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THE ROLE OF A PROFESSIONAL BUILDER IN FACILITY MANAGEMENT

BY

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ABSTRACT

This research studied the role of a Professional Builder in facility management. The researcher chose Awka and Onitsha in Anambra State as the area of study. This study was carried out so as to find out actually, if Professional Builders have a role to play in facility management and identify those roles. In carrying out the study, related literature in the study were reviewed, primary data were collected using questionnaires, while data obtained were analyzed using frequency table and simple percentages and hypothesis were tested using Z-test statistical tools. Some of the findings and recommendations in this research study are: The researcher observed that facility management is not well known and not properly practiced in this part of the world, the issue of which professional should lay claim to facility management service is not properly defined in the minds of people, the role of professionals as a facility manager is not well known. As a result of all these, a proper awareness should be carried out so as to enable organizations engage professional Builders for facility management services, in order to meet organizational goals.

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CHAPTER ONE

1.1. Background of the Study

The building practice as a profession is filled with so many roles, and it is important for a builder to be aware of the basic roles he is expected to play. This is due to the fact that a Builder is said to be responsible for his professional judgement and actions.

Facility management is complex and dynamic and involves a high degree of expertise and professionalism. "As building is maturing into an increasingly advanced sophisticated, specialized and independent profession, the Builders role to maintain and develop the agreed services which support and improve the effectiveness of building primary function/activities comes into play" (British Standard Organization, 2011).

Role, as stipulated by the Oxford Advanced Learner's Dictionary (7th ed.), is the function or position that a person(s) has or is expected to perform in an organization, in a society or in a relationship, while a professional is a word showing that the individual being referred to is well-trained and extremely skilled. According to Oyefeko (1999), a facility manager studies the use of a building, adjust it and its occupancy to best match the current demand so as to slow down value decline of such property. Inevitably in every establishment, there comes a time when wear and tear inside and outside of the premises may lead to need for repairs or replacement of the parts. If repairs are delayed through either lack of knowledge or restricted

expenditure, then very much more costly and extensive repairs are likely to become necessary. It may be impossible to prevent the start of any defect, but with regular and thorough internal and external inspection, any defect may be detected early and remedial action taken before it becomes too bad. Thus, the cost of replacement, extensive repairs and labour is being reduced.

We should then embrace 'Facility Management Approach' for the future management of our buildings and engineering infrastructures, especially with respect to institutional buildings. Considering the problems that may arise as a result of inadequate facility management services, a Professional Builder cannot afford to toy with the services he renders to humanity of which facility management is one, and the present subject of discussion.

1.2. **Statement of the Problem**

The building profession today has a unique role to play in meeting maintenance needs of clients and the general public while paying a greater attention to building facilities. Inspite of this, Builders are not meeting up to the expected level of standards of facility management. This can be attributed to the fact that there is lack of maintenance culture in our society today, and it seems builders do not foresee the implication of this, for if they do, facility management will be adequately practiced.

There are cases of building defects, deterioration hazards and overcrowding of space in our society today, especially here in Nigeria and no doubt there is apparently a knowledge gap in this area by both Builders and clients, for most client are not well informed of the need to engage a registered Builder to manage his works. There is equally a need to fill this knowledge gap in order to bring to the notice of clients the essence of facility management, and to Builders, the essence of providing a well structured facility management plan. These problems necessitated the conduct of this research. Therefore, this research is to help identify the role of a professional Builder in facility management.

1.3. **Aim And Objectives Of The Study**

The purpose of this study is to examine the role of a professional Builder in facility management. Thus, the objectives of this study specifically are:

1. To find out the role a professional builder can play in facility management.
2. To find out why a professional builder should take up facility management as a service.
3. To examine the impact of a professional builder and a well informed client in facility management.

1.4. **Research Questions**

1. What are the roles of a Professional Builder in facility management?
2. Why should a Professional Builder partake in facility management?
3. What are the impact of a Professional Builder and a well informed client in facility management?

1.5. **Research Hypothesis**

H_O: A Professional Builder has no role to play in facility management

H_1: A Professional Builder has a role to play in facility management.

1.6. **Significance of the Study**

It is the earnest desire of the researcher that the outcome of this research work will go a long way in introducing Builders to facility management as a service that they can venture into. This work will also make known, the role a Builder has to perform with respect to facility management. It will as well go a long way in improving the knowledge and information clients and Builders have about facility management. This research is equally geared towards making obvious those reasons why a professional hand is required in facility management. Finally, it will also serve as a reference material to researches, students and professionals in the construction industry. The researcher hopes that all this will be achieved through objective and constructive findings, criticisms, solution and recommendation.

1.7. **Scope of the Study**

This study was conducted with regards to institutional buildings in Anambra State (South-East geo-political zone).

1.8. **Limitation of the Study**

The limitation in this study include: getting useful and up-to-date information for the study, financial constrain and time factor due to tight academic calendar.

1.9. **Definition of Terms**

Role: This is the duty or use that someone or something usually has or is expected to have.

Professional: He is an expert in the specialized knowledge and mechanics of the field in which he practices.

Builder: According to Obiegbu (2008), a Builder is a person who have received appropriate academic training in the science, technology and management process of producing and maintaining building, as well as sufficient hand on experience and statutorily registered by the Council of Registered Builders of Nigeria (CORBON).

Facility: Alexander (as cited in Ogunoh, 2011) defined facilities as factors of production brought to enable an organization achieve its core objectives. They include physical facilities buildings, installations,

accommodations (either owned, shared or rented) and operational tools and Gadgets; plants, machines, computers, telephones, factory equipment etc.

Management: Management concerns all aspects of providing, operating, maintaining, developing and improving facilities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. **Introduction**

This chapter discusses the various literature related to a professional builder's role in facility management. Information is presented under the subheadings such as: facility management, framework of facility management, facility management evaluation methods, facility management tool, a facility manager and a professional builder, a professional builder-becoming and being a professional, a professional builder and a well informed client, property management, benefits of facility management.

2.2. **Facility Management**

Spedding and Holmes (2000) stated that several groups have attempted to define the scope of facility management, while Oyefeko (1999) said that no standard definition has emerged for facility management. Oyefeko defined facility management as a service justified and oriented towards making a positive contribution to the primary core of a business concern. According to Barrett's study (as cited in Oyefeko, 1999) facility management is an integrated approach to maintaining, improving and adapting the buildings or facilities of an organization in order to create an environment that strongly support the primary objectives of that organization.

The Chartered Institute of Building (CIOB) has taken a particular view of facility management which is reflected in the figure 1 below.

