



Evaluation of maintenance of Niger state library complex, Minna, Nigeria

Odaudu Ugbede Sunday¹, Adedokun AA John², Zakari Abdullahi Tijjani³

^{1,3}Department of Architecture, Kano University of Science and Technology, Wudil, Nigeria

²Department of Architecture, Federal University of Technology, Minna, Nigeria

Abstract

The need for maintenance arises because buildings inevitably deteriorate with time due to various causes. Building maintenance has consistently been treated as the poor relation of the construction industry, attracting only a tacit recognition of its importance. To reduce this problem, Niger State Library Complex in Minna was studied with the aim of evaluating its effectiveness and efficiency, in order to generate guidelines to improve the design and services of Nigerian libraries. In achieving this, the research data collection was both quantitative and qualitative using descriptive survey method. Questionnaire, interview and direct observation were used for the data collection and table was used in presenting them. The results showed that many users are not fully satisfied with the library; the design and services of the library are not satisfactory, and it is dilapidating; there is a need for many staff of the library to undergo training that will improve the services for the users. Among other recommendations are: the government should adequately maintain the libraries in Nigeria, and the access roads to the Nigerian libraries should be tarred or covered with any other hard surface to avoid the growing of grasses on them.

Keywords: design, guidelines, maintenance, Nigerian libraries

Introduction

Maintenance is any activity carried out on an asset, in order to ensure that the asset continues to perform its intended functions. Maintenance management is the coordination, control, planning, execution and monitoring of maintenance activities and equipment in facilities operation (Kahn, 2006) ^[5]. The sufficiency of the design of a building project, constructional details and methods of construction determine the usefulness of the building and it is also dependent upon the way that the building is used and the maintenance policies and practice undertaken during its life (Iyagba, 2005) ^[4]. The type of individual material and component of a building will have a significant influence upon the life span of a building and therefore, the use of good quality materials and components for a building for its longevity is very important. According to Van Wagenberg (1989) ^[12]. Post Occupancy Evaluation (POE) is a method of measuring the performance of a building in use with respect to the brief, goals of the design team, and activities and feelings of users. POE can be used to provide information for upgrading or improving existing buildings/facilities. POE was used to assess the condition of Niger State Library Complex, Minna.

The need for maintenance arises because buildings inevitably deteriorate with time due to various causes. Building maintenance has consistently been treated as the poor relation of the construction industry, attracting only a tacit recognition of its importance both within the industry and amongst building owners (Chanter and Swallow, 2006) ^[3]. Contemporary public libraries are more than shelves of books. They have become a type of social and cultural institution, potentially offering a constantly changing range of resources for the community (Buschman & Leckie, 2007)

^[2]. These public libraries have been built to play a role as an inclusive place, offering a broad choice of different media and professional guidance in information searching (Kjekstad, 2004) ^[6]. Thus, maintenance work performed on the library buildings is important to continue to make them to be used and always be in good condition. This means that effective and efficient management is crucial to the sustainable delivery of library services to meet community needs and aspirations both now and in the future.

The management of library plays a key role in determining its operational performance. In the past few decades, researchers had realised the importance of maintainability of buildings in achieving cost savings and better functioning of facilities (Nayanthara *et al.*, 2004) ^[9]. Management of any process involves assessing performance, and maintenance management of buildings is no exception (Adenuga *et al.*, 2007) ^[1]. The best way to achieve excellent maintenance is to have a maintenance management that matches as closely as possible the expected requirements of the user (Zawawi *et al.*, 2010) ^[13].

The customary view of evaluation of library system is coloured by the great deal of consideration given to the evaluation of information retrieval systems (Michael *et al.*, 2009) ^[7]. The difficulty associated with the evaluation of library is well known and it is the problem of determining suitable relevance measures. Basically, evaluation of maintenance of a building helps to improve the effectiveness, efficiency and value of such building. The evaluation of maintenance of buildings is based on the effectiveness, efficiency and value, providing a clear definition of goals and the aim of the maintenance programmes and policies which is as well establishing problems which are expected to be solved.

