ASSESSMENT OF SUITABILITY OF QUANTITY SURVEYORS IN THE PROVISION OF CONTRACT AUDITING SERVICES IN NORTH-WEST GEO-POLITICAL ZONE OF NIGERIA

BY

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DECLARATION

I declare that the work in this project report entitled "**Assessment of suitability of Quantity Surveyors in the Provision of Contract Auditing Services in North-west Geo-political Zone of Nigeria",** has been carried out by me in the Department of Quantity Surveying, Ahmadu Bello University Zaria. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project report was previously presented for another degree or diploma at this or any other institution.

YAHAYA IBRAHIM _____ _____

SIGN **DATE**

CERTIFICATION

This research project report entitled "**Assessment of Suitability of Quantity Surveyors in the Provision of Contract Auditing Services in North-west Geo-political Zone of Nigeria", by IBRAHIM YAHAYA,** meets the regulations governing the award of the Master Degree of Science in Project Management (M.Sc. Project-Management) in the Department of Quantity Surveying, Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work/project is dedicated to my late parents and my Brothers for their rare show of patience in my upbringing and in supporting me morally, financially and otherwise throughout my academic pursuit.

ACKNOWLEDGEMENT

In the name of Allah, the Beneficent and the Merciful, I wish to express my profound gratitude to Almighty Allah for sparing my life towards the successful completion of this project. And may His peace and blessings be upon our noble Prophet Muhammad (S.A.W).

I am especially grateful to my Supervisor Dr. Y.G. Musa -Haddary, whose tremendous assistance in form of advice and constructive criticism made the project a success. I am equally, grateful to the Post Graduate Coordinator of the Department, Dr. K.J. Adogbo, the Head of Department, Quantity Surveying Dr. Yahaya Ibrahim Makarfi, who also doubled as my Internal Examiner, Dr. Ahmed Doko Ibrahim - my second supervisor, Mal. Mustapha Abdulrazak and Alh. Abdu Ali for their brilliance, diligence and encouragement. I thank them so much and to them, I remain highly indebted. To all lecturers of the programme. I say thank you!

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ABSTRACT

The emerging demand for Contract Auditing of most projects procurement efforts in Nigeria has raised the relevant question as to which profession was best suited to expertly provide these services. Conflicting claims for contract auditing services among relevant professionals prompted this study. The study assessed, from the Quantity Surveying point of reference, the perception of contending professionals to the provision of these services. Three hypothesis were tested at five percent (5%) significant level, to find out if the various professions had differing understanding of what professional contract auditing constitutes; the various professions agreed that the Quality surveying profession was best suited to perform the service of contract auditing in Nigeria; the professions were in agreement that an overlapping relationship exist between the services of Quantity Surveying and those of contract auditing. The study concluded that the relevant professions were of the view the view that the Quantity Surveying profession is best suited to perform the service of contract auditing in North-west Geo-political Zone of Nigeria and Nigeria at large. It is therefore, recommended that the Quantity Surveying profession should prepare and empower herself/itself to be able to expertly provide such services to the clients.

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CHAPTER ONE

1.0 BACKGROUND OF THE STUDY

Construction works, either building or engineering, are usually undertaken via the use of a form of agreement. Mostly, the agreement is between two parties where one party, the builder or contractor undertakes to carryout and complete a specified work for the other party, the client or employer or owner, for a given consideration (Gandu and Musa- Haddary, 2007). The consideration is the specified and agreed sum of money or whatever reward for carrying out the agreed works (Gandu and Musa-Haddary, 2007). For the agreement to be effectively executed, it requires examination and control.

According to Arah (2000) auditing is a systematic and official examination and check of business accounts (which include projects accounts). Construction contract auditing therefore, refers to the official examination of construction contracts and accounts to see if they comply strictly with the stipulated agreement.

The objectives of contract auditing include:

(i) To ensure that the contract sum is fair for the work

(ii) That payment made is justified by the value of work completed

(iii) Contract documents appropriately reflect the quantum of works comprised in the project and

(iv) That the works or contract is not unduly inflated or fraudulent (Anyadike, 2000).

This study therefore, seeks to assess the suitability of Quantity Surveyors in the provision of contract auditing services in North West geopolitical zone of Nigeria. As the profession has been clamoring for in recent times (Gandu & Musa- Haddary, 2007).

In an effort to throw more light on audit mechanisms Wyse (2005) explained that, construction contract auditing activities encompasses works or activities performed by government officials after a contract has been awarded, in order to determine how well the government and contractor performed to meet the requirements of the contract. These activities stretch from the time the contract is awarded until the work is completed, accepted or determined and every dispute resolved. Dandago (1999)

emphasized the relevance of this complex issue of auditing public projects in Nigeria. However, contract auditing is not a function performed by 'government officials' as Wyse (2005) explanation alluded to (Musa-Haddary, 2007).

Gandu and Musa- Haddary (2007) explained that "construction contract auditing is a process whereby an independent construction professional team undertakes the re-examination of the process of a construction project; either on-going or that which has been completed by other teams; its main aim being to evaluate the whole construction process, so as to:

i. Determine if the stipulated contract procedures were followed.
ii. Study the area where resources were wasted.
iii. Make sure that proper records and documentation were appropriately kept.

Gandu and Musa- Haddary (2007) went on to predict that "sooner or later construction contract auditing will become a major element in the consultancy services offered by Quantity Surveyors". However, such assertion is yet to be scientifically tested as most literature have revealed that contract auditing was not originally a core function of Quantity Surveying (Seeley, 1978; FGN, 1986; Willis and Willis, 1980; NIQS, 1996; and NIQS, 2007). Contract auditing being a relatively recent Quantity Surveyor's function, this study seeks to determine the Quantity Surveyor's suitability in performing this technical service.

In another submission, Dandago (1999) reported that in the 1980s, most contracts were awarded as cost reimbursement contracts with no in-depth review of vouchers that ensure costs are not being incurred unnecessarily. With the continued insistence of clients requiring real-time data during construction projects, new contractual provisions, such as, audit provisions were drafted into client – contractor agreement (Canterbury, 1992). This was to ensure that the development team meets the overall objective of the owner (completion on time, quality and within budget).

Adebola (2000) regarded construction contract auditing as the official examination of construction contracts and accounts to see that they are in order. While according to Dandago (1999)

an audit can generally be defined as an independent examination of an expression of opinion on the financial statement of an enterprise by an appointed auditor in accordance with the term of agreement and observance of statutory regulation and professional requirements.

Observation by some of the above experts has listed some of the benefits of contract auditing to include: Client confidence, enhanced accountability, reduce project costs and disputes. As such, in today's complex contractual settings, audit provisions are normally incorporated in to the contract with a clear reporting and auditing mechanism. These provisions include: Warrant to check invoice, project books and records. They usually include a provision that specify what an audit is? When the audit can be performed and what happens as a result of the audit? However, what is not so clear is who should perform this function of construction contract auditing?. In other words, who is best suited to deliver effective and efficient service on this highly technical and specialized sub discipline?

1.1 STATEMENT OF PROBLEM

Despite the much considered significance of time, value and costs factors on any construction work in Nigeria and the impact of contract auditing in achieving these factors of projects success, there is a widespread neglect and under-utilization of contract auditing service in the Nigerian construction industry as a whole (NIQS, 2009). This neglect, has been attributed to the absence of a legal backing as to who shall perform the function of projects auditing? Though, the constitution of the Federal Republic of Nigeria (1999) established the office of the Auditor General of the federation and that of state, to audit all public accounts which includes all construction projects. Experience has shown that, the Auditor general lacks sufficient technical know-how to effectively examine, review and appraise the highly specialized and multifaceted practices of the construction industry (Musa-Haddary, 2007).

Construction contract auditing has been recognized as a very necessary function that will bring about proper accountability, transparency and reliable resource justification in project delivery. It should be capable of checkmating the endemic corrupt practices in the sector. The problem however, is

who or which profession is best suited to adequately deliver this service? The technical, legal, ethical, managerial and social underpinning associated with contract auditing services forms the basic problem this study is concerned with.

1.2 SIGNIFICANCE OF THE STUDY

Contract auditing is an essential service area. However, if this service is to be effective and appreciated, the right discipline using appropriate tools and philosophy is necessary for it to attain its laudable objectives. Assessing the claim to the provision of effective and efficient contract auditing services by the Quantity Surveyors will contribute positively to the on-going debate, claims and counter claims (Musa-Haddary, 2007).

1.3 AIM AND OBJECTIVES

Aim

The aim of the study is to assess the perception of professionals on the suitability of Quantity Surveyors in the provision of contract auditing services for construction projects in North-west Geo-political zone of Nigeria.

Objectives:

i. To identify the need for contract auditing service for construction projects in North-west Geo-political zone of Nigeria.

ii. To assess the methods used for auditing of construction contracts in North-west Geo-political zone of Nigeria.

iii. To assess the suitability of Quantity Surveyors in performing effective auditing of construction contracts in North-west Geo-political Zone of Nigeria.

1.4 THE STUDY HYPOTHESIS

- Null hypothesis – Ho_1: there is no difference in the various professions' understanding of contract auditing features

- Alternative Hypothesis –HA_2: there is a difference in the various professions' understanding of contract auditing features.

- Null hypothesis – Ho_2: there is no agreement as to which profession is best suited to perform the service of contract auditing in Nigeria

- Alternative hypothesis – HA_2: there is agreement as to which profession is best suited to perform the service of contract auditing in Nigeria

- Null hypothesis – Ho_3: there is no relationship between Quantity surveying and Contract Auditing

- Alternative Hypothesis – HA_3: there is a relationship between Quantity Surveying and Contract Auditing.

Source: (Field work, 2013)

1.5 SCOPE AND LIMITATIONS

1.5.1. Scope:

The study covered construction and finance professionals who reside in Jigawa, Kano, Kaduna, Katsina, Kebbi, Sokoto and Zamfara States in the North-west Geo-political Zone of the Federal Republic of Nigeria as at December, 2012.

1.6.2. Limitations:

The researcher, being a Quantity Surveyor, professional bias is likely to interfere with the outcome of the study, thus, reducing the reliability of the study outcome. This shortcoming could not be adequately allowed for in the study. The size of samples of various professionals from each of the participating states was limited by the low population of those professionals in some of the states.

CHAPTER TWO

LITERATURE REVIEW

2.1 CONSTRUCTION PROJECTS

Construction projects are undertaken by clients, contractors, subcontractors and design teams within the construction industry.

2.1.1 Construction Industry

Gandu and Musa- Haddary (2007) stated that, "the construction industry is that sector of the national economy that is responsible for the development of both structures and infrastructures". It embraces "a wide range of loosely integrated organizations that collectively construct, alter and repair a wide range of different building and civil engineering structures" (Seeley, 1984). The industry is essentially an assembling industry, assembling on site, the product of other industries. And its product is a facilitator for the smooth operation of the other sectors. The construction industry as a whole, embodies the following players each performing particular type of functions:-

1. Miners manufacturers: Refer to all those that produce the raw material, components, tools, plant and equipment, used to create the end products of construction projects.
2. **Professional bodies**: All organizations that regulate the practice of construction delivery system such as Architecture, Engineering, Quantity Surveying and the Building professional bodies which fall into this category.

i. Professional according to Association of Professional in Nigeria (APN, 1998), is "someone who is providing a service for the good of the public/private, exercises service and skill based on knowledge acquired by training and education leading to a demonstration of appreciable competence with utmost integrity maintained by a code of conduct of the relevant professional body".

3. **Trainers**: Includes schools and institutes that train Construction Experts and Tradesmen.
4. Marketers; Includes all those that sell Construction Materials, Components and Equipments.

5. **Financial Institutes**: Those organizations responsible for financing construction projects.
6. Construction cost researches and publishers of cost information.
7. Construction trades union and associations such as the Employers association, Builders associations and Employees' Trade, Unions under the construction sector.
8. **Employees:** Construction Entrepreneurs, which could be Private Organizations or Government Agencies that place construction contract
9. **Contractors**: Construction Firms or Organizations that bid and execute construction projects for individuals, promoters and developers.
10. Subcontractors, Suppliers and Brokers

Traditionally construction professionals were civil, electrical and mechanical engineering and architects. However, at the beginning of the last century, they were joined by surveyors (Quantity Land, Building Material and Estate), of recent, the team has been further enlarge to include electronic, sound and other type of engineers, System Analyst, Medical doctors and Environmental Specialists, construction professionals do not operate in isolation, they are in regular contacts with other professionals (Lawyers, Town planners, Accountants, Bankers and Business executives) (Mogbo, 2004).

Characteristics of Construction Industry

The construction industry has unique characteristics different from other industries stemming from the physical nature of the construction product, its demand and production. Some of which include the following as postulated by Gandu and Musa – Haddary (2007).

1. The industry assembles on site-finished products of other producers to create its products.
2. Each product is usually designed and planned separately. The designs portray client's interest in drawings and other documents, and skill operatives undertake the work of construction and assembly of components on site.

3. No two projects are identical. Many are one-off design without prototype model available.
4. The production is mainly carried out on the buyer's sit, and in an open environment subject to the vagaries of the weather and of ground condition. The site characteristics for each project also vary extensively.
5. The size and scope of the product do vary considerably. It range from a few hundreds of naira to hundreds of millions. The time of completion also vary from few months to several years.
6. The risk and uncertainties in production is high, and sometime can be shared between the buyer and seller.
7. The method use for price determination is unique
8. The organization of the construction process in complex and the whole process of production involves a complex interrelated work task that is usually carried out in sequential order.
9. The arrangement of the industry is such that the design is often separated from the production.
10. The seller often sells the product before he produces it
11. Instead of the producer to produce and advertise for a buyer, buyers often conceive the products and advertise for producers.
12. The producer often produces the product to meet the needs of a known buyer or at least a clear idea of the likely buyer.
13. At times of national economic boom, the industry flourishes, but at time of austerity it also depresses.
14. Many groups of trained professionals are often involved in a coordinated effort to produce a single project.

2.1.2 **Construction Process and Techniques**

Many writers have classified the construction process, projects and techniques differently. (Gandu and Musa- Haddary, 2007) broadly grouped them into two types namely: Building Projects

and Engineering Projects. The building projects can further be sub-divided into non-residential and residential projects. The engineering projects can be sub-divided into civil, heavy, process and services engineering projects. Detail classification which cannot be seen as liquid is given below:

1. **Building construction projects**:

These are projects mostly conceived, 'planned and designed by the Architect, sub-divided into non-residential and residential taste. A short list and classification of building project is shown below:

(a) Non-Residential Building projects

(i) Manufacturing buildings

(ii) Commercial buildings

(iii) Government buildings

(iv) Educational buildings

(v) Medical buildings

(vi) Recreational centres

(b) Residential building projects

(i) Apartments

(ii) Hotels and motels

(iii) Dorms

1. **Engineering construction projects**

These types of projects owe their conceptualization, planning and design to the trained professional engineers (in place of the Architects). In most cases, this type of project constitutes

facilities that have a public function related to the facilities as such are usually generated (or initiated) by public or semi public organizations. Seely (1984).