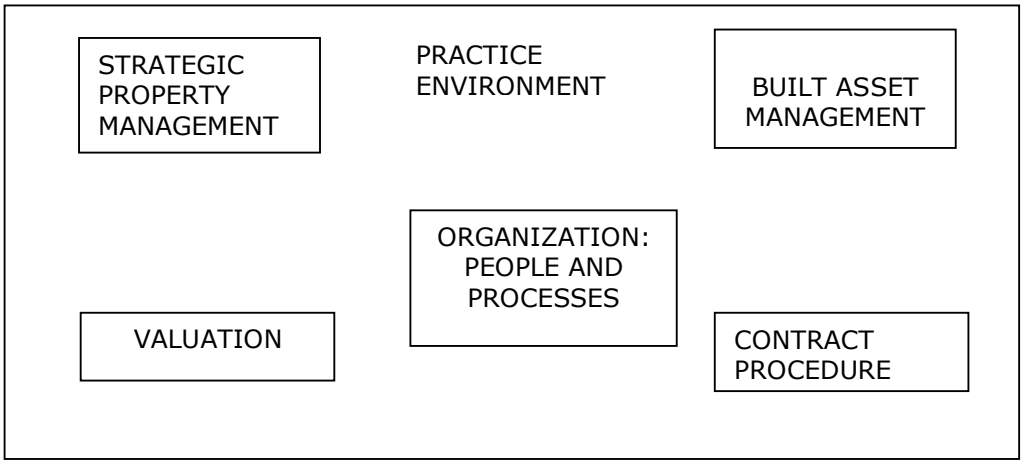

Fig. 1 Facility Management. (Chartered Institute of Building Handbook of Facilities Management).

Figure 1 above highlights the areas of built asset management, strategic property management, organization-people and processes, valuation and contract procedures. These five (5) main grouping of facility management, which also relates to the organization's business environment, many of which are made more efficient by the use of information technology (IT).

2.2.1 **Strategic Property Management And Valuation**

> *According to Worthing (2000), the essence of strategic property management is the realization that the built estate is a valuable resource which, along with other resources such as manpower (Labour) and finance, can help to deliver the corporate goals of an organization. Strategic*

property management is a process where the value of the built estate as a resource is recognized and its salient features understood and measured.

This information is fed into the organization corporate plan, in order to help ensure that property furthers an organization's strategic objectives. It follows that an organization with a large property portfolio, the built estate needs to be managed appropriately in order to play its part in achieving the corporate goals of that organization, while sometimes organizations with large property holdings ignore the built estate and merely produce an uncoordinated shopping list of projects which emerge from planning decisions lacking a property insight. The lack of information on property holdings is an indication of a very serious deficiency which fails to recognize potential value of property in helping effective service delivery. Often this is because neither those responsible for strategic plans, nor those running the estate recognize the potential of that estate in helping to deliver long-term goals. This problem is being compounded by the fact that professional hands like that of a PROFESSIONAL BUILDER often do not have a place at board level and at lower levels.

2.2.2 **Objectives Of Strategic Property Management**

The concern of strategic property management is to ensure that a coherent view of property is fed into the overall strategy of the institution. Avis, Gibson and Watts (1989) gave the following example

of well defined property objectives from an organization in the public sector.

a. Provide economically and efficiently for the present and future needs of clients, either by arranging for the reallocation of space within the existing estate, or by building, purchasing or leasing additional property as necessary.
b. Keep outgoings in the leased estate such as central payments and service charges to the minimum achievable through efficient negotiation of rent reviews and lease renewed with landlords.
c. Hold an estate sufficient to meet objective **(a)** and to dispose of any surplus accommodation quickly and effectively.
d. Reduce the amount of vacant space to the minimum possible.
e. Maintain the operational fitness and value of the estate by timely and adequate maintenance.

2.2.3 **Built Asset Management And Contract Procedure**

This is the aspect that deals with the maintenance and enhancement of the operational efficiency of buildings and can also be said to be a way of conserving the physical asset when built. The corporate business strategy requires careful and expert management of the property components of the total asset base of the corporation. Management activities include:

1. The analysis of each individual property and comparing its actual performance against the expectations on acquisition and its comparison with other assets in the corporate asset base.

2. The search for ways and means of improving the operational performance of property asset.
3. Disposing, redeveloping/refurbishing the asset where long term prospects are likely to be lower than expected.

The property management process may be viewed as the continuing interaction of the decisions made on the basis of an appropriate analysis, and the results and consequences of the actions carried out by the managers in charge. A primary task of built asset management is organization and controlling response maintenance, planned maintenance, renewal and improvements.

The procurement of building work also relates to built asset management which is concerned with conserving the physical assets when built. This is due to the fact that the building design processes, the maintenance of buildings and their eventual maintenance and operation all relate.

2.2.4 **Organization: People And Processes**

This aspect of facility management is concerned with people and their interaction with the building. The main aim of this aspect of facility management is to optimize the design space and its procurement, its utilization, as well as the internal environment. It basically concerns the management of space and the provision of an environment that will support the processes involved.

2.2.5. **Practice Environment**

Practice environment is termed to be the glue between the parts. It involve a range of enabling processes which include the financial management, legal and professional environment within which facility management takes place.

2.3. **Framework Of Facility Management**

According to Hassanain (2002) the development of facility management/asset management framework was motivated by the desire to develop an industrial training (IT) solution for asset management industry. A standard framework cannot truly be institutionalized, because facility management unlike other fields vary considerably from one generation to the other (Oyefeko, 1999).

The framework of each organization has to be developed in response to the particular needs of that organization.

A guide to formulating a facility management framework

a. Users evaluation
b. Contracting out-cleaning-catering, fire services.
c. Use of computer base information system-for collation of data and data processing.
d. Management of people through change-using total quality management technique.
e. Making decisions.

2.4. **Facility Management Evaluation Method**

Facility management has three (3) main evaluation methods, they include:

a. Post Completion Evaluation (PCE)

b. Post Occupancy Evaluation (POE)

c. Continous Evaluation Process (CEP)

a. **Post Completion Evaluation (PCE):** when the facilities are ready for use, the planned parameter is evaluated to identify how successful each stage of the process has been. The mistakes and faults in the stages of production are identified and noted for their future use of a new building or immediate correction on the new facilities.

b. **Post Occupancy Evaluation (POE):** this evaluation is carried out few weeks after the facilities have been put to use. Here, the actual users of the facilities (instead of the management) are interviewed on the actual performance of the facilities in relation to the environment and duties whether the facilities are performing as they should. Preiser, Rabinowitz and White (1988) suggested that POE should cover:

I. Technical elements like fire safety, structural integrity, sanitation, durability, acoustics and lighting.

II. Functional elements like operational efficiency, productivity, work flow and organization.

III. Behavioural elements like privacy, symbolism, social interaction, density and territoriality.

c. **Continous Evaluation Process (CEP**): here evaluation process is continued through the life span of the facilities.

2.5. Facility Management Tool

One of the key tools employed in facility management is VALUE MANAGEMENT. It is an organized approach to providing the necessary functions at the lowest cost (Oyefeko, 1999). Kelly's study (as cited in Oyefeko, 1999) described value management as a philosophy concerned with providing the product described by a customer at the required quality and at optimum cost. This helps to identify and eliminate unnecessary cost.

2.6. A Facility Manager And A Professional Builder

The role performed by a professional Builder in facility management can be liken to that of a facility manager, i.e., a professional Builder is seen carrying out the same role a facility manager ought to perform in facility management. This fact goes on to tell us that a builder is automatically a facility manager and as a result of this, the both persons role will be treated together under one heading so as to avoid repetition of similar ideas.

