

## THE IMPLEMENTATION OF GREEN LIBRARY TOWARDS ENVIRONMENT WORLD

Siti Hajar Ahmad and Vianney Anak Jirok @ Jidokson  
*Faculty of Information Management,  
Universiti Teknologi MARA (UiTM)  
Puncak Perdana Campus,  
UiTM Selangor, Malaysia*

### Abstract

The aim of this paper is to identify the services affect in implementation of green library towards environment world and its factors to implement of green library. This paper proposes a framework to identify the implementation of green library towards environment world. In order to achieve this aim, the proposed framework identifies the aspect that influence in implementation of green library towards environment world. As a result, the study reveals the significance of implementation of green library knowledge. This paper is also expected to act as a medium to look for chances in establishing green library widely all around the world.

**Keywords:** Green Library, services, factors, environment world, green library knowledge.

### 1. Introduction

Nowadays, everyone must already know about the terms of green. Therefore, when we heard about the green library, we believed that everyone can imagine on how it is about. Thus, the services affect in implementation of green library towards environment world gives a various goods affect such as resources aspect, environmental as the main intentioned, materials quality, educational aspect and management aspect. According to Bayley (2014) in his previous studied the benefits of this implementation of green library gives and at the same time helped the natural environment retained sustainable in various aspects environmental quality of resources and responsible waste disposal. In addition, Malode (2014) also had mentioned in his previous studied that green library or in other terms known as a sustainable library gives a good quality services affect towards the environment world.

Thus, this paper aims to discuss the services affect in implementation of green library towards environment world. Therefore, there were several variables found based on the previous articles studied. Generally, the community all over the world thinks that the library is placed only for reading, study and etc. The building also should be invulnerable from sound or view. In 21 centuries, the perspective of the library has changes into green library. Green library is relevant now days all over the world. A green library design to minimize negative impact on the environment and maximize indoor environment quality. Aside from that, that have so many benefits by implement green library, from produce a good environment until we can save the money as well. So that, by a good well organized, we can get a healthy life as well a good condition.

### 2. Literature Review

This research is expected to analyze the services affect in implementation of green library also its factors. For the services affect, we focus on five main aspects; resources, environmental, materials, educational and management which are believed

to be the leading affect that will influence the implementation of green library towards environment world, while the factors in implementation of green library are focused in terms of energy factor, educational factor and management factors.

### *2.1 The Services Affect in Implementation of Green Library towards Environment World*

According to Sonkkanen (2013), had mentioned that green library or either green room was about the availability of environmental aspects and information that offers accessibility of environment basic issues. Besides, it helped keeps updated environmental issues regarding to the development actions information for the community awareness.

Moreover, according to Malode (2014), environmental concerned was built for retained the natural environment quality. The use of natural and reuse resources was the another way to achieved the implementation of green library. In comparison, Meher and Parabhoi (2017) finding out that in 1990s, the information professionals start to give supported towards the implementation of green library. In addition, the green worldwide aspects were already saved a lots of natural reuse resources (Shah, Kumar and Shah, 2015).

Previously studied, Shah, Kumar and Shah (2015) had stated that either the external aspects resources, internal environmental aspects in green library also must be important to take a good cared of it. A good quality surrounding in the green library will gave a positive effect especially in the services ongoing and the collection materials too. Moreover, in contrast finding, Sotak and Karpinski (2014) studied stated that usually human being attitudes very discouraged when it comes to the environment cared aspects. Materials were the main aspects in order to produce and contributed a good quality of the green library. The suitable and right choose of materials such as building materials have helped to achieve the target in implementation of green library (Malode, 2014). Furthermore, according to Meher and Parabhoi (2017), had mentioned that an efficient resources manner was based on the library's structure designed. Besides that, the standards and requirement aspects also important to follow in order to reduce damaged towards environment surrounding in implementation of green library (Leena, Audhir and Mukesh, 2015). While in contrast, another studied article by Sotak and Karpinski (2014) finding that a high quality condition in green library was always happened when using a low energy building and systems.

According to Cardoso and Machado (2015), environmental education in green library must always suitable, comfortable and comes along with updated materials collection. Therefore, a friendly environment surrounding in green library must always in flexible condition. In addition, it is also helped to educate the users about the environmental awareness. Furthermore, above statements have been supported by Bayley (2014) in his studied and added that the relevant life skills of education in green library will always effective and efficient.

According to Hauke and Werner (2013), library management also played a very important role in implementation of green library. Therefore, a systematic library management will be a part of a green profile background. Other than that, the library

administration must focus on projects management in order to approach a good greening library management (Bink et al., 2014).

### 2.1.1 Analysis of review

The analysis analytic table below shows there are five variables was obtained from the reviewing of eight articles. In general, the most variable found is assigned by the materials construction in implementation of green library. The table clearly stated a various types of variables that can be used by green library services based on external and internal environmental issues and awareness. Recommendations range aspects in implementation of green library towards environment world was to implement a large expectation building development practices and procedures. It also provides a framework for the others green libraries for raising community environmental awareness and issues and the benefits of designing and running sustainable libraries. The studied articles also look at public education initiatives and its importance within a library greener work practices.