These works demands skills, ingenuity and technical knowledge in design and construction. It involves a lot of risks and uncertainties because of the nature of the construction environment. It can be sub-divided into for categories:

(a) **Civil engineering construction projects**

(i) **Highways engineering**: Usually designed by government organs and horizontal in construction

(ii) **Heavy construction**: - In most cases constitutes large mass of concrete structures vertical or horizontal in construction as well as underground work.

(a) Process engineering

(b) Heavy engineering construction

(c) Services engineering

Construction process and Techniques involves the various procedures adopted in the construction procurement process up to the production and delivery of the finished product. These processes and techniques begins with the client briefs which could be translated to design by project consultants and referred to as project consultants design brief (Gandu and Musa- Haddary, 2007).

The project consultants prepared the designs (drawings) and other relevant documents. The documents are referred to as tender documents and can also be regarded as the contract documents when the contract agreement has been signed. The scope of the projects delivery process also involves the scope of the works contract, the scope of the consultancy services, the contract period, the terms of payment (for the construction works and the consultancy services), the contract price and contract rates, the conditions of contracts, the special and specific conditions and considerations, the general contract agreements, the contract sum or budget' the completion time, the quality of works etc (Gandu and Musa- Haddary, 2007).

2.1.3 Construction Products

Construction products are products emanating from building constructions (non-residential and residential), engineering construction (highways engineering and heavy constructions), process engineering, heavy engineering constructions and services engineering.

The building products are products mostly conceived, planned and designed by the Architect, and are sub-divided into non-residential and residential taste. A short list of classification of building products are as follows:

Offices, Banks, Stores, Shopping Centres, Post-Offices, Police Stations, Administrative Blocks, Fire Fighting, Primary Schools, Colleges, Tertiary Institutions, Libraries, Laboratories Research Centres, Hospital, Nursing Homes, Pharmaceutical Stores, Gymnasiums, Conference Centres, Theatres, Cinema Halls, Play Grounds, Sports Complexes, Apartments, Hotels and Motels, Dorms, etc.

The types of products that could be obtained from engineering i.e. Civil Engineering's and Heavy Engineering's Constructions are as follows: Paving, Bridges, Drainage, Highways, Dams, Tunnels, Reservoirs, Sea Wells, Power Stations, Jetties, Railway Track Works, Airport Ways, Sea Port, Cooling Towers, Water and Sewage Plants, etc.

The products of process engineering are: Petroleum Refineries, Petro-Chemical Plants, Gas Plants, Synthetic Fuel Plants, Heavy Manufacturing Plants, while the Heavy Engineering Construction Products are the Pipe Lines, Cement Plants, Aluminum Smelters, Steel Mills, Nuclear Power Plants, off Shore Steel Plant Forms, Industrial Construction, Large Steel Structures, Geotechnical Process, Industrial Scaffolding, etc. while the Services Engineering Products are those of Mechanical Installations (Cold water Supply Sanitary Installations, Lifts, Escalators, Fire-Lighting and the Electrical Installations of Power and Lighting Installations, Communication Networks, Heating and Cooling's (Grundy, 1998).

2.1.4. **Projects**

A project is a non-routine, non-repetitive, one-off undertaking, with discrete time, financial and technical performance goals (Wyse and Saahil, 2005).

The person or organization that initiates a construction projects is called a client. He engages the construction team and pays for the cost of doing the work. At the end of the project, the finished project becomes his. The client is also known as the owner, promoter, entrepreneur or developer. The person or organization that builds on behalf of the client in return for payment is called the contractor. The contractor mobilizes relevant available resources (materials, labours, management skill, plant and equipments) to bring a construction product concept into real existence on behalf of the owner. Usually, the owner pays for the work including profit. The client and contractor usually sign an agreement with respect to the work. This agreement is known as contract (Turner, 1997).

Contracting is the major means, by which a client, who may have the financial resource but lack the skills to, constructs gets, procures or buys a construction product. A contract is therefore, a binding agreement between two or more parties. It means that the agreement has legal implication such that parties to it can sue and be sued. It is usually accompanied by terms of the agreement that includes in clear language, the extent of work the contractor is expected to do and the extent of financial commitment the client will pay the contractor if he does the work. After then, the actual creation of the construction product begins on site.

This aspect brings about the question of projects management. ‘Projects management reinforces client control over the complexities of modern development. The project manager is the clients expert representative responsible for coordinating the whole development process to ensure timely completion within budget and performance requirements. The main duties or functions performed in projects management as stated by Ndanusa (2004) are as follows:

i. Identification of the clients objectives and priorities
ii. Development and preparation of the brief

iii. Preparation option/ feasibility study

iv. Coordinating, planning, permission and other statutory consents

v. Advice on the design team selection.

vi. Establish budget and the total project management

vii. Conduct tenders evaluation and select contractors

viii. Establish facilities/maintenance management system.

The Construction Project Evaluation Phase

This phase contain the planning and overall framework of a project in terms of the criteria parameters of cost, quantity and quantity, a subsidiary set of parameter may be devised to relate to a particular stage of the project which is being audited such as during construction, the subject of an internal control might be variation and site instruction. Also, a number of typical systems, which could be evaluated at different stages during a construction project, thus,

Project appraisal, design, tender and construction (Willis and Trench, 1998).

Project appraisal

The system should be able to examine:

i. Application of relevant criteria in assessing the need for the project.

ii. Consideration and evaluation of alternative solutions

iii. Financial appraisal techniques used were appropriate to the project, correctly applied and used consistently in evaluating the alternatives.

Design

At this stage of the system, it should examine.

i. Suitability of the team preparing the design brief, this will include its composition, term of reference, overall expertise and reporting system.

ii. Engagement of a technically competent and well coordinated design team.

iii. Well planned and strictly controlled time table

iv. Regular review of cost

v. Letting number of design changes (Willis and Trench, 1998).

Tender

The system should examine

i. Selection of the tendering method

ii. Selection of the form of contract

iii. Selection of constructor invited to tender

iv. Regulation of the tendering procedure

v. Criteria for tender evaluation

vi. Letting of the contract.

Construction

All this stage of construction, the system should examine:

i. Provision of financial information and reporting procedures, which enables costs to be adequately controlled.

ii. On-site control regulating violations work for interim payment

iii. Examination and control of price fluctuation

iv. Control and issue of variation

v. Receipt and evaluation of contractual claims

vi. Quality control which involves continuous monitoring of the works

vii. Timeliness and accuracy of management information (Barry, 1999).

2.1.5 The Challenges of Construction Projects

One of the most striking challenges of the construction project is that it may take years to complete and there are some instances at the tender stage of construction project procurement in which lot of competition and temptation are high as every tenderer is desired to be selected to execute the proposed works. It is at this state that offers of bribe may be exercise to influence the eventual outcome of the exercises. There are sometimes the temptation to over pay the contractor due to corruption on the part the Quantity Surveyor or his employees through over valuation. The

challenge of loading the contract sum in the final account as could be stated in the final certificate of payment to the contractor is also a matter of utmost consideration in projects (Hudges, 1981).

Government fiscal policies within a given period of time may also pose a great challenges to projects in which cases may lead to abandon projects due to economic constraints. Non-adherence to procurement process or act in public projects undertakings. The aggregates challenge of projects like: complex requirements of projects, need for early completion, need for control, nature of the projects (small, medium, fairly large, large, complex, etc.), the relative important of client priorities (time, cost, function, quality, value for money etc.) are all integrated challenges of projects (Hudges, 1981).

2.2. CONSTRUCTION CONTRACTS AUDITING (NIQS, 1992)

2.2.1 Concept, Definition and Purpose'

Contract Auditing essentially comprises contract review and cost auditing. It is a careful ordering of facts derived from relevant project contract documents, comprising drawings, specification schedules, bills of quantities, schedule of rates, conditions of contract, claims, estimates, cost projections and relevant correspondence relating to events that transpired during the currency of the contract, in such a manner that tells the proper story of the state of affairs of the contractual relationship at the point of the study. The audit report should highlight identified problems and proffer solutions, which help management to address such problems. The report should as much as possible be brief and to the point. To this end it is recommended that an executive summary be presented as a separate report in front of the main report Adebola (2000).

Construction contract auditing employs cost auditing techniques and contract review methodology to achieve monitoring and control objectives of project implementation. Thus review of contracts and cost auditing are the techniques employed to achieve the objectives of constructions contract auditing (Arah, 2000).

Cost auditing is an exercise undertaken to compare and justify contract rates, contract sums, payments, claims and cost estimate of works. The objectives of cost auditing are to ensure that contract

sum is a fair price for the works that payment made in justified by the value of works completed. Contract documents appropriately reflect the quantum of work comprised in the project and that the works contract is not an inflated contract, including ensuring that there is an equitable determination of contract value (NIQS, 1992).

Methodology for Contracts Auditing

An audit assignment is a fact-finding case study involving the examination of the status quo to identify and verify imperfections and abnormal trends. The objectives also extend beyond the identification of undesirable trends, to monitoring and control processes and procedures for better results. The methodology of the study and the techniques adopted are predicated upon the nature of the assignment and are usually influenced by the terms of reference (NIQS, 1992).

Terms of Reference for Contracts Auditing

The terms of reference has to be right for a proper study to be undertaken. Therefore, the study starts with the terms of reference.

If there are no terms of reference, the auditing should start with the drawing of proper terms of reference. Existing terms of reference may be amended with be approval and written consent of the initiating authority. The terms should indicate the problems existing deserving a study and desired facts to be established (NIQS, 1992).

Modality of Verification in Contracts Auditing

Fact finding for construction contract auditing involves the identification and study of project documents; site inspection visits and reports; interview of parties, including submission of claims or explanatory notes in defence of allegations.

After the identification of vital sources of information, the study should proceed through a review of the followings:

- Project Documents
- Site visit Reports

- Interview Reports
- Submission by Parties
- Related professional documents and texts
- Video and audio recordings, especially of site visits (NIQS, 1992).

Summary of Findings for Contracts Auditing Report

General form of fact finding

Certain specific facts re expected to emerge as "findings" from an audit report. An Auditor is therefore expected to ascertain these facts and how they affect successes or failures in the contract implementation. Some of the areas to be examined to ascertain these facts are:

i. The project consultants design brief
ii. The scope of the consultancy services
iii. The scope of the works contract
iv. The contract period
v. The terms of payment (for the construction works and the consultancy services)
vi. The contract price and contract rates (NIQS, 1992).

If the audit identifies construction implementation problems, audit findings should establish management failures or defective performance on the part of the parties. If the audit establishes that pre-contract planning was defective, the findings should show where and how the problem originated. For example, if the contract documents were based on bills of quantities, are the quantities accurate? Are the conditions of contract appropriate for the works and how realistic are the contract rates?

The Auditor by interview and through necessary request for policy documents should establish whether the client organization's policy procedures were followed for the placement of the contract. Where there are no established policy procedures (e.g. tender board rules of procedure) the audit should establish whether standard tender procedures were followed. Audit shall also establish that

necessary approval procedures were followed for both contract award and payments made (NIQS, 1992).

Executive Summary for Contracts Auditing Reports

Because the main report of an audit is voluminous, every effort should be made to save the executives from getting bored reading a voluminous report.

In order to avoid this, there is a separate report usually presented at the front of the report just after the index titled "executive summary". This is usually a two or three page summary which is actually an abstract giving 'vital facts, summing up the details of the assignment, the background, the method of study, the findings and the conclusion. The executive summary is the part the management reads. If they have additional interest in the details of any particular part of the findings and methods adopted for the study, they look up index and to that section (NIQS, 1992).

According to Adekola (2000), construction contract auditing is the official examination of construction contract and account to see that they are in order.

The objective of cost auditing are to ensure that the contract sum is a fair price for the works and that payment made is justified by the value of work completed. It is obvious that most construction projects in Nigeria have their cost inflated because those who have responsibility for their procurement know that the account to such project are not further going to be audited either during or after completion of the schemes.

Construction contract administration terminates usually at the final account. More often than not, all documents connected with the contract are dumped once the final measurement and final payments are made. Ordinarily, this should not be so, there should be post-construction cost control which would be a means of cross-checking the details of the works executed according to original plan. Regrettably, this had been neglected (NIQS, 1992).

As regards to construction contract auditing, every effort should normally be made to ensure that contracts are executed according to the original plan and design of the project execution and

includes visit to sites by the qualified professional, more especially, the Quantity surveyor who has to verify that the execution of the project is in accordance with the original bills of quantities (Folorunsho and Ali, 2013).

According to Seeley (1997) employer sometime require a contract audit of building costs to satisfy themselves that they are being asked a fair and proper price for the work undertaken. It may be that the tender was submitted on the basics of drawings and specification and thus, variations have occurred during the courses of the work. Alternatively, the contract may be on a prime cost plus percentage basic and the employer wishes to be assured that the costs have been correctly calculated.

The Quantity surveyor can investigate all the costs incurred and determine a fair and reasonable price, having regard to all the relevant circumstance. This can involve examining all available records, interviewing the contractors personnel, visiting the site, investigating the procedures which have been used, including an assessment of the effectiveness of the contractors internal control system.

Construction Contracts

An employer commissioning a building project will expect to obtain a building that satisfies his need as to form and quality, of which possession been taken at an agreed time and for which he will pay the optimum economic price; the employer has to invite comparative tenders from different independent contractors (Murdoch and Hughes, 1992).

The employer of a contractor is entitled to draw up the terms or the conditions of contract that will regulate his business relationship with the contractor.

TYPES OF CONSTRUCTION CONTRACTS

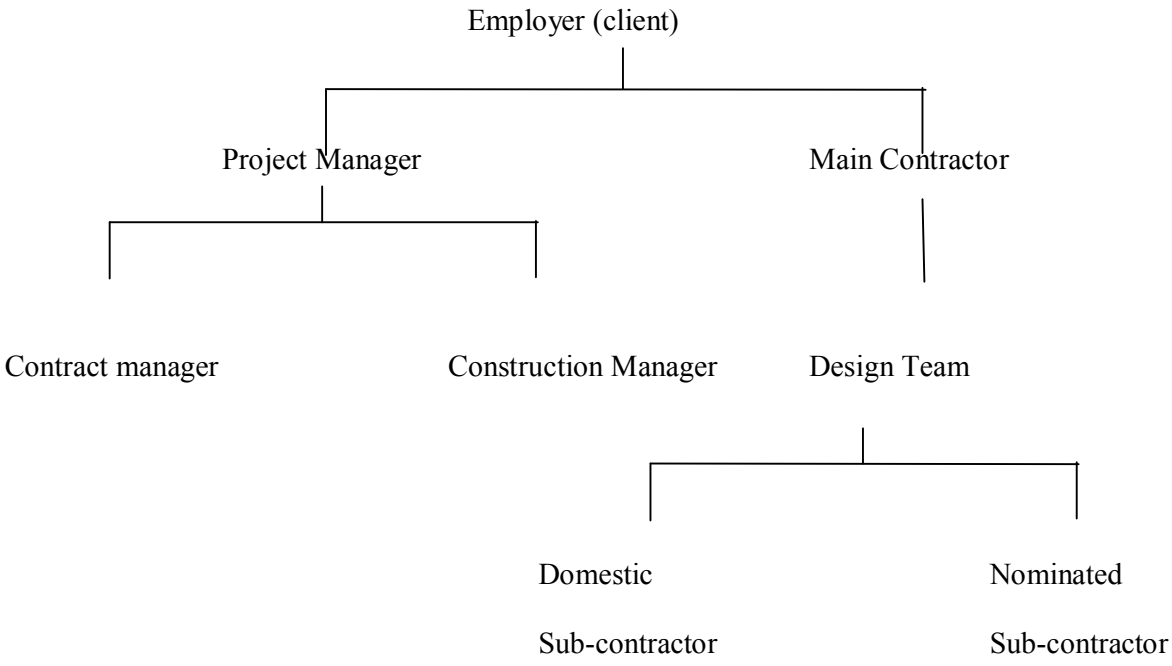


Fig 2.1: **Contractual network in design and build contract**

Source: (Ibrahim, 2011)

Figure 2.3 above provided a schematic presentation of contractual network in design and build contract. Under the above mention contract, the contractor under takes full or partial responsibilities for design. Murdoch and Hughes, (1992) stated that "design and build type of contract occurs where the employer prefers to have direct contractual link with a large and financially stable organizations" managerial skill or where it is a simple fact that the contractor speaks the same language.

