

PROFESSIONAL PRACTICE AND PROCEDURES LECTURE NOTES

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FACILITY MANAGEMENT

Facilities are typically a company's second largest asset, right after its employees. A well designed, well management facility can help in raising the workers productivity level.

Facility management is a profession that encompasses multiple disciplines to ensure functionality the built environment by integrating people, place, process and technology.

As at today, eleven competencies define the practice arena of professional facility Practitioner.

They are;

- Emerging preparedness & business continuity.
- Operations & maintenance
- Real estate & property management
- Human & environmental factors.
- Planning & project management
- Leadership & strategy
- Business & finance
- Quality assessment & innovations
- Communication
- Technology

Within the competencies above, the facility management should be able to perform many duties at any given time.

- Maintenance is the process of maintaining, preserving or restoring to its original state or form. Those actions required for the care of machinery, building, etc to keep it clean and in a functional state and to forestall damage due to normal use.

CORRECTIVE MAINTENANCE.

Building maintenance performs general repairs and seeks to correct all level of dilapidations in order to restore same to its original state.

Building maintenance comprises all preventatives, remedial and upgrade works required for the upkeep and improvement of buildings and their components.

This works include disciplines such as paintings & decoration, carpentry, plumbing, glazing, plastering, tiling, electrical works etc.

Maintenance, testing & inspection schedules are required to ensure that the facility is operating safely and efficiently, to maximize the life and reduce the risk of failure of building, fixtures and machineries. The work is usually planned using computer aided facility management system.

RESPONSIBILITIES OF MAINTENANCE MANAGERS.

- Develop a building maintenance & repairs policy and propose it to the tenants.
- Gather information about the building repairs needs by surveying apartments, public areas, and by conducting annual roof-to-cellar building inspections.

- Compare your repair needs along your engagement letter and ensure that all major repairs are captured in an approved repair plan.
- Put in place sectional or project specific coordinators
- Work with the tenant's representative or association.
- Develop a scope of work which clearly explains what is required or expected for each contract repair job, contract contractors for bids, review and evaluate bids received, then advise the officers on selection of a qualified contractor.
- Develop and maintain upcoming repair and projects on progress including necessary details.
- Meet with contractors regularly to review/ and monitor progress and quality of work till satisfactory completion.
- Maintain an up-to-date file containing complete records for all past and present maintenance repair projects.

PREVENTIVE MAINTENANCE

- Provides for extended life of the building and grounds.
- Provides a healthy ^{living} learning environment for occupants.
- Increases productivity and healthy living
- Improved aesthetic qualities of the buildings & grounds.
- Timely identification of building degradation that may otherwise be unnoticed.
- Maintains compliance with current codes and standards.
- Achieves reductions in energy cost and enormous restoration costs if allow to manifest for long.

The overall objective of preventive maintenance is to keep materials and components maintained at an optimal level of performance at competitive costs and time.

a) Successful pm Protocol-Training.

- Establish routine training
- Collect and provide up-to-date training materials.
- On the job training \Rightarrow perfect skills under supervision

b) Pm Protocol – Record keeping

- Work logs
- Work orders
- Inspection checklists
- Equipment maintenance logs
- Equipment manuals and warranties
- Computerized maintenance management software (CMMS).

PUBLIC PROCUREMENT

Procurement is the act to purchase goods and services for actualization of certain specified and identified objectives.

Procurement is the acquisition of appropriate goods and or services at the best possible total cost to meet the need of the purchaser in terms of quality & quantity, times and location public sector purchases of goods and services is referred to public procurement e.g. government.

b. Functions of public procurement Bureau.

- Formulate the general policies & guidelines relating to public sectors procurement.
- Publicizes & explain the provisions of PPA 2007 and all amendments thereto.
- Monitor the prices of tendered items and keep a national database of prevailing prices.
- Publish the details of major contracts in the procurement journal.
- Maintain national database of the particulars, classifications and categorizations of contractors, service providers and consultants.
- Collate and maintain in an archival system, all Federal Government plans & information.
- Undertake procurement research & surveys
- Organize training & development programmes
- Prepare and update standard bidding and contracts documents
- Perform procurement audits
- Coordinate relevant training programmes to build institutional capacity.