> *A Professional Builder (as a facility manager) is a person who studies the use of a building, adjust it and its occupancy to best match the current demand so as to slow down value decline of such property. He may also adopt measures like refurbishment,*

alteration and even change of use in order to prolong the value of life and properties. He also aims at getting the correct and best usage of a building which in-turn will help to eliminate wasted space and in-efficient departmental interface and get rid of unattractive working environment (Oyefeko, 1999).

2.6.1. **Role of a professional builder/facility manager in facility management.**

According to the Association of Graduate Careers Advisory services, AGCAS (2010) duties vary with the nature of the organization, but a professional builder (facility manager) generally focus on using best business practice to improve efficiency by reducing operating cost while improving productivity. This is a wide field with adverse range of responsibilities which are dependent on the structure of the organization.

Facility managers are involved in both **strategic planning** and **day-to-day operations** particularly in buildings and premises. Likely areas of responsibility include:

1. Procurement and contract management.
2. Building and grounds maintenance.
3. Cleaning.
4. Space management.
5. Health and safety.
6. Catering and vending.
7. Security.

8. Utilities and communication infrastructures.

1. **Procurement And Contract Management**

- **Procurement-** Procurement is a process that is used to deliver construction projects (Ascoorth & Hogg, 2002). They also stated that clients who have a major decision to build are faced with the task of procuring the construction works that they require. This may be a daunting prospect, given the level of financial commitment and other risks associated with the venture, the complex nature of construction the possible perception of the construction industry as one that is frequently under performs.

Procurement options

There are several procurements options available to the client and within each broad types, there are several variants. It is the facility manager's duty here to assist the client make a good choice that would accommodate the client needs and project specifies. The various procurement options are explained briefly below.

a. **Traditional Method:** In this case, the client will appoint a design team, either individually or through a project manager to administer the project from first identification of needs through to hand over on completion and beyond to the end of the defects maintenance period (Park, 2000). The contractual link here is illustrated graphically in figure 2 below.

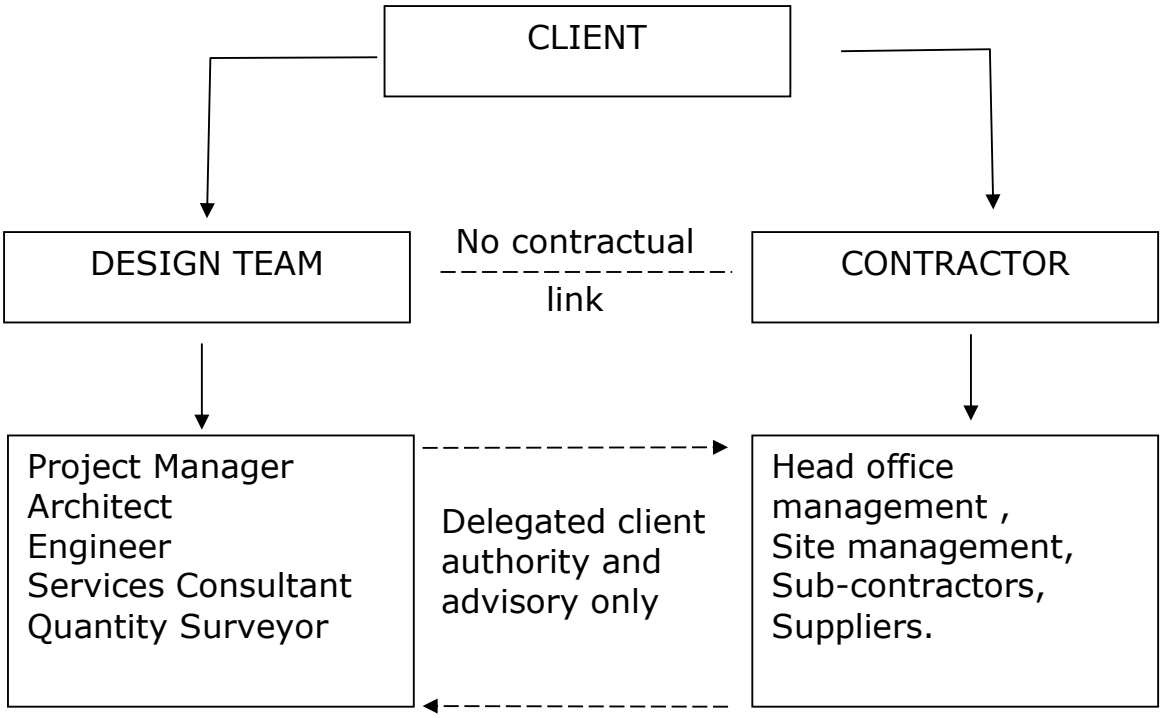

Fig. 2. Contractual traditional method of project procurement (Chartered Institute of Building handbook of facilities management).

b. **Design and build contracts:** In this case, contractors are invited to tender, assuming responsibility for not only the construction of the building but also its design. This method is often championed as a fast track procurement rate allowing a rapid start on site.

c. **Management Contracts:** Park (2000) stated that there are two (2) main variations on this type of contract.

i. **Construction management contract:** in this type of procurement method, the client engages a design team like the procedures in traditional contracts, but in addition will also engage a construction manager who coordinates activities both to meet the project programme, and the overall budget is paid

a fee for this service and receives no financial benefit from the construction costs.

ii. **Management contracting:** here the client engages a contractor on a fee basis to organize the building process. The management contractor carries out the role of obtaining trade prices and organizing the work in site rather like the construction manager.

d. **Negotiated Contract**

When circumstances dictates the selection of a single contractor, a negotiated contract offers better protection than entering into an open ended commission in terms of price, quality and time.

- **Contract Management:** a well managed contract is just as reliable as an in-house managed function as long as good selection, specification setting and performance monitoring are carried out.

Categories of Contract Management

There are four (4) basic categories of contract management, they include:

i. Dispersed
ii. Centralized
iii. Partial grouped or bundled
iv. Totally outsourced

i. **Dispersed Contract Management-** here contracts are controlled by various managers within the organization who historically may have an interest in particular area. For instance, the personnel manager may look after the catering contract as it is seen as part of the employee benefit package.

ii. **Centralized Contract Management-** this allows a uniform approach to administration, supplier selection and monitoring of performance. Responsibility and accountability are focused and problems are more easily resolved. Here facility manager will often use directly employed subordinates to control a number of contracts.

iii. **Partially grouped/ bundled-** bundling occurs when the number of contracts under management becomes unwieldy for one person to control. Grouping contracts or bundling puts a number of contracts under the management of one supplier. A common grouping can be cleaning, security and catering- three of the more labour intensive services. This service type was carried out due to two (2) reasons

a. Clients wanting fewer points of contact and reduced administration.

b. The desire of some contracting companies to expand their range of services and make use of more effective site arrangement.

iv. **Totally outsourced-** total outsourcing does not mean that all contracts have to be carried out by one company, but does mean that one company can manage the range of services specified as a series of individual contracts for each service bundling where appropriate.

