

# Application of Facilities Management Practice in High Rise Commercial Properties: Jos in Perspective

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## Abstract

The article studied the application of facilities management practice in high rise commercial properties. Convenience sampling technique was used in administering questionnaires to the 60 respondents who responded to the survey. It was found out that the extent of application of facilities management in the subject properties is better described as below average. Similarly, the most frequently tools of facilities management in use and employed in the properties were outsourcing and in-house sourcing. This was influenced by the level of their familiarity with the tools. Planned and Preventive maintenance should be taken regularly in order to enhance the effectiveness of the facilities management and to satisfy both the owner and customers of the organization.

**Keywords:** Commercial Properties, Facilities Management, High Rise Buildings, In-house Sourcing and Outsourcing.

## 1. Introduction

Facilities management is one of the fastest-growing professions in the world and was one of the main cost-cutting initiatives during the 1970s. Facilities managers are generally known to be responsible for buildings and services which support businesses and organisations. This view does not comprise the holistic facilities management perspectives in the corporate world. Effective facilities management encompasses multiple activities under various disciplines, combines resources, and is vital to the success of any organisation. To appreciate facilities management in a business context, it is important to establish the definition of facilities management.

Pitt and Hinks (2001) suggest that facilities management is often seen as a management of cost-efficiency rather than a method to achieve multi-dimensional enhancement of business competitiveness. Many still view facilities management in collective term, which lumps together all building facilities and services within the organisation. It becomes a non-core department, supporting services that do not fit well into other core areas of a business. However, this view fails to recognise the value that facilities management can bring towards organisational effectiveness through the management of services, the improvement of services and more importantly the innovation that can be brought about by improving the management of services. The scope of this study is limited to High rise commercial properties in Jos metropolis of Plateau State, Nigeria. The study opted to restrict the scope to Jos metropolis because a study beyond that would make conclusions unnecessarily wide, varied and incapable of clear interpretations. The study is also limited to Jos as this allows the investigation to provide definite conclusions, which may provide a clear interpretation.

## 2. Statement of the Problem

In Nigeria, a good number of facts and incidents aid and abet the development of high rise commercial properties. First is the public sector involvement, which had been predominant at least up to the late nineties. High rise properties were established for providing office accommodation for government workers. Examples include J.D. Gomwalk House and Murtala House all in Jos, Plateau State. Such buildings are owned and managed by the government. However, these buildings are bedeviled by mismanagement and bureaucracy leading to facilities decay, which caused their gradual collapse (Bode-Thomas, 2003).

Facilities management is a relatively new area with origin in United States of America and spreading to the United Kingdom in the late eighties. Most of the current literature in Nigeria are therefore preliminary and pedagogic addressing issues such as definitions and scope (Odiete, 1998) and Ojo, 2002), facilities management tools (Mbamali and Adebayo, 2006 and Opaluwah, 2005) and which of the professionals within the environmental setting is best suited to serve as facilities manager or to handle what within the facilities management field (Odiete, 1998; Ahmad, 1998 and Ojo, 2002).

It is only recently that facilities management has come to be applied to specific sectors of the economy usually education and hospital sectors. Most of earlier studies have taken place in South Africa (Kotze and Nkado, 2003) and United Kingdom (Amaratunga and Baldry, 1999 and Amaratunga, 2000). In Nigeria, studies have not yet been applied to any sector of the economy. Most of the studies in Nigeria have been devoted to

clarifying what facilities management really entails and distinguishing it from the traditionally practiced property management and maintenance management. Little had been written about the management of facilities in high rise commercial properties in Nigeria and in particular Jos, Plateau State. In the light of the above, the research work tends to assess the management of high rise commercial properties with particular regards to the management of their facilities and property assets within the study area.

### 3. THEORETICAL BACKGROUND

Three main streams of literature form the theoretical background of this study: definition, concept and scope of facilities management literature (e.g., Jensen, 2009; Pathirage et al., 2008; Then, 1999), literature on the role of facilities management in a business context (e.g., Christopher, 2000; Moberg et al., 2003), and literature on evolution of facilities management practice in U.S, U.K and Nigeria (e.g., Rogers, 1995). Nevertheless, as application of facilities management practice in high-rise commercial properties is the main focus of this article, the emphasis here is on a basic understanding of application of facilities management practice.