PUBLIC PROCUREMENT AND CORRUPTION

Procurement processes are highly vulnerable to corruption, collusion, fraud and manipulations.

Estimates suggest that up to 30% of the value of procurement may be lost through corruption while on the other hand procurement itself is estimated to constitute of to 45% of our national GDP of government spending.

The Federal Government claimed to up have saved over a trillion naira in fund since the Act was introduces 10yrs ago. This has also encouraged part in our

procurement processes. This greatly improved the country's corruption index which has implications on our global look.

d) THE FUNDAMENTAL PRINCIPLES OF PUBLIC PROCUREMENT

- Adequate information through adverts & announcement.
- Transparency of bidding
- Honest evaluation process
- Accountability
- Non-restrictive bidding conditions
- Non-discriminatory practice to
- Equality of bidders
- Independent observers during bid openings
- Correct recordings in the presence of bidders representatives
- Non-interference by schedule officers & government organisations.

e) OBJECTIVES OF THE PUBLIC PROCUREMENT

- To get the best value for money
- Provide equal opportunity to all eligible bidders.
- Ensure transparency and openness
- Promote & sustain competition and fair play
- Build in accountability & responsibility
- Reduce corruption scope and abuse
- Improve domestic economy
- Be seen to imbibe best practices.

CONSULTANT BUILDER

a) A builder as a designer.

- Preparation of Building & Maintenance report
- Preparation of quality management plan.
- Preparation of project health and safety plan.
- Preparation of construction programme.
- Preparation of construction methodology
- Preparation of construction early warning system.

All the above must be prepared at the pre-contract stage like architectural & engineering drawings before approval.

b) A Builder as clients Advisor at post contract stage.

- Transform the brief to reality.
- Manage production process effectively.
- Ensure economic utilization of resources On site.
- Avoid fraudulent use of resource.
- Relates to the client on materials of equipment necessary at site.
- Monitor's the contractors construction programming.
- Correctly interprets production documents to the client satisfactorily.

c) A Builder as a Company Employee.

- ^{Prepares} Reports weekly progress reports.
- Reports on movement of labour, equipment & ^{materials} ~~labour~~
- Prepares site wages & emoluments
- Keeps records of way bills & invoices

- Maintains accurate weather charts.
- Attends various meetings ^{as} ~~on~~ necessary.
- Ensures health & safety meetings are regularly held.
- Ensures security of site
- In charge of operation/production activities
- Contract manage
- Staff welfare.

ETHICS AND PROFESSIONAL CONDUCT FOR BUILDERS

A. CODES OF PROFESSIONAL ETHICS

For purposes of emphasis, ethics as variously defined in the “CORBON Code of Ethics and Professional Conduct for Builders” are:

- The discipline dealing with what is good and bad as it relates to moral duties and obligations.
- A set of accepted moral principles and values about what ought to be
- A theory or system of moral principles governing the appropriate conduct for an individual group.
- A code of morality.

A code of practice is adopted by a profession or by governmental organisation to regulate that profession. A code of practice can also be referred to as code of professional responsibility to provide a clear account of what behavior is considered ethical or correct or right in any circumstances failure of members to comply with code of practice can result in disciplinary action, expulsion or even persecution. The professional code of practice embellishes principles, values, standards or rules of behaviour that guide the decisions, procedures and systems of an organization in a way that;

- Contributes to the welfare of its key stakeholders, and
- Respects the rights of all constituents affected by its operations.

In summary Ethics can be defined as the rules of conduct recognized in respect to a particular class of human action(s) or to a group, culture, club

etc. Ethics is the barometer of moral principles of individual or group.

B. CODE OF ETHICS AND STANDARDS OF PROFESSIONAL CONDUCT

The code of Ethics and standards of professional conduct are ethical benchmark for Built- environment professionals worldwide, regardless of job title, cultural differences or local laws.

The Code of Ethics maintains that you must:

- ✓ Place the integrity of the profession and the interests of clients above your own interests.
- ✓ Act with integrity, competence and respect.
- ✓ Maintain and continuously develop your professional competence.

The standard of professional conduct encompasses:

- Professionalism and integrity among the stakeholders.
- Duties to clients and employers.
- Conflict of interest and your responsibilities.
- Raising standards and embracing best practices.

A code of professional conduct is a necessary component to any profession to maintain standards for the individuals within that profession to adhere. It brings about accountability, responsibility and trust to the individuals that the profession serves.