2. **Building Maintenance And Grounds Maintenance**

❖ **Building Maintenance**

According to Gandhi (2011) maintenance is the act of keeping the equipment in operational mode. Maintenance management is then said to be an orderly and systematic approach to planning, organizing, monitoring and evaluating maintenance activities and their cost. A good maintenance management system coupled with knowledgeable and capable maintenance staff can prevent health and safety problems, and environmental damages yield longer asset life with fewer breakdowns and results in lower operating costs and higher quality of life.

Maintenance Strategies/Options

This means schemes for maintenance, i.e. an elaborate and systematic plan of maintenance actions. The maintenance strategies that are commonly used are as follows:

a. Breakdown maintenance/operate to failure/unplanned maintenance

b. Preventive/scheduled maintenance

c. Predictive/condition based maintenance

d. Opportunity maintenance

e. Design out maintenance.

The equipment under breakdown maintenance is allowed to run until it breaks down. Then, repairing and putting it back to operation. This strategy is suitable for equipments that are not critical and have spare capacity and redundancy available.

In PREVENTIVE/SCHEDULED maintenance, maintenance actions like inspecting, lubrication, cleaning, adjustment and replacement are undertaken at fixed interval of numbers of hours or kilometers. An effective preventive maintenance programme help in avoidance of accidents.

In OPPORTUNITY maintenance, timing of maintenance is determined by the procedures adopted for some other items in the same unit or plant. Finally, in DESIGN-OUT the aim is to minimize the effects of maintenance.

- **Grounds Maintenance**

> *The United States Department of Labour (2010) stated that grounds maintenance department is made up of staffs or workers who perform a variety of tasks necessary to achieve a pleasant and functional outdoor environment. They mow lawns, rake leaves, trim hedges and trees, plants flowers, and ensure that the grounds of houses, business and car parks are attractive, orderly and healthy. They are divided into several specialists like landscaping, grounds keeping, pesticide handlers, tree trimmers, and grounds maintenance supervisors.*

Functions Of A Maintenance Department

A maintenance department is responsible for the following major functions:

I. The maintenance of installed equipment and facilities.

II. Installation of new equipment and facilities.

III. Inspection and lubrication of existing equipment.

IV. Monitoring of faults and failures using appropriate techniques.

V. Modification of already installed equipment and facilities.

VI. Management of inventory.

VII. Supervision of manpower.

VIII. Keeping records.

3. **Cleaning**

Leaman and Tong (2000) stated that proper cleaning diligently and regularly carried out is probably the most cost effective measure that can be applied in any office building, as it reduces dust and air borne contaminants thereby making the building feel fresher for the occupants. It is the duty of the facility manager to set up a system for checking the quality of cleaning, whether it is done by an in-house staff or it is contracted out. The specialist cleaning of carpets and soft furnishings for instance is recognized to be of considerable importance in

reducing **Sick Building Syndrome**. Also, a regular/periodic outside cleaning jobs to keep gutters, gullies, drains and the like operational must be scheduled.

4. **Space Management:** Worthington (2000) stated that the size of a building may be calculated by assembling a space budgets for present and future requirements. For the future needs of a company with a moderate annual increase in staff, it is normal to allow space sufficient to take into account growth for two (2) years after move-in. In a rapidly growing organization, approximately 15% increase in staff per annum expansion space may be provided for by a policy of moving groups out of the building to make room for the expansion of those that remain.

A total space budget for a building is composed of the following elements:

a. **Workplace areas:** this is the space required by each grade of staff to undertake the work, plus the immediate area required to circulate between equipment and workplaces.

b. **Group requirements:** for storing group files and reference materials.

c. **Secondary circulation:** space required to move within and between groups.

d. **Common amenities:** facilities provided for all staffs like canteen, reception, print and mail room and break areas.

e. **Special facilities:** like computer areas, training rooms, laboratories etc.

f. **Primary circulation:** this is the space required for access between departments.

g. **Building core and plant:** includes lifts, stairs, lobby and water closet (W.C.) facilities.

h. **Area of structures and perimeter construction:** is an additional area included in arriving at the gross overall size for the building.

When planning interior layouts, allocation of space per person will need to be agreed according to three (3) factors namely:

I. Amount of time spent at work place

II. The type of work being undertaken and the need for confidentiality or to concentrate one to one meeting and, storage and layout.

III. Social status of the organization.

5. **Health and Safety Monitoring:** - according to the Council of Registered Builders of Nigeria, CORBON (2010), one important component of a contract document is the Health and Safety Management Plan. For a building of two storeys and above, it is statutorily mandatory to take out a Builder's All Risk Insurance, Hoarding erected, a proper gate into the site etc. also a well

equipped first aid station must be established on site and an emergency relationship established with a nearby hospital.

The Health, Safety and Welfare Act (1974) of The Chartered Institute of Building (CIOB) stated a wide scope and apply to facility managers in a number of ways, as detailed below.

a. **Duties to employees**

The act provides that it is the duty of every employer to ensure so far as is reasonably practicable, the health, safety and welfare at work of all his employees. This particularly have to do with the provision and maintenance of safe plant and safe systems of work; safety in the use, handling, storage and transport of articles and substances; provision of information, instruction, training and supervision, maintaining a safe place of work, including entrances and access and providing a safe working environment.

b. **Duties to persons other than employees**

It is recognized in the act that more than one person may be involved in controlling the premises. There is a duty on each person who has, "to any extent", control of non-domestic premises to ensure they are safe and without risk to health. The act specifically provides that where the person has, by virtue of a contract or tenancy, and obligation in relation to

maintenance and repair of the premises or safety from plant or substances of said premises, that person shall be treated as a person having a duty for this purpose.

2.6.2. **Typical Work Activities**

Facility managers are seen in all sectors and industries, and the diversity of the work may be reflected in different job titles such as operations, estates, technical services, asset or property manager. Responsibilities often cover several departments, as well as central services that link to all the teams in the organization. In smaller companies, duties may include more practical and hands on tasks. A Professional Builder may be employed on a consultancy basis or contracted to manage some or all of these activities by a client organization. Typical tasks may include:

1. **Preparing documents to put out tenders for a contractor.**
2. **Project management and supervising and coordinating work of contractors.**
3. **Investigating availability and suitability of options for new premises.**
4. **Calculating and comparing costs for required goods and services to achieve maximum value for money.**
5. **Planning for future development in line with strategic business objectives.**

6. **Managing and leading change to ensure minimum disruption to core activities.**
7. **Liaising with tenants of commercial properties.**
8. **Directing and planning essential central services such as reception, security, maintenance, mail, archiving, cleaning, catering, waste disposal and recycling.**
9. **Ensuring the building meets health and safety requirements.**
10. **Planning best allocation and utilization of space and resources for new buildings or re-organizing current premises.**
11. **Checking that agreed work by staff or contractors has been completed satisfactorily and following up on any deficiencies.**
12. **Coordinating and leading one or more teams to cover various areas of responsibility.**
13. **Using performance management techniques to monitor and demonstrate achievements of agreed service levels and to lead on improvement.**
14. **Responding appropriately to emergencies or urgent issues as they arise.**

2.7. **A Professional Builder**

2.7.1. **Becoming and Being A Professional**

According to Ogunbiyi (2008) for anyone to lay claim to professionalism or call himself a professional, he must exhibit the following traits:

i. Be an expert in the specialized knowledge and mechanics of the field in which he practice.

ii. Undergo a formal training process, frequently academic in nature.

iii. Build an inventory of practical skills based on experience.

iv. Engage in a continued learning process for the specialized knowledge in his field, which is dynamic.

v. He must be alert to events and information in the world beyond his areas of specialized knowledge

vi. He must possess an understanding of the history of his profession's relation to society which can both be inspiring or cautioning his conduct/behaviours.

vii. He must always remember the value of common sense.

viii. He must have relationship with his colleague and clients that are mutual and trustworthy.

ix. He must protect the public from his own profession.

x. Finally, he must exercise discretion, wisely.