The following characteristics can also assist:

1. The technical complexity of the project
2. The client familiarity with construction
3. The need for an early start on site
4. The potent of the responsibility and communication

5. The cost of the project need to be competitive including cost control (Ibrahim, 2011).

(a) **The traditional procurement system**

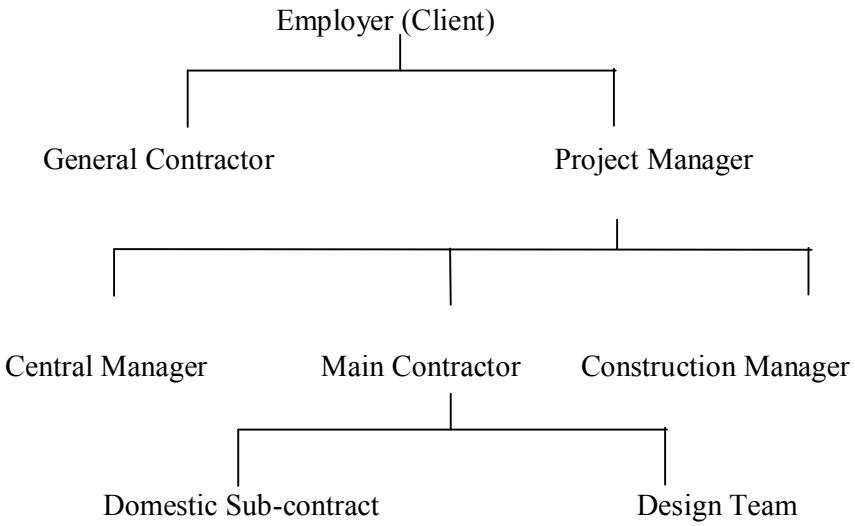


Fig. 2.2: **Contractual Network in traditional procurement system**

Source: (Ibrahim, 2011)

The contractual network in traditional procurement system as depicted in figure 2.4, involve a contractual network where by the obligations rests on the contractor to carryout and complete the specified works, in return for the employer obligation to pay the agreed price. Under this procurement system the client has a direct contractual link with most of the participants.

(b) **Management contracting**

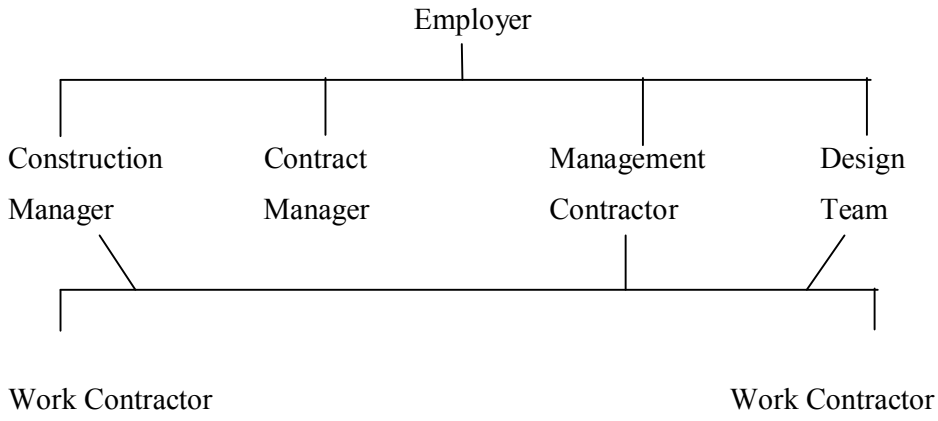


Fig: 2.3: **Contractual Network in Management Contracting**

Source: (Ibrahim, 2011)

Figure 2.5 represents a contractual network in Management contracting. Management contracting provides contractual relationship where by the contractor becomes part of the design team, at a level which can be equated with that of the professionals involved.

According to Murdoch and Hughes (1992) Management contracts in the projects at an early stage contribute construction experts of the design and manage the construction". Circumstances under which management contracting could be considered include:

1. The projects is fairly large
2. The project requirements are complex
3. There is need for early completion
4. Need for cost control

(a) Construction management contract

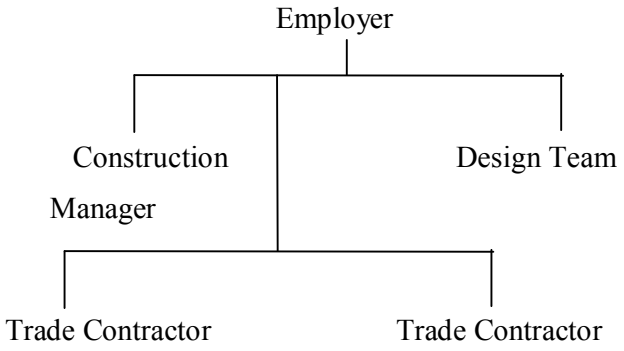


Fig: 2.4: **contractual network in construction management contract**

Source: (Ibrahim, 2011)

The contractual network in construction management contract as represented in figure 2.6 above has an interesting feature. The feature of construction management is that the client places a direct contract with each of the specialist in the contract. In order to achieve success in these contracts, the client engages the expertise of a construction management who acts as a consultant. The use of

construction management method of procurement has been found suitable under some or all of the following circumstances:

1. The client is familiar with construction, and knows some or all the professional teams.
2. The project is technically complex, involving diverse technologies and sub-systems.
3. The client requires an early start on site.
4. The nature of the project is such that it makes sense to separate professional responsibility from the management of the project.
5. The relative important of client priorities (time, cost, function, quality, value, for money etc.)
6. The need to make variations to requirement as work proceeds

Design and manage contract

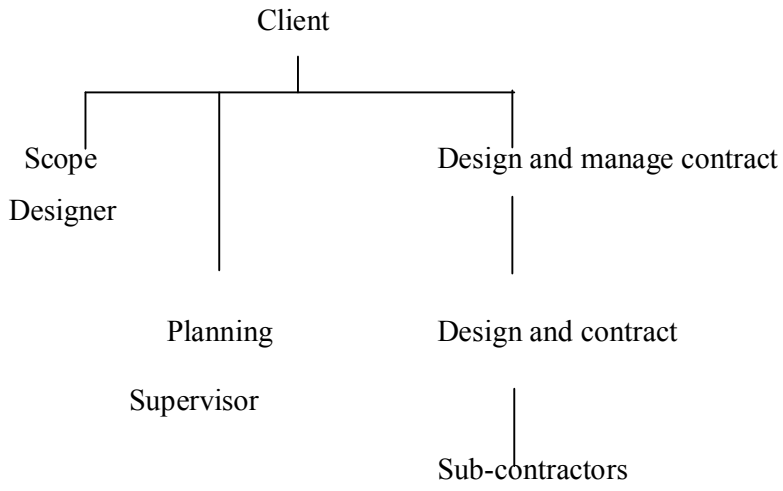


Fig: 2.5: **Contractual network in design and manage contract**

Source: (Ibrahim, 2011)

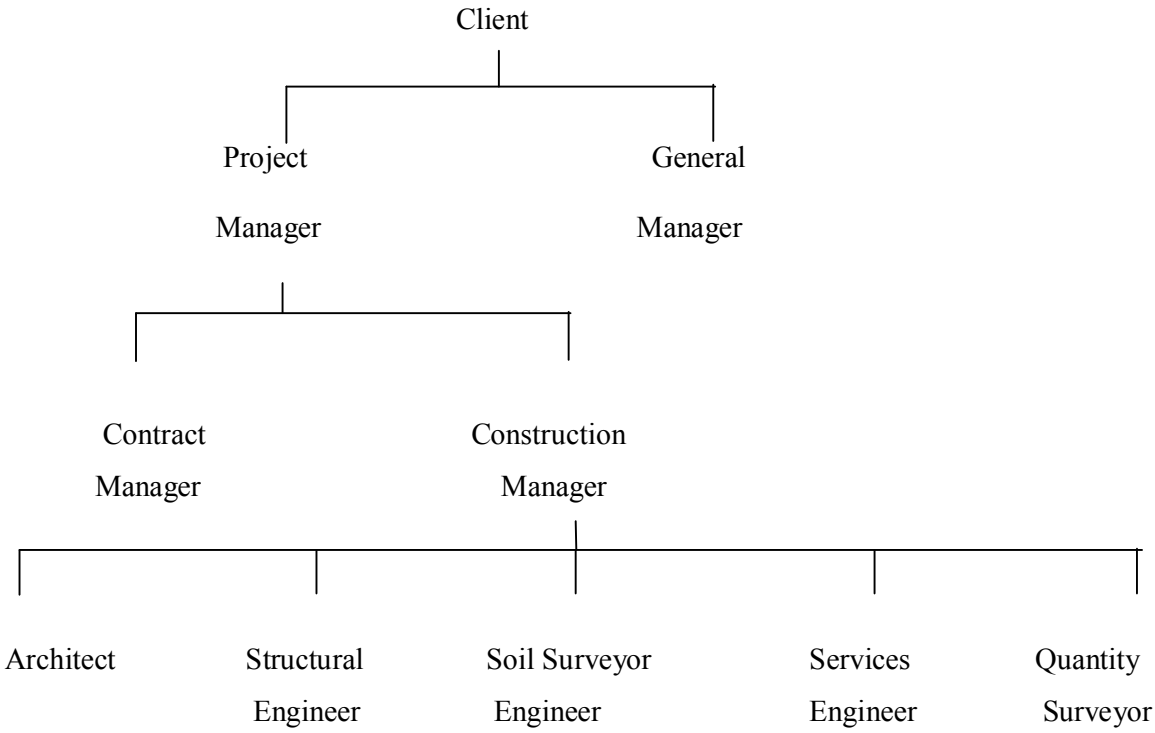


Fig: 2.6: **Contractual network in design and manage contract**

Source: (Ibrahim, 2011).

Any of the discussed procurement system of contracts or project may be appropriately used to engage these professionals.

However, the right, duties and obligations of the participants become relative. Each participant depends on the contract or the conditions of engagement in exercising his responsibility, authority or even accountability.

The primary obligation upon the client is to give the contractor the sum of money which forms the consideration for the contract (Hughes, 1981). Other duties, right and obligation of the client are protected and administered by the commissioned professionals.

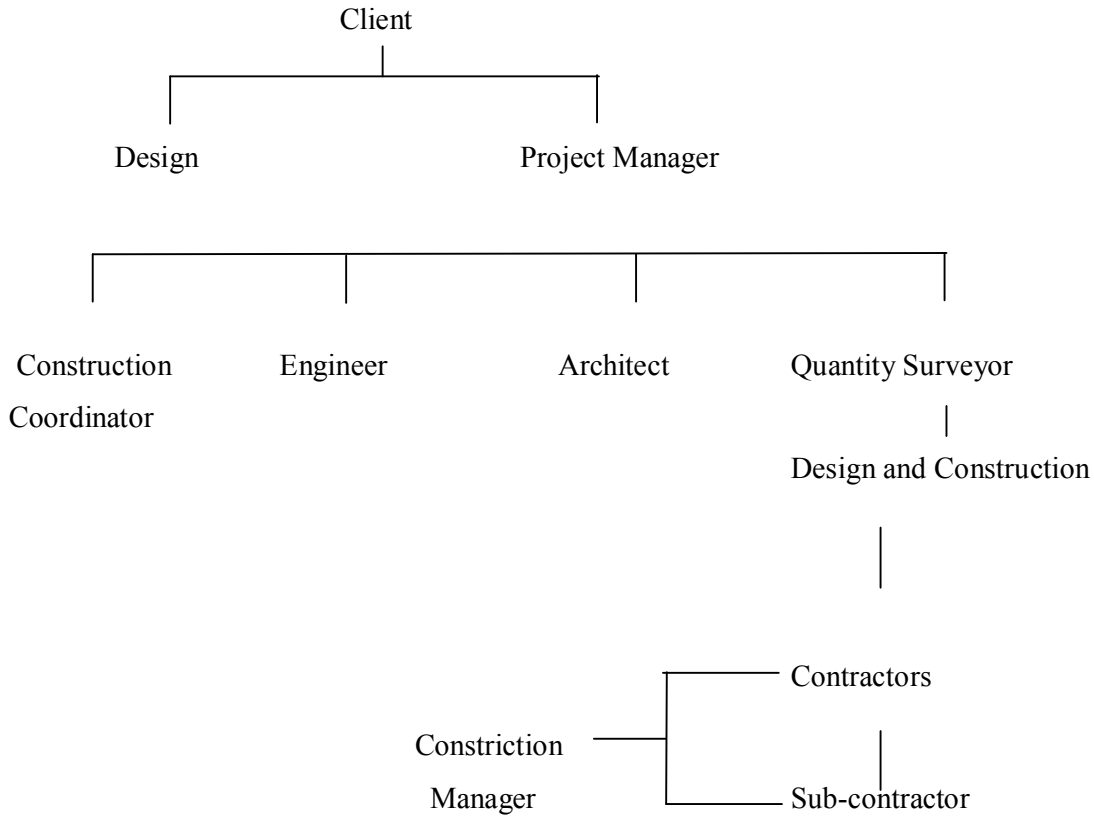


Fig: 2.6: **Contractual network in design and manage contract**

Source: (Ibrahim, 2011)

Figures 2.7, 2.8 and 2.9 represented a series of method of contractual network in design and manage contracts. According to Seeley (1987), there is variety of employer-contractor relationship and his choice will be influenced considerably by the particular circumstance. These ranges from cost reimbursement or cost plus contract at one end of the scale to truly lump – sum contract at the other.

The essential difference between the two extremes evolves upon which party is to carry the risk of making a loss (or profit) and the incentives which are building into the contract to encourage the contractor to provide an efficient and economic service to the employer or client.

Lump-Sum Contracts

In lump-sum contract, the cost of the project is fixed; the profit is the fixed contract account less contractor cost. The advantage of lump-sum contacts is that the cost of the project is not up front.

The disadvantage is that all alterations to the original contract, such as change order could be expensive (Ibrahim, 2011).