Table 1. The Services Affect in Implementation of Green Library towards Environment World

Author	Resources	Environmental	Material	Educational	Management
Malode (2014)	/		/		
Meher & Parabhoi (2017)	/		/		
Shah; Kumar & Shah (2015)		/			
Hauke & Werner (2013)					/
Cardoso & Machado (2015)	/			/	
Sotak & Karpinski (2014)		/	/		
Bayley (2014)			/	/	
Binks et al. (2014)					/

## *2.2 Factors to Implement of Green Library*

According to previous articles, mostly mention about the factor to implement of green library. There have a few factors that they discuss on the articles. According to Binks (2014), from the factor itself, we can see the objectives to implement the library as a green library can be achieved or not. It is because the factor is very importance thing to move forward. Kurbongnulu and Boustany, (2016) as well discuss that, by provide information literacy and give some instructions can have transformed an ordinary library to the green library movement.

Energy is the importance factor by produced a good of green library. It is because by controlled energy it can protect air quality. Energy is the most importance factor that we have to control it. Based on the LEED (Leadership in Energy and Environmental Design) rating, energy is the heaviest factor should be focused on. We can use the other alternatives way to save the energy. The energy that we used should be independent. For example, wind, solar or geothermal. All this kind independent energy come from the nature. (Kumar,2012). So as person, are very important to know what condition or recognize the locations before decide to build a new green library. This purposes to make it sure that the objective to build a green library can be achieved. Based on previous articles, that has a few recommendations to enhance the use of independent energy. It is because not only can protect the environment but also can save the cost and provides a good healthy environment such as air quality.

Aside from that, the libraries itself must use a suitable material the libraries. For example, use an adequate window, glass windows and window palate as initiative to allow natural light squally in to the library. From this initiatives, we don't need to use electricity during the day, only use an electricity energy at night or during summer. (Meher and Parabhoi,2017). From the previous study shows that Indian Library are constantly use the natural energy because of their culture and the compactness of people. We as an individual should agree with an energy give a big impact to the environment and society. According to Binks et al. (2014), renewable energy is the first step to move forward as a new era. Renewable energy gives a positive impact on both environment and human. For example, by using natural energy, the greenhouse spout can be decrease, lessen demand in contacts of maintenance and resources. Most of developed country use their natural excess as the initiatives to save the energy. For example, Austria use a solar to replace an electricity on their green library. We can say that, all the ideas or creativity to implement a green library should be starting from the heart of the institutions like library because something important usually started from important places.

Education is an input that we grab from many resources such as learning process or an experiences. To make others aware about the green environment, the libraries especially public library should provide a collections regarding green educations because probability to others get the knowledge and information from public library. Whereby, in this green education speakers can be invited to give talks related to the green environment. Aside from that, the activities such as reuse and recycle can be added on the library programs. Besides, workshops also are the best way to increase

the awareness among people. Provide a workshops such as gardening technique. With this small efforts, people can implement what they have done on their own. Indirectly people can learn something new. (Kurbanonglu and Boustany, 2016).

Other than that, some information literacy and it instructions can be transformed into green library movement. Besides, the outdated collections such as CD, books and etc are preferred to reuse if all these thing are in a good condition. For example, book can make a rough paper or make an origami to garnish a library or special rooms as well as non-printed collections also can be as an exhibition for next generations. Based on (kumer,2012), the librarians also must have extra knowledge and have to attend the seminar to enhance their teaching skills. Also know how to transformed all the printed collections into computerized systems. From the previous study, focus on public libraries given because mostly people going there for spent time there. So on going to educate people about the green, they should steer with the example. Educate not only focus on designing or renovations but we should live in the green environment and share an experience to others. From that we can see the extent of our efforts. (Binks et al. 2014).

The role of management gives a big impact for the library's objectives. If the management are committed with their role, the aims to be green library can be achieved. The role of management is focus on how to market the library itself by focusing on green library. The management should provide a few activities. For example, make a collaboration with other organization that are provided a green information such as exhibition or gardening activities. Aside from that, the management of library also can make a conference that topic related with green environment. This effort can give some knowledge to community. Besides that, the management also can find a strategic location to build a library or provide some space to do activities for green networking. (Hauke and Werner, 2013).

According Kumar, (2012) the management also should be very effective and efficient to choose the materials. Management can discuss with the supplier to supply all the collections and materials that are friendly environment. Other than that, all the things such as computers or books can be recycle or reuse. Such as computer, the management can donate the computer to others that needed. Indirectly, we can help the people out there. Same goes the books, we can give to people that interested to keep the book collections. So that we can see how importance of the management to the library to make it sure that objective to implement a green library was achieved it.

