

## POWER RELATIONS IN OPEN SOURCE SOFTWARE USE IN HIGHER EDUCATION LIBRARY IN BALI

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### ABSTRACT

This research focuses on the actors involved in using open source software. The interaction of these actors creates power relation among them. The power that arises is not only caused solely by position but also by knowledge possessed by these actors. This research uses the theory of the power relation of Foucault. The power relation theory from Foucault is used to analyze the things that happen behind the use of open source software. This study uses actors in the library as informants, such as the head of the library, users, IT staff, and others. The results showed that the background of open source software development is not merely aimed at technical matters, but also based on the ideology of the developer (programmer), the open source business model is very much determined by the community, besides this, power practice causes the power relations of actors who are equal and dominant, the sustainability of open source software in libraries, and the placement of knowledge as power in power relations

**Keyword:** Open Source Software, Power Relations, Hegemony, and Deconstruction

### INTRODUCTION

The rapid development of information and communication technology (ICT) in the era of globalization can change human civilization, from traditional and industry societies to information societies. The development of the technology has caused the improvement of library management, so we know the term electronic library, hybrid library, virtual library, digital library, and library 2.0. All libraries rely on information systems to handle library work electronically. Information systems are computer-based systems that contain various information which used as a means of decision making.

As part of an information system, software is an important element to support the success of an information system because it functions as a translator of commands run by computer users. The software consists of paid software (proprietary), self-built, and open source. Rusmanto (2014) states that in general a program called open source software is a program in which the author gives the user permission to run it for anything, study and modify the program, and distribute copies of the original or modified program, without having to pay royalties to previous developers. In connection with the description above, questions from various parties about open source software arise namely "why do open source software developers contribute their time, energy, and effort to the creation of the software product?" The question is very logical considering open source software gives others to use the program without any cost. Open source is a new system for distributing software to users by giving free programs and source code (Rifqi, 2012: 98).

The use of Open Source Software in Bali mostly uses SLiMS which is 83% (Suhartika, 2018: 74). The practice of power in the use of SLSMS at the University Library in Bali has a number of socio-cultural issues especially felt by users of the system. Power relations between programmers (software makers) with software users (libraries) are not balanced. With the knowledge possessed, the programmer can use his power or interests in the library. The power referred to here is not in the form of physical strength, but rather leads to ownership of knowledge. Laksmi (2015: 169) states that power is not interpreted as a physical force, but

rather shows an exchange relationship, one of which does not have the same value. Therefore, power relations here are defined as interactions based on agreement, acceptance or resistance, rejection or negotiation, in various matters relating to the interests of each pillar. The existence of this power practice is expected to reveal the phenomenon behind the use of open source software at the University Library in Bali.

The practice of power holds a number of socio-cultural issues. For this reason, this study will examine the management of open source software in the midst of conflicts of interest, so that the constellation of power relations in the management of open source software is increasingly visible. In this study, the contestation of power relations is seen by utilizing Foucault's power relations theory, and is supported by Gramsci's hegemony theory and Derrida's deconstruction. Foucault's power relations theory emphasizes on the production of knowledge that forms the construction space itself. In line with this statement, power is an episteme or knowledge that is not constantly in contact with experience, but that knowledge is considered as reality. Therefore power can operate in all places. When the individual realizes what he wants, then there will appear power, and vice versa, when individuals are not aware of their desires, then the power seems not attached to him. In connection with this, Foucault initiated a relationship that emphasizes power over what is inherent in each individual. This relationship is called a power relation. Power relations connect one or more people to other people or groups where each group of people has power over what they have. The relationship feels more humane because it puts ideas rather than material or physical, so that everyone will have power even the slightest such power. However, power in the community is not always what Foucault wants, but it also relates to physical strength or position. Power like this often means dominance, in this case, when individuals implement their ideas to repress other people or other groups who are not aware of the ideas they have, then that power can mean dominance. Therefore, power will also give birth to class differences, namely the dominant class and the classes below it.

In connection with the foregoing, Gramsci developed the concept of hegemony. This concept emphasizes the agreement of the lower classes, in this case, the dominant class is run in civil society by inviting the subordinate classes to accept the values and ideas that have been taken by the dominant class. Therefore, hegemony is not a power dominant, but a relationship of agreement using political and ideological leadership. Although in general the dominant class can hegemony the lower classes, however, in the concept of hegemony, the lower classes will have the opportunity to hegemony other classes. Such conditions are called counter-hegemony. Agreement that is loaded with values and ideologies will give individuals the power to dismantle social structures that have already been built and reorganized. Such a situation by Derrida is called deconstruction. This concept holds that each individual can construct and interpret his own knowledge of social reality, so that in social construction there is no single meaning, but only variations in meaning of social reality. Derrida's deconstruction can be understood as a description aimed at two double movements, namely demolition and remanage. Deconstruction as a demolition movement refers to efforts to reduce, decrease, or release of a form, structure, or social structure whose existence has been built. While the remanage contains the meaning that deconstruction does not merely reduce or decrease, but also is followed by efforts to reorganize, and rearrange. Deconstruction can occur in various aspects of human life, especially in works that are full of values and ideologies such as literature, engineering, politics, law, and information technology.

