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PROCUREMENT IN REAL ESTATE PROJECTS DEVELOPMENT AND DELIVERY: A CASE OF HUMAN RESOURCES AND MATERIAL RESOURCES IN AWKA CAPITAL TERRITORY

Ifediora, Christian Osita¹

¹ Ajayi Crowther University Oyo, Oyo State, Nigeria.

Obineme, Chinaza Henry²

²MSc Student Nnamdi Azikiwe University Awka, Anambra State, Nigeria.

ABSTRACT

This work deals with procurement of human and material resources and how these human and materials resources are handled by project managers within the study area, it also identified practices involved in procurement of human and material resources. It also identified how those practices involved in procurement of human and material impacts on real estate project success. Questionnaires were distributed to project managers, from the returned questionnaires analysis were made resulting in the findings, recommendations and conclusion.

KEYWORDS: Human Resources, Materials resources, Procurement, Real estate, Project.

1.0 INTRODUCTION

The rate at which real estate projects collapse, fail and/or abandoned is alarming and has been a source of worry and concern to all the stakeholders in the construction sector. It is also worrisome that even in the public sector where it's expected that the provisions of the procurement act should be followed to later, there still exist issues of failures, abandonment and collapse.

The corporate organisations, churches and even the organised private sector were not left out as they are not even an exception to the issue of failures, abandonment and collapse. Expert/Professional has over the years continued to blame such on high cost of materials, use of poor quality materials, poor supervision, poor funding among others. This blame game has continued over the years unresolved. The stakeholders/professional have also failed to look inward in a bid to study and find out the obvious issues especially as it concerns

procurement. They have failed to consider this all important aspect that deals on both human and materials resources.

How to go about procurement of both human and materials resources should be of primary concern to project managers. The process is of utmost importance, this aspect is also critical because when not properly handled, it could create problems for project managers, developers and/or clients alike.

Moreso, some people who are involved in sale and supply of materials are engaged in some cases in so shoddy practices.

So the issue that bothers on procurement should not be treated with kid gloves. It should be treated with every seriousness and high level of professionalism.

1.1 Problem

When there is a problem of building development failure, abandonment or collapse,

everybody looks up to the engineers who in their professional pride and personality ego accept the blame but could not ravage the menace, Nwachukwu, C.C. and Emoh, F.I. (2011). This case of collapse, failure and abandonment has continued to linger unabated and yet there seems not to be a sign of this being resolved in the near future. This case of collapse, failure and abandonment of real estate projects has continued to wield a negative influence on housing/real estate project delivery and in turn has negatively affected the economy, no doubt the increasing shortage in accommodation for urban and rural dwellers, in fact for the entire populace. Most time experts look at the those issues from wider perspective without actually looking at areas which seems not to be very significant, so they show less concern about procurement, the aspect that concerns human and materials resources. The issue that concerns procurement, is the aspect that researchers believes has a critical role in success of any real estate project, hence the need for the research.

1.2 Aim and Objectives

The aim of this study is to study human and material resources aspect of procurement while concentrating on real estate project development and delivery. To this end the following objectives were considered:

- To identify human resources practices especially as it concerns procurement of both human and materials on real estate projects.
- To examine the perception of project managers on human resources practices which are involved in the procurement aspects of real estate projects contributes to failure and success.
- To examine the ways project managers handles human resources practices as it concerns procurements.
- To identify and as well examine the ways which materials resources are procured.
- To examine how Human Resources practices in case of procurement of Human and Materials resources impacts on real estate project development and success.

2.0 REVIEW OF RELATED LITERATURE

This chapter helps to paint a clearer pictures of the various terms frequently used in procurement especially as it focuses on human resources, its practices and materials resources aspects of procurement of real estate projects.

It also looks at the works of other researchers in relation to procurement, human resources and material resources especially as it concerns real estate project. In this work, there is need to explain certain terms:

2.1 Procurement:

In simple terms procurement means the purchase of goods or services. The term

procurement as stated by Van Weele and Rozemeijer (1996): All activities required in order to obtain the product (service) from the supplier and get it to the place where it is actually used. It encompasses the purchasing function, store, traffic and transportation, incoming inspection, and quality control and assurance. Some firms also include salvage and management of environmental issues (as they are related to materials [services]) in procurement.