#### 3.1 Definition and Scope of Facilities Management

Numerous definitions of facilities management have risen in recent years. However, many of these definitions provide widespread variance on the understanding of what facilities management is, how it operates, and to what extent it offers sustainable opportunities for businesses (Tay and Ooi, 2001). The BIFM (2010) defines facilities management as “the practice of coordinating the physical workplace with the people and work of an organisation”. Despite being simple and well-focused, this definition fails to stress on the contribution of well-managed facilities towards the prosperity of an organisation. Barret (1995) provides a more robust facilities management definition but restricts the facilities management paradigm to buildings, while neglecting the diverse nature of the facilities management profession. Nevertheless, Tay and Ooi (2001) argue that the identity crisis of facilities management may be due to it being a relatively new discipline. While this discipline is still in the process of evolving, it is hard to generalise a universal definition of facilities management (Bell, 1992; Nutt, 1999; Goyal, 2007a). Failure in finding a sole definition of facilities management is evident in Tay and Ooi (2001) when they provide a summary of various definitions given by previous individuals and organisation in searching for a common meaning of facilities management.

For the purpose of this paper, it is necessary to identify the contributions of various authors to the development of the encompassing definition and functions of facilities management. Spedding (1999) accepted the definition of facilities management as adopted by International Facilities Management Association (IFMA) in its early days as the practice of coordinating the physical workplace with the people and work of the organization, integrating the principles of business administration, architecture and behavioral and engineering science. This definition focuses on unity in diversity that must necessarily be a concern in organizations and achieving such by tapping on the knowledge and capability of various professionals. The real business area of facilities management was not highlighted which include space management and support service management.

However, there are as many definitions of facilities management as there are many practitioners all contributing to a professional calling that is now internationally recognized. This assertion was confirmed by the Royal Institution of Chartered Surveyors (RICS) research report of 1999 which highlighted the many and varied definitions of facilities management. Becker (1999) defined facilities management as being responsible for co-ordinating all efforts relating to planning, designing and managing buildings and their systems, equipment and furniture to enhance the organization’s ability to compete in a rapidly changing world. This definition focuses on building and tries to make facilities management wider than necessary. Nonetheless, this definition can be compared with RICS definition, which is the total management of all services that support the core business of an organization.

Jim Steinmann [cited in Hamer (1988:1)] also defined facilities management as the systematic method of inventorying, planning, designing and maintaining space, equipment and furniture for general or special purpose facilities that are subject to a need to be flexible to accommodate change. This definition added space inventory and recognition of facilities management as an instrument to sustain change programme of an organization. Alexander (1996) defines facilities management as the process by which an organization ensures that its buildings, systems and services support core operations and processes as well as contribute to achieving its strategic objectives in changing conditions. It focuses on meeting users’ needs to support the key role of people in organizations, and strives to continuously improve quality, reduce risks and ensure value for money.

It is clearly an important management function and business service. Major organizations worldwide use it as part of their strategy for restructuring to provide a competitive edge. It can also ensure that buildings and support services improve customer responsiveness and contribute to business objectives. Alexander (1996) emphasized the fact that facilities management is purely an instrument to support the core business of an organization with the aim of making it more efficient and more productive. Hamer (1988) described facilities management as the process of planning, implementing, maintaining and accounting for appropriate physical

spaces and services for an organization, while simultaneously seeking to reduce the associated total cost. This definition introduced workplace as an instrument of strategic management, which prompted IFMA to commission a research into its cost per employee in North America.

Park (1994) sees facilities management as the structuring of building plant and contents to enhance the creation of the end product. As with all systems it is the generated benefit to the business or activity that matters, not the system itself. The end product can, in this case, be a tangible manufactured item or a service; in either case the product benefits in competitiveness and quality. A recent attempt by Tay and Ooi (2001) to harmonize eight current and influential definitions of facilities management led to the identification of facilities management as the integrated management of the workplace to enhance the performance of the organization.

