

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Real estate sector is one of the pillar industries in Nigerian economy. Its strategic importance in the nation's economic development cannot be underestimated. Real estate is like a catalyst that not only serve as an engine that energises every other sector of the economy but gives impetus to development rating of the environment, (Nwachukwu, 2015). The real estate industry is already at the centre of rapid economic development and contributing immensely to the transformation of the built environment. (PricewaterhouseCoopers (PwC), 2014). Real estate industry has continued to attract capital and demonstrate its resilience as an investment asset class, (PricewaterhouseCoopers (PwC), 2017). Investments in real estate have consistently shown immunity to the market volatile fluctuations, even in bleak period, real estate values have continued to appreciate.

According to Bhaskar, Deshmukh and Aradhana (2016), in many developing countries, major construction activities accounts for about 80% of the total capital assets, 10% of the GDP, and more than 50% of the wealth assets invested in fixed assets. More than 50% of asset of most nations is held in real estate (Brown and Matysiak, 2000). The Nigerian real estate sector is growing at a rate 8.7%, which is faster than the average GDP growth of 7.4%, (PwC, 2015).

Globally investments in real estate projects are expanding rapidly, leading to expansion in job opportunities; this is particularly true as evidences abound even in emerging and developing economies. This expansion in opportunities is already changing investment landscape and has substantial implications for the real estate investment community. The

expansion in the industry can be seen as dynamic as well as systematic which demands good understanding of factors affecting its implementation success. The level of effort made on private real estate projects implementation is not only measured financially in terms of time, cost, but also quality of human and material resources. For any real estate project to be termed successful, it is expected to pass four success criteria in respect to time, the cost, effectiveness and client's satisfaction. The question is how many real estate projects meet these four criteria? The success of any real estate project (whether public or private) depends largely on a number of factors. Some of these factors to certain extent contribute to failure which can be in form of abandonment and sometimes collapse depending how they are handled.

Real estate project abandonment is the unplanned suspension of the work progress especially at the execution stage such as failure to complete a contract after practical completion time, (Nwachukwu, 2015). Abandoned private real estate projects are typical example of failed or unsuccessful projects; they litter every gamut of the nation's environment and are also seen within states in South East Nigeria.

Many private real estate projects are unsuccessfully implemented, whether abandoned or collapsed; they are recurring issues in South East Nigeria. Nwachukwu, Echeme and Okoli, (2010), stressed that the rate at which building construction projects fail, or are abandoned, and the collapse of buildings, some even under construction, is retrogressive in a developing economy like Nigeria.

Real estate project failure is illustrated by a failure to achieve the four success criteria, so if a project has been conceived and implementation/execution commenced, only to be stopped half way which could lead to delay in meeting estimated completion time, or seen

to have exceeded the budget, such real estate project is seen as failed one, otherwise can be said to be successful if it meets those success criteria.

Once there is abandonment or collapse of any real estate project, such project is seen as unsuccessful in terms of implementation. In the case of abandonment, it does not mean such project cannot be continued at a future date, but the fact that the initial estimated completion time is not met based on the established success criteria, such project is seen as failed and not successfully implemented such has implication in all ramifications both financially and otherwise. It could lead to variation in cost of completing the abandoned real estate projects. When the initial cost of such project is reviewed upwards the implication is that there is bound to be cost overrun, one can see that such project has automatically failed in terms of cost criterion.

Nwachukwu, (2016), explained that real estate construction failure, abandonment and collapse do not encourage development and investment, this calls for management solutions. According to Nzekwe, Oladejo and Emoh (2015), there is very high numbers of abandoned projects defacing the landscape and there are instances where high rate of collapse of privately-owned building projects has been recorded, with obvious casualties. Collapse of real estate projects is prominent in developing economies and a global issue; examples of cases of such abound even within the states in the South East Nigeria.

According to Peijun, (2010), private real estate investment is a typical one-shot decision problem for personal investors due to the huge investment expense and the fear of substantial loss. The loss obviously many come in form of collapse of same under construction. The huge investment expense devoted to private real estate projects implementation should be a matter of concern to all the stakeholders, because when they fail it impacts on the investor appears devastating.

