

Open Licenses and Radical Shift in Digital Content Distribution.

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Introduction

World Wide Web is becoming the most preferred location for academic community, librarians and other professionals for communication, content generation and transfer. They are extensively making use of web services such as blogs, podcast, wiki's, digital libraries and institutional repositories for the transfer and access of information content in digital format. Text, images, audio and video in digitized format facilitate easy creation, transfer and duplication of information throughout networks. Reckless use and transfer of digital content through Internet invokes threats to copyright claims of commercial content creators. This situation force commercial publishers to make use of technology and law to ensure security and prevent unauthorized access of digital content.

Users have been enjoying the freedom to read published print works found in traditional libraries without seeking permission from the copyright owner. But the same freedom is restricted in a publicly accessible digital collection [1]. Making and distribution of an unauthorized copy of digital content may invite provisions relating to the violation of copyright. Copyright can prevent libraries from providing open access to the digital information they collect and make barrier to the development of digital library collection [2].

Existing intellectual property rights are designed to protect the interests of commercial publishers and curtail the user's freedom to share the content. This situation would not be good for innovation and consumer welfare in the long run [3]. Copyright laws make hindrances to authors and users to share and make use of copyrighted materials. Open licenses are designed on the foundations of open source principles and protect the right of content creators and make sure public access of creative works. Open content licenses give content creators the freedom to publish their works for free access without losing their ownership.

Background setting for open content licenses

A content license is a document that states the freedoms and limitations that you apply to your work— an explanation of what someone can and cannot do with what you make [4]. Traditionally creative content is published and distributed through tangible objects like books, manuscripts, sheet music, video tape, microfilm, and audio cassettes. Copyright laws provided protection for publishers from unauthorized use of content in physical materials, including literary, dramatic, musical, artistic and other intellectual works. It is considered as illegal if anyone violates the rights provided by the copyright law to the owner of copyright. Libraries and its users survived copyright restrictions by using the provisions of 'fair use' and 'library privilege' clauses. These exclusive provisions allow public to access and make copy of documents in libraries. Copyright laws give protection to creative works for a limited time, after which the work is added to public domain.

With the increasing popularity of Internet, the movie, music and publishing industries failed to implement copyright law in networked environment. As the result, commercial content creators hopefully turned towards technology to protect the content from unauthorized use and distribution. Digital content publishers

implemented DRM (Digital Rights Management) to control the copyright threats. DRM is an umbrella of technologies that allow right owners to set and enforce terms by which people use their intellectual property. This system combines an encryption scheme to protect the content and authentication systems to open content for only authorized users [5]. Online music sellers, bibliographic database vendors, and journal publishers are successfully making use of DRM to control the use of content. They developed authorized softwares, water mark, IP based access, user name and password schemes to monitor and restrict the access of the content only in user's computer.

Brief History of Open Content License

Open content licenses are built on the basics of open source software licenses. Richard Stallman drafted 'GNU General Public License' in 1984 for the free distribution of software. David Wiley's GNU Free Documentation License in 1984 is considered as the first non-software open license. Contributions of Tim O'Reilly and Andy Oram made open content licenses more suitable for the online versions of printed books and journals, as a result, Open Publication License (OPL) was released in 1999. Larry Lessig constituted Creative Commons in 2001 for the distribution of literature, art, music, and film in public domain. This initiative designed a variety of licensing options to public access of creative works. Later a range of open content licenses appeared, and most of them contain the spirit of Creative Commons licenses.

Characteristics of Open Content Licenses

Copy right laws are not user friendly for public access of digital content and is crafted with provisions advisable to accredit the monopoly of commercial publishers. Open content licenses are attributing the principles fostering free culture and have commitment to society. Lawrence Liag [6] an exponent of open content licenses noted its key characteristics:

1. Open content licenses give users right to copy, distribute, modify, perform, display and create derivative works.
2. It ensures a work based on original work should get license under the terms and conditions of the open content license.
3. Open content licenses include the provisions for both commercial and non commercial usage.
4. Open content licenses strictly instructs the appropriate credit to be given to the author of the work.
5. This model of licenses ensures community participation in content development and distribution.

Most of the open content licenses terms are more or less same. Open content licenses give dual advantages: it protect creator's right on the content and at the same time it give free access for users. The freedoms of usage allow for non commercial purpose only. In certain context, permission of the creator is necessary for commercial usage of content and derivatives based on original work.

Nature of Community Content Development in Internet

Community participation is the main feature of content development in public domain; both developers and users actively engage in the effort. Main players associated with open content development are Professionals,

amateurs, libraries, archives academic institutions and public broadcasting companies. Amateurs and professionals participate in open content development to gain respect and accreditation from community. Public organizations engage in content development and distribution to satisfy the information needs of tax payers. Research institutes and researchers are very keen to publish their research output with the hope that “it brings increased visibility, usage and impact for their work” [7]. Online institutional repositories of academic institutions and libraries enable the free public access of scholarly content. Institutional repositories archive peer reviewed scholarly literature created by faculty members and research scholars. Academic institutions also distribute course content including lecture notes, multimedia, exams materials, presentations and reusable learning objects for seamless access by academic community and public.