To Brochner (2003), facilities managers are responsible for ensuring cost efficient management of the building and related facilities, and creating an environment that supports the activities of the building user, and their experience and knowledge would provide vital background to building related decisions. Hamer (1988) sees facilities management as the responsibility for co-coordinating efforts to ensure that buildings, technology, furniture and organizational trends are responded to, over time. However, these definitions do not stress the contribution, which well-managed facilities can make to an organization. Barrett (1995) [Cited in Hassanien and Losekoot (2002)] defines it as an integrated approach to operating, maintaining, improving, and adopting the buildings and infrastructure of an organization in order to create an environment that strongly supports the primary objectives of that organization. However, neither definition refers to the process or activities, which are associated with facilities management.

The British Institute of Facilities Management (2000) defines facilities management as the integration of multi-disciplinary activities within the built environment and the management of their impact upon people and the workplace. This definition recognizes the contribution of processes, principles, laws, theories and practices from other professions and re-iterates the need to manage the tremendous impacts that such diverse background could have on people and the workplace of the organizations.

Nourse (1990) implies that facilities management does not have a strategic orientation which contradicts Nutt (2000) who addresses the strategic role that facilities management plays in a business entity. Nourse (1990) is of the opinion that facilities management does not have a “bottom-line emphasis”, which is contrary to Becker’s (1990) view that facilities management can make a positive contribution by enhancing the firm’s ability to compete successfully through good facilities management (Tay and Ooi, 2001). Other inconsistencies are apparent regarding the scope of responsibilities for facilities manager. Alexander (1999) and Then (1999) suggest that facilities management is concerned with many aspects such as people, process, environment and health and safety, while earlier definitions such as Becker (1990) suggests that facilities management is only concerned with what may be termed “physical” such as building, furniture and equipment. Despite diversities noted in finding a common meaning of facilities management, Tay and Ooi (2001) coin a widespread theme that threads facilities management identity. Facilities management is applicable to all organisations since it relates to the uses of space in a workplace. . Facilities management plays a supporting role in enhancing the performance of a firm. An integrated approach is required in employing facilities management practices.

### **3.2 The Role of Facilities Management in a Business Context**

Facilities management was traditionally viewed as the poor relation between real estate and construction professions (Atkin and Brookes, 2000), with the term often conjuring images of maintenance plants, care-taking and cleaning. Although aspects such as these fall under the facilities management category, Facilities management is a profession requiring a wide range of skills and knowledge. Practitioners are concerned with managing the multi-disciplinary activities to optimise their impact on people and the workplace and giving its customers value for money (Goyal, 2007). Bell (1992) points out that, facilities managers are responsible for co-coordinating and managing an extremely wide range of specialist areas including property and estates.

Facilities management is a new field of study emerging within engineering as well as a new service sector that has been developing due to outsourcing of non core competencies such as cleaning and office management to third party providers. As a consequence, there are many definitions and understandings of facilities management (e.g., Then, 1999; Nutt, 2000). One way to understand facilities management is to look at it as the integration of the organizational processes in order to maintain and develop the services supporting and improving the effectiveness of the primary processes (Jensen, 2009). Another definition describes facilities management as an integrated approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organization in order to create an environment that strongly supports its primary objectives (Pathirage et al., 2008, p. 5).

These views are implicitly based on the concept of the value chain that distinguishes primary activities from secondary activities of an organization (Porter, 1980). Pathirage et al. (2008) argue that the facilities management literature identifies four generations of facilities management that focus on the changes to the

management of facilities over the last few decades. In the first generation, facilities management was considered as an overhead to the organization and was something that had to be managed at minimum cost rather than optimum value. In the second generation, Facilities management took a process perspective and promoted the process focus between the organization's individual businesses and the facilities management organization by making facilities management activities within the organization a continuous process. In the third generation, facilities management became more concerned with resource management, concentrating on managing supply chain issues associated with facilities management functions.