C. ETHICAL BEHAVIOURS *principles*

- i. Ethical Conduct — acting with honesty, integrity and responsibility in the spirit of good faith and fair dealing.
- ii. To abhor sharp practices — not to engage in unfair, harsh and unprofessional conduct such as staling fitting/construction materials, variations with an intention to cheat undervaluing PC or PS sums.
- iii. Changing specifications/standards in order to get additional benefits.
- iv. Need to adhere strictly to the guidelines and law.
- v. Promote and observe the principle of the code.

D. BUILDERS CODE OF ETHICS

Builders should uphold and advance the integrity, honour and dignity of the Building Profession by;

- Using your Knowledge & Skill for enhancement of human welfare and sustainability of the environment.
- Being honest & impartial and serving with fidelity in the public, the employees and clients.
- Strive to improve on competence and prestige of the building profession.

BUILDERS' CANONS

- The Builder shall hold paramount safety, health and welfare of public and strive to comply with principle of sustainable development.
- The Builder shall perform services only in areas of their competencies.
- The Builder shall issue public statements only in objective and truthful manner.

- The Builder shall act in professional matters for each employer or clients as faithful agents or trustees & shall avoid conflicts of interests.
- The Builder shall build their professional reputation through their services and shall not compete unfairly with others.
- The Builder shall uphold the honour, integrity and dignity of the building profession.
- The Builder shall continue professional development throughout their career.

E. OBJECTIVES OF BUILDERS' CODE OF ETHICS

- ✓ To promote best practices at all stages of Building Procurement & delivery.
- ✓ To set and inculcate standard of acceptable behavior.
- ✓ To adhere to government policies and guidelines regarding the building industry.
- ✓ To evolve and discharge equitable complaint and disciplinary actions.
- ✓ To encourage and sustain positive innovations.
- ✓ To further develop the industry's human capital.
- ✓ To stimulate culture of free and open competition.

THE BUILDER

A builder is an academically trained, professionally equipped personnel engaged in the administrative, commercial, managerial, scientific and technical aspect of building. He is responsible for managing the construction process on the site including planning and programming the works, budgeting and costing and ensuring that the standards and quality of building meet the requirements of the developer or client. He is a very important professional required by a developer for if the builder fails, all others in the building team fails - even including the developer himself.

He is the one who is able to give effective coordinating management know-how to these myriads of firms of sub-contractors, suppliers, and craftsmen to ensure the successful execution of the building.

The builders' education, like all other professionals commences with a primary and secondary education from where he proceeds to the tertiary institution To gain entry into the University to study Building which is a five year programme, one must possess at least five credit level passes in the following subjects — English language, Mathematics, Physics plus any two from the following — Chemistry, Further Math's, Technical Drawing, Economics, Geography, and Building Construction in GCE O Levels or SSCE. On graduation from the University, he like his peers in the building Team, undergoes a period of practical training under the tutelage of his professional seniors before preparing himself for the professional examinations conducted by the Nigerian Institute of Building (NIOB) to test his professional competence. On passing the NIOB Corporate Membership examination, he will be examined by the Council of Registered Builders of Nigeria (CORBON), which, after due process, confers on worthy Corporate Builder the

privileged qualification referred to simply as a “Registered Builder,” with empowerment to describe himself as “Bldr.” So and so; A builder is therefore a highly qualified professional in Building Industry.

A good professional builder should:

Attain high educational standards which make him the critical thinker of the building industry, understanding the dreams of the architect as transmitted into working drawings, the structural engineers calculations and analysis summarized in the structural drawings and bending schedules, and the quantity surveyors permutations and calculations detailed in the bills of quantities. Using all these, the Builder will now erect a physical structure — the end product desired by the client.

Demonstrate expertise and rare skills needed to solve the multifarious construction problems be it technical, financial and managerial, which might emerge in the process of physical realization of the building project.

- Adhere strictly to professional ethics and standards of conduct in order to make their products unique in the building industry.
- Cultivate the right attitude to work in the construction industry and a desire to achieve high productivity and quality products at reasonable time and cost.