Wiki based content development process arrange global participation of experts in content creation and editing. A wiki is a Web application whose content is collaboratively added, updated, and organized by its users. A wiki's content is editable through a Web page interface [8]. Wikipedia is the best example of collaborative effort to build an open content encyclopedia. This multilingual encyclopedia is a community endeavor of volunteers around the world. A large group of peer reviewers ensures high quality articles. ‘Flu Wiki’ (www.fluwikie.com) is another example of collaborative conformation to build a knowledge base for local communities to defend communicable diseases. A group of volunteer editors inspect the content quality and suggest modifications wherever needed.

‘LibriVox’ (<http://librivox.org>) is a public project instituted to publish free audio books on the Internet. In this project, books for reading are chosen on the basis of user’s suggestions. Volunteers read and record the book content in digital format and coordinators upload the files on project website.

Open access journals and institutional archives or repositories are mainly used to manage digital scholarly content, especially research articles. Open journals conduct peer review. Archives do not perform peer review and can contain preprints, post prints, or both [9]. Open Journal Systems, Eprints and Dspace are the popular software platforms for the management of online scholarly content. All these systems are facilitated online submission, peer reviewing, subscription, indexing and notifications.

Open content development model encourage both solo and collaborative content development. Various services are available online for content management and they can handle different types of digital content format. Such services have provisions to promote open licensed content and they are encouraging authors to publish content in public domain.

Popular open content initiatives

Project Name	Content Type	License
Wikipedia	Encyclopedia	GDFL
Librivox	Audio books	Creative Commons
Flickr	Image database	Creative Commons
Open Clip Art Library	Clip arts	Creative Commons
PLoS (Public Library of Science)	Medical Literature	Creative Commons
OpenLearn and MIT Open Courseware	Educational resources	Creative Commons

Popular Open Content Licenses

Open content licenses are developed to distribute free content which does not contain any harmful licensing terms same contain in commercial digital contents. It also promote ethical, legal framework for the distribution and use of digital content.

Creative Commons

Creative commons is considered as most popular and flexible license for free content distribution. The Creative Commons initiative designed this license with the support of practitioners and theorists of law and technology. James Boyle, Michael Carroll, Lawrence Lessig, MIT computer science Professor Hal Abelson, cyber law expert Eric Saltzman, and public domain Web publisher Eric Eldred founded Creative Commons in 2001. Creative Commons is a set of legal licenses from which creators can select the rights they wish to retain and those that they are willing to give to the public. A Creative commons license is based on copyright. So they apply to all works that are protected by copyright law. The kinds of works that are protected by copyright law are books, websites, blogs, photographs, films, videos, songs and other audio & visual recordings [10]. Popular projects make using Creating Commons are MIT OpenCourseWare, Public Library of Science, Flickr, Ourmedia and Wikinews.

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1. Wikipedia
2. PlanetMath - a free, collaborative, online mathematics encyclopedia.
3. Japanese History Documentation Project (<http://www.openhistory.org/jhdp/>)
4. Free Online Dictionary of Computing (<http://www.foldoc.org/>)

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Free Art License is developed from as a result of the inspiration gained from the meeting “Copyleft Attitude” in Paris in 2000. With this license users are authorized to copy, distribute and freely transform the work of art while respecting the rights of the originator. The basic aim of Free Art License is to promote and protect artistic practice freed from the rules of the market economy [11].

Open Music License

Open Music License is a set of customized licenses which allow public to use the music and giving credit to the musician. In addition, this license contains provisions to earn money for musician. Three versions of Open Music License are available;

The Green License – Free for copy, distribution and modification.

The Yellow License – Free for all use, but prevents commercial use.

The Red License – Personal use and distribution only.

The open Music License was drafted after consultations with several song writers, musicians and bands [12].

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Creative Commons outwits other open content licenses in the case of popularity and usage. Ability to habitat any content format and flexibility in privilege customization make Creative Common license favorite option for content distribution. Creative Commons offers six types of licenses with various rights for fair use. There is an increasing acceptance of open content licenses. As per license adoption estimate at 2006, 140 million web pages contain Creative Commons content [13]. Creative Commons license leads in the popularity and considered as the most successful Open Content license format and proved its endurance in court. Adam Curry, a popular podcaster and former MTV VJ won law suit against a magazine which published photos of his family under Creative Commons non-commercial license on Flickr without his permission.

