Open Source Software Use in Libraries: Implications for Social Justice?

Vandana Singh

School of Information Sciences, University of Tennessee, USA

Abstract: This paper starts an initial discussion into relating use of open source software and technology for social justice via libraries. A thorough literature review of social justice, role of libraries in social justice and open source and its relation to social justice by libraries is presented. Experience based evidence of use of open source software in libraries for the purpose of achieving social justice is provided. Recommendations for libraries and future collaborations are also outlines.

1. Introduction

Libraries in the United States and presumably in other countries are not the richest institutions around. Libraries are always struggling to get their budgets increased or to avoid the every present budget cuts, in tough economic times it becomes even more of a struggle then in regular times. At a fundamental level libraries are committed to providing services to their community, to provide equal access for all populations and to play an active role in their community. When there is lack of resources, these services provided by the libraries are affected and librarians look for alternatives to help them deal with the financial situation and still be able to provide the services that they are committed to. Technology exponentially improves their effectiveness and efficiency, if they are able to afford the infrastructure and resources required for using technology. Open Source Software use is one such alternative that helps librarians in tight budgetary situations and enables them to maximize their resources. Open Source Software by definition does not cost money to use, if the library has the technical expertise required to use the software, they can use it for absolutely no cost to them. That is why; it is a viable alternative to proprietary software. Also, the basic philosophies of open source software movement are very much in line

with the basic philosophies of libraries as discussed in the literature review. This panel presentation focuses on use of multiple open source software in libraries and reflects on the implications that this has had on the libraries, librarians and the communities in these settings. The discussion starts with understanding of what social justice is, what has been its implications in library settings and explores literature to find any evidence of research that connects use of open source software with social justice. Next, the author compiles instances of use of technology/open source software to work towards social justices. These experiences are compiled from teaching technology courses in a graduate program in United States, some courses were specifically targeted towards an underserved population, while others were a diverse mix. Also, the experiences are compiled from the author's research in open source software use in libraries.

2. Literature Review

This section is divided into four sub sections, starting with the basic definition of social justice and what it means followed by a review of the literature discussing the role of libraries in social justice. Next section presents literature review on open source software and its use in libraries.

What is Social Justice?

Social justice has been defined in various ways throughout its long cultural, historical, and philosophical history. At its most fundamental level, social justice is based on the premise that "all people have the same status" (Stoll, 2011). Social justice is basically a policy of inclusion in which a society or institution provides all individuals with equal opportunities (Stoll, 2011). Although social justice can be seen as an abstract and formal theory, usually it is conceptualized in terms of policies, such as the "redistribution of goods and resources to improve the situation of the disadvantaged" (Bankston, 2010). Issues like consumption, civil rights, legislation for disadvantaged groups, charity, and religion usually accompany discussions of social justice (Bankston, 2010; Stoll, 2011; Choules, 2007). Contemporary research on social justice topics is mainly concerned with developing a multidisciplinary and international approach (Miller, 2011; Tomblom & Kazemi, 2011).

Social Justice and Libraries

Social justice is also a major concern in library and information science. Social justice has long been a part of discussions about the philosophy, morality, and ethics of librarianship (Samek, 2008). As librarians generally serve large communities, issues of human rights, social action, and citizen input are frequently examined (Samek, 2008). Because an understanding of social justice can boost both "theory building" and "professional practice" in the library world, many instructors in library science schools are seeking to increase their students' exposure to this concept (Rioux, 2010).

Social justice has many implications for libraries, but three of the major ones discussed in the literature regard intellectual property rights, information poverty, and library-community collaboration. Intellectual property rights, when balanced with "rights to access and benefit sharing," are vital to protect "people's rights, identity and livelihood" (Rangnekar, 2011). The issue of

access is closely related to information poverty. Although today's world is characterized as a "global Information Society," in reality many individuals and groups lack the skills, materials, and infrastructure to access the information they need and participate in this society (Britz, 2008; Britz, 2004). To remedy this situation, Britz and Blignaut (2001) suggest developing an "ethical framework based on social justice" that can be referred to when seeking to eradicate these information inequalities. Another way to combat these inequalities is to encourage collaboration between librarians and other information professionals such as archivists in reaching out to underserved patrons and developing reference collections that include "alternative press" or "street" resources (Morrone & Friedman, 2008).

What kind of role have libraries played in social justice?

Librarians have played many roles in fighting for social justice throughout their history. These roles can be classified based on the type of library being considered and the type of patrons it serves.

Because they serve entire communities and thus seek to prevent "social exclusion," public libraries have been frequent champions of social justice (Bundy, 2010; Vincent, 2012). Inclusion in public libraries ranges from making the libraries an inviting place for all patrons to developing diverse collections that effectively represent the populations they serve (Bundy, 2010). The issue of censorship is closely related to this policy of inclusion. Public librarians support "free access to information for all people" and thus do or should address censorship challenges with a broad perspective and avoid self-censorship in the selection and classification of materials (Moody, 2004). Public libraries also seek to offer both access to new technology and opportunities for patrons to learn about that technology in classes and workshops, thus narrowing the digital divide (Henderson, 1988). Some public librarians have begun to argue that their libraries should be even more active in becoming community centers, fighting for "positive social change," and encouraging "civic engagement" (Henderson, 1988; Shuler, 2007).

