

The value of (digital) social innovation: how to describe it and how to support its growth

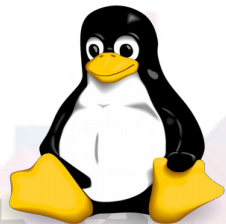
David Rozas (University of Surrey), Mayo Fuster Morell (Universitat Autònoma de Barcelona) and many others

This work was partially supported by the Framework programme FP7-ICT-2013-10 of the European Commission through project P2Pvalue (grant no.: 610961).

Value creation in Commons-Based Peer Production: dimensions of value

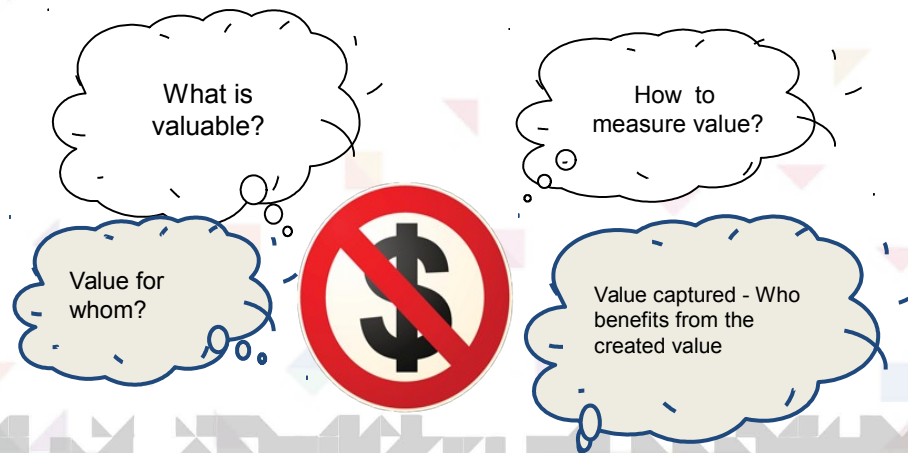
What is Commons-Based Peer Production (CBPP)?

- Spreading to diverse areas: open science, open agriculture, Peer-to-peer urbanism, etc. (Fuster Morell et al., 2014)
- **Collaborative process**
- **Peer-based:** different levels of structure depending on the process, but not mainly based on contractual obligations nor coercion
- **Commons-process:** process driven by the general interest, results in openness of the resources
- **Favouring reproducibility:** via Free Software or Creative Commons licenses, exchange of practices, etc.



Value creation in CBPP

- Today, focus on one of the research sub-questions: **how does value creation function in Commons-Based Peer Production?**
- Traditional theories of value do not apply to CBPP
- Alternative strategies to assess value

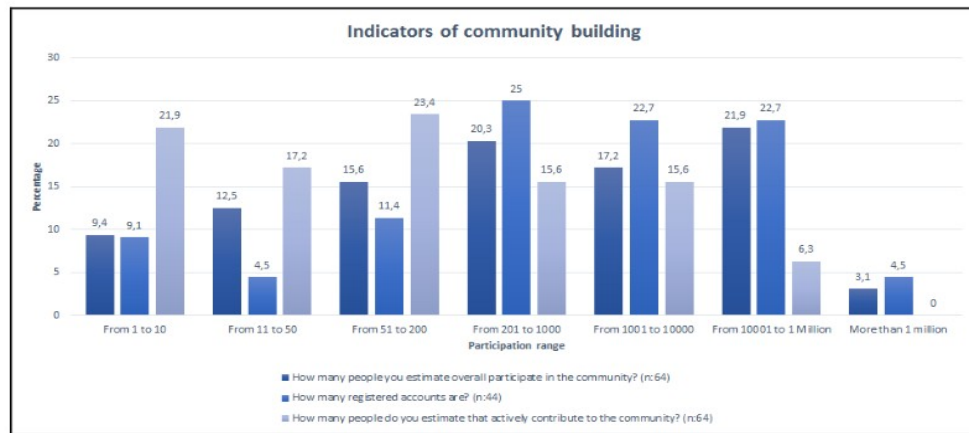


Dimensions of value

- Value as a plural concept:
 - Community building
 - Mission accomplishment
 - Monetary flow
 - Social use value
 - Reputation

