

DIGITAL COMMONS

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A new common?

Commons, as the word suggests, are resources that do not belong to a particular individual or group of individuals. No one has an exclusive right to them, making them accessible everybody by definition. As Ostrom suggests, individuals are not always “trapped” in the tragedy of the commons, but are in-fact capable of creating their own institutions, rules and enforcement mechanisms which ensure the sustainable use of such resources with certain prerequisites.

There is a modern common that satisfies all the above criteria of being a common and is also managed by a community. Digital Commons, as defined by Mayo Fuster Morell are “as an information and knowledge resources that are collectively created and owned or shared among a community and that tend to be non-excludable, that is, be (generally freely) available to third parties. Thus, they are oriented to favor use and reuse, rather than to exchange as a commodity. Examples of digital commons are Wikipedia, a type of Free Software and Open-source hardware projects. It should be mentioned here that our common in this case is not governed by a local communities defined by geographical boundaries. However, this deviation from the theme adopted so far is justified as the software and the Internet that the digital commons are based on, transcend geographical boundaries.

Free and Open software and sources (FOS) can be better understood as commons, sharing characteristics with natural common resources, in their distinction from proprietary software such as Google documents, Microsoft office etc. Proprietary Software prevent the users from changing or sharing the software which results in a situation of Vendor-lock-in; a situation where the users have to rely on corporations (such as Microsoft) to provide updates, help, and support. For software to qualify as an FOS, however, its source code should be the public domain and it is vital that the users have the right to modify and use the content in any manner.

How is the Digital Common governed?

Case Study: Wikipedia

There are a lot of restrictions, laws and policies that prevent the misuse of open source software. For instance, Wikipedia has restrictions on who can modify, edit or create a new article. Only registered users are allowed to edit the articles. Articles that are prone to controversy or vandalism are now protected or locked, that is, only certain editors or the administrators are allowed to make changes. In some cases, all editors are allowed to submit their modifications but review is required for some editors. Insertion of obscenities, crude humour, adding false information, irrelevant formatting, manipulating the underlying code of an article, or use images disruptively are some of the common types of vandalism found on Wikipedia. Vandalism is easy to

remove and takes a few minutes to be resolved but some take a long time to be repaired. Wikipedia's content is subject to the laws of United States and the US state of Virginia. Its editorial principles are embodied in the "five pillars", which is stored in the form of Wiki and can be revised by the editors. Even its editors can modify the guidelines and policies. According to Wikipedia's law, an article is not considered to be owned by its editor or any authority. Contributors avoid a tragedy of commons by internalizing benefits. 'Administrators' in Wikipedia are privileged to delete pages and see that the articles are not changed in case of editorial disputes and vandalism. But they are not supposed to enjoy special privilege in case of decision making. Wikipedians can sometimes dispute; in such a case, editors can initiate a request for comment. The Arbitration Committee is the head of the dispute resolution process. Anti-social behaviour and personation can lead to complete ban from Wikipedia. Anti- consensus or violation of the editing policies are limited to warnings.

Deviations

Lessons in game theory tell us that a player deviates from a position when he has the required incentives to do so. Deviation in the present case would mean not abiding to the regulations that requires all Free and Open Source and Software users to share every modification in the original piece in the public domain. What can possibly act as incentives for players in the Free and Open Source-Software community are monetary benefits and recognition that brings brand-power along with it. However, the decision to deviate would rest upon two distinct factors. One is how the monitoring is done of the Common, which basically relates to the cost of monitoring. The other is the penalty that a potential deviator would incur, if caught. If the cost of monitoring are high and the penalties are negligent, there are more chances of a player from within the community deviating from his current position. One such case is of CyanogenMod (CM), which is an open-source operating system for smartphones based on the Android mobile platform. It developed as free and open source software based on the official releases of Android by Google, with added original and third-party code. In 2013, project founder Steve Kondik announced that Cyanogen Inc. would be established as a commercial enterprise to develop and market the firmware more widely. This has sparked controversy within the community as developers claim that rights and licensing issues such as acknowledging and compensating past developers and honoring the original ethos of the community project, are not being addressed adequately. These claims were rejected by Kondik as he stated that most CyanogenMod code, as with Android generally, is bound by a non-restrictive Apache license, the same license used by Google Inc. In his 2013 blog post on Cyanogen's funding, venture funder Mitch Lasky stated,

“ Benchmark has a long history of supporting open source projects intent on becoming successful enterprises. Our open source history includes Red Hat, MySQL, SpringSource, JBoss, Eucalyptus, Zimbra, Elasticsearch, HortonWorks and now Cyanogen. We've been behind many of the most successful open source software companies in the world. We have a deep respect for the special needs of these businesses, and how to build companies while preserving the transparency and vigor of the open source communities. ”

Limitations of a Digital Common

Security in case of open source software is another big challenge. Firefox uses sandbox security model and limits its accessibility from other websites. Mozilla Foundation offers a “bug bounty” to those whose find severe security loopholes in the software. Official guidelines for securing vulnerabilities discourage early disclosure of vulnerabilities so as not to give potential advantage to attackers in creating exploits. Further reliability is another challenge as far as the Digital Commons in general are concerned. In the case of open sources for instance, in spite of various laws and regulations, Wikipedia is cited with inaccuracies and misrepresentation. It is seen that it has fared well in the science articles but not in the humanities and sampling articles. Critics argue that Wikipedia’s open nature makes it unreliable. The open structure of these sources and software makes it an easy target for spammers and internet trolls.