Finally, the fourth generation focuses on the alignment between organizational structure, work processes and the enabling physical environment arguing that the organization's strategic intent must clearly reflect the facilities dimensions in its strategic business plans. This article does make such strict distinctions and is mainly positioned in the fourth generation of facilities management according to Pathirage et al. (2008). These are however background concepts for investigating the factors impacting on the application of facilities management practice in high-rise commercial properties in the study area. However, it can be said that some of these factors are more relevant at the strategic level, others are more relevant at the tactical and operational levels, while some may be important at all three levels.

### **3.3 Evolution of Facilities Management**

According to Owen (1995), Facilities Management became recognized as an identifiable management concept in the United States at the start of the eighties and has been practiced in the United Kingdom since 1983 with the main growth occurring in the nineties; all the functions, now incorporated under the Facilities Management umbrella existed prior to the recognition of Facilities Management. Owen (1995) gave a brief beginning of the facilities management faculty. Facilities management's roots are to be found in a broad spectrum of backgrounds. The term facilities management itself originated in the hi-tech computer world and was transposed into the built environment area via space planners and office furniture manufacturers. There it was used as a communication vehicle between these interior space specialists and a wide range of clients or users; many represented by staff with no property background, including personnel and administrative staff, accountants and production managers. Facilities management became recognized as identifiable management concept in the United States of America at the start of the eighties and has been practiced in the United Kingdom since about 1983, with the main growth occurring this decade. All the functions, which are now incorporated under the facilities management umbrella, existed prior to the recognition of facilities management. What facilities management has achieved, that is new, is an understanding that a coordinated and integrated approach to a range of business activities can add value to an organization's process. This was corroborated by Spedding (1999) when he said that what is new in facilities management is the view of the support which the property can give to the mission and goals of a particular business.

In particular, the tendency for multi-national companies, with highly serviced buildings in expensive city locations, to insist on making assets work in the most efficient way has given rise to the profession of facilities management and it is unlikely that this is a passing trend. The practice of facilities management as a professional discipline (with its own defined procedures, professional and educational associations, and the like) has begun. The growth of the most prominent trade organization in this field – The International Facilities Management Association (IFMA) – from its inception in 1980 to 1,500 members in 1985 and more than 4,000 members in 1987 is one dramatic example of this (Hamer, 1988). Spedding (1999) was in line with this account when he revealed that he came in contact with the concept of facilities management in the late 1980s.

The re-structuring of the Royal Institution of Chartered Surveyors (RICS) England from seven divisions into sixteen faculties in 1995 saw the coming into existence the Facilities Management Faculty. This gave impetus to the professionalization of Facilities Management among surveyors. This incident led the College of Estate Management at the University of Reading to establish a professional diploma in facilities management, which was accredited by the Royal Institution of Chartered Surveyors. The combined efforts of the Royal Institution of Chartered Surveyors, British Institute of Facilities Management and International Facilities Management Association through conferences, publications, and research and industry liaison have internationalized facilities management and these actions have been aided and abetted by communication and information technology including internet.

### **3.4 Facilities Management Practice in Nigeria**

Facilities management practice in Nigeria, as at now, is extremely limited and recent (Odieta, 1998 and Ojo, 2002). Definitely, it is an offshoot of property management practice and maintenance management, which are widely accepted and well rooted. For instance the Oyo State Government farmed out Adamasingba Recreation Centre and Shopping complex as well as Agbowo shopping complex at Ibadan to different firms of Estate Surveyors and Valuers to manage. Internal team of experts is managing the refurbished and rehabilitated National Arts Theatre at Iganmu, Lagos.



The Nigeria Industrial Development Bank's (NIDB) building and NAL Towers among others have also been firmed out to consultant Estate Surveyors and Valuers. Facilities management emergence could be attributed to the activities of multi-national companies with American origin particularly those in the oil industry. Examples include Chevron and Mobil that have spearheaded the practice of facilities management in an attempt to provide a good working and living environment within their organizations and sustained their crude oil production. Also, some hotels like Nigerian Hotels with branches at Benin and Akure are firmed out to private management companies to manage. Most five star hotels such as Nicon Noga Hilton (Now Transcorp Hilton), Sheraton hotels and Towers and Eko Meridien have also put facilities management practice in place (Bode-Thomas, 2003).