Maintenance of building is grossly neglected in most public maintenance agencies, and maintenance crisis remains the prevailing norm (Shake, 1995) [10]. Maintenance management in the public buildings in Nigeria has suffered from lack of funds for a considerable time (Adenuga *et al.*, 2007) [1]. while requirements for good practice in maintenance management of building stock have been established over a considerable period, the achievement of good practice is by no means universal (Turrell, 1997) [11]. Maintainability of building has been identified as one of the key areas in which the construction industry must achieve a significant improvement (Nayanthara *et al.*, 2004) [9]. The existing library buildings in Nigeria lack adequate maintenance attention and State Library Complex, Minna is included.

The aim of this study is to evaluate the effectiveness and efficiency of Niger State Library Complex in Minna, in order to generate guidelines to improve the design and services of Nigerian libraries. The objectives of this study are: to assess the physical condition of the library building; to determine the opinion of the staff on the condition of the library; to ascertain the feelings of the users on the condition of the library. The scope of this study is Niger State Library Complex in Minna. The State Library Complex is located along Old Airport Road, opposite Niger State Post Office in Minna, Nigeria. Minna is the capital of Niger State. It consists of three major ethnic groups which are called the Hausa, Nupe and Gwari. As at 2006 Census, the population of Niger State was 3,954,772 (National Population Commission of Nigeria, 2006) [8].

Methods and Procedures

A descriptive survey research method was adopted for this study, and both quantitative and qualitative data were generated. There is only one library complex for Niger State. Therefore, the population for this study is the staff and users of Niger State Library Complex in Minna. 100 questionnaires were administered to the users of library complex and 10 questionnaires were also administered to its staff, in order to know the available facilities, quality of space, sources of power and water supply, and way of the disposal of waste to the environment, which in turn generated the levels of satisfaction of the staff and users of the library complex for the purpose of determining the optimum performance for which the library was designed. Direct observation of the current condition of the library and interviews with a group of staff were also employed in gathering the data for the evaluation of the library.

Data presentation and discussion of results

In this section, the physical condition of the library, opinions of staff on the condition of the library, and opinions of users on the condition of the library were considered.

Physical Condition of the Library

It was observed that the interior parts of the library complex are spacious, and the environment of the library complex was clean. However, some of the ceiling tiles have been removed at the first floor of the library complex. Similarly, the wall paint is faded up and in some places the paint is already peeling out of the wall, especially at the entrance. Fig 1 shows the removed ceiling tiles, and Fig 2 shows the faded and peeling wall paint.



Fig 1: The Removed Ceiling Tiles (Source: Authors' Field Work, 2018).



Fig 2: Faded and Peeling Wall Paint (Source: Authors' Field Work, 2018).

It was observed that there are cracks on the first floor. The access road to the library complex is not tarred or covered with any other hard surface, and this led to the growing of grasses on it; there are no drainages for ground water control around the library complex. Fig 3 shows the access road to the library complex with grasses growing on it.



Fig 3: Access Road to the Library Complex with Grasses Growing on it (Source: Authors' Field Work, 2018).

Opinions of Staff on the Condition of the Library

According to some of the staff of the library complex, the library was commissioned by the then military Governor of Niger State (Colonel Lawan Gwadale) on 31st December, 1991. However, it does not have adequate staff and it has gradually been deteriorating over the years. Niger State government that owns and runs the library complex has not been carrying out adequate maintenance services on it. It was revealed that there is no water supply to the library

complex and the supply of electricity is by Abuja Electricity Distribution Company (AEDC) which is only for a few hours in a day. The roof of the library complex is leaking and as a result of the leakage, rain water has spoilt many books in the library which has in turn drastically reduced the number of available books in the library. The library is made up five sections which are circulation section, reference section, children section, serial section and technical section. Out of these sections, it is only the circulation section that is presently functioning with 14 shelves and inadequate books while other sections are no longer functioning due to the lack of maintenance on the library complex. The staff of the library complex also revealed that they are not satisfied with the current condition of the library complex in general and specifically said that even the toilets in the library complex are no longer functioning.