UNIQUE ROLES OF PROFESSIONAL BUILDERS

a) At the Pre-Contract Stage:

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The principal aim is to make the construction as easy and simple as possible and to reduce waste, such as excessive cutting of components. Another aim is to make the maximum use of site plant and to increase productivity. The design details should encourage a good logical sequence of constructional activities, and the contract documentation activities, and the contract documentation should show clearly that the design has been prepared to permit ease of building and the achievement of an economical project, often involving the consideration of alternative methods. Gray (1980) posit that buildability is the method, of analysis used to discover the potential construction problems within a particular project design and an assessment of the implications and risks involved by the builder and it is aimed at devising appropriate construction methods, minimizing variations and disruption of work programme.

The basic function of studying the production information is to identify the most cost effective methods of site execution (production), future maintenance and to draw the attention of the designers to any part of the design, working drawings, schedules and specifications that could be an impediment in achieving the clients' objective. This requires that a professional builder be engaged at the same time other consultants are engaged. This will improve cost effectiveness and smoother contract administration and execution of building projects. It would also ensure optimal maintainability of the building.

The International Union of Architects in their publication titled

'Recommended Guidelines for the UIA Accord on Recommended International Standards of Professionalism on Architectural Practice — approved on Feb. 2005 by AIU Council, states in section 4.3 of that document, I quote:

has two main functions — (a) to assist the estimator during the preparation of the estimate and, (b) to describe the method of working that will be adopted on site should the contractor be successful in winning the project. If the contractor prepares this document, the consultant builder is to review the document. Method Statement is used to analyze critically and comparatively all constructional details and methods of achieving appropriate standards of performance relating to durability, strength, fire resistance, thermal and sound insulation and other relevant factors.

Project Quality Management Plan — It should be the desire of all building constructors to apply Total Quality Management systems on their products with a view to achieving compliance with specifications at first attempt. The builder should prepare the Project Quality Management Plan with the following objectives:

1. To provide the means to establish, document and maintain an effective and economical quality management system and to ensure and demonstrate that works carried out by the builder conform to the specified requirement
2. To provide information on operations and to serve as a reference manual for site personnel
3. To provide means by which a client may derive confidence that a project will be and has been carried out in accordance with specified requirements.

Clients should demand that constructors commit themselves in ensuring that quality management planning has been part of the preparation for construction and included in his Contract Document.

Project Health and Safety Plan — in this document, the builder outlines the safety policies for the very particular project. He assesses the risk inherent in each

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Section 4.3 — The Value of a Builder on the design Team One of the principal advantages of the participation of a builder in the design and documentation process is to provide a continuing buildability assessment on the project and an early warning of design or construction problems. The participation of an experienced builder on the design team, with an understanding of the design process and the contribution that can be made, can provide some project client with greater confidence in the outcome' unquote.

The present system of building process in Nigeria allows communication to work in one direction only. Thus, while design affects Construction Planning, Construction Planning has not been allowed to officially affect design. This adversely increases construction costs and time overrun. This is the case in Nigeria today in spite of the benefits that would have been derived by the client and the Nigerian Construction Industry. In majority of projects, the construction period is either too long or too short compared with a carefully calculated programme, based on the most cost effective and appropriate construction methodology. For a building project to be successfully executed on site, the constructors must forecast, plan and put in place various Project Monitoring and Control Documents. The Builder will prepare the following documents or vet those submitted by the main contractor or sub-contractor:

- 6 **Construction Methodology,** - Builders are responsible for the programming of construction works. This helps to establish the methods to be used for the construction of the project. Construction methods can have a huge impact upon costs. The method statement will assist in the preparation of the estimate by providing guidelines on how the work is to be undertaken. The method statement

element of the construction processes and proffers solution on how to avert or manage the risks. He should state the welfare provisions on site, the first aid facilities and how to attend to an accident in event of any occurrence. Also he will detail the procedures of establishing safety culture on the construction site. -

b) MANAGING THE CONSTRUCTION PROCESS:

The role of the professional builder here is about the dynamics of building construction in order to achieve specified quality standards at first attempt. This includes ensuring on site, and/or off site the implementation of all the Project Monitoring and Control Documents. He undertakes the assessment of the quality of workmanship skills of craftsmen. As the construction process is closely managed and monitored by professional builders, the work would be carried out safely, on time, within cost and it will conform to design and specified quality standards. Quality management involves getting all site activities right at the first attempt leading to no rejection of works carried out.

c) MATERIALS AND WORKMANSHIP SPECIFICATIONS.