#### **4. Research Method**

##### **4.1 Population of the Study and Sampling Technique**

The population for the study was the High-Rise commercial properties in Jos metropolis, Plateau State, Nigeria. According to sources from the Plateau State authorities, there are two (2) identified High-Rise-Commercial properties within Jos metropolis that are in –use-as at the time of this study. Ownership of high rise commercial properties can be government, public as well as private investors. All of these properties are owned by the Plateau State Government.

The sample size are the 2-High Rise commercial properties, that is, Joseph. D. Gomwalk House and General Murtala Ramat Muhammad House, out of 3 representing about (67%) of the sample frame which were administered with questionnaire. The sampling technique adopted was convenience sampling. Out of the seventy (70) questionnaires administered in the selected properties, 60 (86%) were retrieved and used for analysis.

##### **4.2 Data Requirements**

One of the features of a good research design is the generation of data for refuting or validating the presumed expectations or hypotheses. Both primary and secondary data were generated for this research. Primary data mainly came from the respondent's responses to questionnaires. Secondary data are also required for this research, which came from various sources such as information obtained from published materials such as textbooks, newspaper, newsletter and information from the internet which are relevant to the research work.

##### **4.3 Data Collection Instrument and Method of Data Analysis**

The research method adopted for this work to generate the required data was survey research. The survey research basically focused on self-administered questionnaires complemented with in-depth personal interview and physical survey of the constructed facilities. It is considered that a combination of self-administered questionnaires and in-depth personal interviews are, for the research, the most appropriate data collection instruments. This is because of the advantages derivable from both approaches which include high response rate, opportunities for clarification request if any and detailed investigation of the physical assets. Besides, Okoroh, Jones and Ilozor (2003), Nebel and Ghei (2002) and Amaratunga (2000) used the same methods while carrying out similar researches.

The self-administered questionnaire was complemented by personal interview especially at the initial stage of data gathering process. Moreover, interviews allow explanation of issues in the questionnaire by the interviewer in areas where some respondents may not be fully knowledgeable. Two sets of questionnaires were designed namely:

- a. Occupants/Tenants Questionnaire: It consists of ten (10) questions on the property.
- b. Landlord/Facilities Managers Questionnaire: It consists of fourteen (14) questions on how the facilities of the property are being managed.

The data presented in this research work were analyzed using simple frequency tabulation and percentages. These were employed in presenting and analyzing the data collected.

#### **5. Results and Discussion**

This section presents a comprehensive breakdown of data collected from questionnaires administered in the study area. The analysis undertaken in this section has been arranged into four sections. The first section analyzes the challenges faced by facilities managers in the course of administration and it covers the reasons for choosing facilities management as a tool for property management and how to improve the management of the facilities in the subject properties. The second section covers the analysis of the type of management practice applied in the study area. The third section involves the analysis of the conditions of facilities available. The fourth section dwells on the analysis of the satisfactory level of the facilities management practice by the respondents.

**Table 5.1: Challenges Faced by Facilities Managers in the Course of Administration**

Problems faced	Frequency	Percentage (%)
Bureaucracy from office administration	4	40
Failure to replace outdated facilities	2	20
Inadequate funds to facilitate efforts of management	4	40
<b>Total</b>	<b>10</b>	<b>100</b>

**Source: Field Survey, 2014**

Table 5.1 above shows the challenges facilities managers are facing in the course of administration. The challenges that facilities managers are facing in administration has to do with bureaucracy from office administration. For instance, four (4) respondents representing 40% and two (2) respondents representing 20% attributed the challenges to failure to replace outdated facilities. Furthermore, four (4) respondents representing 60% opined that the challenges they are facing has to do with inadequate funds to facilitate efforts of management.