School libraries are also active in social justice issues in terms of both policy and practice. The Information Literacy Standard 10 from the American Library Association requires that school library media centers be "dedicated to justice, equity and social responsibility" (Abilock, 2006). The standard encourages school library media specialists to develop programs that allow students to discuss current issues, engage in service learning, and make their voices heard (Abilock, 2006). In practice, school libraries have been very concerned about being inclusive of all the different types of students they serve. Issues such as the lack of interracial books for children and the difficulty of engaging special needs children in library-based research are some instances in which school library media specialists are seeking to make their facilities more inclusive and accessible to all students (Charnes, 1984; Kruger, 2006).

Academic libraries usually support social justice by encouraging or providing resources for social justice topics in the curriculum for students and training sessions and workshops for faculty (Longstaff, 2011). Librarians at colleges and universities have found ways to support larger institutional programs that

emphasize the importance of advocacy and service (Longstaff, 2011). Many colleges and universities affiliated with religious denominations have been particularly outspoken about their support for these types of programs (McCook, 2001). Finally, although many people do not generally think of archivists as fighting for social justice, a large number of scholars address this connection. Social justice is a central part of the professional ethics of archives (Wallace, 2010). Because archives are associated with cultural memory, they have often sought to be "neutral" or inclusive in the sense that they seek out and preserve materials from all types of individuals and communities (Gilliand, 2011; Jimerson, 2007). Depending on the community the particular archive serves, this neutrality or inclusion can look very different. In communities with a history of social injustice and conflict, archives include materials about all groups, especially those materials that explicitly address social justice concerns (Krizack, 2007; Adami, 2009). In traditional oral communities, on the other hand, archivists generally focus on listening to and recording elders' stories for the benefit of future generations ("Overcome silence," 2004).

One can also conceptualize libraries' role in social justice based on the groups of people they serve. For example, libraries seek to avoid discriminating against information workers or excluding patrons based on race or ethnicity (Durrani, 1999). Many librarians have also begun to study how certain bibliographic classification schemes like the Dewey Decimal Classification system might contain racial or ethnic biases (Furner, 2007). Increasingly, libraries are also concerned about serving individuals, especially young adults, with a homosexual orientation who may be having difficulty "coming out" or getting support at home or at school (Mehra & Braquet, 2006).

Open Source Software

From its early days, OSS has generated a lot of interest and support within the community of librarians because of its strikingly similar foundational principle: taking collective action for the benefit of the community (e.g Arkles, 2002). The success of open source software depends on community effort, echoing the economics of libraries (Chudnov, 1999), hence the OSS philosophy has been welcomed by librarians.Open Source Software has a strong appeal to librarians because of the freedom, flexibility, customization, and lower cost that it promises. In recent years, the Open Source Software (OSS) development paradigm has emerged and provided alternatives to a multitude of proprietary resources. Integrated Library Systems (ILS) is an essential part of libraries and have been traditionally provided to the libraries by commercial vendors. But in recent years, multiple ILS have been proposed by the open source software community. As a result, the discussion of open source software vs proprietary software has become a very popular point of discussion in the library world (Corrado 2005, Breeding 2007, & Wrosch 2007). Initiatives like OSS4Lib (Open Source Systems for Libraries) are catering to the needs of librarians by providing the latest information about products, bibliographies and other relevant resources for using open source solutions in libraries. The Online Computer Library Center (OCLC) supports the development of open source software for libraries through OCLC research (Balas 2005). The main reasons

for the adoption of and interest in OSS by librarians are eliminating their dependence on the proprietary-service vendors, gaining more control over the ILS by making it customizable to the local requirements of the libraries (Wrosch 2007), lowering costs, and acquiring the flexibility of additional feature development (Eby, 2007).

Social justice and open source software

A few articles have been written about libraries' use of technology in general and open source software in particular in a social justice context. However, considering the rapid development and adoption of these technologies, there is still a great need for further and more detailed studies on this topic.

In terms of general technology, libraries, nonprofits, and social workers have all begun to adopt the Internet as a teaching tool. They employ social software, free software, and other information technology resources to help broaden advocacy and social justice efforts (Dunlop & Fawcett, 2008). Some have even used social networking technologies like Second Life, a virtual environment where users interact via avatars, to educate people about and experiment with social justice ideas (Kaye & Spurgin, 2011). Regarding education, school libraries have been particularly active in seeking to narrow the digital divide by providing access to and training in "appropriate technological resources" (Banister & Reinhart, 2011). Another library issue that is recently being connected to a social justice context is open access. Open access journals in general, which allow any individual free access to their content usually in an online format, clearly support social justice by decreasing exclusive barriers to information. Open access to political documents and criminal justice scholarship can be particularly helpful in sustaining social justice (Scherlen & Robinson, 2008). Finally, librarians are also beginning to see the social justice implications of open source software, for it has the potential to decrease barriers in the dissemination and access of information. According to Sullivan (2011), "non-expert users" and "advocacy organizations" have taken the concept and discourse of free open source software and applied it to the broader concern of "digital freedom" with discussions of the Creative Commons, digital privacy, and global development. The social justice adaptation of free and open source software has then encouraged more traditional software groups to support "digital rights and social justice" (Sullivan, 2011). It is clear, however, that the potential for open source software in libraries to support social justice is wide-ranging and requires much additional study beyond this single article.