According to Nwachukwu, (2015) some factors which singly or in combination could seriously constrain the success, development and even the survival of a formidable project management of public and private sector construction. Nzekwe, *et al*, (2015), stated that projects do not succeed by chance, rather, successful project implementation is a result of careful conceptualization, design and implementation, factoring in all the variables which may influence project success in a given locality. When construction projects are involved, their unique features must be taken into consideration in order to guarantee success. This is particularly true when most real estate projects in the study area fail due to so some factors. This is confirmed by Nzekwe *et al.*(2015), even as they noted that the Nigerian construction project industry in particular is dotted with too many cases of failed, abandoned or uncompleted projects. These include both publicly-owned facilities and private projects. This assertion is true as can be seen in real estate sector. A tour of the project sites within the states in South East Nigeria clearly confirms that there are many cases of private real estate projects which are not successful, they are either abandoned or must have collapsed. They litter every gamut of the built environment in the study area. Many has been taken over by reptiles, some serves hide outs for hard drug smokers.

It is worthy to note that there are cases of failed private real estate projects in almost all the states in the South East Nigeria. More disturbing is reports by Nwachukwu and Emoh (2011), who asserted when there is a challenge of building development failure, abandonment or collapse, everyone looks up to the Engineers who in their professional pride and personality ego accept the blame but could not find solutions the menace. The engineer especially the civil/structural engineers will look at the structural issues that contribute to failure. While we acknowledge that the issue is not accepting blame, but how to find a lasting solution to the challenge. The Engineers are not the only

professionals within the real estate industry, sampling opinions of other professionals one will also discover that they have their own peculiar views or opinions on factors that affects private real estate implementation success for example, Estate Surveyors will insist on feasibility and viability appraisal/study of the proposed development, whether there was appraisal on the said project, this may see as the reason why such project failed hence absence of feasibility and viability appraisal on a proposed project could be a factor that affects its implementation success from their view. Other professionals surely have their own view different from others, which peculiar to their own professional calling.

Moresowhen a private real estate project is abandoned or collapsed, such project is termed not successful considering the time spent, huge financial and material resources involved. It is based on the foregoingthat the researcher is poised on carrying out research on the analysis of factors affecting private real estate projects implementation success in the states in South East Nigeria, while emphasising the view of relevant professionals involved in private real estate projects implementation in the study area and also noting the extent to which the identified factors affects implementation success.

1.2 Statement of the Problem

Failure to successfully implement most private real estate projects has become a concern to the stakeholders especially the professionals in the built environment. This failure has continued to manifest in form of collapse or abandonment. Abandoned and collapsed private real estate projects are typical fall out of unsuccessful projects and they abound in South East Nigeria. Some studies have identified several factors which affectreal estate projects implementation successbut the extent to which these factors affect implementation success is not yet known from the point of view of the professionals. There has also been calls by some researchers on the need to take

cognizance of these identified factors as such will serve as a guide in successful execution of real estate projects, yet there still exist cases of unsuccessful private real estate projects in the study area. Nzekwe, Oladejo and Emoh (2015), noted that the real estate sector of Nigerian construction industry is dotted with too many cases of failed, abandoned or uncompleted projects. The issues of failure of the projects have been identified to include private real estate projects. Nwachukwu *et al* (2011) stated that the case of failure, abandonment and collapse of real estate projects is prominent especially in developing economies, incidentally the states under study falls under a nation that is categorised under a developing economy. Sadly too, there are still abandoned projects defacing the landscape and recurring cases of collapse of private real estate projects in Abia, Anambra, Enugu, Ebonyi and Imo, these could be attributed to a number of factors, i.e. there are recurring cases of private real estate projects which are abandoned in the study area. Flummey (2016) identified the factors which are critical to project success, these are project management, procurement-related, client-related, design-team related, contractor related, project manager related, business and environmental related factors. However this study considered the factors that affect private real estate projects implementation success by classifying them into; human-related factors, project-related factors, project procedures, project management actions, environmental related issues/constraint, project participants/related factors, human resources management practices and related factors. It is believed these identified factors are the reasons why states in South-East Nigeria have witnessed cases of private real estate project failures in the time past and even now. To ensure that private real estate projects are successfully executed, there is need to assess the identified factors that affect private real estate projects implementation success in South East Nigeria. This is a right step in the right direction towards curbing these reoccurring cases and ultimately ensuring success in

implementation of private real estate projects in the study area. This study was designed to tackle the problems from the perspectives of professionals; how the identified factors affect implementation success and the extent the identified factors affect private real estate projects implementation success.

1.3 Aim and Objectives of Study

The aim of this study is to analyse the critical factors that affect private real estate projects implementation in South East Nigeria with a view to ascertaining the extent of their impact on project success.

Objectives of the Study

The research pursued the following objectives:

- i. To identify the critical successfactors that affect private real estate projects implementation;
- ii. To rank the impacts of the identified factors that affect private real estate projects implementation success;
- iii. To identify the extent of engagement of relevant professional in privatereal estate projects implementation and satisfaction level;
- iv. To ascertain if feasibility and viability appraisal were carried out by developers on proposed private real estate projects and
- v. To ascertain if there is consensus in the opinions of relevant professionals involved in real private estate project implementation in the study area.