Audit Issues in Lump-Sum Contracts

- The contractor may cut corners on contract specifications by utilizing lower quality material, lower skill level employees and inferior construction technique.
- The contractor may charge unreasonable amount for change order.
- The contractor may fail to give credit for original contract work replaced by change orders.
- The contractor may fail to maintain performance bonds and insurance coverage throughout the project, for example, insurance coverage might be dropped shortly after the project begins.
- The contractor may fail to give credit for cost included in the contract price that is directly paid by the company. Allowance may not be properly adjusted.

Cost-Plus Contracts

In a cost-plus contract, the cost of the project is typically determine multiplying the direct costs actually incurred on the project by some specified percentage often referred to as the "overhead rate" and contractor's profit is build into overhead rate.

The advantages of cost-plus contractor are that the contracts needs to disclose all costs incurred in the project and that change orders are usually costed same way as the rest of the projects. The primary disadvantages are that the contractor does not have a vested interest in controlling costs, since higher cost-means high profit (Ibrahim, 2011).

Audit Issues in Cost-Plus Contract

(a) The contractor may double-charge by including overhead or other improper costs in the direct cost base for the project. For example, the contractor may include administrative cost as part of the contract cost when such costs are also build into the "plus" or overhead rate.

(b) Some dubious contractors may unnecessarily inflate project costs by using higher labour costs or materials, failing to use competitive bidding for sub-contractors, or by neglecting to give proper credit for discounts or refundable deposits.

(c) The contractor may charge for cost not incurred on the project, such as material that are purchased but not used.

(d) Contractor may inflate equipment costs by charging excess rental rate or the equipment they own by keeping the equipment on site longer than it is needed or by double-charging one piece of equipment that is used on two different contracts to the same jobs.

2. **Time and Material Contract**

Time and material contract are similar to cost-plus contract. The cost of the time and materials project is determined by actual cost of direct materials used plus some additional amount based on the labour used. The time or labour-related charge of the contract cost is typically derived by multiplying labour burdens by the actual direct labour hours charged to the project.

The contractor's profit is build into the labour burden rate. Like the cost-plus contract, time and material contract required the contractor to disclose cost incurred on the project, and change orders are usually the same way as the rest of the project.

The main disadvantage, again, is that the contractor or does not have a vested interest in controlling cost, since higher costs means higher profit (Ibrahim, 2011).

Audit Issues in Time and Material Contract

(a) All the audit issues related to inflated or improper materials charged with the cost-plus contract cost must also be considered with time and materials contract.

(b) The contractor may inflate the direct labour base used to computes the time portion of the contract cost by improperly including the overhead personal labour or fringe benefits such as vacation and sick time in the base, or by including labour related items such as relocation cost.

(c) If the time portion of the contract cost is base on the audit direct labour hour incurred on the project, the contractor may inflate the base by using less skilled labour, by including overhead personal labour hour in the base, or by the employing direct labour efficiency.

2.2.2 **The Need for Contract Auditing**

A contract audit is a particular type of audit, it does emphasize the need for an audit of major construction project, and it provides the opportunity to assess the management and control of a contract especially if the process begins during the pre-construction and early construction stages and extends to a post-completion review and verification (NIQS, 2007).

In view of the fore going, there is an urgent need to put in place structure that will make it mandatory for project contracts (including costs) to be audited before they can be accepted as official documents from local government to federal government.

In view of the relevance of the construction industry to the National Economic Development, the war against corruption cannot be won if the corruption is not eliminated or cured in the construction industry.

Prevention and detection of errors, mis-statements, material exaggeration or fraud, as well as, the presentation of true, correct and fair position of situations are the hall mark of audit.

In Nigeria, it has been historically discovered that it is in the award of contract by various government in Nigeria that the poor transparency image of the country is mostly ascribed.

The scenario forced the then administration of President Olusegun Obasanjo in his famous reform programme to set-up the Budget Monitoring and Price Intelligence Unit (BMPIU), that commenced a process of contract award review, oversight and certification function now commonly known as “DUE PROCESS” (Ibrahim, 2008).

The Due process staffs comprise experts with a bias for project management, construction and procurement. It is a simple mechanism that certified for public funding only those projects that have

passed the test of proper international competitive bidding approach in the award process. Through the instrument of certification, value for money and transmittal premises for public expenditure.

In the time-lag of the implementation of the Due Process, reasonable progress in promoting fair play and competition resulting in huge savings through reduction in contract sums worth Hundred million of U.S Dollars. There have also been a number of cancellation of contracts awarded by spending unit that failed to comply with laid down open, competitive bid parameters. Respect and public confidence in the contract award process as well as the mechanism for checking corruption gradually taking a proper shape.

Nowadays, it is a waste of time to inflate contract by all ministers and head of parastatals, because, if detected the consequences can be grave. Good enough, Nigerians are also beginning to know about a mechanism that has been put in place by government to check corruption. The reasonable success of the due process has strengthened the resolve of the government to push forward a public procurement commission with a broader mandate of over sighting all federal procurements.

Pre-Due Process Procurement Problems

A survey conducted by the Chief Olusegun Obasanjo administration shortly on assumption of office revealed that prior to May 29, 1999, Nigeria must have lost an average of forty Billion Naira (N40, 000,000,000) annually through all kinds of manipulation of the procedures for the award and execution of public contracts (Ibrahim, 2008).

These manipulations were open in the form of contract costs, use of contract system to divert public funds to private pockets, award of contract, over invoicing, influence peddling, award of contract to friends, relations and family members and above all award of contract without planning and budgetary provisions.

This major menace in public spending led to major leakage in the public treasury, abandonment of projects, proliferation of project, and proliferation of white elephant projects, poor service delivery and denial of social amenities to the people. It was a major source of corruption and created poor

image for our Nation, Nigerian nation. The introduction of the public procurement and the budget monitoring and price Intelligence Unit in the year (2001) to implement a robust public procurement Reform Programmes designed to address these critical challenges in management of public resources in Nigeria.

Objectives of Due Process

- To harmonize existing Government policies/practices and update same on public procurement.
- To ensure that packaging of project conception is geared to the realization of priorities and targets.
- To determine whether or not Due process has been observed in the procurement of services and contracts.
- To introduce more honesty, accountability and transparency into the procurement process.
- To monitor the implementation of projects during execution with a view to providing information on performance, output and compliance with specification.
- To ensures that only projects which have been budgeted for are admitted for execution.

In the light of the above, therefore, in order to eliminate corruption in the project, construction contract auditing is a must. Therefore, all the tiers of government (Federal, State, and Local) should with immediate effects engage the services of Quantity Surveyor who specialize in construction contract auditing in the procurement of capital projects to ensure that the effects of corruption are eliminated and obtains the best value for any expenditure made in the procurement of capital project in Nigeria (Ibrahim, 2008).

Process of Auditing

According to Anyedike (2000) to carry out the audit of the project properly, the audit will review and ensure that the different tender boards were properly constituted at different levels, department tender boards, ministerial tender boards, and federal execute council level in case of public

sector project. The review of contract and evaluation of the costs involved in the relationship are determined through process that essentially involved:-

(i) Phasing of assignment and time budget.

(ii) Review of document

(iii)Personal interviews

(i) Compilation of findings

(ii) Report writing

(iii)Formal presentation.

2.2.3 **The Process Involved in the Performance of Construction Contract Auditing**

In order to carryout construction contact auditing especially in the public sector projects in Nigeria, the construction contract auditor need to review and ensure that the various tender boards were properly constituted at different levels; such as; the departmental tender boards, the ministerial tender boards and the federal executive council level. He will also ensure that the financial authority at each level was not violated or exceeded. It should be ensured that adequate publication were made in the national dailies for the tenders to be submitted. There should be ascertained whether construction/projects were awarded to competent bidders and if not should be necessary to determine the rationale used in awarding the contract if there were any variations that must be produced. The contract agreement should contain provisions for access to the site for the purpose of inspection, review and evaluation. It should be necessary to determine whether the contractor had to complete the execution of the project within the time provided in the contract, it should be necessary to determine whether or not the ministry or agency concerned recovered the percentage amount of the contract/project specific as damage in the contract agreement as penalty for non-performance or delayed execution of the contract (Adebola, 2000).

Consultancy Services:

Consultants have recently played a major part in supervising the execution of both private and government projects. The role of the Auditor here should be to ensure that they are properly appointed and that payments made to them are in accordance with federal government of Nigeria approved rates for consultancy services as negotiated by the federal ministry of works and housing scale of fees 1996 (Turner, 1997).

Valuation Certificates

In the execution of all projects, more especially those involving civil engineering works and services payments are usually made on the basis of work done at a particular point in time, which is usually based on the valuation of the project by Quantity Surveyor or Resident Engineer to support any payment to be made to the contractor. An interim payment certificate should be attached to the payment voucher used in paying the contractor. The auditor should then ensure that the payment made to the contractor was commensurate with the work already accomplished (Adeniyi, 2006).

Auditor and project officers

Besides examining and evaluating of the various financial accounting and related technical matters concerning the project, the Auditor has to gather some more useful facts, information etc by holding discussion with project officers supervising the projects, both in the office and at the projects sites. The Auditor could therefore improve his knowledge about the project by constant discussion with the relevant project officers. It could happen that facts and issues which were uncertain when they were examined on papers could be cleared through discussions (Adebola, 2000).

Physical inspection of Project

Projects cannot be complete and meaningful, unless and until the auditor pays visit to the project sites where the execution of the project could be examined and evaluated. During the site visits the auditor should take note of any signs of waste or effectiveness that might indicate shady performance of the job. The objectives of the physical inspection are:

(i) To evaluate the work and services rendered, to ascertain the quality.

(ii) Relate the works and services rendered with the payment made to date.

(iii) Identify construction defects if any and ensure that appropriate materials were used as provided in the priced bill of quantities and specifications.

(iv) Ascertain whether the project when completed will attain the intended objectives.

(v) Ensure that contractors rectify the construction defects observed.

(vi) Assess the alternatives ways or means of project implementation.

(vii) Ensure that the project monitoring and evaluations are adequate.

(viii) Ensure that economy and efficiency were achieved in the use of funds (NIQS, 1992).

Reporting Stage

Report writing is the final stage in the audit process. It includes discussing the report with the senior management of the audited organization including the accounting officer. The report should highlight the findings on the essential areas of the economy, efficiency and lapses which can be rectified and avoided in future cases. The report must stress the present state of affairs, the audit findings and how improvement can be achieved (NIQS, 1992).

Practice and Procedure of Contract Auditing

A construction contract audit should be performed by disciplinary teams, which comprises of construction professionals and Auditors. The latter may be specialist internal auditor or a firm of external auditors. Their responsibility is not simply to carry out a paper work exercise. They are involved in validating the contacts, overall project management arrangements and system procedure against available documentation, it is often necessary to make site visits and carryout inspection of materials belonging to the client which are held off-site (Maisara and War, 2009).

In a construction project, an auditor to a project can use various techniques in achieving efficiency in his auditing services. An approach to a control audit can be carried out in parameters which are critical to the success of a project and enable him evaluate his performance and correct

deficiencies and weakness of the system. Approach consists of the three (3) principal phases or stages as follows:-

(i) System evaluation

(ii) Compliance testing

(iii) Test of details

Each of which should be supported by working papers.

The planning format of these papers can be based on Internal control Questionnaire (ICQ) (Arah, 2000).

The System Evaluation

This phase contain the planning and overall framework of a project in terms of the critical parameter of cost and quantity, a subsidiary set of parameters may be devised to relate to a particular stage of the project which is being audited such as during construction, the subject of an internal control questionnaire might be variation and site instruction. Also a number of typical systems, which could be evaluated at different stages during a construction project (NIQS, 1992).

Stage 1:

Project Appraisal:-

The system should be able to examine:-

(i) Application of relevant criteria in assessing the need for the project.

(ii) Consideration and evaluation of alternative solutions.

(iii) Financial appraisal techniques used were appropriate to project, correctly applied and used consistently in evaluating the alternatives.

Stage 2:

Design:

At this stage of the system, it should examine:-

(i) Suitability of the team preparing the design brief, this will include its composition, term of reference, overall expertise and reporting system.

(ii) Engagement of a technically competent and well coordinated design team.

(iii) Well planned and strictly controlled time table.

(iv) Regular review of cost

(v) Letting number of design changes.

Stage 3:

Tender

The system should examine:-

(i) Selection of the tendering method

(ii) Selection of the form of contract

(iii) Selection of contractor invited to tender

(iv) Regulation of the tendering procedure

(v) Criteria for tender evaluation

(vi) Letting of the contract.

Stage 4:

Construction

At this stage of construction, the system according to (NIQS, 1992) should examine:-

(i) Provision of financial information and reporting procedures, which enable costs to be adequate controlled.

(ii) On-site control regulating violation of work for interim payment.

(iii) Examination and control of price fluctuation.

(iv) Control and issue of variation

(v) Receipt and evaluation of contractual claims.

(vi) Quality control which involves continuous monitoring of the works.

(vii) Time lines and accuracy of management information.

Stage 5:

Post-Completion:

At this stage, the system should be able to examine:

(i) Completeness and accuracy of final account

(ii) Recovery of liquidated damages where appropriate.

(iii) Post-completion assessment of cost and time variances i.e. the differences between the original estimate and the actual outcomes (NIQS, 2007).

- The record of a system should describe the system as it is actually used to check that the record is complete and correct. A typical evaluation procedure consists of: - Definition (by the auditor, independently of the client) of the control objectives of the system.
- Preparation of an internal questionnaire in which the auditor devises a series of questions to assess the strength and weakness of a system and test whether an objective control is capable of being met by the system.

These questions should be designed so that a positive answer indicates strength and negative answer a weakness.

The implication of a weakness should be recorded in a working paper together with any recommendation.

Compliance Testing:

The purpose of compliance testing is to discover whether and if so, How a system is actually used; it is one thing to have a good system in place and then to discover that in practice, on site for example if a different system is used or that there is no system in use. The compliance phase may involve carrying out interviews, examining the clients accounting records or an engineer's or Quantity surveyors working papers.

Testing May involve an examination of individuals items as they pass through each procedure in the system or the selection of different items of each procedure tested (NIQS, 2007).

Compliance testing might be review of a system for the procurement. The system might stipulate that:-

i. The tender brief may be fully defined before bids are invited.

ii. No amendments are made to the brief after bids have been invited.

iii. All equipment is let competitively.

iv. All equipment should be delivered on site to the main contractor on a specified date.

v. The supplier should commission the equipment and prepare operations and maintenance manuals.

vi. A warranty for the equipment should run from the date of the main contract or work.

vii. Stage payment should be made when the equipment is delivered on site, at full commissioning and handover of the main contractors works.

Each of these stages would be examined against records of the clients, equipment supplier and main contractor. Documentary checks might be supplemented with the result of site inspection to discover whether equipment was stored solely on site whether it had been incorporated into the works, stage payments had been made on time and for the agreed amount. Consideration should be noted at the date on which a warranty began to take effect, especially if the main contractor works were delayed (NIQS, 2007).

Test of Details

Test of details are needed for an external audit, when evidence of financial value is required and weakness have been exposed during system evaluation and compliance testing. The sample selected should be properly established and of an appropriate size based on whether a misstatement of a particular size frequently could affect the interpretation of data and any points of weakness identified during system evaluation and compliance testing.