### *2.2.1 Analysis of review*

Table 2 shows the study that discuss about the factor to implement the green library. There have three factor to implement of green library. Under the factor of energy there have three author argue about the energy. Each of them have a different view related to energy. Whereby there have three author argue about the factor of education. For the last factor is management, there have only two author discuss about an education from the previous study.

Table 2. Factors to Implement of the Green Library.

Author	Energy	Education	Managem ent
Kurbanoglu & Boustany (2016)		/	
Kumar (2012)	/	/	/
Meher & Parabhoi (2017)	/		
Hauke & Werner (2013)			/
Binks et al. (2014)	/	/	

### 3. Proposed Framework

Previous studies show that the implementation of green library towards environment world depends on two vital components which are the services affect in implementation of green library and its factors to Implement of green library. Thus, both components are considered as the independent variables while the implementation of green library towards environment world are considered as the dependent variable. Resources, environmental, materials, educational and management are the services affect that influence in implementation of green library which then would give impact to the green library. Figure 1 shows the proposed research framework to guide this research.

This research is also expected to identify and discuss about the factors to implement the green library. There have three factors to implement of green library. Those factors could be considered in the preparation of implementing green library towards environment world. As this research also focuses on how the implementation of green library towards environment world depends on two vital components, the findings will identify the importance of leveraging the implementation of green library towards



environment world. This research is expected to be able to be used in all domains and will contribute to the existing green library that have been implemented.

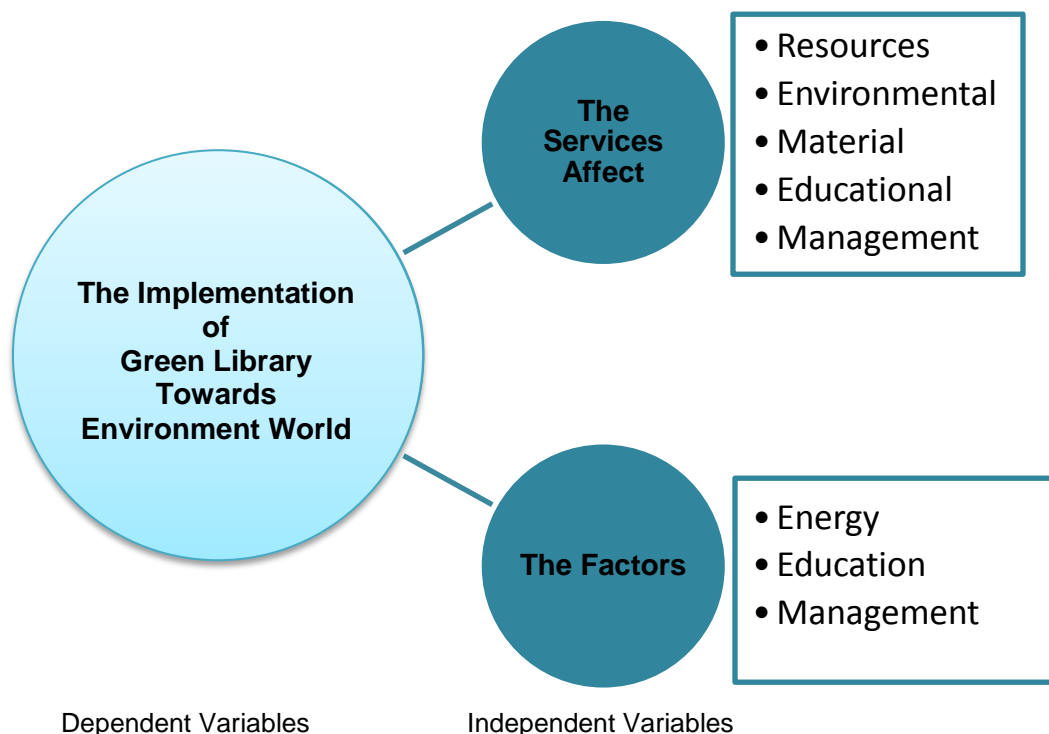


Figure 1. Proposed framework.

#### 4. Conclusions

In a conclusion, previously all the studied articles had mentioned about the environmental information for public awareness regarding an initiatives aimed at green library. Hence, there are also examples of recommendation aspects that have been adopting based to the spaces, resources, management and services in implementation of green library, even though it is crucial as a guideline to all green libraries all around the world and engaged in this green movement to maintain the quality and upgraded environmental conditions aspects.

Last but not least, when we talk about the library, first thing comes on our mind is the problem. Based on all three factors, it's easy to implement a green library. It is because of the library always face on problem in terms of collection of books, system also the environment. So that by implement a green library, all those problem can be overcome by minimize the cost, electricity and produce a healthy life. The green library is very relevant now days regardless national or international library. From that, all the parties should have played their role to help the library such as fund to help them refurbishing and also get involved all the activities and encourage them.

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