1.4 Research Questions

To achieve the aim and objectives of the study, the following research questions were addressed.

- i. What are the various factors that affect private real estate projects implementation success?

- ii. What is the extent the identified factors affects private real estate projects implementation success in the study area?
- iii. To what extent are relevant professional involved in private real estate projects implementation and how satisfied are professionals involved with the level of engagement?
- iv. Do developers go for feasibility and viability appraisal (studies) on proposed private real estate projects?
- v. Is there consensus in the opinions of relevant professionals involved on factors that affect private real estate projects implementation success in the study area?

1.5 Statement of Hypotheses

In order to test the statistical validity of effects of answers obtained on the above research questions, the following hypothetical propositions were tested:

Ho₁. The identified factors have no impact on private real estate projects implementation success in South East Nigeria.

Ho₂. There is no significant difference in the opinion of real estate professionals with regards to impact of the identified factors on private real estate projects implementation success in the South East Nigeria.

1.6 Justification of the Study

The current state of real estate development and the reoccurring cases of abandonment and collapse in the study area informed the choice of this study, hence there are cases of private real estate projects which are unsuccessfully implemented in South East States of Nigeria.

As noted earlier, the real estate industry is already at the centre of rapid economic development and contributing immensely to the transformation of the built environment,

(PwC, 2014). While its contribution to the built environment is clear, there is tendency to undermine the implications of the factors affecting its implementation success.

Noted also is that the Nigerian construction project industry in particular is dotted with too many cases of failed, abandoned or uncompleted projects; these include both publicly-owned and private real estate projects (Nzekwe, *et al*, 2015), this needs to be addressed.

Tackling the cases abandonment and collapse as major issues in private real estate projects implementation success by analysing those factors affecting same in South East Nigeria will go a long way in solving the reoccurring cases of such in the sector.

The reoccurring case of twin issues abandonment and collapse has greatly affected the number of accommodation/housing unit needed for ever increasing population of the states under study. These reoccurring cases of abandonment and collapse are an indication that actors in real estate development are yet to get it right.

Implementation of recommendations will help reduce to barest minimum the reoccurring cases of abandonment and collapse in private sector projects in the study area. More importantly it will save the economy from huge loss as result of these triple issues of failure, abandonment and collapse whenever there is such, hence there is a need to study the factors that continue to contribute towards real estate projects failure and their effects from a socio-economic perspective in avoiding this problem from recurring continuously. When this is done, investors' confidence in real estate development will be secured.

Also knowing the extent these factors affect private real estate projects implementation success can go a long way in helping curb the challenges faced in that sector, the best practices aimed at reducing the negative effect of the identified factors will be adopted and high ranked factors will be attended to with high level of professionalism.

The study is significant to the academia (researchers), stakeholders in real estate project industry, the professionals, government and general reader. The academia (researchers) will find it useful as it will form sources of information on solutions to the cases failure of private real estate projects from perspectives of the professionals involved.

The stakeholders will be more aware of views of the various professionals involved and this will guide all in their actions in private real estate projects implementations. Awareness of this will help stakeholders to be familiar with the factors that affect implementation success which ordinarily has not been fully captured in their studies.

Professionals will find it useful since their views/perspectives are appreciated and this will in turn guide in their future actions in matters relating to projects implementations.

People who read the work will better understand/appreciate the perspective of the professional especially on the extent the identified factors affects real estate project implementation success.

The research will contribute to literatures globally as a source of information in the academic on matters concerning the factors affecting private real estate projects implementation success especially from the perspectives of professionals involved.

1.7 Scope of the Study

The study was limited to the aim which this research pursued, that is to analyse the critical success factors that affect private real estate projects implementation in Abia, Anambra, Ebonyi, Enugu and Imo States respectively, all in South East Nigeria while ascertaining the extent they affects implementation success from the perspective of professionals involved. The five states in South East Nigeria were used because private real estate are found in all the states. It focused on firms that are involved in private real estate projects implementation within the study area which comprises of firms of Architects, Builders, Engineers - Civil, Estate Surveyors and Valuers and Quantity

Surveyors. These professionals were also found in all the states within the South-East Nigeria and are the dominant. This is particularly necessary since the views or perspectives of the professionals involved are the focus of the study and these professional including their firms are major actors in real estate project implementation in the study area. The study was conducted in Anambra, Abia, Ebonyi, Enugu and Imo State with emphasis on the perspectives of professionals involved private real estate projects implementation. This was done to allow for focus and easy access to the professionals firms. Again these states were adopted because it is believed that there has been considerable increase in the volume of real estate activities in those states which has translated into job creation in the sector. More so, the professionals' perspective is the area that is yet to be explored in terms of research in the study area. So the study is delimited to the five South-East states as well as the professionals earlier identified while focusing on their perspectives.