The purpose of these tests is to look for overstatement or understatement and to examine the quality of management decision, which falls outside the scope of the system in place for a contract. This will be suitable in private projects audit not in an audit for a public sectors project.

Examination of the quality management decision is included to ensure that lessons are learnt for the and to provide data needed for the revision of the system; if this proves to be necessary the size of the sample tested should be related to the strength and weakness identified in the system evaluation. If the systems are weak, the sample size may need to be increased. The process of selection may be either judgmental (relying heavily on an individual auditor's skill and expertise) or (as is often the case in internal audits) size may be determined by "materiality" and assessment of rest materiality is the monetary amount of misstatement which would affect the user of an account, the amount is a matter of judgments depending on the circumstance of the case.

Assessment risk on the overall scheme, where systems have been shown to be weak, the risk would be high (NIQS, 2007).

2.2.4 **Who Provides Contract Auditing Services?**

The questions of who provides contract auditing service in the construction industry can easier be handled without any or much contention from the various stakeholders in the industry in respect of an answer to be provided.

The Quantity Surveyor is by all standards, the most qualified professional within the construction industry to effectively and efficiently performs the functions of construction contract auditing services, hence, (Gandu and Musa- Haddary, 2007) predicted that " sooner or later construction contract auditing will become a major element in the consultancy services to be provided by the Quantity Surveyors".

Seeley (1997) defines a Quantity Surveyor as a professional, trained, qualified and experienced in dealing with construction problems on behalf of the employer. He is essentially a cost expert whose prime task is to ensure that the project is kept within agreed budget and that the employer obtains value for money.

The Nigerian Institute of Quality Surveyor (NIQS 1986) describe the Quantity surveyor as an expert who is concerned with financial probity in the conceptualization of design with planning for the execution of works both in new and refurbishment works in the building, civil and other important engineering projects. His services are centered on value for money, cost control, cost modeling, cost advice, feasibility studies, cost-benefit analysis etc. Below are the litany of services and roles offered and played by the Quantity surveyor in the construction industry and which gives him an edge over all other professionals in the industry to comfortably perform the functions of construction contract auditing with utmost efficiency and acceptability.

2.2.5 The Role of the Quantity Surveyor on Construction Projects or Contracts.

Gandu and Musa- Haddary (2007) outline the tasks performed by a Quantity Surveyor to contractor, client and or employer as follows:-

- **Tendering: -** In competitive bidding, the Quantity Surveyor uses his knowledge of bidding strategies to compete for jobs on behalf of the contractor.

The contractor is always in dilemma when bidding for a job. He must quote high enough to make profit, yet, high enough to be competitive. In this situation, the contractor has to use a lot of bidding

skills to overcome other interested bidders. The Quantity Surveyor uses his training and skills to balance the extremes. If the contract is a negotiated contract in nature, he uses his expertise to negotiate a profitable job for the contractor.

- **Profit Maximization**: He unsure the maximization of profit in the company by managing expenditure, raising claims on fluctuation, variation, delays, site instruction and additional works and also negotiates for payment on behalf of the company.
- **Interim Payment**:- The contractor can be quizzed financially if he continues to work without intermittant payment; Quantity Surveyor raises claim and applies for interim payments as the project progress.
- **Evaluation of cheap ways of construction**: - In each step of the actual construction implementation process, he evaluates the best approach to save the resources of the constructor.
- **Manages the cash flow**: - He manages the contractor's cash and flow and keeps financial accounts and records.
- **Legal expertise**:- He advises the contractor on all legal matters that pertains the contract (Gandu and Musa-Haddary, 2007)

Tasks as a client's Quantity Surveyor: - If the client is his employer; he performs the following functions for him.

- Prepares client budget
- Undertakes feasibility studies
- Undertakes cost planning for the project
- Prepares the bill of quantities for the project to be issued for the tendering process.
- He administers such as cost monitoring and cost control.
- Financial positions periodically as the project progresses.
- Administration of provisional sum and quantities,
- Administration of prime cost sums.

- Assessment of claims arising from variations;
- Fluctuation, additional works and site instructions to make sure that the contractor did not over-quote his claims.
- Advises on procurement methods suitable for the proposed project.
- Managing the cash flow schedule of the client
- Administer the retention money and defect liability period.
- He prepares final account for the project after it is completed (NIQS, 2007).

As management becomes increasingly emphasized in construction and people continue to demand for accountability, the need for construction contract auditing will increase. Even though it is already being practiced in some developed nation, many third world countries are yet to introduce the practice in their construction procurement process (Gandu and Musa- Haddary, 2007).

Again, according to Anyadike, (2000), the services offered by the Quantity Surveyor include:-

(a) **Feasibility studies of capital projects**

(i) Budgeting planning for annual, rolling, medium and perspective development merit plans.

(ii) Capital investment policy advice

(iii) Advice on financial plans and procurements

(iv) Cash flow forecasts and analysis

(v) Value analysis and management and cost benefit studies

(vi) Life circle studies and cost-in-use.

(vii) Time effect and cost and profitability

(b) **Cost Modeling**

(i) Cost estimate and management

(ii) Cost studies and research of construction resources.

(iii) Cost planning, monitoring and control to ensure the clients budget is not exceeded.

(c) **Contract document and procurement**

I. Procurement, tendering procedures and contractual arrangement.

II. Preparation of bill of quantities and other documents for obtaining tenders for the purpose of contract administration.

III. Tender evaluation, analysis and reporting.

IV. Contract administration

(d) **Contact Administration**

I. Preparation of interim valuation

II. Adjustment and measurement of changes in scope of works.

III. Management of cost implications of contractual issues.

IV. Cost control-preparing financial statements, cash flow and final accounts.

(e) **Monitoring of capital projects:**

I. Programme management

II. Project auditing

III. Monitoring and evaluation of developments.

(f) **General**

Preparation of cost profit, pricing of bills of quantities and appropriate documentation for:-

I. Capital allowance and taxation advice

II. Technical and contract auditing

III. Banks loans and facilities

IV. Planning approvals etc.

(g) Project management

Project management reinforces client control over the complexities of modern development. The project manager is the client's expert representative responsible of coordinating the whole development process to ensure timely completion within budget and performance requirement such as:

I. Identification of the client's objectives and priorities

II. Development and preparation of the brief

III. Preparation option/feasibility study

IV. Coordinating planning permission and other statutory consents

V. Advice on the design team selection

VI. Establish budget and the total project management

VII. Conduct tenders evaluation and select contractors

VIII. Establish facilities/maintenance management system.

(h) Facilities Management

Quantity surveyors are by their training experts in total and procurement management well suited for the management of all facilities, which are contract in maintenance/rehabilitation projects and facilities managements.

I. Other management oriented services

II. Contract management and supervision

III. Cost financial and procurement management services for built, operation and transfer (BOT) development and projects.

IV. Privatization and commercialization studies and management

(i) Direct Labour Projects

I. Preparation of labour and materials schedule to determine the quantity of labour and materials required on a particular project.

II. Supervision of actual purchasing of the materials using the appropriate inventory modeling technique.

III. Coordinating and stimulating the different activities involved in a direct labour approach to construct contracts.

(j) Arbitration

I. sitting as an arbitrator or umpire

II. Preparation of proved of evidence

III. Preparation of award

(k) Expert witness

I. Provision of expert witness and certification in construction disputes

(l) Fire Insurance Assessment

Assessment of replacement cost of buildings for insurance purposes by preparation of price bill of quantities.

(m) Dilapidation

I. Preparation of schedule of dilapidation.

II. Preparation, measuring and pricing schedules of dilapidation

III. Negotiation and settlement of land and tenants

IV. Expert evidence in case of dispute

The core competencies of Quantity Surveyors can therefore be said to reside in feasibility studies.

2.2.6 Auditing Elements in Quantity Surveying Services

i. Checking for errors in a bill of quantities

According to the standard form of building contract (JCT, 1998) with Quantities. These errors where they occurred are to be treated as variation and the contract sum adjusted accordingly.

Many contract organizations do not employ qualified Quantity Surveyor and Estimator with the result that most times where errors are inherent in the bill of quantities of resulting in the reduction of the contractors profit and sometimes leading to loss. At the tender stage, the contractor estimator may not have sufficient time or expertise to detect these errors depending on the size and complexity of the project as well as the time allowed for the preparation and submission of tenders. However, where the services of the construction cost Auditor is engaged to supplement the effort of the project it has often resulted in improved chance of the contractor being selected as appropriate tendering strategy would be employed to make the tender more competitive.

The engagement of the services of an independent construction Auditor, even after the contractor has been selected, can be used to enhance the profits of the contractor by checking for errors in the Bill of quantities, services that will eliminate or at least minimize the occurrence of errors in the bill of quantities (JCT, 1998).

ii. Checking for errors in the schedule of materials

Most fraudulent activities perpetrated against building Contractor by their employees take place at this stage when the quantities contained in a bill of quantities are converted into a schedule of materials, plant and labour to facilitate ordering of materials for the works. Following the selection of the building contractor after the tendering process, the contractor's estimator would proceed to prepare the schedule of input materials, labour and plant. A fraudulent estimator can direct the contractors profit in to his own pocket by manipulating the quantities of the inputs required for the project.

Assume a situation where the contractor had allowed a 10% profit margin on the project and where the estimator loads the quantities of inputs in his schedule by say 10% obviously the projected profits will be earned by the fraudulent when he directs the 10% overload for his private use and benefit.

It is clear that the building contractor needs to protect himself against the activities of fraudulent employers by engaging the services of a contract auditor whose fees when compared to the potential loss of profit or indeed liquidation in insignificant (JCT, 1998).

Contractors should not see these services as an unnecessary expenditure because these employers other than by engaging the services of an independent construction cost auditor. It is also pertinent to note that where an employer (client) choose to execute working through direct labour approach, he would be exposed to fraudulent activities of employees just as the quantities of inputs could be manipulated for the selfish interest of the employees (JCT,1998).

iii. Reconciliation of the Accounts

Considering that a construction project may take years to complete, it is necessary to engage the services of the construction Auditor as early as possible on a construction project to facilitate reconciliation of the project accounts. In this case, the interim payment received with the materials ordered to site by the staff or estimator should be reconciled. If the exercise is not carried out on a continued basis until completion of the scheme, the contractor or direct labour agency may discovered to its disappointment, later on, that he had labored in vain for fraudulent employees. It is therefore, recommended that the building contractors (including sub-contractors) and direct labour agencies and building finance company should engaged the services of qualified and competent construction Auditor for services to them to avoid the in unpleasant effect of the activities of fraudulent employees on their business (JCT,1998).

iv. Contractor/Sub-Contractor/Supplier Selection

At the tender stage of construction project procurement there is usually a lot of competition and temptation as every tenderer is desired to be selected to execute the proposed works. It is at this stage that offers of bribe may be exercise to influence the eventual outcome of the exercise. The tender report should be examined by the contract Auditor to ensure that the most suitable Contractor has been selected both in term of price and peculiarities of the project under consideration. Similarly the nomination of sub-contractors is examined to ensure that the suitable contractor has been selected. The

prime cost and provisional sums expenditure should also be scrutinized to ensure profiting (JCT, 1998).

v. Interim Valuation Reports

During the execution of capital project, because of their usually long construction period, the contractor is usually paid instalmentally for the work properly executed. There is sometimes the temptation to over pay the contractor due to corruption on the part of the Quantity Surveyor or his employees through over valuation. This could be by way of inflating the quantity of work properly executed, by over-prizing of variation or indeed fluctuation or loss and expenses claims.

Generally where a contract Auditor is engaged on a capital project, any interim valuation for payment should be forwarded to the contract Auditor who should systematically examine and check such valuation before forwarding same (albeit with modification) and recommendation to the project for the issuance of the interim payment certification put in place, the employer is protected from a situation of over expenses to the contractor as otherwise, the employer may be paying the contractor for the work which he has not properly executed such that should the contractors employment be determined by the employer before completion of the works, the employer would have overpaid the contractor with its attendant implication (JCT,1998).

vi. Final Account Report

The standard form of building contract (JCT, 1998) requires the contractor to submit all relevant documents required for the final adjustment of the contract sum within a period of six month after practical completion of the works to the Architect or the Quantity and is required within three month after receipt of the relevant documents to prepare a statement of all adjustment to be made to the contract sum and ascertain any loss or expenses.

The contract sum shall be adjusted in the contract and such adjusted contract sum shall be subjects to adjustment of nominated sub contract sum constitute a final account for the project. The Architect is required to issue his final certificate based on this adjusted contract and in final account. This stage of financial administration of the contract account affords the corrupt contractor and his collaborators their last chance to "load" the contract audited to ensure all the adjustment made have been made in compliance with the contractual terms contained in the building contract.

2.2.7 **Challenges of Construction Contract Auditing**

The greatest challenge today in the delivery of construction contract auditing services is the absence of legal backing empowering the professionals within the Nigerian construction industry to carry out the functions of contract auditing. Because section 358 of the constitution of the Federal Republic of Nigeria (1999) stated that "a person shall not be qualified for appointment as an auditor, unless he is a member of a body of accountants in Nigeria. Again, section 83 of the same constitution vested the custodianship of the public sector auditing to the office of the Auditor General of the Federation. Hence, the office has all the power to audit and inquire into all the relevant books of account of all federal ministries, extra-ministerial departments, Federal Government Project and Revenue Department. The same applied to states and local government offices of the Auditors general (JCT, 1998).

These Auditors statutorily backed by law lacks the training and technical capabilities to audit construction contracts due to the complexities associated with the construction industry practices and procedures.

The problem of who performs construction contract auditing services among the teeming professionals of the Nigerian construction industry is also another challenge (JCT, 1998).

2.3 AUDITING

Auditing is a well-recognized discipline that produces Auditors as her practitioners.

2.3.1 Concept, Definitions and Purpose

Shedding more light on what auditing really is, the American Institute of Certified Public Accountants AICPA (2002) defined Auditing "as a form of attestation, and attestation as a written communication that expresses a conclusion about the reliability of a written assertion which is the responsibility of another party". Komrath (2005) sees auditing "as a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the result to interested users". However, it is understood that auditing is not only concerned with "economic actions" as legal and technical actions were also among its sphere of activities (Adeniyi, 2000; Arah, 2000). In a recent media article, building experts (Folorunsho and Alli, 2013) recommended the audit of building practices to check incessant collapse, stating "Audit of building is all about conducting integrity test on a building to ascertain its stability". However, auditing is much more than just conducting integrity test on a building.

Auditing is neither a new discipline nor a tool in the control of public expenditure. It has proven to be a dependable tool in the process of ensuring strict compliance with stipulated rules and procedures, in public expenditures; this is done to ensure accountability and transparency in the prudent use of public resources. The audit profession undertakes this function in all spheres of public and private spending. It is worth noting that Audit duties are not legally and exclusive function of Auditors. For instance, the National Assembly performs similar duty under their "oversight functions" recognized in section 83 of the 1999 constitution of the Federal Republic of Nigeria (FRN, 1999). Quantity Surveyors perform similar form of auditing under most construction contracts generally referred to as "final account" (Willis & Willis, 2005; JCT, 2005).