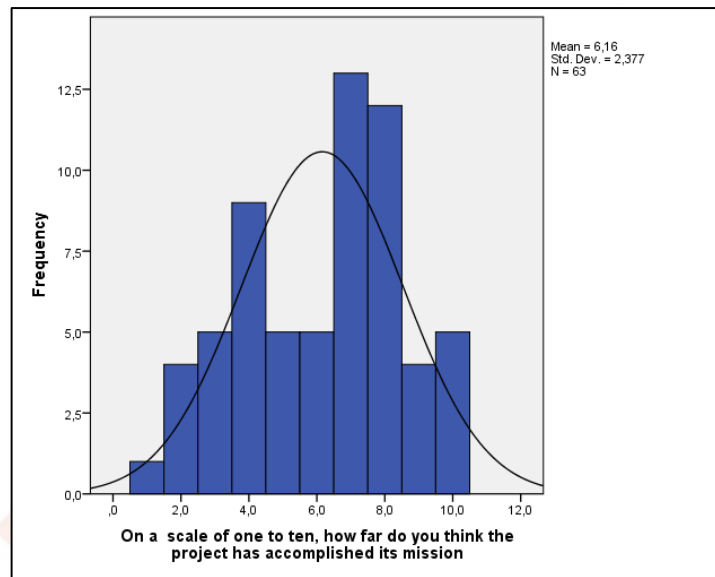
Dimensions of value: community building

- Refers to the indicators of participation and interaction within the community
 - As a productive result *per se*
 - As implicit indicator of perceived value (Wenger et al., 2011; Kelty, 2008)
- Results:
 - Scale of the communities is extremely variable
 - Power law (around 1/9/90) is present in the communities



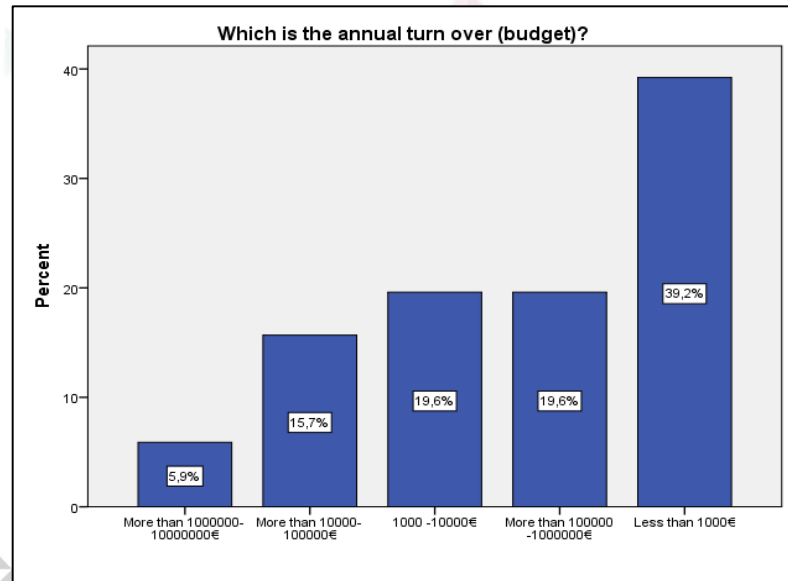
Dimensions of value: mission accomplishment

- Refers to the self-evaluation of mission achievement
- Results:
 - Projects are quite satisfied
 - Half the cases assign themselves a score between 7 and 10



Dimensions of value: monetary flow

- Although does not capture core value, necessary to consider (especially for hybrid cases)
- Annual budget of the project
- Results:
 - 39% of cases have budgets of less than 1,000€



Dimensions of value: Value use & reputation distribution CBPP ecosystem

- Social value: refers to its usage or adoption
- Reputation: referring to external (and proprietary) indicators of reputation, such as Google Page Rank, Alexa, etc.
- Results:
 - CBPP cases have a typical range of value creation or “success” that is relatively high:
 - 50% at least 2.800 Twitter followers and 3.000 Facebook likes
 - 10% of the sample very successful (Rank lower than 3000 in Alexa)

Dimensions of value: social use & reputation distribution

Indicators of reputation and social use (usage or adoption)

Google Page Rank, Alexa, Kred, Twitter followers, & Facebook likes

Strong correlation between them

Indicators available for all cases, but corporate based and non transparent



Urge an open CBPP oriented indicator of value

New indicators of value: more in-depth example

New indicators of value: in-depth example

- Previous results looking at these dimensions on CBPP cases as unit of analysis
- But similar issue of need of new and open indicators of value within the communities themselves in individual level
- More in-depth example of a FLOSS case study: Drupal

Case study: what is Drupal?