Marika, T.P., Kirsi, A. and Harri, H. (2015), As procurement in the real estate and construction sector (RECS) is principally involved in buying services and subcontracting, adaptation of this definition to also include service....

Within the RECS, the work is typically carried out in the form of projects that have limited temporal duration.

Project procurement activities are more operative and include the planning of purchases and acquisitions, planning contracting, supplier selection process, contract administration, and contract closure (Winch, 2009), whereas procurement activities on a project business level are more strategic and include, e.g., the creation of the pool of potential suppliers, supplier-base management, developing relationships and business processes with suppliers, supplier capability development, and purchasing strategy development.

Procurement process:

The processes are:

1. **Plan:** Plan procurement.

The inputs includes: Requirements definitions, Scope statement, Project description, Teaming agreements (stakeholders), Project security(SRCL), Risk register and plan, Preliminary cost and schedule, Project funding by activity, Market conditions –Enterprise environmental factors, Organisational process assets, Constraints/Assumptions, Conduct, Administer and Close-out.

Tools and techniques: Internal and external resources, Planning and analysis, Resources expertise, Selection methodology and Contract type selection.

Outputs: Procurement management plan, Statement of work, Procurement decision, Source selection criteria and Change request process.

2. **Conduct:** Conduct Procurement.

The Inputs are: Procurement management plan, Statement of requirements, Statement of work, Request for proposal, Projects specifications, Stakeholders/resources commitment, Procurement documents, Qualified sourcing lists and Evaluation criteria and Organisational process Assets (Policies and Directives).

Tools and Techniques: Bidder conferences, Jobs showings, Proposal/bids evaluation methodologies, Standard forms, Resources expertise, Advertising, Weighting system, Screening system, Independent estimates and Negotiation.

Outputs are: Procurement documents, Statements of work updates, Bids/proposals, Contract, agreement, standing offer, open agreement, work/job order, Project management plan updates and Document updates.

3. Administer: Administer the Procurement.

The Inputs are: Project plan, Procurement documents and contract, Contract performance standards and derivable, Change requests process, Organisational process assets and Invoice.

Tools and Techniques: Contract change control system, Performance reporting, Inspection and Audits., Payments system, Claims administration and Records management system.

Outputs are: Procurement documentation/correspondence, Contract change request/amendment, Payment requests and Project management plan updates.

4. Close out: Close procurement.

The Inputs are: Project plan update and Contract documentation.

Tools and Techniques: Procurement audits and Negotiated claims settlements. NPMS/Sigma.

Outputs are: Contract file, Formal acceptance and closure and Close.

2.2 Procurement of materials.

How to procure materials is also a primary concern as humans are involved in this area. The process is of utmost importance, this aspect is also critical because when not properly handled, it could create problems for project managers. Most people who are involved in sale and supply of materials are engaged in so many shoddy practices.

While considering this critical aspect of human resource practices the following should be adhered to:

There is need for open competitive bidding, Formal invitation to bid, validity of the period of bid and withdrawal of tenders, bid opening, examination of bid, successful bid based on lowest cost bidder, domestic preferences, mobilisation fees, contract performance guarantee, interest on delayed payment and recorded procurement.

However the above discussed is more of public procurement that involves large scale real estate projects. Essentially in my opinion; in practice, especially in private undertaking (private real estate projects), procurement most times does not necessarily go through that formal process. Emphasis are laid on aspect of procurement based on already established relationship with contractors and supplies, there is in this aspect already established trust and contractors are contracted when need be.

In procurement of materials these fundamental questions should also be asked:

1. Is procurement of materials is based on personal interest of the Project Manager?
2. Based on established relationship with the client and supplier?

3. Is it based on established relationship between project manager and vendor?

Human resources Practices/Procurement: *Appointment of contractors /subcontractors /suppliers.*

The process that leads to appointment of contractors requires careful and professional input. One cannot just appoint based on familiarity. It necessary to check if one is appointing based on *interest, experience of the contractor, on general or established procedure.*

Appointment of contractors through established procedure is more relevant in public real estate projects and its procedure is as outlined below according the public procurement of 2007.