Figure 2.1 provides a schematic description of the audit process. It summarizes the process in a flow chart.

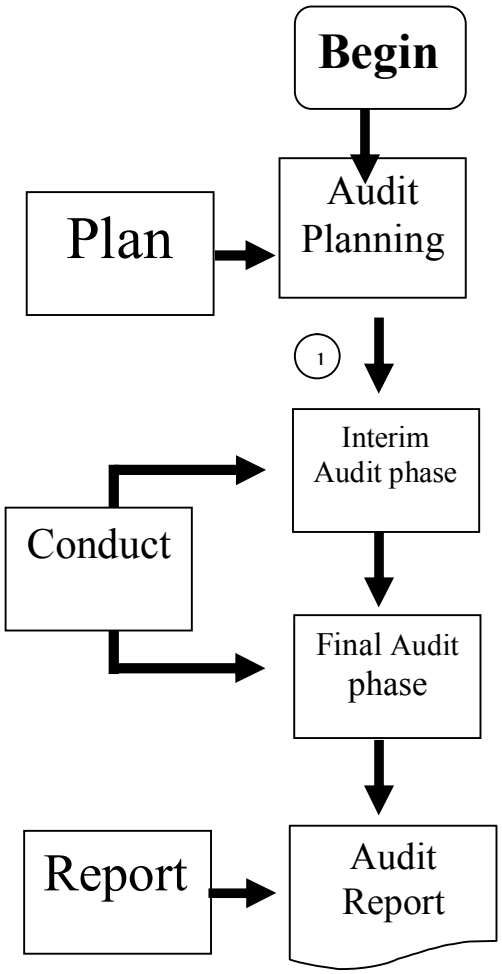


Fig. 2.7: The audit process

Source: (Komrath, 2005)

The primary aim of an audit is to enable the auditor to say "in my opinion, this account shows "a true and fair view" of the accounts of the organization or (any other account) audited or of course, to say that they do not (Komrath, 2005). Objective of an audit therefore, are in two fold as stated by (Damagun, 2005):

(i) Primary objective and (ii) Subsidiary objectives

The primary objective is to produce a report by the auditor about his professional opinion on the truth and fairness of financial statements so that any person reading and using them can have belief in them.

According to Komrath (2005) the Subsidiary objectives are:

- To detect errors and fraud
- To prevent errors and fraud
- To provide spin-off effects
- To examine financial statements to be sure that they are accurate and comply with laws and regulations.
- Compute taxes owed
- Prepare tax return
- Ensure that taxes are paid properly and on time.

2.3.2 **Types of Auditing**

(i) **Internal Audit**: - This is the independent review or appraisal within an organization of the accounting, financial and other operation as a basic for protective and constructive service to the management. The internal auditor is charged with the responsibility of safe guarding the assets and the liabilities of a company and other (constructive) service that will enhance the efficiency and effectiveness of the operation of the company through the review of accounting system, review of the implementation of the cooperate policies, plans, procedures and possibly, through carrying out special investigations assign by the company or organization.

(ii) **External Audit**: - This is an audit undertaken by a qualified statutory Auditor who conducts his work independent of the organization's financial statement in accordance with the terms of his appointment and in compliance with any relevant statutory and professional requirements. External audit is required by law and is mandatory on all limited liability companies (Dandago, 1999).

(iii) **Contract Audit**: - This type of audit is a kind of investigation. If properly performed; a contract audit provides an opportunity to assess the management and control of contract, especially, if the process begins during the pre-constructions and early construction stages and extends to post completion, review and verification (Dandogo, 1999).

2.3.3 Auditing as a Profession

Auditing can generally be defined as an independent examination and the expression of an opinion, on the financial statement of an enterprise by an appointed Auditor in accordance with the terms of agreement and the observance of statutory regulation and professional requirements (Dandago, 1999).

(iv) **Auditor**

An Auditor is a person who prepared and examines financial records. He ensures that financial record is accurate and that taxes are paid properly and on time. He assessed financial operations and worked to help ensure that organization runs efficiently (Adebola, 2000).

(v) Characteristics of an auditor

An auditor can be characterized according to:

a. The nature of the work undertaken
b. The method of approach to the work

a. **By the nature of the work undertaken**:

(i) **Statutory Audits**: - These are audits carried out because the law required them

(ii) **Private Audits**: - These are conducted into a firm's affairs by independent auditor because the owner desires it not because the law requires it.

(iii) **Internal Audits**: - These are audits conducted by an employee of a business into any aspect of its affairs.

(iv) **(Management Audits**: - This is an enquiry into effectiveness of management by the external Auditor.

b. **By method of approach**:

(i) **Final or Complete Audits**: - This implies that the audit is carried through to completion in one continuous session.

(ii) **Interim Audits**: - This is when an audit is conducted on a particular data within the account period.

(iii) **Continuous Audit**: - The work of this audit is conducted through the course of financial year but not taking a specific accounting period.

2.3.4 Process and Techniques of Auditing

Audit planning: - This involves all activities carried out by the auditor to set out the work to be done in advance, in a systematical manner in order to facilitate the maximum utilization of available resources and to achieve optimum result.

According to International Standard Accounting (ISA, 2005) planning means developing a general strategy and a detailed approach for the expected nature, timing and intent of the audit, it involves an understanding of the factors affecting the business such as environment, political, legal, economic, etc. An audit plan is the formulation of the general strategy for the audit, which set the direction for the audit, describes the expected score and conduct of the audit which provides guidance for the development of the audit programme.

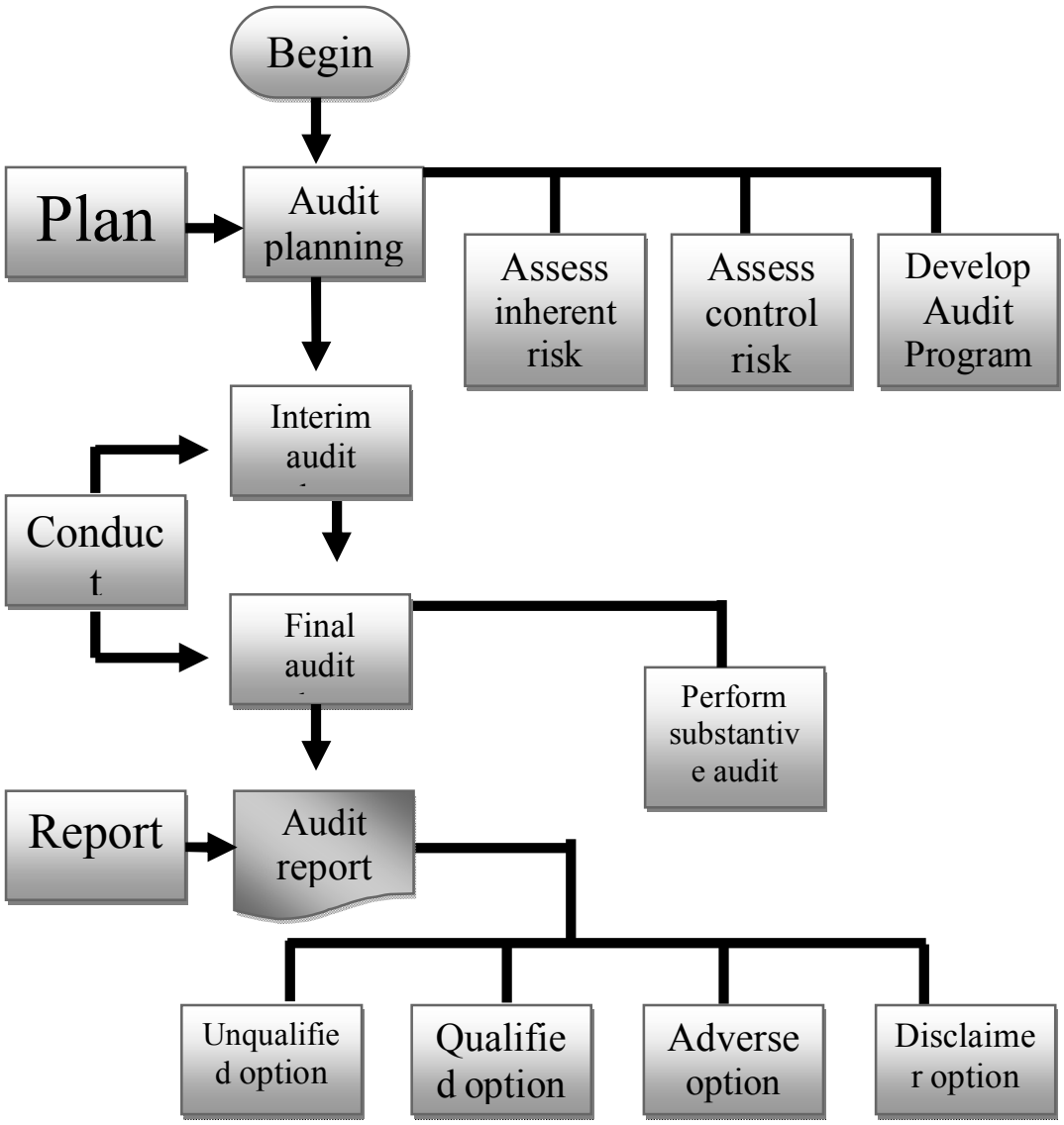


Fig. 2.8: The Audit Process

Source: (Komrath, 2005)

Fig. 2.2: Above, summarizes the audit process in chronological order.

The following paragraphs discuss the various steps shown in the diagram.

(a) **Preliminaries:** - After accepting an entity as an audit client, the independent auditor begins the audit process by gathering information concerning the operations of the entity, its organizational structure, its internal control system as related to the published financial statements, and the

characteristics of its data processing applications. This is referred to as preliminaries, this process enables the auditor to gain working knowledge of the entity, it also assist audit planning by identifying those high – risk areas requiring special attention (Komrath, 2005).

At the beginning of this section, client acceptance was assumed. During preliminary discussions with the client, however, the auditor may discover that he or she does not possess the technical expertise to conduct the audit, where management integrity is sufficiently lacking to preclude acceptance, or that certain mutual relationships rule out the necessary independence between the auditor and the client. If for any reason, the auditor concludes that an audit is not feasible, the client should be so informed and the engagement declined (Adeniyi, 2006).

(b) **Engagement Letter**: - whether it concerns an initial or recurring audit, both the client and the auditor should sign an agreement letter. The engagement letter summarizes the agreement of the parties formulated during the preliminaries, and states clearly the mutual understanding of the nature of the engagement. Its main function is to provide written evidence of agreement concerning the audit (Komrath, 2005). Misunderstanding between auditor and client regarding the nature of the engagement may be more easily resolved given the engagement letter. Engagement letters are recommended, regardless of the nature of the appointment and should be used for all types of auditing/assurance services (Damagun, 2005).

(c) **Audit risk analysis**: - before performing test of transactions, the auditors should gain a thorough understanding of the clients business, balances and industry of which it is a part, and the existing internal accounting controls as they effect the assertions contained in the financial statements. A major trend in auditing, created by the rising incidence of cases alleging auditor negligence, has been, increased attention given by auditors to audit risk analysis (Damagun, 2005).

Audit risk may be defined as the probability of rendering an unqualified opinion on financial statements that are materially misstated. In order to adequately assess risk exposure, the auditor needs

to understand the entity, the industry, and the economic substance of all significant transactions. The auditor also needs to obtain a sufficient understanding of the clients internal accounting control policies and procedures to permit planning of the audit (Komrath, 2005).

Audits must be alert to attempts by management to deliberately misstate the entity's financial position and results of operations, termed fraudulent financial reporting. These attempts have been prompted by such diverse factors as, increased competition and the need to maintain earnings growth, liquidity problems and the attempt to conceal violation of restrictive covenants in loan agreements, a declining industry (defense contracting, for example) and resulting efforts to mask uncertainty about confirmed existence, and dishonesty in management (fabrication of earnings and assets through fraudulent transactions). The possibility of fraudulent financial reporting is a principal factor in audit risk analysis of the business and the industry, along with the study and evaluation of the internal control collectively represent the most significant part of audit risk analysis and assessment ((Damagun, 2005)

(d) **Audit field work planning**: - Before the audit team can actually begin the field work, (that part of the audit performed mainly on the client's premises). Some preliminary audit planning of the field work needs to be done. First, preliminary audit programmes need to be formulated. Audit programmes are collections of audit procedures to be applied to meet specified audit objectives. At this stage in the audit, the programmes will be based on the preliminaries, the analysis of the business and industry and the Auditor's understanding of internal accounting control Anyadike, (2000).

Once the preliminary programmes have been formulated, the in-charge (Senior) Auditor is in a position to determine the number of people needed to conduct the various phases of the audit. A time budget, which contains extensive detail concerning each phase of the audit and the number of hours of assistant, senior, manager, and partner time required, is prepared at this point (Dandago, 2005).

After the time budget has been prepared and people have been selected for the audit, a pre-audit conference with the audit team members may be convened by the audit partner to discuss significant

aspects of the audit. Such matters as assignment of audit tasks, high – risk areas, information regarding the nature of the entity to be audited and a general description of the internal accounting controls should be covered during the pre – audit conference Damagun (2005).

Computer based accounting applications and the possible need for computer audit specialists should also be considered at this time (Arah, 2000).

(e) **Interim Audit work**: - Traditionally, audit field work (the actual application of auditing procedures) has been conducted in two major phases.

i. The interim audit phase, which consists of testing the clients internal accounting controls and performing substantive tests of transactions; and

The final audit phase, during which more substantive testing of transactions and substantive tests of balances are, performed (Komrath, 2005).

Inventory observation: - If the client has significant amounts of inventory and takes a physical inventory at or near year end, the independent Auditor will plan to be present to observe the physical inventory. The main purpose for inventory observation and conducting test counts is to gain satisfaction concerning the inventory's existence (Komrath, 2005).

Tests of transactions and balances: - Many of the tests of transaction and most of the tests of balances are performed during the final audit phase, preferably at or close to year end. These procedures are referred to as substantive tests because the Auditor examines evidence representing the substance underlying the transaction and balances. The tests includes, but are not limited to, confirming accounts receivable with customers, determining that amounts recorded as accrued and deferred are correct and searching for unrecorded liabilities. Added control testing also may be necessary at this time if significant changes in the manner in which transactions are processed have occurred since the interim audit phase.

During both the interim and the final audit phases, the in-charge Auditor should supervise all audit work of assistants. Upon completion of the final audit phase, the audit Manager is usually called in to perform an overall review of the audit (Adebola, 2006).

(f) **Audit Report**

The audit report is the final step in the audit process. It summarizes the scope of the audit and present the auditor's finding in the form of an audit opinion. Audit report also refers to any written report by an Auditor in accordance with the terms of his appointment and professional standards. It is a way or medium through which an Auditor express his opinion. Audit reports follow generally accepted auditing standards (Adeniyi, 2006).

The standards of audit reports are as follows:

(i) The report shall state whether the financial statements are presented in accordance with generally accepted accounting principles.

(ii) The report shall identify those circumstances in which such principles have not been covered in the current period in relation to the preceding period.

(iii) Informative disclosure in the financial statements, are to be regarded as reasonably adequate unless otherwise stated in the report.