Building is critical to human existence and the need to master and overcome its complexity/complications demands that its production and maintenance require the involvement of a distinct discipline or a particular group not only to continue to develop, but to be dynamic in its technology production and management (Ogunbiyi, 2008).

2.8. **A Well Informed Client And A Professional Builder**

Being informed has to do with having or showing a lot of knowledge about a particular subject or situation. Information is seen to be the keyword here, as it helps to manifest some personal, environmental and social characters.

2.8.1.**A Well Informed Client**

When considering a client, two (2) factors are of utmost importance; happiness and satisfaction. A well informed client is said to be a happy and satisfied customer. Some clients are more knowledgeable than others, this is due to the fact that they have been into the business for long and may be of help to the Builder during the process of service delivery. Clients with little or no knowledge about facility management may have little or no contribution to make in the services the Builder would deliver. The client little or no participation in facility management services may be averted when and if the client is given proper orientation on facility management. Once knowledge

is acquired by a client (either by self acquisition or by tutorial from an expert), the end result would incorporate happiness and satisfaction on his part with the services he gets from the Builder.

A Professional Builder

A Professional Builder has more impact to make in the society than the client. These impacts may be itemized as follows:

I. A Professional Builder gives information and goes further to explain things in detail.

II. He helps a client know what to expect and approximately when.

III. He empowers the client to make **well informed choices** by offering tactical advice on the functionality, efficiency and cost benefits of building materials and finishes, and plant and equipment.

IV. He ensures that everything done, meets environment and community standards.

V. He uses only products with good reputation, a process of track records made by established manufacturers, meet local building standards and come with a warranty.

VI. Building certainty

VII. He builds relationships based upon respect and integrity.

VIII. He relentlessly pursues innovation improvements and professionalism in everything.

IX. He does everything possible to achieve a healthy and safe workplace.

X. He provides a stimulating and rewarding working environment that encourages staff to advance to their full potential.

XI. He achieves sustainable business results that significantly exceed industry norms.

XII. He provides Third-Party Warranty on their homes in order to protect purchase against faulty materials or workmanship.

XIII. Finally, a well informed Builder makes a client HAPPY and gives clients REST OF MIND.

2.9. **Property Management**

Property management is a branch of facilities management which most a times can be thought to be the same. It covers a wide range of activities in facility management. Consequently, the functions of property management vary from entity to entity, as well as from the private industry to the public sector. Functional areas of property management must include the following:

2.9.1 **Strategic property management:-** this includes master planning, feasibility studies of land use or building alternatives, inspections of existing structures, preliminary architectural and engineering designs and cost estimates, analysis of regulations for land use, zoning, environment and building codes, operations and maintenance costs and

support services like telecommunication, special transportation needs, parking and security.

2.9.2. **Real estate acquisition:** This has three (3) phases of site acquisition namely,

a. Develop several feasible alternatives.

b. Reduce the feasible alternative to the best three or four candidates.

c. Select the preferred site.

2.9.3. **Disposal of Real Estate:** under most circumstances, The General Land Office has the responsibility for disposal of all state owned real estate. Institutions of higher education may dispose of their own real estate, otherwise, The General Land Office has the authority to make the property disposition. A general criterion applicable to the disposition of real estate includes:

a. Determine applicable legislation and rules pertaining to the disposition of state owned property.

b. Obtain appraisal to determine the fair market value except for small value property.

c. Maintain a written land disposition policy.

d. Perform a space utilization analysis.

e. Involve entity attorney in title transfers.

f. Dispense proceeds of the sake to the proper account.

2.9.4.**Risk management:** this is a process that has the purpose of minimizing losses or injuries in the entity. Steps to this may include:

a. Identification of perils and risk exposures.

b. Assess the significance of the exposures.

c. Select appropriate risk management method.

d. Implement the chosen risk management method.

e. Evaluate the risk management programme.

2.9.5.**Lease management:** as earlier mentioned with regards to real estate disposal The General Services Commission also have the responsibility for securing all leases for property for state agencies and institutions of higher education that make use of state appropriated funds for leasing facilities, unless that authority has been delegated to the specific agency.

2.9.6.**Financial data management:** The annual maintenance and repair budget should be prepared to consist of two components:

a. Routine expenditure for maintenance, repairs and planned replacement.

b. Expenditures for deferred maintenance or back log reduction.

Routine expenditures are related to the physical nature of the facilities and their uses, including design age, intensity of use, and climate of the region where the building is located. These factors influence the rate at which a building deteriorates. The second component, backlog reduction or deferred maintenance is related to

the level of funding available for entity's maintenance efforts. Funding and back-log are said to be inversely proportional, i.e. the less the funding, the larger the back-log.

2.10. **Benefits of Facility Management**

According to Modupe (2005), an organization that embraces facility management stands to gain several advantages over those that do not, particularly in areas of:

I. Cost reduction and effectiveness.
II. Value for money.
III. High performance/productivity.
IV. Risk minimization.
V. Product/services quality improvement on long term basis.
VI. Maintenance of competitive edge.
VII. Profit maximization.
VIII. Flexibility of operations.
IX. Satisfaction of customer/user needs.
X. Prestige enhancement.

The above mentioned benefits are in consonance with the concepts of total quality management. Facilities management promotes appropriate response to changes in the business environment arising from economic, social, political and other issues.

CHAPTER THREE

3.0. RESEARCH METHODOLOGY

According to Nachimias and Machimas (1983) methodology would enable an interchange of ideas and information. This information would help us to formulate commonly accepted rules and procedures and develop corresponding method and techniques that would facilitate a thorough research study. This is a research work on **the role of a professional builder in facility management,** using Anambra State as the area of study. It also explained the procedures used by the researcher in order to achieve the stated aim and objectives of the study. The procedures include:

- Research design
- Sources of data
- Population of the study
- Sample and sampling techniques
- Instrument for data collection
- Validation of the instrument
- Method of data collection
- Method of data presentation and analysis.

3.1. **Research Design**

The research is designed to accommodate collection of data from respondent and analyzing these data, so as to achieve the aim of the study.