3. Methods

In my cumulative research and teaching experience I have seen the following instances of use of technology in general and open source software in specific by libraries. In all of these instances, social justice was not necessarily the objective of the use but it was the consequence. Outlining of these instances is very informative in what actions can be taken by libraries for working towards achieving social justice. My teaching experiences come from teaching in a graduate program in the United States and engaging with students from diverse background. One group was specifically formed of rural librarians.

My relevant research experience comes from being the Principal Investigator on a research grant to study open source integrated library systems.

The data for this study is a combination from both of the source mentioned. The data from teaching is based on explicit feedback given by the graduate students during the course; this includes written reflections and verbal discussions in class. The data from the research project is a result of multiple interviews, surveys and interaction with librarians interested in open source software or using open source software.

4. Results and Recommendations

Specific examples of ways in which libraries can use open source software for social justice.

Free access to information for all – Since this is one of core values of libraries; majority of their efforts are geared towards achieving this goal. Use of technology, especially web based technology helps the librarians disseminate information to all the sections of society. Students in my classes have used open source software (Drupal) to create websites that disseminate information and are accessible to all with an internet connection. These websites organize and present information that is useful to different sections of community, for example, people seeking information regarding jobs, specific diseases and ailments, services provided by the library, etc. In my research I have seen open source software being utilized to automate the collection of a library, giving them access to sophisticated integrated library system. One of my students implemented Koha, an open source ILS for a local church. The church would not be able to afford a proprietary software and hence would never have had access to an online catalog and all the benefits that come with it.

Information Poverty and issues of digital divide: The notion of information poverty refers to the lack of availability of information as well as technology to certain populations. In digital divide literature this is also referred to as the gap between have's and have not's . It is not only about access to information and technology but also about the ability to use it for ones benefit. Students in my classes have utilized open source software to create tutorials for the sections of the community that do not have the skills to use the basic services provided by technology, for instance, my students have created screencasts using Jing and Audacity software to do effective Google searches. By doing this, they are providing effective search skills to populations who have access to computers but are not able to utilize them effectively. Also, by providing training classes for special groups, libraries are able to work towards closing the gap in digital divide.

Multilingual Resources –   In the United States, the changing face of the US population makes it very critical for librarians to create resources in multiple languages and be able to provide access to all the standard information to the other growing ethnic populations like Hispanic, Chinese, Indian, etc. In my class, I have trained my students to use open source tools to add translate

features to the websites, so that people who do not speak English are still able to utilize the services provided by the librarians.

Prevent Social Exclusion – There are many people who are not able to actually reach the physical library for services and therefore by creating a web presence using open source software tools, the libraries are able to prevent social exclusion of any disadvantaged population for instance, the physically disabled, the elderly or any other disenfranchised community members like LGBT. Libraries and their technology use ensures that there is no discrimination or social exclusion of particular groups.

Library Community Collaboration : Using open source software my students have created portals for community collaboration and they are able to integrate community discussions, local news and events and also engage their patrons with the library. They have used a variety of Web 2.0 tools to engage their communities on the websites and have formed groups of various interests. Some of my students have created websites for particular groups that they belong to and have integrated them into the library community portal. For instance using Blogs a discussion can be started about a book event. Before an author is coming to the library, the community is already engaged in a discussion.

Advocacy: Libraries play a very useful role in advocacy of different types and I have personally seen examples of libraries using open source software to create awareness about certain issues for example the issues that arose with the US legislation named as DMCA, SOPA and PIPA. Libraries created webpages to inform citizens about these issues and also directed citizens to proper resources to understand these issues. Library websites also designed online tools to have the voices of citizens heard by signing petitions to their government representatives. My students participated in these protests by creating the information and by taking action.

Software Creation and Sharing Libraries use open source software and contribute to the community of open source software by creating the software as well as by sharing what they have created as is evidence by the following quotes from open source users in libraries.

"And then that whole being part of a bigger thing, that whole open-source, we're working together for the good of all. That's what we do. We're libraries."

"The best thing about an open ILS system is the freedom of sharing. You can do something and you can share it and everybody's"

Conclusion

In this paper we have initiated the discussion on open source software and the role it can play in helping libraries in their goal of achieving social justice. We provided some concrete examples of how technology and open source software is used to carry out activities that contribute to the goal of achieving social justice. In future work, we look forward to creating a more concrete set of

guidelines for libraries and also connecting specific open source software to specific activities that the other libraries can implement.

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