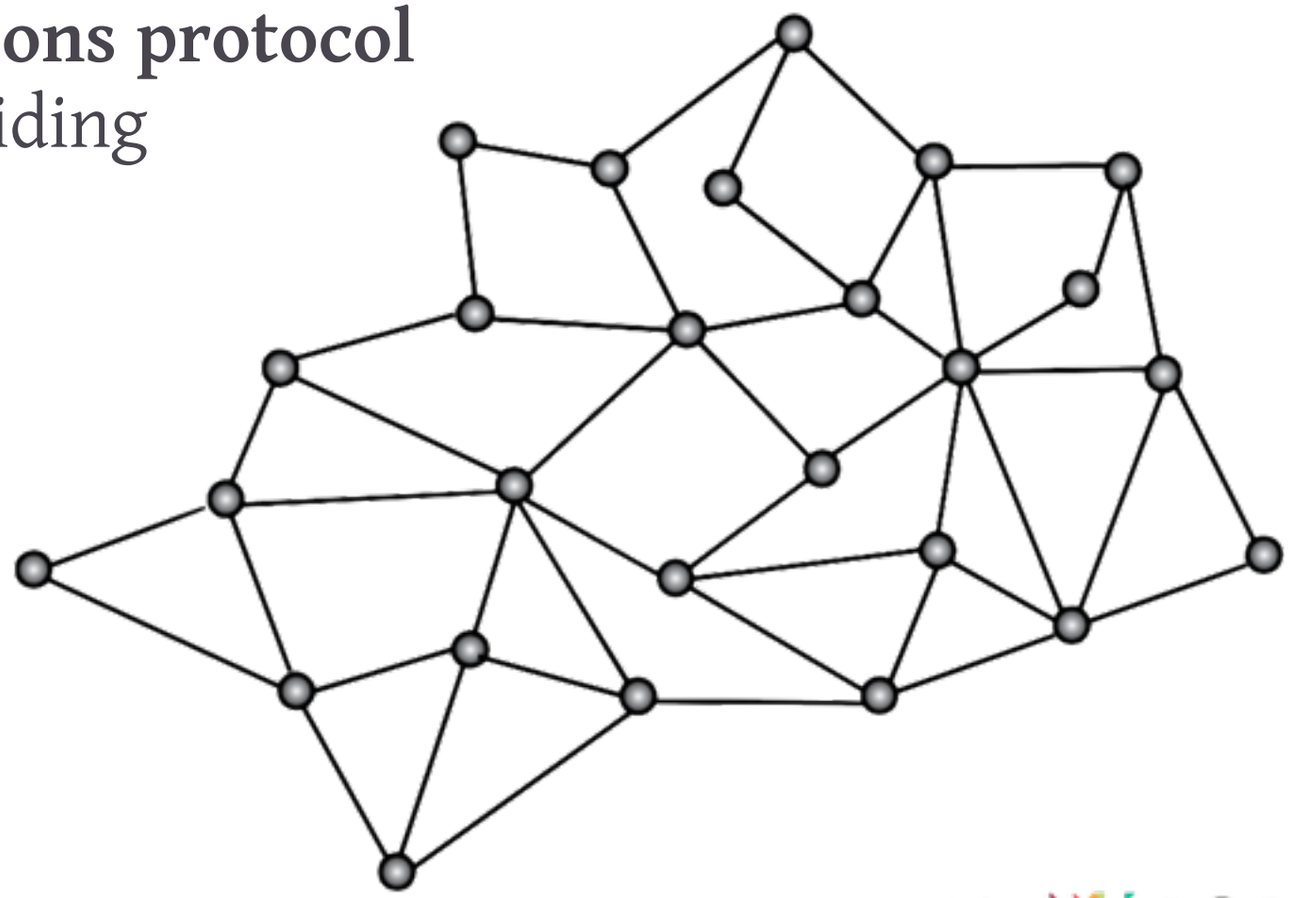
Privacy, Licensing & Forking

Privacy by design

- **Anonymous or pseudonymous participation**
  - Only require basic user information to access a platform's default functionalities
  - Further registration required to access more advanced functionalities (e.g. Wikipedia)
- **Customizable privacy settings**, specifying which kind of information and data can be shared and with whom
- **Tools for self-management of privacy**, where users should:
  - Have complete control over their data, including ability to delete their profile
  - Be able to grant access rights to the files they want to share specifically with a member or group of members
- **End-to-end encryption by default**
  - End-to-end encryption for communication between users
  - Server-based encryption for personal data stored on the server, e.g. passwords

Decentralized architecture

- Whenever possible, **decentralized infrastructures** (e.g. peer-to-peer networks) should be preferred despite the technical and organisational challenges they may sometimes present
  - When decentralization cannot be achieved, **federated architectures** can be adopted as hybrid solutions
- **General-purpose communications protocol** in the form of a public API, providing some basic functionalities: data storage, real-time collaboration etc.
- **Forking feature** allowing code to be 'detached' from main project to easily create sub-projects



Licensing

- **Free licenses as default option** for all community projects
  - But allowing for other options such as is the case with Creative Commons.
  - Cases combining free and exclusive rights licensing should also be provided for
- **Clear information on licensing schemes** (including license compatibility)
- **Free software licence for the platform**, to allow forking of the project itself
- **Visualisation of forks and branches** of community projects, like on Github
- **Contributor License Agreement (CLA)**, in order to ensure compliance with the community's choice of license