- Solicit for expression of interest.
- Consultants required to make proposal.
- Allow consultant to request for classification.
- Submission of proposal.
- Establishment of criteria to evaluate proposals and prescribe relative weight to be accorded to each criterion and the manner in which they are to be applied in the evaluation.
- General selection procedures.

However in private real estate project most time it does not follow a formal or defined or established procedure, it could be based on interest, relationship, trust, etc.

In appointing contractors/subcontractors/suppliers one should critically consider the following:

1. Is appointment based on personal interest?
2. Experience of contractors?
3. General or established procedure?
4. Is it based on established relationship?

3.0 METHODOLOGY/APPROACH, DATA PRESENTATION, ANALYSIS AND INTERPRETATION.

Data was collected from, selected projects managers drawn from the study area.

The questionnaire was used to obtain the required information which helped researcher in data presentation, analysis and interpretation of results. Oral interview were also held with project managers.

This identified human resources practices with major emphasis on procurement of both human and material resources. In addition also was how human and materials resources were handled by real estate project managers. All the above stated, provided a basis that guided the drawing of conclusion and recommendation.

Reconnaissance survey was conducted which helped in obtaining first hand, in addition to survey is observation.

Questionnaires were designed and administered to real estate project managers within the study area.

A purposive random sampling technique was used targeting real estate project managers

within Awka metropolis. An objective Evaluation Questionnaire (OEQ) was used in primary data collection. The questionnaire distributed was 75 in all and a total of 53 were returned.

Respondents were required to rate the human and materials resources practices observed in while going about the procurement of both human and materials resources in other of their importance. Also considered of importance in the rating were how they handle both human and materials resources, the impact these resources and practices makes in real estate project delivery and how they affect them. Likert scale ranging from *SD - Strongly Disagree*, *A - Agree*, *SA - Strongly Agree*, *A - Agree*, *GE - Great*

Extent, M.E - Moderate Extent, LE - Less Extent and NA - Not at All. VHL - Very High Level, HL - High Level, LL - Low Level and NA - Not at all, Very important - VI, Important - I, Moderately important - MI, Of little important - LI, Unimportant - UI, Often/Always - O/A, Sometimes - S, Undecided - UN and Not At All - NAA

In analyzing data collected, descriptive statistical tools of analysis through the use of tables and simple percentages was adopted.

4.0 DATA PRESENTATION

TABLE 1: Age of Respondents

| Age of Respondents | Number | Percentages (%) |
|--------------------|-----------|-----------------|
| 20 - 29 | 13 | 24.53 |
| 30 - 39 | 21 | 39.62 |
| 40 - Above | 19 | 35.85 |
| Total | 53 | 100 |

Table 2: Sex of Respondents

| Gender | Number | Percentages (%) |
|--------------|-----------|-----------------|
| Male | 49 | 92.45 |
| Female | 4 | 7.55 |
| Total | 53 | 100 |

Table 3: Educational Qualifications

| Qualification | Number | Percentages (%) |
|-----------------------------------|-----------|-----------------|
| Diploma/Ordinary National diploma | 19 | 35.85 |
| B Sc/B Tech/HND | 29 | 54.72 |
| Post Graduate | 5 | 9.43 |
| Total | 53 | 100 |

Table 4: No of years in practice.

| Range of Years. | Number | Percentages (%) |
|-----------------|-----------|-----------------|
| 0 - 5 | 15 | 28.0 |
| 5 - 10 | 21 | 40.0 |
| 11 -20 | 12 | 22.6 |
| 21 - 30 | 5 | 9.4 |
| Total | 53 | 100 |

Table 5: Rating of the practices A Project Manager should do (does)/considers in appointment of contractors, subcontractors and suppliers.

| S/NO | Practices | SA | A | D | SD | Total % |
|------|---|-------|-------|------|------|---------|
| 1 | Appointment based on personal interest. | - | 2 | 20 | 31 | 53 |
| | | | 3.8 | 37.7 | 58.5 | 100 |
| 2 | Experience of contractors. | 27 | 26 | - | - | 53 |
| | | 50.94 | 49.06 | | | 100 |
| 3 | General or established procedure. | 24 | 27 | - | - | 53 |
| | | 45.28 | 54.72 | | | 100 |
| 4 | Based on established relationship. | 23 | 28 | 2 | - | 53 |
| | | 43.4 | 52.8 | 3.8 | | 100 |