Money matters

Content creation and distribution is a money tinkling business of commercial content distributors. Content companies act as intermediary between content creators and end users and a great portion of profit and reputation goes to content companies and not to original creators. Copyright of the content is loose from the author’s side and it restricts him to further manipulation of his own creation. Traditional content distribution practice is not suitable for voluntary content creators who like to earn reputation than money. Online commercial content distributors possessed the technology and expertise in digital content publication. Now online content distribution scenario has entirely changed with the popularity of World Wide Web. There author can directly publish their content with the help of user friendly online tools. And many alternative business models are introduced for content creators without hurting the user’s freedom of free content access. Following are

the business models currently being used by digital open content (audio, video and image) distribution services [14]:

1. Distribution of content charging nominal subscription fee.
2. Selling extra services for users is a popular strategy of open content business. Flickr is an online photo sharing service which provides free limited space for image uploading. If users pay an extra charge, they would offer unlimited storage space.
3. Open licensed content are free to share and can be used to generate profit by organising and distributing content in packaged media. Here users need to pay only the cost of media (CD, DVD).
4. Advertisement with free content is the most popular income generation practice. Video sharing services (Eg. YouTube, Revvr) displays a hyperlinked advertisement frame at the end of each video. If the viewers click on the promotional frame, the advertiser is charged and the fee is shared among content creator and video sharing service.

Open Access scholarly publishers follows different types of business models to meet the expenses of online publishing. Innovative income models currently being used to support the open-access distribution of peer-reviewed scholarly and scientific journals are [15] [16]:

Article processing fees: *A few number of Open Access journals charge fee from authors for article processing.*

Hardcopy sales: *MedKnow, an Indian medical publisher earns money by sales of the print version. Their journals are freely accessible online.*

Sponsorships: *Institutional or corporate offers to take over journals operating expenses in exchange for publicity.*

Donations and fund raising: *Fund raising campaigns and donations from individuals and institutions ensures stable income.*

Internal and external subsidies: *BioMed Central's membership program allows societies to offer the right to publish without article processing fees as a member benefit.*

Institutional membership schemes: *Institutions to pay a lump sum annually in advance for articles that their authors will publish.*

Education and research is public funded activity in most of the countries. Open Access journals and repositories of educational and research institutes are not drive by financial motivation. They believe that, Open Access publishing model increase access to its published research and this lead to better research communication. Free content use, world wide access and reputation are the advantages of adopting open content distribution model.

Conclusion

Content creators are using a range of open content licenses which suitable for free distribution of content socially and economically. Open Content licensing projects should work together for better inter operability and handle copyright management issues. [17]. Open license initiatives are on the way to develop more activities and tools to promote open content. They concentrate on coordinating legal experts around the world, translation of project documents, development of license metadata integration tools, search engines to find open licensed content, establishing open licenses within academic and scientific community. More business models should be introduced for open content distribution to attract more content creators into community based content development. In sum, open content licenses could radicalize the content use and distribution to endorse community based content development.

References

1. Samuelson, Pamela, "Encoding the law into digital libraries". Communications of the ACM, 41(1998): 13-18.
2. Kuny, Terry, "The digital library: myths and challenges", 62nd IFLA General Conference. Beijing. August 25-31, 1996.
3. Samuelson, Pamela, "Intellectual property for an information age", Communications of the ACM 44(2001): 66-68 .
4. Reberts, "Sharing Creative Works", Creative Commons, http://wiki.creativecommons.org/Sharing_Creative_Works
5. "Q&A: What is DRM?" BBC, <http://news.bbc.co.uk/2/hi/technology/6337781.stm>
6. Liang, Lawrence. "A Guide To Open Content Licences." Piet Zwart Institute. http://pzwart.wdka.hro.nl/mdr/research/liang/open_content_guide.
7. "What's in it for me?" SURFfoundation, <http://www.openaccess.nl>
8. Scott, Mitchell, "Easy Wiki Hosting, Scott Hanselman's blog, and Snagging Screens", <http://msdn.microsoft.com/en-us/magazine/cc700339.aspx>
9. Suber, Peter "Open Access Overview: Focusing on open access to peer-reviewed research articles and their preprints", www.earlham.edu/~peters/fos/overview.htm
10. "Frequently Asked Questions." Creative Commons, <http://wiki.creativecommons.org/FAQ>
11. "Free Art License." Copyleft Attitude, <http://artlibre.org/licence/lal/en/>
12. Liang, Lawrence. "A Guide To Open Content Licences." December 2004. Piet Zwart Institute. http://pzwart.wdka.hro.nl/mdr/research/liang/open_content_guide
13. "Midyear license adoption estimates", Creative Commons. <http://creativecommons.org/weblog/entry/5936>
14. Hietanen, Herkko. Community Created Content; Law, Business and Policy. Helsinki: Multiprint, 2007.
15. "Income models for Open Access: An overview of current practice", SPARC, <http://www.arl.org/sparc/publisher/incomemodels/>

16. Swan, Alma and Chan, Leslie, "Open Access Journals: business models" in "Open Access Scholarly Information Sourcebook", www.openoasis.org

17. Hietanen, Herkko. Community Created Content; Law, Business and Policy. Helsinki: Multiprint, 2007.

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