3.2. **Sources Of Data**

For the purpose of reliability and accuracy, the researcher made use of personal interviews while issuing out questionnaires, observations and documentary sources in collecting data. These data will be obtained from both primary and secondary sources.

a. **Primary data:** these are data generated from questionnaires and personal interviews made to some professionals in the building construction industry and students in related field of study.

b. **Secondary data:** the secondary data are generated from text books, cooperative journals, magazines and similar papers related to issues on the professional builder and facility management, and other project on relevant topics.

3.3. **Population Of The Study**

The population of this study comprise of professionals in the construction industry and students of related field in higher institutions in Anambra State. Places to carry out this research are Awka and Onitsha which are major cities in Anambra, with lots of facilities and presence of professionals who are there to manage those facilities.

3.4. **Sample And Sampling Techniques**

Twenty five (25) persons were randomly selected from the five professionals used for the questionnaire while twenty five (25) students were randomly selected from the five departments mentioned in the questionnaire. Thus 50 respondents made up the sample size.

3.5. **Instrument For Data Collection**

The instruments used for this study are of questionnaires and personal interviews.

a. **Questionnaires:** the questionnaire was aimed at getting the views of professionals and students in related fields of study, concerning the role of a professional Builder in facility management. The questionnaire is made up of two section, section A and B. section A was structured for the personal data of the respondents, while section B was structured for the respondents to give require information related to the role of a professional Builder in facility management.

b. **Personal interview:** the researchers conducted interview while issuing out questionnaires, with some of the building professionals and students to get their opinion on certain issues concerning the role of a professional Builder in facility management. This information gathered helped in the analysis.

3.6. **Validation Of The Instrument**

in order to seek answer to research questions, the questionnaire which is used as an instrument for data collection was pre-tested before the actual distribution. This was to ensure that the questions asked were well understood in the same manner by various types of prospective respondents. The questionnaires were pre-tested by my supervisor and one other lecturer in the department of building. This added to the validity of the data collected.

3.7. **Method Of Data Collection**

Fifty-five (55) questionnaires were distributed, but fifty (50) were returned: twenty-five (25) from students and twenty-five (25) from professionals (90% of responses). The respondents were allowed to take the questionnaire home to answer so as to give useful answers.

3.8. **Method Of Data Presentation And Analysis**

The statistical tools used in analyzing the data collected in this research study include frequency distribution and percentages of all the respondents. This enabled the results to be properly evaluated and understood. The hypothesis used was the Null (H_0) and Alternative (H_1) hypothesis respectively. The hypothesis shall be tested using Z-test statistical tool. The pre-determined alpha level at which any of the hypothesis could be rejected or accepted is fixed at 0.05 (i.e. 5% significance level).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Introduction

In this chapter the researcher shall present data collected for this study using frequency table and simple percentage. In addition the hypothesis shall be tested using the Z-test statistical tool.

4.2. Analysis Of Data

Section A

Table 4.1: Occupation/Profession of Professionals.

Profession	Number of response	Percentage of Respondent
Building	7	28%
Engineering	6	24%
Architecture	3	12%
Quantity Surveying	4	16%
Estate Management	5	20%
Total	25	100%

Source: field Survey, 2011.

Table 4.1 showed that 28% of respondents are Builders, 24% are Engineers, 12% are Architects, 16% are Quantity Surveyors and the remaining 20% are Estate Valuers. The majority of the respondents from the table are Builders.

Table 4.2: Department of students in related field of study.

Profession	Number of response	Percentage of Respondent
Building	10	40%
Engineering	3	12%
Architecture	5	20%
Quantity Surveying	2	8%
Estate Management	5	20%
Total	25	100%

Source: Field Survey, 2011.

Table 4.2 shows that 40% of the respondents are from the department of Building, 12% are from Engineering, 20% are from Architecture, 8% are from Quantity Surveying and 20% from Estate Management.

Table 4.3: Working Experience (Years).

	Profession						
Years of experience	**Building**	**Engineering**	**Architecture**	**Quantity surveying**	**Estate management**	**Total**	**Percentage of respondents**
1-5	1	-	-	1	-	2	8%
5-10	-	-	2	1	1	4	16%
11-15	3	3	1	-	2	9	36%
20 and above	3	3	-	2	2	10	40%
Total	7	6	3	4	5	25	100%

Source: Field Survey, 2011.

Table 4.3 shows that, 7 are Builders and 6 are Engineering, 3 are Architects, 4 are Quantity Surveyors and remaining 5 are Estate

Valuers. 8% of the respondents have less than five years experience, 16% have between 5-10 years experience, 36% have 11-15 years experience and remaining 40% have experience of 20 years and above.

Table 4.4: Age Bracket for Professional.

	Profession						
Age(years)	**Building**	**Engineering**	**Architecture**	**Quantity surveying**	**Estate management**	**Total**	**Percentage of respondents**
21-30	2	-	-	1	-	3	12%
31-40	1	1	1	1	1	5	20%
41-50	3	2	1	-	3	9	36%
51 and above	1	3	1	2	1	8	32%
Total	7	6	3	4	5	25	100%

Source: Field Survey, 2011.

Table 4.4. shows that 12% of the respondents are between 21-30 years of age, 20% are between 31-40years, 36% are 41-50years and the remaining 32% are 51years and above.

Table 4.5: Age Bracket for Students.

	Department						
Age (Years)	**Building**	**Engineering**	**Architecture**	**Quantity surveying**	**Estate management**	**Total**	**Percentage of respondents**
16-20	2	-	2	-	1	5	20%
21-30	8	3	3	2	4	20	80%
Total	10	3	5	2	5	25	100%

Source: Field Survey, 2011.

Table 4.5 shows that 20% of the respondents are between 16-20years of age and the remaining 80% are from 21-30years.

Table 4.6: Educational Qualification (Professionals).

	Profession						
Qualification	**Building**	**Engineering**	**Architecture**	**Quantity surveying**	**Estate management**	**Total**	**Percentage of respondents**
NCE/OND	-	-	-	-	-	-	-
BSC/HND	5	3	1	2	2	13	52%
PGD/MSC	2	3	2	2	2	11	44%
PhD	-	-	-	-	1	1	4%
Total	7	6	3	4	5	25	100%

Source: Field Survey, 2011.

Table 4.6 shows that 52% of the respondents are Bsc/HND holders, 44% are PGD/MSC holders and 4% are PhD holders.

SECTION B

6. Table 4.7: Facility Management is a well known specialization in the Building Construction Industry.

Options	**Frequency**	**Percentage of respondents**
Strongly Agree	28	56%
Agree	20	40%
Strongly Disagree	0	0%
Disagree	0	0%
No Opinion	2	4%
Total	50	100%

Source: Field Survey, 2011.

The table above shows that 56% of the respondents chose Strongly Agree, 40% chose Agree, 4% had no opinion and there was no value for Strongly Disagree and Disagree.