Over the centuries building materials and workmanship specifications have grown to be part of the condition of contract procedures for accepting or rejecting materials and workmanship. Material specification must identify the minimum measure of performance, similarly, measure of quality of workmanship, which is deemed to be acceptable or reject able must be known. It is the duty of the builder to ensure that these specifications are met on the site. It is also the duty of the builder to plan the construction mechanics and material handling so that unnecessary wastes should be eliminated on the site. Builder should provide necessary training and familiarization of the new techniques being demanded by the emerging new material and construction methods.

Views have been expressed that materials of questionable engineering and mechanical properties are freely marketed in Nigerian construction market. It is the responsibility of the builder to identify, source, select quality material for the project, and if possible conduct tests to ascertain the properties of the materials he is imputing in the project.

7:0 OTHER ADVANTAGES OF ENGAGING THE SERVICES OF PROFESSIONAL BUILDERS

Other advantages of engaging the services of professional builders are as follows:

- i. Reliable and unbiased professional advice on all aspects of building construction and maintenance can be obtained at reasonable cost.
- ii. A single relationship with one professional builder instead of with a host of less co-ordinate independent tradesmen for physical construction of buildings to achieve the clients set objectives.
- iii. Resolving inadequacies in production information before an operation commences on site.
- iv. Ensuring the correct selection and use of appropriate, durable materials and components.
- v. Ensuring cost reduction of projects by the use of better construction techniques, sequence of operation, elimination of unnecessary details and specifications.
- vi. High standard of practice and discipline will be maintained.
- vi. Poor workmanship, shoddy works, inefficiency, sales of contract and disorderly development in the construction industry will be eradicated.
- vii. Incessant collapse of buildings would be reduced (if not eliminated) to the barest minimum.

- viii. Ensuring the security of our country by using our own people who are basically qualified and experienced for executing sensitive building projects will be achieved.

ENTREPRENEURSHIP FOR BUILDERS

1.0 INTRODUCTION

Today, we live in an entrepreneurial age. We are in a world where business has become way of life, a situation where the whole of life has been organized into some kind of business. Entrepreneurship is no longer an issue of measurable aspects of economic activities that had no place for human elements, but a reality that considers the important role of the individuals, as well as their social and cultural factors. Thus, America (USA), discovered by entrepreneurs has become a world economic power through entrepreneurial activities. This goes for all the BRIC nations (Brazil, Russia, India, and China) which are defining and ascertaining that our future economic developments rest squarely on “entrepreneurial ventures founded by creative individuals” who will thrust us into the 21 century (McOliver and Nwagwu, 2006).

This explains why businesses have sizes small, family, medium, large or mega and conglomerates, each depicting the human element contents. This concept of entrepreneurship distinguishes it from capitalist tendencies (large organizations) by bringing out factors such as innovations that lead to the establishment of an enterprise, and the subsequent promoter, the entrepreneur, who has distinct ways of carrying out his activities entrepreneurial functions. This, Schumpeter described as “simply the doing of new things or the doing of things that are already being done in a new way”.

1.1 ENTREPRENEUR

J. Schumpeter defined an Entrepreneur as "the person who destroys the existing economic order by introducing new products and services, by creating new forms of organization, or by exploiting new raw materials". He does that by "finding a new business but may also do it within an existing one".

The Portable MBA in Entrepreneurship defines an entrepreneur as "everyone who starts a new business". i.e. "a person who perceives an opportunity and creates an organization to pursue it".

The Oxford Advanced Learners Dictionary (7th ed.): A person who makes money by starting or running a business, especially when this involves taking financial risks.

The Lexicon Webster Dictionary defines an entrepreneur as "the person who organizes, manages, and assumes the risk of a business".

CHARACTERISTICS AND TRAITS OF AN ENTREPRENEUR

1. He is not a capitalist who owns the means of production. This is not essential to his function.
2. He is not a manager that runs the business. He sets up a new enterprise.
3. He is not necessarily an inventor as he does not take invention into practice. The inventor produces ideas; the entrepreneur gets things done in his own way and not necessarily in the way of the inventor an inventor can be an entrepreneur only when he has the ability to produce or market or make a business out of what he has invented or created.