Opinions of Users on the Condition of the Library

According to some of the users of the library complex, there are not enough chairs and reading tables and even the available few ones are always dusty. They added that there are no current books for use in the library. The users complained that the library is not equipped with new technology like internet services, and sometimes the staff close the library complex before the official closing time. Moreover, there are not enough staff of the library complex to adequately attend to the users of the library complex. The users also complained that there is a lot of noise-making from the female staff, especially female cleaners due to the unnecessary jokes and too much conversation while they are on duty; this noise disturbs the users of the library complex who pointed out that the attitude of the staff of the library complex towards users of the library complex should be

improved.

Table 1 displays the data that were obtained from the responses of 100 users of the library complex which is covered by the study in respect of the levels of satisfaction with the library complex with regards to the staff official services and building services. It shows that 10% of the users of the library complex are not satisfied with regards to the official services of staff of the library complex. This means that there is a need for some staff to be trained on how to render proper services to the users of the library. 70% of the users of the library complex are averagely satisfied with regards to the official services of the staff. 20% of users of the library complex are very satisfied with regards to the official services of staff of the library complex. This means that some of the staff of the library complex are very good in rendering services to the users of the library complex. Thus, these staff of the library complex that are very good in rendering services to the users of the library complex can be motivated to train other staff on how to improve on the ways services are rendered to the users of the library complex.

Table 1 also shows that 40% of the users of the library complex are not satisfied with regards to the building services. This means that almost half of the users of the library complex are not satisfied with regards to the building services. Similarly, 60% of the users of the library complex are averagely satisfied with regards to the building services. This means that more than half of the users of the library complex are averagely satisfied for using the library complex with regards to the building services. Finally, 0% of the users of the library complex are very satisfied with regards to the building services. This means that all the users of the library complex are not satisfied with regards to the building services.

Table 1

S. No.	Types of Satisfaction	Percentage (%) of Users that are not Satisfied	Percentage (%) of Users that are Averagely Satisfied	Percentage (%) of Users that are Very Satisfied
1	Satisfaction with Regards to the Official Services of the Staff	10	70	20
2	Satisfaction with Regards to the Building Services	40	60	0

Source: Authors' Field Work, 2018.

Conclusion and Recommendations

The sufficiency of the design of a building project, constructional details and methods of construction determine the usefulness of the building and it is also dependent upon the way that the building is used and the maintenance policies and practice undertaken during its life. Niger State Library Complex in Minna was evaluated with regards to its effectiveness and efficiency, in order to generate guidelines to improve the design and services of Nigerian libraries. The findings showed that some of the ceiling tiles have been removed and the wall paint is faded up; in some places the paint is already peeling out of the wall. There are cracks on the first floor, and the access road to the library complex is not tarred or covered with any other hard surface, and this led to the growing of grasses on it. Also, there are no drainages for ground water control around the library complex. There is no water supply to the library complex and the supply of electricity is only for a few hours in a day. The roof of the library complex is leaking and as a result of the leakage, rain water has spoilt

many books in the library. Out of the five sections of the library, it is only the circulation section that is presently functioning with 14 shelves and inadequate books. The toilets in the library complex are no longer functioning. There are not enough chairs and reading tables and even the available few ones are always dusty. There are no current books for use in the library and the library is not equipped with new technology like internet services, and sometimes the staff close the library complex before the official closing time. There are not enough staff of the library complex to adequately attend to the users of the library complex and there is a lot of noise-making from the female staff, especially female cleaners due to unnecessary jokes and too much conversation while they are on duty. Almost half of the users of the library complex are not satisfied for using the library complex with regards to the building services. Thus, the following guidelines are recommended to improve the design and services of Nigerian libraries:

- i) The government should adequately maintain the libraries in Nigeria.