Table 6: Rating of how often Project Manager applies those practices identified in appointment of contractors, subcontractors and suppliers.

| S/NO | Practices. | O/A | S | U | NAA | Total % |
|------|---|------------|------------|-----------|-----|-----------|
| 1 | Appointment based on personal interest. | 31 58.5 | 19 35.8 | 3 5.7 | - | 53 100 |
| 2 | Experience of contractors. | 13 24.5 | 38 71.7 | 2 3.8 | - | 53 100 |
| 3 | General or established procedure. | 10 18.9 | 43 81.1 | - | - | 53 100 |
| 4 | Based on established relationship. | 11 20.7 | 33 62.3 | 9 17.0 | - | 53 100 |

Table 7: Ratings of fundamental question needed to be asked on procurement of material resources.

| S/NO | Fundamental questions. | SA | A | D | SD | Total % |
|------|---|------------|------------|------------|------------|-----------|
| 1 | Is procurement of materials is based on personal interest of the Project Manager? | 15 28.3 | 14 26.4 | 11 20.8 | 13 24.5 | 53 100 |
| 2 | Is it based on established relationship with the client and supplier? | - | 6 11.3 | 39 73.6 | 8 15.1 | 53 100 |
| 3 | Is it based on established relationship between project manager and vendor? | - | 37 69.8 | 7 13.2 | 9 17.0 | 53 100 |

Table 8: Rating on how important the established procedure in procurement act of 2007 for procurement in public real estate are to project managers.

| S/N | Procedure. | VI | I | MI | LM | UI | Total % |
|-----|--|-------------|-------------|-------------|-----------|----|-----------|
| 1 | Solicit for expression of interest. | 16 30.2 | 14 26.4 | 15 28.3 | 8 15.1 | - | 53 100 |
| 2 | Consultants required to make proposal. | 41 77.4 | 5 9.4 | 7 13.2 | - | - | 53 100 |
| 3 | Allow consultant to request for classification. | - | 3 15.1 | 38 71.7 | 7 13.2 | - | 53 100 |
| 4 | Submission of proposal. | 39 73.6 | 5 9.4 | 9 17.0 | - | - | 53 100 |
| 5 | Establishment of criteria to evaluate proposals and prescribe relative weight to be accorded to each criterion and the manner in which they are to be applied in the evaluation. | 21 39.6 | 9 17.0 | 23 43.4 | - | - | 53 100 |
| 5 | General selection procedures. | 12 22.64 | 12 24.53 | 28 53.83 | - | - | 53 100 |

Table 9: Rating of impact or the extent these practices (impacts) on real estate project success.

| S/NO | Practices | GE | ME | LE | NAA | Total % |
|------|---|------------|-------------|-------------|-------------|-----------|
| 1 | Appointment based on personal interest. | - | 12 22.64 | 13 24.53 | 28 52.83 | 53 100 |
| 2 | Experience of contractors. | 27 50.9 | 24 45.3 | 2 3.8 | - | 53 100 |
| 3 | General or established procedure. | 31 58.5 | 4 7.5 | 18 34.0 | - | 53 100 |
| 4 | Based on established relationship. | 2 3.8 | 25 47.2 | 26 49.0 | - | 53 100 |

Table 10: Ratings of the extent fundamental question asked on procurement of material resources impacts on project success/delivery.

| S/NO | Fundamental Questions | GE | ME | LE | NAA | Total % |
|------|---|-------------|-------------|-------------|-----|-----------|
| 1 | Is procurement of materials is based on personal interest of the Project Manager? | 13 24.53 | 27 50.94 | 13 24.53 | - | 53 100 |
| 2 | Is it based on established relationship with the client and supplier | 3 5.7 | 39 73.6 | 11 20.7 | - | 53 100 |
| 3 | Is it based on established relationship between project manager and vendor? | 4 7.5 | 10 18.9 | 39 73.6 | - | 53 100 |

Table 11: Rating on the extent established procedure in procurement act of 2007 impacts on public real estate development.