(iv) The report shall either contain on opinion regarding the financial statements taken as a whole, or an assertion to the effect that an opinion cannot be expressed; the reasons therefore should be stated. In all cases where an Auditor's name is associated with financial statements, the report should contain a clear – cut indication of the character of the Auditor's examination, if any and the degree of responsibility taken (Adeniyi, 2006).

The general standards of audit are:

i. The examination is to be performed by a person or persons having adequate technical training and proficiency as an auditor.

ii. In all matters relating to the assignment, independence in mental attitude is to be maintained by the Auditor or Auditors.

Due professional case is to be exercised in the performance of the examination and the preparation of the reports (Komrath, 2005).

The standards of field work are:

i. The work is to be adequately planned and assistants, if any are to be properly supervised.

ii. A sufficient understanding of the internal control structure is to be obtained in order to plan the audit and to determine the nature, timing, and extent of tests to be performed.

Sufficient, competent evidential matter is to be obtained through inspection, observation, inquiries and confirmations to afford a reasonable basis for an opinion regarding the financial statements under examination (Damagun, 2005).

In relation to companies, Auditors are statutorily required to make a report to member of a company on the account examine by them especially, in the case of public companies.

1. The auditor of a company should make a report to its members on the accounts examined by them, and on every balance sheet and profit and loss accounts, and on all group financial statement copies of which are to be laid before the company in a general meeting during the Auditor's tenure of office.
2. The Auditor's report which shall be counter signed by a legal practitioner shall state the matters out as provided for in schedule 6 of this act (Arah 2000).

3. In addition to the report made under sub-section (1) of this section, the auditor shall in case of public company make a report to the audited company's balance sheet and (if not consolidated) its profit and loss accounts are in agreement with the accounting records and returns.

4. If the Auditor's are of the opinion that proper accounting records have not been received from branches not visited by them, or if the balance sheet is not consolidated, the profit and loss account are not in agreement with the accounting records and returns, the Auditors shall state the fact in their report (Komrath, 2005).

2.3.5 **Challenges**

The challenges of auditing and auditors in Nigeria begin with the qualification of Auditors. Section 358 of the constitution of the Federal Republic of Nigeria, (1999) states that:

1. A person shall not be qualified for appointment as an Auditor of a company for the purpose of this act, unless he is a member of a body of Accountants in Nigeria established from time to time by an act.
2. None of the following person shall be qualified for appointment as auditor of a company.

a. An officer or servant of the company

b. A person who is a partner or in the employment of an office or servant of the servant.

c. A person or firm who offers to the company's professional advice in a consultancy capacity in respect of secretariat, taxation or financial management.

d. **A body corporate:**

And for this purpose an Auditor of a company shall not be regarded as either an officer or a servant of it

1. A person should also not be qualified for appointment a an Auditor of a company if he is, under sub-section (6) of this section, disqualified for appointment as Auditor of any other body

cooperate which is that company subsidiary or holding company or a subsidiary of that company's holding company, or would be so qualified if the body cooperate were a company.

2. Notwithstanding sub-section (1), (2) and (3), of this section, a firm is qualified for appointment as Auditor of a company if not only if, all the partners are qualified for appointment as Auditors of it.

3. No person shall act as Auditor of a company at a time when he knows that he is disqualified for appointment to that office and if an Auditor of a company to his knowledge became so disqualified during his term of office, he shall there upon vacated it by reason of that disqualification constitution of the Federal Republic of Nigeria (1999) as amended.

Another challenge of auditing especially, contract auditing is the fact that the Auditor's recognized by the law lacks the technical capabilities to carry out contract auditing despite the fact that they are the only body recognized by the law to perform such function. This is due to the complex nature of the construction industry and the construction projects or activities.

The other challenge is that of absence of legal backing to professionals within the construction circle to carry out the functions of auditing (i.e. contract auditing), since, the constitution (FRN, 1999) as amended recognized only the Accountants. The challenge of who among the construction professionals should perform the functions of contract auditing is also another serious issue of contention (Komrath, 2005).

CHAPTER THREE

3.0. RESEARCH METHODS

This chapter narrates the research design and procedure employed to investigate the suitability of Quantity Surveyors in the provision of contract auditing services in North-west Geo-political Zone of Nigeria. The research made use of selected professionals in both the field of construction, auditing and finance.

3.1 Research Design

A research design is a plan or strategy through which the research is guided towards conducting the investigation (Denga and Ali, 1989, Akuezile and Agu, 2003).

This study employed a descriptive research method. It studies people or items in group, and also describes and interprets relationships between or among variables that exist in a method. Further, a survey method was used for the collection of relevant data as recommended by Olawiwola (2007).

i. **Population For The Study**

The population for the study comprises of trained professionals in both the field of construction, finance and auditing that were practising in both the public service and private sector in the participating states.

Seven (7) categories of professionals were selected namely: Accountants, Architects, Auditors, Bankers, Builders, Engineers and Quantity surveyors.

1. The seven (7) participating states are: Jigawa, Kano, Katsina, Kebbi, Kaduna, Sokoto and Zamfara.

Sample Size and Sampling Procedure

From the population (which could not be determined) for the study, convenient samples of seventy (70) respondents (professionals) were selected using purposive sampling technique from the seven states. In order to minimize unintended skewness due to professional biases; it was decided to select

equal number of participant from each of the seven professions. The sample was spread between seven states because of the limited population of some professionals within some states and also to enhance the quality of responses.

Table 3:1 sample distribution

Professions

S/N	*STATES*	*ACCOUNTANTS*	*ARCHITECTS*	*AUDITING*	*BANKER*	*BUILDER*	*ENGR*	*QS*	*TOTAL*
1	KANO	2	2	1	1	2	1	1	10
2	KADUNA	2	1	2	1	1	2	1	10
3	KATSINA	2	1	1	2	1	1	2	10
4	KEBBI	1	2	1	1	2	1	2	10
5	SOKOTO	1	1	2	2	1	2	1	10
6	ZAMFARA	1	1	2	1	2	2	1	10
7	JIGAWA	1	2	1	2	1	1	2	10
.....	Sub-total	10	10	10	10	10	10	10	**70**

3.2 DATA COLLECTION

3.2.1 Instrument for Data Collection

The instrument for this study was the questionnaire designed to obtain data from the selected professionals, their professional opinions and their chosen professions concerning the topic being studied.

The questionnaire was divided into four (4) sections 1, 2,3, and 4. Section 1 contains Bio Data of the professionals (respondents).

Section 2 consist of 2 sub-sections, with sub-section 1 containing five optional responses a-e, while sub-section 2 contain optional responses a-s , While section three also contain 2 sub-sections 1 and 2 which deal with the relationship between the two professions of Auditing and Quantity Surveying. Sub -section 1 deal with the professionals and section four with optional responses a-j see appendix A.

3.2.2. Procedure for Data Collection

The sample size in this research were the seventy (70) respondents (professionals) selected from seven (7) statutory professions whose professional services often involved them in examining project, processes and financing in Nigeria.

In total, seventy (70) questionnaires were distributed to the seven (7) category of professionals (ten 10 questionnaires per profession). Table 3.1 is a summary of the sample distribution.

The researcher collected data by administering a well-structured questionnaire personally covering the seven mentioned states (Jigawa Kano, Kaduna, Katsina, Kebbi, Sokoto and Zamfara).

3.3. DATA ANALYSIS

Table 3.2 shows the break-down of items in each section and

Table 3.3 shows the break-down of all items in all sections.

SUMMARY OF DATA COLLECTED FROM .....

S/NO	NAMES	SECTION 1 BIO DATA		SECTION 2 CONTRACT AUDITING		SECTION 3 CONSTRUCTION AUDITING AND THE QUANTITY SURVEYING PROFESSION	SECTION 4 QUANTITY SURVEYING INVOLVEMENT IN CONTRACT AUDITING
		Professional Status	Cognate Experience	1	2		
	Total						
	%						

TABLE 3.3 BREAK-DOWN OF ALL ITEMS IN EACH SECTION

SUMMARY OF DATA COLLECTED FROM ....

S/No	NAMES	SECTION 1						SECTION 2				
		BIO DATA						CONTRACT AUDITING				
		Professional Status	Cognate Experience					1				
			L5 Yrs	6-10 Yrs	11-15 Yrs	16-20 Yrs	>20Yrs	a	b	c	d	e
	Total											
	%											

NAMES	SECTION 2																																			
	CONTRACT AUDITING																																			
	2																																			
	a		b		c		d		e		f		g		h		I		j		k		l		n		o		p		q		r		s	
	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed
Total																																				
%																																				

NAMES	SECTION 3													SECTION 4															
	CONSTRUCTION AUDITING AND THE QUANTITY SURVEYING PROFESSION													QUANTITY SURVEYING INVOLVEMENT IN CONTRAC															
	1							2						a		b		c		d		e		f		g		h	
	Architect	Accounting	Auditors	Q.S	Builder	Engineer	Banker	yes	no	yes	no	yes	no	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed	Agreed	DisAgreed
Total																													
%																													

3.3.1 Instrument of Data Analysis

Data was sorted and tabulated as shown in table 3.2 and 3.3. Descriptive statistics of frequency, percentage and mean was used to further analyse the data.

Analysis of variance (ANOVA), employing the SSPN software, was then used to test the null and alternate hypothesis developed in chapter one at 5 percent significant level.

3.3.2. Procedure for Data Analysis (One Way Anova)

Given that K-samples with sizes n_1, n_2, n_3….n_k respectively, the following step are carried out in order to perform a one-way analysis of variance test.

a) Evaluate: (i) Samples totals T_1, (ii) Grand total T

b) (iii) Square of sample totals T_1^2 (iv) Sum of values $\frac{T_1^2}{n_1}$ then $\frac{\Sigma(T_1^2)}{n_1}$, (v) Sum of squares of original x values $\sum x^2$

c) Calculate $SS_T = \sum x^2 - \frac{T^2}{n}$ and $df_T = n - 1$

d) Calculate $SS_B = \frac{\sum T_1^2}{n1} \quad \frac{T^2}{n}$ and $df_B = k-1$

e) Hence find $SS_w = SS_T - SS_B$ and $dF_w = dF_T - dF_B$

f) Evaluate the two variance estimate: $s_B^2 = \frac{ss_B}{df_B}$ and $s^2_w = \frac{ss_w}{df_w}$

g) Thus to calculate the value of test statistics F as $F = \frac{s_B^2}{s_B^2}$ which under the H_O of "no difference between sample means" has an F $(_{k-1, n-k})$ distribution.

Note: That the critical value for the test is always one-tailed, that is, the whole of the significance level is placed in the right hand tail.

Table: 3.4 A typical table for one-way ANOVA

Sources of variation	**Sum of squares**	**Degree of freedom**	**Variance estimate**	**F-ratio**
Between samples Within samples	SS_B SS_W	K – 1 N – K	SS_B/K -1 SS_W/N-k	
Total	SS_T	N –K		

CHAPTER FOUR

4.0. DATA ANALYSIS PRESENTATION AND DISCUSSION

4.1. DATA ANALYSIS AND PRESENTATION

4.1.1. Personal Information on Respondents

Members from seven (7) independent professions were sampled for the study namely: Accounting, Architecture, Auditing, Banking, Building, Engineering and Quantity Surveying. The demography of these sampled respondents is shown pictorially in Figure 4.1, Table 4.1 and 4.2

On the aggregate; the seven sampled professions have four (4) fellow members among the respondents; nineteen (19) full members; five (5) registered members, five (5) probationary members; twenty one (21) technicians; and sixteen (16) non-registered members respectively. These made up the total number of 70 respondents as whole in the study.

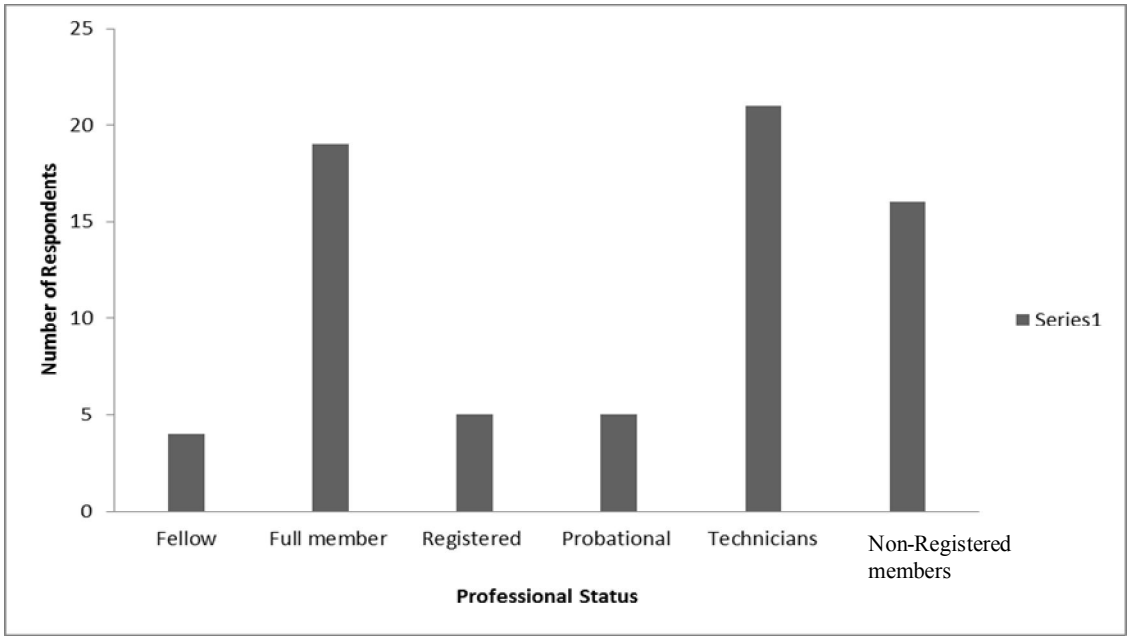


Fig. 4.1: The Bar-chart is showing the number of respondents' membership of their professional bodies.

Sources: - Field work (2013)

Table 4.1 Respondents Membership of their professional bodies

S/N	***Professional Status***	***No of Respondents***	***Cognate Experience***				
			< 5yrs	6-10yrs	11-15yrs	16-20	Over > 20
1.	Fellow	4	-	2	-	1	1
2.	Full member	19	2	3	3	7	4
3.	Registered	5	-	1	2	2	-
4.	Probational	5	-	-	1	2	2
5.	Technician	21	7	6	6	1	1
6.	Non-registered members	16	10	5	1	-	-
	Total	**70**	**19**	**17**	**13**	**13**	**8**

Table 4.1 indicates that, over 60% of respondents had over 50 years cognate experience.

4.1.2. Respondents Familiarity with Contract Auditing Services

When respondent were asked to select one correct definition of contract auditing from available options, only 30% selected the correct definition. Out of these percent, Quantity Surveyors constituted 10% while all the others had the remaining 20%. Table 4.2 summarizes the detailed breakdown.