#### **PRACTICE OF AUTHORITY IN THE USE OF OPEN SOURCE SOFTWARE IN HIGHER EDUCATION LIBRARY IN BALI**

The practice of power in the use of open source software involves three main components of the library, namely people, activities, and open source software. Human library is an actor consisting of librarians, users, and external parties who come from internal institutions (universities) and external institutions (parties outside the university). These outside actors also include IT personnel and vendors. Library activities are actions by the actors to achieve the goal, whereas, open source software is a system used by libraries to carry out automation activities in the library.

Determination of open source software as a library automation system is more determined by actors who have power. The power has implications for ideologies or sectoral interests of the actors. The practice of power discourse is seen from the planning, implementation, and evaluation, so that it always synergizes with the knowledge and experience of the actors, as stated by the informant, namely:

"The determination of the use of software / systems in the library is entirely from the head of the library and coordinates with the library IT coordinator and IT staff assigned by the UPT ICT or Puskom to handle the library program. All system needs are facilitated by PR I "

The informant's statement shows that each actor in determining the software / library system has their respective power, although ultimately decided by the head of the library, the decision is made through the consideration of other actors such as library IT coordinators, IT UPT ICT staff, and PR I who provide facilities the system needs. The power relation does not only involve library actors but actors outside the library, namely PR I and IT staff at UPT TIK or Puskom. In determining the system, the actors use their inherent power according to their function. Thus, the practice of power in determining the system is still running in accordance with the functions of each actor, so that other interests of certain actors cannot dominate the practice of power. Therefore, it can be said that the power relation in practice has found its point, because each stakeholder (actor) has power that is parallel with one another. However, when the desire of one actor dominates the interests of other actors, then this condition cannot be maintained, as stated by the informant as follows:

"When the person assigned to handle the library program is transferred by the head of the UPT ICT, then that person cannot be maintained. This is beyond our control because for the benefit of higher institutions that prioritize it. So, there are still external elements in the sustainability of the system "

Determination of the use of such a system is also experienced by other libraries, although the final decision lies with the head of the library, but the library is required to use a system purchased by other parts of the university, as stated by the informant as follows:

"The decision to use the system is made by the head of the library, but the system has been provided by the vendor through other parts of the university"

From these two informants' statements, it can be seen that the power of one actor dominates the interests of other actors, and the actor consciously follows the wishes of the actor. The transfer of IT staff and the use of available systems is a form of desire from actors who have more power than other actors, so that in this cultural event, there has been domination that leads to a person's hegemony over others. In addition, the knowledge of someone who is used as power of capital cannot block more power, so that the person is willing to follow the wishes of the actors, in this case the Head of UPT ICT and PR I. In connection with this, it can be said that the practice of power carried out among stakeholders or the actor does not produce a balanced power relationship but makes the actor dependent on other actors, so that the wishes of the various actors do not produce a relationship that puts power in the proper position. Power is not only owned by the program organizer (library), but is also owned by the user of the system (student) as conveyed by the informant as follows:

"... complaints only on the program, because the program does not facilitate the wishes of users, such as thesis validation, and other problems. In addition, users also provide input for further system development. Usually the library follows up on complaints and input "

Such user complaints often occur in each library as conveyed by other informants as follows:

"... complaints are only about system availability. They want the system to operate 24 hours, and we have agreed to that desire"

The two statements above show that although the system users are people who are very dependent on the system, but they still have power in the implementation of the system, so that program operators should include the interests of these users considering they are also part of the culture, in this, system users also have ideas that can influence cultural events. Another authority is also shown by one of the actors in relation to the sustainability of the system, as conveyed by the informant as follows:

"There is a system update plan as needed. We will use According to the library IT coordinator, the system is more complete and modern".

This informant's statement clearly shows one's dependence on knowledge, in this case to replace the previous system of an actor depends on other actors who have more knowledge in the field of the system. Therefore, it can be said that knowledge plays an important role in power relations because knowledge is power), in this case, without knowledge of power it is impossible to exercise, and that knowledge eventually gives birth to power, thus it happens the dual power of knowledge. Besides knowledge, the informant statement above shows the desire to update the system according to user needs, in connection with that, there has been a deconstruction here that has dismantled the default SLiMS system through customization according to their needs. Through this deconstruction, the ideology of the initial developer has been contaminated with the ideology of the next developer based on the developer's background and experience. Therefore, the next developer can counter the hegemony of the system user. In addition, deconstruction has a personal impact on developers such as identity, income, branding (label), and social status.