**Table 5.2: Reasons for Choosing Facilities Management Practice as a Tool in Property Management**

Reasons	Frequency	Percentage (%)
To enable the Facilities Manager identifies defectiveness in the structure	4	40
To give quick access to part of the property that needs attention	3	30
To give a guide so as to plan a schedule of maintenance based on knowledge of facilities therein	3	30
<b>Total</b>	<b>10</b>	<b>100</b>

**Source: Field Survey, 2014**

Table 5.2 above shows the reasons for choosing facilities management practice as a tool for property management. From the four (4) questionnaires distributed, 4 of the respondents representing 40% indicated that their reason is to enable the Facilities Manager identifies defectiveness in the structure, three (3) respondents' opinion representing 30% was to give quick access to parts of the property that needs attention. However, three (3) respondents representing 30% response was to give a guide so as to plan a schedule of maintenance based on knowledge of facilities manager.

**Table 5.3: How to Improve the Management of the Facilities in the Properties**

Ways of improving the Management of facilities	Frequency	Percentage (%)
Constant inspection and release of funds by the property owners	4	33.3
Facilities Managers should be given freehand to operate	4	33.3
Adequate funds should always be released to enhance efficiency	4	33.3
<b>Total</b>	<b>12</b>	<b>100</b>

**Source: Field Survey, 2014**

Table 5.3 above shows the ways by which the management of facilities in the subject properties can be improved. From the responses of the facilities managers of the subject properties, constant inspection and releases of funds by the property owners, given free hand to managers to operate and lastly the release of adequate funds to enhance efficiency was opined by 4 respondents each representing 33.3% respectively.

**Table 5.4: Type of Management Practice Applied**

Facilities	Properties	
	JD Gomwalk House	Murtala House
Lifts	Outsourcing	Outsourcing
Cooling system	Outsourcing	Outsourcing
Management of building	In-house	In-house
Equipment management	In-house	In-house
Lightning	In-house	In-house
Fire extinguishers	In-house	In-house
Cleaners	Outsourcing	Outsourcing
Security	Outsourcing	In-house

**Source: Field Survey, 2014**

Table 5.4 above shows the type of facilities management practice in use in the subject properties. The lifts are being managed through Outsourcing at both J.D Gomwalk House and Murtala House. Cooling systems are also being managed through Outsourcing at both Houses. Management of the building, lightning and fire extinguishers are all being managed using In house sourcing at both the two Houses, while cleaning and services is being carried out through outsourcing at both House. Furthermore, security service is being undertaken using

Outsourcing at J.D Gomwalk House and In-house at Murtala House.

**Table 5.5: Condition of Facilities at Murtala House**

Facilities	Very Good	Good	Fair	Poor
Water supply	25 (96.15%)	1 (3.85%)	0 (0%)	0 (0%)
Lifts	0 (0%)	0 (0%)	4 (15.38%)	22 (84.66%)
Cooling system	0 (0%)	18 (69.23%)	8 (30.76%)	0 (0%)
Lightning	26(100%)	0 (0%)	0 (0%)	0 (0%)
extinguishers	3 (11.54%)	23 (88.46%)	0 (0%)	0 (0%)
Power supply	19 (73.07%)	7 (26.92%)	0 (0%)	0 (0%)

**Source: Field Survey, 2014**

Table 5.5 above shows the state or conditions of facilities at Murtala House. 25 respondents representing 96.15% responded that water supply in the property is very good and 1 respondent representing 3.85% responded as good. The condition of lifts was fair from the respondents as 4 respondents representing 15.38% indicated while 22 respondents representing 84.66% responded as poor. However, cooling system was considered by 18 respondents representing 69.24% as good while 8 respondents representing 30.76% responded as fair. Lightning's condition was obtained from all the 26 respondents as very good. Fire extinguishers condition was very good as indicated by 3 respondents representing 11.54% and good by 23 respondents representing 88.46%. Power supply was obtained from 19 respondents representing 73.07% and good by 7 respondents representing 26.92%.