Table 4.2 Respondents familiarity with contract Auditing Services

S/N	*Professionals*	*Contract Auditing Services*				
		A	**B**	**C**	**d**	**e***
1.	Accountants	1	0	5	4	0
2.	Architects	1	1	4	3	1
3.	Auditors	5	0	2	0	3
4.	Bankers	5	0	0	1	4
5.	Builders	0	2	3	1	4
6.	Engineers	0	0	6	2	2
7.	Quantity Surveyors	0	1	1	1	7
	Total	12	4	21	12	21
	Percentages	17.14%	5.71%	30%	17.14%	30%

Key

e* = is the only correct answer

Sources: Field work (2013)

4.1.3 Construction Contract Auditing And Quantity Surveying Services

Table 4.3 summarizes the assessment by respondents in response to the question which of the profession best suited to provide contract auditing services in Nigeria?

Table 4.3 Respondents view as to which profession is best able to Provide Contract Auditing Services.

S/N	*Respondents*	*Acct*	*Arch*	*Audit*	*Bankers*	*Builders*	*Eng*	*Qs*
1.	Accountants	2	-	3	-	-	-	5
2.	Architects	-	1	-	-	-	-	9
3.	Auditors	-	-	9	-	-	-	1
4.	Bankers	2	-	5	-	-	-	3
5.	Builders	-	-	-	-	-	-	9
6.	Engineers	-	-	-	-	-	2	8
7.	Quantity surveyors	-	-	1	-	-	-	10
	Total	**4**	**1**	**18**	**-**	**-**	**2**	**45**

Source: - Field work (2013)

Over 64% of respondent were of the view that the Quantity Surveyors are the best suited, this was followed by the Auditors with about 25% favourable responses while the remaining five professions received, in total less than 20% responses in their favour.

4.1.4 The Involvement Of Quantity Surveyors In Construction Contract Auditing

On the question of Quantity surveyors' involvement in contract auditing and whether they are most qualified to provide contract auditing services or not; 79% of the respondents agreed that Quantity surveyors would be best qualified and can perform contract auditing only if trained; while 64% of the respondents disagreed with the notion that Quantity surveyors can perform contract auditing only if registered as professional auditors. Another 71% of the respondents also disagreed that Quantity surveyors are not Auditors and hence should not usurp the services of the auditing profession. 70% of

the respondents disagreed with the suggestion that Quantity surveyors are not adequately trained to perform contract auditing function. 71% of the respondents agreed that because of the Quantity Surveyor's specialized services he can best provide contract auditing services.

79% of the respondents agreed that there are some Quantities Surveying services that are in a better state or position to deliver effective contract auditing function; 91% of the respondents clearly agreed that Quantity surveyors need to be further trained and equipped for effective contract auditing services. The same 91% of the respondents agreed that contract auditing services will add value for money to projects.

Table 4.4: Respondents view on the involvement of Quantity Surveyor in Contract Auditing

s/n	Quantity Surveyors Involvement in Contract Auditing	Responses			
		Agreed		Disagreed	
1	(a)	55	78.57%	15	21.43%
2	(b)	39	55.72%	31	44.29%
3	(c)	25	35.71%	45	64.29%
4	(d)	20	28.57%	50	71.43%
5	(e)	21	30.0%	49	70.90%
6	(f)	52	74.29%	18	25.71%
7	(g)	55	78.57%	15	21.43%
8	(h)	64	91.43%	6	8.57%
	Total	**331**	**59.11%**	**229**	**40.89%**

Table 4.5 One-way ANOVA for the test of contract auditing and Quantity Surveyors Involvement in contract auditing

Profession	Remark	Sum of squares	Df	Mean square	F	Sig.
Accountants	Between Groups	24.686	1	24.686	5.236	.051
	Within Groups	37.714	8	4.714		
	Total	62.400	9			
Architecture	Between Groups	1.071	1	1.071	.400	.545
	Within Group	21.429	8	2.679		.
	Total	22.500	9			
Auditors	Between Groups	3.733	1	3.733	2.800	.133
	Within Groups	10.667	8	1.333		
	Total	14.400	9			
Bankers	Between Groups	43.886	1	43.886	61.440	.000
	Within Groups	5.717	8	.714		
	Total	49.600	9			
Builders	Between Groups	.000	1	.000		
	Within Groups	.000	8	.000		
	Total	.000	9			
Engineers	Between Groups	.171	1	.171	.960	.356
	Within Groups	1.429	8	.179		
	Total	1.600	9			
Quantity Surveyors	Between Groups	.686	1	686	.400	.545
	Within Groups	13.714	8	1.714.		
	Total	14.400	9			

The test revealed that there is significant difference among the professions. The observed significant level of 0.000(P<0.05) was obtained this further indicates that the null hypothesis of no significant difference between the different professions cannot hold and therefore, rejected. It was also observed that Quantity Surveying prove to be the most preferred profession to handle contract auditing services rather than others.

Result of hypothesis

	Accepted	**Rejected**	
Ho_1:		V	
H_2	V		There is a difference in the various professions' undertaking of contract auditing
Ho_2		V	
Ha_2	V		There is agreement that the Quantity Surveyor is best suited
Ho_3		V	
Ha_3	V		There is relationship between Quantity Surveying and Contract Auditing

4.2 RESEARCH HYPOTHESIS AND THEIR TESTS (DISCUSSION OF RESULTS).

It was observed that the level of significance for the F-test is 0.51, 0.545, 0.133, 0.000, 0.356 as before described 0.545(P<0.55). This is less than the calculated values of 5.236,0.400,2.800,61.440,0.960 and 0.400 (F-test calculated values). This further indicates that there was no significant difference between contract auditing and Quantity Surveying profession or Quantity Surveying and contract auditing respectively. Therefore, the null hypothesis was rejected.

Auditing is the discipline and profession responsible for the general auditing of organization accounting practices (Damagun, 2005). It is widely acknowledge that an accounting watchdog better than a contract oversight function. The general auditing function is lacking in the specialized technical processes of construction contracts, very much handicapped and deficient in effective auditing of

construction practices which involve not only financial, but also legal technicalities. Auditing is akin to accounting as contract review and evaluation is to Quantity Surveying. Quantity Surveyors have long been regarded as construction cost "accountants" and "lawyers"(Adebola, 2000; Anyadike, 2000; Arah, 2000; Gandu & Musa-Haddary 2007; and NIQS, 2007).

Taking into consideration the limitation of this study, there is significance indication of vital and vast support for the Quantity Surveyors' claim to the provision of contract auditing services from other relevant professions. This is supported by the findings of this study in the following:

- The quantity surveying profession was much more acquinted with contract auditing than all the other contestable professions
- The significant sampled profession of the inter-disciplinary professionals was in agreement that the Quantity surveying profession was the best qualified to provide the functions of contract auditing.
- The sampled professionals agreed that quantity surveying professionals have a strong relationship with contract auditing.
- Majority of the respondents acknowledged and accept the Quantity surveyors close relationship and involvement in contract auditing.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY OF FINDINGS

In the course of this study, it was revealed that:

i. Majority of the opinions of the respondents favour contracts auditing of construction projects in Nigeria.

ii. It can also be deduced from the study that, contract auditing is not widely practiced in Nigeria despite the introduction of the due process mechanism of the Budget monitoring and intelligence unit (BMIU).

iii. The general agreement was that only 30% of public projects are subjected to contract auditing and the remaining 70% of public projects in Nigeria are not contract auditing compliance.

iv. Though, other professionals also lay claim to being qualified to practice contract auditing they all generally agreed that the Quantity surveying profession was the best qualified to such a claim.

5.2 CONCLUSION

i. The study has provided evidence to support the claim of Quantity surveyors of having a greater role in the provision of effective contract auditing services in Nigeria.

ii. There are significant relationship between contract auditing and Quantity Surveying services

iii. The Quantity Surveyors are the most suitably qualified professionals to exercise the functions of contract auditing.

iv. The involvement of Quantity Surveyors in the provision of contract auditing services was generally agreed by other professionals under the study.

5.3 RECOMMENDATION

(a) **From the findings,** it is hereby recommended that Quantity Surveyors involvement in the provision of contract auditing services should be adequately marketed, popularized and canvassed for.

Also, the Quantity Surveyors training curriculum should be re-engineered to include all aspects of contract auditing services.

(b) **For further study**; further research should be undertaken to provide a veritable framework for effective dispensing of contract auditing services.

(c) **For the implementation of findings;** the following should therefore, be considered.

i. Concerted efforts and necessary mechanisms should be put in place for the practical implementation of contract auditing of all projects in Nigeria, because it is not widely practiced at the moment.

ii. The Nigerian Institute of Quantity Surveyors (NIQS) and the Quantity Surveyors Registration Board of Nigeria (QSRBN) should encourage registered Quantity Surveyors to include contract auditing services in their product marketing mix.

d. **The contribution of the study to knowledge**

i. The study provided a scientific proof that the Quantity Surveying profession is accepted by the relevant professions to be best suited to provide contract auditing function in Nigeria.

ii. The study also proved that contract auditing function are part of the professional staffs of the Quantity Surveying profession.

iii. The study provided that Quantity Surveyors are the most suitable professionals among all others to perform the function of contract auditing services.

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APPENDIXES

QUESTIONNAIRE

DEPARTMENT OF QUANTITY SURVEYING,
FACULTY OF ENVIRONMENTAL DESIGN,
AHMADU BELLO UNIVERSITY, ZARIA,
KADUNA STATE, NIGERIA.

Dear Respondent,

REQUEST FOR PROFESSIONAL OPINIONS ON POSSIBLE ROLE OF QUANTITY SURVEYORS IN THE PROVISION OF CONTRACT AUDITING SERVICES.

I am a student in the department of Quantity surveying, at the Ahmadu Bello University, Zaria currently studying for a Master of Science degree in project Management. As part of the requirement for my graduating, I am researching into the possible role of the Quantity Surveyor in the provision of contract auditing services in Nigeria .

Consequently, I wish to solicit your kind assistance in providing data for this study through this questionnaire. This research is purely academic exercise and any opinion expressed by you in this questionnaire shall only be used for this purpose and no other.

You are therefore, kindly requested to fill and tick the appropriate spaces as provided in each of the items below as response that best represent your professional opinion on this issue raised.

Your sincerity and co-operation will be highly appreciated and the responses shall be treated in the highest confidence.

Thank You
Yours faithfully

Yahaya Ibrahim)(Msc / ENV,DESIGN/12929/10)

SECTION 1

BIODATA

1- Name (optional)

2- Profession

(i) Quantity Surveyor

(ii) Architect

(ii) Engineer

(iv) Builder

(v) Banker

(vi) Accountant

(vii) Auditor

3- Professional Status

(i) Fellow

(ii) Full member

(iii) Registered

(iv) Probational

(v) Technician

(vi) Student

4- Cognate Experience

Less than 5 year

6-10 year

11-15 year

16-20 year

Over 20 year

SECTION 2

CONTRACT AUDITING

1- Which one option among the following best describes contract auditing in your opinion

(a) An unbiased independent examination of the condition of a contract

(b) An appraisal of the project's contract management system

(c) Taking on the responsibility of confirming amounts actually incurred by the contractor and determining if these amounts are allowable under the term of contract

(d) An unbiased formal evaluation of the performance of a contract to determine if the project provides good value for money

(e) Taking on the responsibility of evaluation/ confirming the entire procurement process of a given contract and determining if such a process comply substantially with the term of the contract.

2- Which of the statement do you agree or disagree with?

	Agreed	Disagreed
a. Auditing is a bonafide profession of its on		
b. No relationship exist between auditing and quantity surveying professions		
c. As Quantity Surveyors are to accountants so are contract auditors to Company Auditors		
d. Contract auditing requires technical skills that are beyond company Auditing.		
e. Construction cost expertise is necessary for effective contract auditing		
f. Contract procurement skills are necessary for effective contract auditing		
g. Project design skills are necessary for effective contract auditing		
h. Legal expertise is necessary for necessary for effective contract auditing		
i. Conflict management skills are necessary for effective contract auditing		
j. Accounting skills are necessary for effective contract auditing		
k. Banking skills are necessary for effective contract auditing		
l. Marketing skills are necessary for effective contract auditing		
m. I have participated in contract auditing presently		
n. I am familiar with the concept of contract auditing		
o. The concept of contract auditing is not necessary		
p. Contract auditing is part of auditing		
q. Contract auditing should be performed by professional Auditors only		
r. Contract auditing is already being carried out effectively in Nigeria.		

SECTION 3
CONSTRUCTION AUDITING AND THE QUANTITY SURVEYING PROFESSION.

1- Which of the following professionals is most qualified to exercise the functions of contract auditing?

(i) Architect
(ii) Accounting
(iii) Auditor
(iv) Quantity Surveyor
(v) Builder
(vi) Engineer
(vii) Banker

2- Does Quantity Surveying have any relationship with contract auditing?

Yes ☐
No ☐

If yes, specify

_____

If No, specify

_____

3- Currently, does the Quantity Surveying training includes aspect of contract auditing

Yes ☐
No ☐

4- Should the Quantity Surveying curriculum include aspect of auditing?

Yes ☐
No ☐

If yes, specify

_____

If No, specify

_____

SECTION 4
QUANTITY SURVEYOR'S INVOLVEMENT IN CONTRACT AUDITING

Which of these statements do you agree or disagree

	Agree	Disagree
(a) Quantity Surveyors are Qualified to carry out contract auditing		
(b) Quantity Surveyors can perform contract Auditing only if trained		
(c) Quantity Surveyors can perform contract auditing only if registered as professionals auditors		
(d) Quantity Surveyors are not auditors and should not infringe into the services of the auditing profession		
(e) Quantity Surveyors are not adequately trained to perform contract auditing function		
(f) Contract auditing is a quantity Surveyors function and not that of an auditor		
(g) There are quantity surveyors services that are in a better state position to deliver effective contract auditing function		
(h) Quantity Surveyors should be trained to equip them for effective contract		

auditing

(i) Company Auditing should be trained to equip them to perform contract auditingeffectively.

(j) Contract auditing will add value for money to projects

SUMMARY OF DATA COLLECTED FROM .....

S/NO	NAMES	SECTION 1 BIO DATA		SECTION 2 CONTRACT AUDITING		SECTION 3 CONSTRUCTION AUDITING AND THE QUANTITY SURVEYING PROFESSION	SECTION 4 QUANTITY SURVEYING INVOLVEMENT IN CONTRACT AUDITING
		Professional Status	Cognate Experience	1	2		
	Total						
	%						

TABLE 3.3 BREAK-DOWN OF ALL ITEMS IN EACH SECTION

SUMMARY OF DATA COLLECTED FROM .....

S/NO	NAMES	SECTION 1 BIO DATA: Professional Status	SECTION 1 BIO DATA: Cognate Experience (<5 Yrs, 6-10 Yrs, 11-15 Yrs, >20Yrs)	SECTION 2 CONTRACT AUDITING: 1 (a b c d e)	SECTION 2 CONTRACT AUDITING: 2 (a–s)	SECTION 3 CONSTRUCTION AUDITING AND THE QUANTITY SURVEYING PROFESSION: 1 (Architect, Accounting, Auditors, Q.S, Builder, Engineer, Banker)	SECTION 3: 2 (yes/no, yes/no, yes/no)	SECTION 4 QUANTITY SURVEYING INVOLVEMENT IN CONTRAC (a–h)
	Total							
	%							