From the description above, it can be said that the practice of power in the use of open source software in the Higher Education Library in Bali gave birth to the power relations of equal and dominant actors. The parallel power relations show that each actor has a balanced role in the use of the software. This is in line with Foucault's thought that the power relation is not a hierarchical structural relationship which presupposes that there is a master and a master, so that there is no distinction between binary oppositions because power includes both. Foucault also stated that power is not negative, such as repressive, coercive, and repressive actions from an institution that has power, including the State, however, is positive, productive and reproductive. Therefore, in the use of open source software at the University Library in Bali, the power is not centralized, but rather spreads and flows in the practice of the power of the actors. However, in certain cases, the practice of power also gives birth to domination where the power of one actor influences other actors so that other actors are very dependent on these actors, even though the role of the actors lies in their respective knowledge or the knowledge they have, so that knowledge can be used in negotiating with other parties in need. In addition, the practice of this power still views the formal position of the actors, so that when an actor has a higher position, then the other actors follow his wishes, which according to Gramsci the condition is referred to as hegemony. Gramsci argues that the hegemony of the dominant class is carried out in civil society by inviting the classes that are under (subordinate classes) to accept the values and ideas that have been taken by the dominant class itself, and by building a network of cooperation based on values -the value. A higher position does not always have dominant power, but sometimes, a lower position can counter-hegemony with other actors, such as in the use of the SLiMS software, where in taking policy, the library head always depends on IT staff. This is reasonable considering the IT staff has broader knowledge in the field of systems. Thus, it can be said that the knowledge possessed by one person can produce power over another person. Counter-hegemony is shown in system deconstruction, and the result of system dismantling can be used and trusted by the user. To deconstruct a system, a person must have experience and knowledge in his field. Therefore, knowledge, hegemony, and deconstruction are interconnected in the practice of power.

### **THE IMPLICATIONS OF POWER PRACTICE ON THE USE OF OPEN SOURCE SOFTWARE IN HIGHER EDUCATION LIBRARY IN BALI**

The implications of the power practices on the use of SLiMS open source software in the Higher Education Library in Bali are inseparable from the power practices carried out by the actors in the library. The power relation can be interpreted as the implementation of various ideas in a relationship to achieve a goal. Therefore, the implications of these power relations are various. They can be grouped as follows:

- Arrangement of HR (Human Resources) Library  
HR (Human Resources) relating to open source software includes actors who act as system users (users) including policy makers in libraries and at universities, operators (librarians), administrators (programmers), and vendors (program providers). The power practice

regarding the use of open source software has implications for the actors above. For librarians, the power practice makes them aware that the ideas or ideas attached to them are very necessary for the realization of a balanced relationship between actors. For programmers, the practice of power provides opportunities to create more optimally in the context of fulfilling users. Creativity can be through system deconstruction, hegemony and counter-hegemony. For vendors, the practice of power of attorney shows that the program must be distributed according to its rules. For policy makers (library head and Vice Rector I), the practice of power shows that power is not always seen from its position or status, but is seen from the knowledge it has. From this description, it can be said that the practice of power over the use of open source software in libraries makes HR management (human resources) more optimal.

- **Professional Capacity Building for Open Source Software**  
Professional capacity building in the open source SLiMS software sector greatly influences the practice of power in the library. Open source software professionals are not only SLiMS developers (programmers), but also people who care about the open source, such as teachers / computer instructors and people who learn programs without going through a teacher (self-taught). People (autodidacts) often try to code the program with knowledge gained through their own experience and knowledge. The professional capacity must be increased considering that knowledge and skills are a means of negotiating for someone in cultural practices in the library and surrounding communities in order to create more harmonious social relations.
- **Sustainability of Open Source Software in Libraries**  
Community is the key to success for the sustainability of open source software in libraries. Even so, efforts to maintain the sustainability of software in libraries need to be made by all parties including the open source software community. Sustainability of this software is important because this software has an important role for libraries in optimizing library information systems.
- **Placement of Knowledge as Power in Power Relations**  
Internal conflicts or sectoral egos of the actors in the library often result in a lack of optimal collaboration between the actors. This often happens because the actors use their position or status as their authority. Therefore, the utilization of ideas or ideas inherent in each actor is very necessary. Through these activities, the actors realize the importance of ideas or knowledge in social relations. Thus, the placement of knowledge as power in power relations is very important. Through knowledge, the actors can communicate appropriately in power relations.

## **CONCLUSIONS AND RECOMMENDATIONS**

Some conclusions related to this research can be described as follows:

- The background of open source software development is not solely aimed at technical matters, but also based on the ideology of the developer (programmer) namely the ideology of togetherness and commercial
- Open source business model is very much determined by the community, in this case, the more the community, the more familiar the system is by its users, and directly, the income of developers increases
- The practice of power in the use of open source software at the University Library in Bali gives creates equal and dominant relations among the actors. The power relations show a balanced role in the use of the software, while the dominant power relations show the influences of other actors to the others, so the situation will cause hegemony and counter-hegemony
- The implications of the power practice consist of structuring the HR (Human Resources) library, increasing the professional capacity of open source software, the sustainability of open source software in the library, and placing knowledge as a power in power relations.

Some things that are used as recommendationa in this study can be described as follows:

- Research like this really needs to be done so that a thorough evaluation of a software is not only done technically, but also through a cultural approach
- This research is a preliminary research in the field of technology that uses a cultural perspective, so it is hoped that this type of research can be carried out in the future to contribute to the development of cultural studies.
- Open source software can be used as alternative software for libraries in Bali that do not have sufficient funds to procure the system.

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