**Table 5.6: Condition of Facilities at Joseph D. Gomwalk House**

Facilities	Very Good	Good	Fair	Poor
Water supply	0 (0%)	22 (73.3%)	8 (26.67%)	0 (0%)
Lifts	0 (0%)	0 (0%)	0 (0%)	30 (100%)
Cooling system	0 (0%)	18 (69.23%)	8 (30.76%)	0 (0%)
Lightning	1(3.33%)	29 (96.66%)	0 (0%)	0 (0%)
extinguishers	0 (0%)	0(0%)	0 (0%)	30 (100%)
Power supply	0 (0%)	23 (76.66%)	4 (13.33%)	3 (10%)

**Source: Field Survey, 2014**

Table 5.6 above shows the state or conditions of facilities at Joseph D. Gomwalk House. 22 respondents representing 73.3% responded that water supply in the property is good and 8 respondents representing 26.67% responded as fair. The condition of lifts was poor from the respondents as all the 30 respondents representing 100% indicated. However, cooling system was also considered as poor by all the 30 respondents. 18 respondents representing 69.24% as good while 8 respondents representing 100%. Lightning's condition was obtained from 29 respondents representing 96.99% as very good and 1 respondent representing 3.33% as very good. Fire extinguishers condition was poor as indicated by all the 30 respondents representing 100%. Power supply was obtained from 23 respondents representing 76.66% as good and considered fair by 4 respondents representing 13.33% and poor by 3 respondents representing 10%.

**Table 5.7: Satisfactory Level of Facilities Management Practice in the Study Area**

Performance	Frequency	Percentage (%)
Very good	0	0
Good	30	54
Fair	24	43
Poor	2	3.6
Total	<b>56</b>	<b>100</b>

**Source: Field Survey, 2014**

Table 5.7 above shows the satisfactory level of facilities management practice in the study area. Among the 56 questionnaire distributed in the study area, 30 respondents representing 54% indicated that their level of satisfaction in terms of facilities management is good, 24 respondents representing 43% opined that their level of satisfaction is fair while 2 respondents representing 3.6% were of the opinion that their level of satisfaction is poor.

## 6. Conclusion and Recommendations

The Main driving force of this research work is the exploratory study of the application of Facilities Management Practice in High Rise commercial Property; the following findings were made from the analysis of data collected as follows:

- (i) The extent of application of facilities management in the subject properties is better described as 'below average'.

- (ii) There is strong evidence to suggest that facilities management as a tool of management aids High Rise commercial Property's effectiveness generally.
- (iii) The various tools used in the management of facilities in the high rise commercial properties are outsourcing, in-house sourcing and co-sourcing facilities management tools.
- (iv) The effectiveness of facilities management practice is determined by preventive, planned and corrective maintenance practice.
- (v) There is also evidence to suggest that facilities provided in the subject property are in a poor condition.
- (vi) High financial cost involved in the management of the facilities is one of the identified difficulties encountered in the facilities management of the high rise commercial properties.

Furthermore, this article has brought to the lime light the degree of the application of facilities management practice in Jos, Plateau State. The study has equally addressed other issues such as derivation of indicators of effective application of facilities Management in the high rise commercial properties and the challenges that are likely to be faced in its application. It is hoped that the business of the organization in the study area will be enhanced by supplementing the activities of the owner and the facilities.

In view of the findings from this research work, the following recommendations are established.

- (i) Facility management should be used as tool in the management of high Rise Commercial properties in the study areas and other areas with similar antecedents.
- (ii) Preventive and Planned maintenance should be taken regularly so as to enhance the effectiveness of the facilities management and to satisfy both the owner and the customers of the organizations in the study area.
- (iii) It has been established through this study that application of facilities management practice in the management of high rise commercial properties within the study area was low, thus, suggesting its unpopularity among the property owners. In this light, accelerated education of the populace in this field is very vital and this will go along way in promoting the practice.
- (iv) Since the realization of the fact that adequate and timely release of funds will serve as a proper solution to the problems that are militating against proper administration of facility management in the study area, therefore, the property owners should ensure the timely and adequately release of funds for the management of high rise commercial properties.
- (v) The Nigeria Facilities Management Association should establish a standard of practice, code of conduct, standard of training and encouraging Continuing Professional Development through seminars, workshops and public lectures in an effort to vigorously pursue the application of facilities management practice in high rise commercial properties.

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