- A free software framework to build web applications
- More than 2% web (W3C, 2015). Including whitehouse.gov, data.gov.uk, louvre.fr, mtv.co.uk, blogs.aljazeera.com, etc.
- Currently +1M users registered at Drupal.org, +30k code contributors(Drupal.org, 2014a)
- Hundreds of local F2F events, dozens of camps and cons in 4 continents (Drupal.org, 2014b)



Contribution

- A blurry notion: meanings constantly evolving as part of negotiation processes between the participants
- Critical in CBPP communities focussed on digital commons: economy of contribution [not based on direct reciprocity] rather than economy of gift [based on direct reciprocity] (Wittel, 2013)



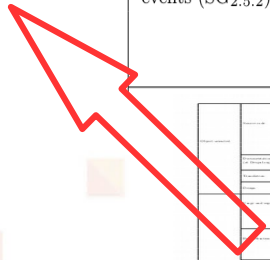
Contribution: “code-centrism”

- **“Code-centrism”:**
- In FLOSS literature: typically looking at source code as main notion of contribution
- In FLOSS communities: “Talk is silver, code is gold”
- What about other contributions?

Contribution beyond source code

- Two main types emerged, according to the focus of action:
- **“Object-oriented”**: source code, documentation, translation, etc.
- **“Community-oriented”**: usage & support, online community management, training & mentoring, organisation & participation in F2F events, etc.
- Suggestive, not exhaustive, list

Organisation and participation in F2F events (SG2.5)	Local events (SG2.5.1)	Organisation of the event (e.g. logistics)
		Give talks, run workshops, etc.
	DrupalCamps / Drupal Dev Days / Frontend United and other regional or role-specific events (SG2.5.2)	Attendance to the event
		Organisation of the event (e.g. logistics, selection of presentations, etc.)
		Creation of the website, social media management, etc.
		Prepare a presentation
		Run a BoF (Birds Of a Feather)
		Attendance to the event



Event name	Event description	Event date	Event location	Event type	Event status	Event contact	Event notes
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-01	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-02	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-03	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-04	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-05	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-06	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-07	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-08	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-09	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-10	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-11	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-12	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-13	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-14	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-15	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-16	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-17	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-18	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-19	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-20	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-21	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-22	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-23	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-24	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-25	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-26	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-27	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-28	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-29	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-30	Brussels	Local event	Completed	DrupalCamp	
DrupalCamp	DrupalCamp is a series of events that bring together Drupal developers and users from around the world to share knowledge and experience.	2015-07-31	Brussels	Local event	Completed	DrupalCamp	

Relevance of community-oriented contributions: newbies

“[...]indeed, the fact of attending these meetups, it was really good. Because you realise there are people behind the source code, right? There are people behind the modules. And you meet people that can tell you this kind of personal stories.[...] And then, it stops being something anonymous, it becomes something yours.”

Drupal developer and devop, 1.5 years. Original reply in Spanish.

- Drupal becomes a community, avoid barriers, increases the will for reciprocity, etc.
- Also for experienced: increase of commitment, avoid to burnout, etc.

Relevance of community-oriented contributions: scaling up

“Because the community is growing, then you have less of a sense of community. But I think the solution to that is to have smaller local communities.

So, you know, as the worldwide community grows, then you start finding, like whereas before it might have been 50 people worldwide, now you have like 50 people in your part of London, or wherever.”

Drupal themer and developer, 11 years.

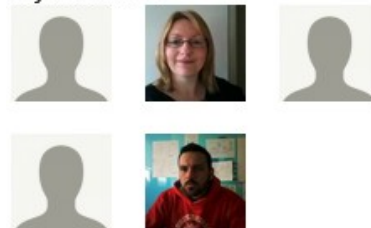
- Local activities help to scale up the sense of community, as it grows

Example of community-building indicators

- Drupal community working on that direction:
improve how these activities are represented in the user profiles at Drupal.org, to “[...] go beyond code creation activity and into more community-oriented stuff, since that’s also a huge part of what makes Drupal healthy.” (Drupal.org, 2014a)

Value of community-oriented contributions reflected in platform

My mentors:



2 people list drozas as a mentor

Conclusion

- Example of adaptation of socio-technical systems to include new dimensions of value, by communities themselves.
- Additional challenges and horizons of values systems: need to keep on exploring conceptualisation and incorporation of value in CBPP communities
- Not only due to socio-cultural reasons, also technical limitations.
 - Need for decentralised infrastructure
 - Need for open indicators of value in CBPP

Economic sustainability in CBPP

Profitability vs non-profitability of infrastructure provision

- 57% of the cases are non-profits
- Non-monetary contributions are considered relevant: 51% assign 10/10 value
- Most of the work is voluntary, but people are hired when growing: 45.8% have hired people
- Monetary exchange interactions are very low (only 4% often)

References

- Benkler, Y. (2006). The wealth of networks: how social production transforms markets and freedom. Yale University Press.
- Fuster Morell, M. et al. (2014). Theoretical synthesis: Final theoretical synthesis of WP1, including research reports on data collection. http://p2pvalue.eu/sites/default/files/u28/D12_31July_TheoreticalFindingsA%20%281%29.pdf
- Wenger, E., Trayner, B. & Laat, M. de, 2011. Promoting and assessing value creation in communities and networks: A conceptual framework, Ruud de Moor Centrum The Netherlands.
- Kelly, C. M. (2008) Two bits: The cultural significance of free software. Duke University Press.
- Drupal.org (2014a). <https://www.drupal.org/>
- Drupal.org (2014b). Drupal upcoming events. <https://groups.drupal.org/events>
- Engeström, Y. (1987). Learning by expanding. An activity-theoretical approach to developmental research.
- Wittel, A. (2013). Counter-commodification: The economy of contribution in the digital commons. Culture and Organization, 19 (4), 325, 327–328.
- Marlow, J., Dabbish, L. & Herbsleb, J. (2013). Impression Formation in Online Peer Production: Activity Traces and Personal Profiles in Github. In Proceedings of the 2013 Conference on Computer Supported Cooperative Work (pp. 117–128). CSCW '13. San Antonio, Texas, USA: ACM. doi:10.1145/2441776.2441792
- Stewart, D. (2005, October). Social Status in an Open-Source Community. American Sociological Review, 70 (5), 823–842. Retrieved from <http://search.proquest.com/docview/218806561?accountid=17256>
- Hardt, M. (1999). Affective labor. Boundary 2, 26 (2), 89–100.
- Images:
 - <http://caps-conference.eu/wp-content/uploads/2014/12/Logo-caps-2015-logo-no-back.png>
 - <http://upload.wikimedia.org/wikipedia/commons/a/af/Tux.png>
 - <http://upload.wikimedia.org/wikipedia/commons/5/53/Wikipedia-logo-en-big.png>
 - http://upload.wikimedia.org/wikipedia/commons/d/d7/Amsterdam_Fab_Lab_at_The_Waag_Society.JPG
 - http://farmhack.net/sites/default/files/The%20Garlic%20Master%20001_0.JPG
 - http://www.colaborabora.org/wp-content/uploads/sites/7/2011/10/CBB_diapoPROCOMUN1.jpg
 - <http://www.garfieldtech.com/presentations/sfsf2012-drupal8/images/lego-druplicon.jpg>
 - <http://www.siftdigital.co.uk/sites/default/files/drupal-community.png>
 - https://www.drupal.org/files/druplicon.large_.png
 - <http://blog.101financial.com/wp-content/uploads/2014/03/Making-A-Contribution-To-Society.png>
 - Screenshot from <https://drupal.org/contribute> , retrieved 11th November 2014
 - Screenshot from <https://www.drupal.org/user/> , retrieved 24th March 2015 (not available unless logged in)
 - Screenshot from <https://www.drupal.org/u/webchick> , retrieved 5th November 2014
 - Screenshot from <https://groups.drupal.org/user/8713> , retrieved 5th November 2014.
 - Screenshot from <https://www.drupal.org/user/740628/edit/Drupal> , retrieved 22nd October 2014 (not available unless logged in)
 - Screenshot from <https://www.drupal.org/u/lewisnyman> , retrieved 5th November 2014
 - Screenshot from <https://www.drupal.org/u/chandeepkhosa> , retrieved 5th November 2014

Any questions/feedback?

Thanks!

Ευχαριστώ!

¡Gracias!

Grazie!

Danke!

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