Table 4.8: Its definition is given as:

Options	Frequency	Percentage of respondents
It's the practice of coordinating the physical workplace with people and works of the organization.	2	4%
It's an umbrella term under which a wide range of property and organization user related functions may be brought together for the benefit of the organization and its employee.	11	23%
It's an integrated approach to maintaining, improving and adapting the buildings or facilities of an organization in order to create an environment that strongly support the primary objectives of that organization.	20	42%
It's an integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities.	15	32%
Total	48	100%

Source: Field Survey, 2011.

The table above shows that those that chose the third option of 42% to be very close to the idea of what facility management is about, 32% went for the fourth option, 23% went for the second option, but the remaining 4% went for the first option.

8. Table 4.9: source of information.

Source	Frequency	Percentage of respondents
Tertiary institution	23	48%
Personal research	13	27%
Professional training	10	21%
Journal	2	4%
Others	0	0%
Total	48	100%

Source: Field Survey, 2011.

Table 4.9 shows that 48% of respondent got informed through tertiary institutions, 27% got theirs through personal research, 21% got their information through professional training and the remaining 4% are from professional Journals.

9. **Table 4.10:** the level of emphasis made by my source of information was on the high side.

Options	Frequency	Percentage of respondents
Strongly Agree	21	44%
Agree	25	52%
Strongly Disagree	-	-
Disagree	-	-
No Opinion	2	4%
Total	48	100%

Source: Field Survey, 2011.

From the table above, 44% of respondents Strongly Agree to the fact that the level of emphasis made was on the high side, 52% chose Agree, and those that chose No Opinion who had 4% were those that got their information from professional training.

10. **Table 4.11:** the level of Emphasis made by my source of information was satisfactory.

Options	Frequency	Percentage of respondents
Strongly Agree	25	52%
Agree	21	44%
Strongly Disagree	-	-
Disagree	-	-
No Opinion	2	4%
Total	48	100%

Source: Field Survey, 2011.

The table above shows that 52% chose Strongly Agree, 44% chose Agree and the remaining 4% chose No Opinion. The respondents that chose Tertiary institution as their source of knowledge stated that their source was satisfactory because it is the basis source of knowledge acquisition which cannot be in any way misleading.

12. **Table 4.12:** A Builder has a better hand in facility management.

Options	Frequency	Percentage of respondents
Strongly Agree	26	54%
Agree	20	42%
Strongly Disagree	-	-
Disagree	2	4%
No Opinion	-	-
Total	48	100%

Source: Field Survey, 2011.

From table 4.12 above 54% of the respondents concurred to the fact stated above by ticking Strongly Agree, while the remaining 42% went for Agree and 4% Disagree. Most of them who Agree where of the opinion that an Estate Valuer also has a big role to play in facility management while some said that Civil Engineers are not equally left out in facility management.

Reasons were that:

<u>For BUILDERS</u>

1. He knows more about building structures and its facilities.
2. He poses the techniques of evaluation that is needed for facility management in him.

3. He carries out work while putting into consideration building maintenance and sustainable development.
4. He is specifically trained to undertake building construction and maintenance, hence manages the structure better.

For ESTATE VALUERS

1. Since they are professionals of real/built assets they would be in the best position to take up facility management service.

For CIVIL ENGINEERS

1. They opined that they are grounded in soil textures and strength of materials to be used and as such builders should take directions and not manage.
2. That as Civil Engineers they acquire diverse opinion.

13. **Table 4.13:** The role professionals will play.

Professionals	**Roles**
A Builder	1. Building production management 2.Building maintenance management 3. Health and safety 4. Construction planning 5. facilities evaluation and manager
An Estate Valuer	Evaluation and expert advice to the organization/client.
A Civil Engineer	1. Structural works 2. Transportation 3. Geotechnic 4. Building Design and construction

Source: Field Survey, 2011.

Table 4.13 gave the respondents view of various roles three Professionals would play in facility management.

14. **Table 4.14:** facility management is essential for building management.

Options	Frequency	Percentage of respondents
Strongly Agree	28	58%
Agree	20	42%
Strongly Disagree	-	-
Disagree	-	-
No Opinion	-	-
Total	48	100%

Source: Field Survey, 2011.

The table above shows that 58% Strongly Agreed to the fact stated above, while the remaining 20% chose the option Agree.

15. **Table 4.15:** Building Property owners are aware of facility management.

Options	Frequency	Percentage of respondents
Strongly Agree	-	-
Agree	20	42%
Strongly Disagree	13	27%
Disagree	10	21%
No Opinion	5	10%
Total	48	100%

Source: Field Survey, 2011.

Table 4.15 above stated that 42% chose Agree, 27% chose Strongly Disagree, 21% chose Disagree and 10% of the respondent had no opinion about the matter at hand. Some had the view that

facility management is not implemented or practiced in this part of the world, except in developed countries. Majority of the respondents are also of the opinion that the public and the government are not aware of facility management.

16. **Table 4.16:** Industrial, Public and Institutional buildings enjoy the benefits of facility management.

Options	Frequency	Percentage of respondents
Strongly Agree	30	62.5%
Agree	18	37.5%
Strongly Disagree	-	-
Disagree	-	-
No Opinion	-	-
Total	48	100%

Source: Field Survey, 2011.

From Table 4.16, 62.5% of the respondents Strongly Agreed to the above stated fact, while 37.5% went for Agreed option.

17. **Table 4.17:** Reasons for benefit received.

Options	Frequency	Percentage of respondents
They have maintenance department that is staffed with Professionals in the Building industry	20	42%
They have facilities that were acquired at exorbitant price which needs care so as to last long	16	33%
They want the best performance of their staff so that they can boost productivity	6	12.5%
They desire to have an environmental friendly surrounding	6	12.5%
Total	48	100%

Source: Field Survey, 2011.

The table above shows that 42% of the respondents agreed to the first option, 33% Agreed to the second option, the third and last option had 12.5% each.

18. **Table 4.18:** measures applied in promoting facility management.

Respondents	Frequency	Percentage of respondent
Use of the right professional to carry out facility management service	8	17%
Creating awareness about fight to the general public	40	83%
total	48	100%

Source: Field Survey, 2011.

From table 4.18 most of the respondents gave their opinion to be base on creating awareness for others to know about facility management, thus had 83%, while the remaining 17% talked abut using the right Professional to carry out facility management service.

4.2. **Test Of Hypothesis**

In order to make a meaningful test of hypothesis, the 48 filled questionnaires out of the 50 that was returned were considered and used. This is because the 48 contained relevant responses that would guide and facilitate the test.

Test of hypothesis

H_0: A Professional Builder has no role to play in facility management.

H_1: A Professional Builder has a role to play in facility management.

Table 4.19: Categorization table for hypothesis

Question/statement number 14	Strongly Agree	Agree	Strongly Disagree	Disagree	No Opinion	Total
A Builder has a better hand in facility management	26	20	-	2	-	48

Source: Field Survey, 2011.

This hypothesis is tested using Z-test proportions given as

$$Z = \frac{P_y - P_N}{\sqrt{\frac{P_y(1-P_y)}{N_y} + \frac{P_N(1-P_N)}{N_n}}}$$

Where P_y= Proportion of respondents who responded positively to the statement/question.

P_N= Proportion of respondents who responded negatively to the statement/question.