| S/N | Procedure. | GE | ME | LE | NAA | Total % |
|-----|--|-------------|-------------|-------------|-------------|-----------|
| 1 | Solicit for expression of interest. | 13 24.53 | 15 28.30 | 13 24.53 | 12 22.64 | 53 100 |
| 2 | Consultants required to make proposal. | 25 47.2 | 4 7.5 | 24 45.3 | - | 53 100 |
| 3 | Allow consultant to request for classification. | 2 3.8 | 27 50.9 | 24 45.3 | - | 53 100 |
| 4 | Submission of proposal. | 27 50.9 | 23 43.4 | 3 5.7 | - | 53 100 |
| 5 | Establishment of criteria to evaluate proposals and prescribe relative weight to be accorded to each criterion and the manner in which they are to be applied in the evaluation. | 11 20.8 | 39 73.6 | 3 5.7 | - | 53 100 |
| 5 | General selection procedures. | 9 16.98 | 42 79.25 | 2 3.77 | - | 53 100 |

4.2 FINDINGS

The following are the findings of this study:

On rating the practices A Project Manager does or consider in the appointment of contractors, sub-contractors and suppliers; it was discovered that majority of the respondents do not agree that appointment should be based on personal interest of the project manager, the reason why 37.7% and 58.5% of the respondents went for disagree and strongly disagree. However, for that of experience of contractors, general or established procedure and based on personal relationship, the respondents opinions were in affirmation which accounts for 50.94% and 49.06%, 45.28% and 54.72% and 43.4% and 52.8% respectively that the respondents went for Strongly agree and Agree.

For ratings of how often project managers applies those practices in appointment of contractors, sub-contractors and suppliers, greater percentage of the respondents went for Often/Always and Sometimes while few went for undecided and none identified with Not At All.

On ratings of fundamental questions needed/expected to be asked on procurement of materials resources, respondents opinions were divided especially as it concerns that based on

personal interest of the Project Manager. This accounted for 28.3%, 26.4%, 20.8% and 24.4% which were for Strongly Agree, Agree, Disagree and Strongly Disagree. However, from the result obtained, those who affirmed that such questions should be asked were of greater percentage. Also whether it should be based on established relationship with the client and supplier, and based on personal relationship between the Project Manager and the Vendor, greater percentage went for Disagree and Strongly Disagree, which represent 73.6% and 15.18%, and 69.5% and 13.2% respectively.

For ratings on how importance the established procedure in the procurement Act of 2007 with regards to public real estate development are to project managers, one could see that majority of the ratings falls into very important, importance, and moderately important, even though some went for unimportant, it can be considered to be less significant while none went for unimportant.

On ratings of the extent to which practices identified impacts on real estate project development and delivery, greater percentage accounting for 52.83% were of the opinion that appointment based on personal interest have not

much impact which is why they chose Not At All. For experience of contractors, general or established procedure, and based on established relationship, majority of the respondents went for Great Extent, Moderate Extent and Less Extent while none went for Not At All.

For ratings of the extent to which fundamental questions asked on procurement of material resources impacts on project development and delivery, greater percentage Great Extent, Moderate Extent and Less Extent even as none went for Not At All.

Finally, for ratings on the extent to which established procedure as provided for in the Procurement Act 2007 impacts on real estate project development/delivery, majority of the respondents went for Great Extent, Moderate Extent and Less Extent while none went for Not At All. However, for that of solicit for expression of interest respondents views were spread across Great Extent, Moderate Extent, Less Extent and Not At All.

4.3 RECOMMENDATIONS AND CONCLUSION

It could be observed from the findings that respondents' opinion were in affirmation in case of those practices identified for appointment of contractors, sub-contractors and suppliers except for that of appointment based on personal interest where opinions were divided.

Notable findings were also made in case of procurement of materials resources. In addition the study also identified the extent those practices impacts on development and delivery of real estate, the impacts are now obvious. Also the importance of the procedure identified in the Procurement Act of 2007 were not left out as none of the respondents identified with unimportant.

Judging from the finding, one could see that it's very important if not critical to take the findings of this study serious and sincere effort made to put into practices all that has been discovered, it's very important that stakeholders in real estate development industry take the human and materials aspect of the procurement very serious as this if not properly will continue to be a major drawback to successful project development and delivery.

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