- ii) The access roads to the Nigerian libraries should be tarred or covered with any other hard surface to avoid the growing of grasses on them.
- iii) Library complexes in Nigeria should be designed to have drainages for ground water control.
- iv) There must be supply of water to all the Nigerian libraries.
- v) Adequate electric power should be supplied to the Nigerian libraries.
- vi) The government should provide adequate chairs and reading tables for the users of Nigerian libraries.
- vii) The government should also provide current books for use in the Nigerian libraries.
- viii) Nigerian libraries should be equipped with new technology like internet services.
- ix) The government should device a monitoring strategy to stop the staff from closing the Nigerian library complexes before the official closing time.
- x) The government should provide adequate staff for the Nigerian libraries to attend to the users.
- xi) The government should be organising training for the staff of the Nigerian libraries on a regular basis to improve their services.

This study did not evaluate the effects of the lack of proper maintenance of the library complex on the users. Therefore, it is finally recommended that the effects of the lack of proper maintenance of the library complex on the users should be addressed in subsequent research of this nature.

References

1. Adenuga A, Odusami T, Faremi O. Assessment of Factors Affecting Maintenance Management of Public Hospital Buildings in Lagos State, Nigeria. The Construction and Building Research Conference of the Royal Institution of Chartered Surveyors. www.unilag.edu.ng/opensoc.php?sno=23672&doctype=pdf. Retrieved on 17-08-2016, 2007.
2. Buschman J, Leckie G. *The Library as a Place: History, Community and Culture*. West Port, London: Libraries Unlimited, 2007.
3. Chanter B, Swallow P. *Building Maintenance Management*. United Kingdom: Blackwell Publishing Limited, 2006.
4. Iyagba ROA. The Menace of Sick Buildings: A Challenge to all for its Prevention and Treatment. An Inaugural Lecture delivered at University of Lagos, Lagos, Lagos State, Nigeria, 2005.
5. Kahn JD. *Applying Six Sigma to Plant Maintenance Improvement Programmes*. Proceedings MARCON 2006 - 3rd International Marketing Congress, Lahore, Pakistan. March, 2006, 19.
6. Kjekstad T. The Role of Libraries in Lifelong Learning. Final Report of the International Federation of Library Associations and Institution (IFLA) on Project under the Section for Public Libraries. IFLA, Sweden, 2004.
7. Michael B, John H, Frank W. *External Evaluation of the Central Library of the European Commission*. November/December, 2009 Final Report. http://ec.europa.eu/dgs/education_culture/more_info/evaluations/docs/general/library_en.pdf. Retrieved on 16-08-2016, 2009.
8. National Population Commission of Nigeria. State Population. Data for National Development. <http://www.population.gov.ng/index.php/state-population>. Retrieved on 01-02-2017, 2006.
9. Nayanthara DS, Mohammed FD, Florence YY, Ling GO. *Improving the Maintainability of Buildings in Singapore*. Building and Environment. 2004; 39:1243-1251.
10. Shake RH. An Evaluation of Maintenance Management and Organisation in Nairobi City Council. Unpublished B.A. Research Project, University of Nairobi, 1995.
11. Turrell P. Small is Different: A Strategy of Effective Management of Maintenance in Nonprofit-making Organization. The Royal Institution of Chartered Surveyors, 1997, 1-3.
12. Van Wagenberg AF. Post-Occupancy Evaluation for General Hospitals. Paper Presented at first International Symposium on Facility Management, Washington D.C. May, 1989, 10-12.
13. Zawawi E, Kamaruzzaman S, Ali A, Sulaiman R. *Assessment of Building Maintenance Management in Malaysia: Resolving by Using a Solution Diagram*. Journal of Retail and Leisure Property. 2010; 9(4):349-356.
14. Zubairu SN, Olagunju RE. *Post Occupancy Evaluation of Some Selected Secondary Schools in Minna, Nigeria*. Journal of Economics and Sustainable Development. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online), 2012, 3(7).