N_y= Number of respondents that responded positively.

N_n= Number pf respondents that responded negatively.

Solution

$$Z = \frac{0.96-0.04}{\sqrt{\frac{0.96\ (1-0.96)}{46} + \frac{0.04\ (1-0.04)}{2}}}$$

$$Z = \frac{0.92}{\sqrt{\frac{0.96\ (0.04)}{46} + \frac{0.04\ (0.96)}{2}}}$$

$$Z = \frac{0.92}{\sqrt{\frac{0.0384}{46} + \frac{0.0384}{2}}}$$

$$Z = \frac{0.92}{\sqrt{0.020034782}}$$

$$Z = \frac{0.92}{0.141544277}$$

$$Z = 6.49$$

Decision Rule

We reject H_0 α Z computed is greater than Z tabulated at 5% (0.05) level of significance. Otherwise we accept H_0 Ztab=Z 0.975=1.960

Decision

We reject H_0 which said that A Professional Builder has no role to play in facility management since Z calculated=6.49 is greater than Z tabulated= 1.960. We therefore conclude that a professional Builder has a role to play in facility management.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION

5.1. Summary of findings.

The major findings in this research study are:

1. Being that facility management is an indispensable specialization in the management of facilities, it is not well known and practiced in this part of the world, especially here in the Eastern part of Nigeria (specifically Awka and Onitsha). This is to say that thee general public people and professionals in construction industry are not aware of the need for facility management, and the role they have to play in facility management.
2. Professionals and the general public are equally confused about who is the ideal professional to manage an organization, in terms of facilities management.
3. It was also observed by the researcher that the major means of information about facility management was through the tertiary institutions, other areas had a lower percentage.

5.2. **Conclusion**

Generally, this research study analyzed the results obtained from the data collected through primary source of data collection in order to investigate, on the role of a professional Builder in facility management using Awka and Onitsha as a case study, which is the aim of the research study. A section of the questionnaire deals with who should be at the fore front of facility management. The field survey result revealed that the Builder is and should be an Organization's facility manager, but some other professionals are not left out.

5.3. **Recommendations**

The recommendations made by the researcher as a result of a careful research study are summarized as follows:

1. Awareness of the need for facility management should be created and the role everyone has to play should be clearly stated and practiced as should. Awareness can be made through professional journals of seminar, workshop and conference, media houses, institutions, professional training, electronic bill boards etc.
2. Professional Builders should partake fully in facility management so as to enhance the built environment and help

organizations achieve their aim and objectives. The Builder's involvement would help:

i. Checkmate un-usual deterioration in facilities.
ii. Encourage and improve proper and safe handling/care of equipments and facilities.
iii. Drastically curb value decline of built asset and its environment.
iv. Provide adequate work space/area that would enhance productivity of the employees in an organization.
v. Finally, would provide organizations with well structured facility management plan.

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APPENDIX A

RESEARCH QUESTIONNAIRE

Department of Building

Nnamdi Azikiwe University

PMB 5025

Awka

August, 2011.

Dear Respondent,

I Ezenwa Godfrey Chidozie a five hundred level (500 level) student of the above mentioned department and institution. I am conducting a research survey on the topic: THE ROLE OF A PROFESSIONAL BUILDER IN FACILITY MANAGEMENT. Your participation in this survey is unanimous, voluntary, confidential, and very much appreciated.

Please work through the questionnaire, and remember there is no right or wrong answers, and please indicate how you feel personally regarding the usefulness and adequacy of these statements or items stated below.

Thanks.

Yours Faithfully,

Ezenwa Godfrey Chidozie

APPENDIX B

Please tick ( ) in the boxes provided for an answer you consider appropriate, otherwise you may wish to provide your own answer where necessary.

SECTION A: PERSONAL INFORMATION

1. **OCCUPATION/ PROFESSION**

   a. Building ( ) b. Engineering ( ) c. Architecture ( ) d. Quantity surveying ( ) e. Estate management ( ) f. Student ( ) g. others ( )

2. **DEPARTMENT (STUDENT IN RELATED FIELD OF STUDY)**

   a. Building ( ) b. Engineering ( ) c. Architecture ( ) d. Quantity surveying ( ) e. Estate management ( )

3. **WORKING EXPERIENCE (YEARS)**

   a. 1-5 ( )b. 5-10 ( )c. 11-15 ( )d. 20-Above ( )

4. **EDUCATIONAL QUALIFICATION (PROFESSIONALS)**

   a. NCE/OND ( ) b. Bsc / HND ( ) c. PGD/ Msc ( ) d. PhD ( )

5. **AGE**

   a. 16-20 ( ) b. 21-30 ( ) c. 31-40 ( ) d. 41-50 ( ) e. 50-Above ( )

6. **GENDER**

   a. MALE ( ) b. FEMALE ( )

SECTION B: RELATED INFORMATION

1. Facility management is a well known specialization in the building construction industry

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

2. If (a) or (b), what is your view about it?

a. It's the practice of coordinating the physical workplace with people and works of the organization. ( )

b. It's an umbrella term under which a wide range of property & organization user-related function may be brought together for the benefit of the organization & its employee. ( )

c. It's an integrated approach to maintaining, improving & adapting the buildings or facilities of an organization in order to create an environment that strongly support the primary objectives of that organization. ( )

d. It's an integration of processes within an organization to maintain & develop the agreed services which support & improve the effectiveness of its primary activities. ( )

3. How were you informed? Through:

a. Tertiary institution ( ) b. Personal research ( ) c. Professional training ( )

d. Journal ( ) e. Others ( )

4. If Others, please state: ……

5. The level of emphases made by my source of information was on the high side

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

6. The level of emphases made by my source of information was satisfactory

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

7. Why do you consider it to be satisfactory?

……

……

……

……

8. If (c) or (d), what aspect do you think should be touched?

……..……

……

……

……

9. A Builder has a better hand in facility management.

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

10. If (a) or (b),please give reasons

a. He posses the techniques of evaluation that is needed for facility management in him, ( )

b. He knows more about the building structure and its facilities. ( )

c. He carries out work while putting into consideration building maintenance and sustainable development. ( )

11. If (c) or (d), which professional in the building construction industry do you think would play a better role in facilities management and give reasons for your choice?

……

……

……

……..

12. State the roles, that professional you chose would play?

.....

.....

.....

.....

13. Facility management is essential for Building management

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

14. Building property owners are aware of facility management.

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

15. The masses and government are well informed about facility management.

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

16. Facility management is mostly practiced on industrial, public, and institutional buildings.

a. Strongly Agree ( ) b. Agree ( ) c. Strongly Disagree ( ) d. Disagree ( ) e. No opinion ( )

17. If (a) or (b), why is it so?

a. They have maintenance department that is staffed with professionals in the building industry. ( )

b. They have facilities that were acquired at an expensive price which needs care so as to last long. ( )

c. They want the best performance of their staff, so that they can boost productivity. ( )

d. They want to have an environment friendly surrounding. ( )

18. If (c) or (d), please give your own opinion

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19. What measure do you apply in promoting facility management?

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