1.8 Area of Study

The study areas include Abia, Anambra, Ebonyi, Enugu and Imo.

Abia State

Abia State in South-Eastern Nigeria was created on 27th August, 1991 out of the old Imo State. The capital is Umuahia. The state lies approximately within latitudes 4° 40' and 6° 14'N and longitudes 7° 10' and 8°E. It occupies a land area of about 5,243.7 Square Kilometers with a population projection of 4,112,230 based on the 2006 census. It has common boundaries with Ebonyi and Enugu states to the north. Rivers State to the south and southwest, Cross River and AkwaIbom states to the east and southeast respectively, Imo State to the west and Anambra State to the northwest. Abia people are of the Igbo ethnic group.

Anambra State

Anambra is a state in southeastern Nigeria, with Awka as capital and was created 27 August 1991. It has a land mass of 4,844 km² (1,870 sqm). Its geographical coordinate is 6°20'N 7° 00'E. The total population census according to National Bureau of Statistics (NBS) is as 2006 is 4,177,828 and density of 860/km² (2,200/sqm). The estimated population projection in 2016 according to Nigeria Bureau of Statistics is 5,527,809. Anambra State is comprised of 21 Local Government Areas and a total of 177 communities. Bounded in the west by Delta State, Imo State and Rivers State to the south, Enugu State to the east, and Kogi State to the north. Anambra has three major urban centers which comprises of Onitsha, Nnewi and Awka. The indigenous ethnic groups are 98% Igbo and 2% Igala.

Anambra State has so many tourist attractions, several educational and health institutions. Natural resources includes; Agricultural produce, iron ingots and scraps. Anambra has in abundance natural gas, crude oil, bauxite, and ceramic. It has an almost 100 percent arable soil. Anambra state features many completed real estate development, some abandoned, and some still on-going.

Ebonyi State

Ebonyi State one of the six states created in 1996 by the Abacha government is a state of Nigeria, in the south of the Eastern region, its capital and largest city is Abakaliki. Ebonyi State has an estimated population projection of 4,339,136 based on the 2005 census and the inhabitants are spread across 5,935 square kilometers. The state is predominantly dominated by the Igbos with other minority ethnic groups from neighbouring states. With a land area of about 5,935 sq. km, Ebonyi State is popularly known as the 'Salt of the Nation' apparently because of the large deposits of salt water in the state. The State shares

a border with Benue State to the North, Enugu State to the west, Imo and Abia States to the south and Cross River State to the east.

Enugu State

Enugu State also called the Coal-City State or Wawa State is also in the South East geopolitical Zone of Nigeria with Enugu as its capital. Enugu State, it was created by a military decree on the 27th of August, 1991. Enugu is found on 6°30' North of Equator and 7° 30' east of Latitude. It shares border with the following states: Abia and Imo to the south; Ebonyi to the east, Benue to the north-east, Kogi to the north-west and Anambra State to the west. It covers an area of 7,161 km² (2,765sq m), and ranks 29th out of the 36 States of Nigeria in terms of land area.

Enugu State has an estimated population of 3,267,837, according to 2006 population census; by NBS, the estimated population project according to National Bureau of statistics for 2016 is put at 4,411,119. It has many educational and health institutions. Enugu state features many completed real estate development, some abandoned, and some still on-going. Same can be said of professional in built environment whose offices are domiciled in the area The State is a public sector driven economy. The State Government is the highest employer of workforce.

Imo State

Imo state also known as Eastern Heartland was created on February 3, 1976 out of the old East Central State by the then regime of General Murtala Mohammed. It has an estimated Population is 3,934,899 according to 2006 population census. The estimated population projection for 2016 according to National Bureau of statistics is put at 5,408,756. It has Owerri as its capital and largest city and features many completed real estate development, some abandoned, and some still on-going. Same can be said of professional in built environment whose offices are domiciled in the area. The entire Imo State is situated on an

area of 5,530 square kilometres. The neighbouring states are Enugu and Ebonyi States to the north, Anambra State, Rivers State Rivers State, Cross River and AkwaIbom States. Imo state is situated within latitudes $4^{\circ}45'N$ and $7^{\circ}15'N$, and longitude $6^{\circ}50'E$ and $7^{\circ}25'E$. It also has many tertiary and health institutions.

The map of the study area is as shown in figure 1.0

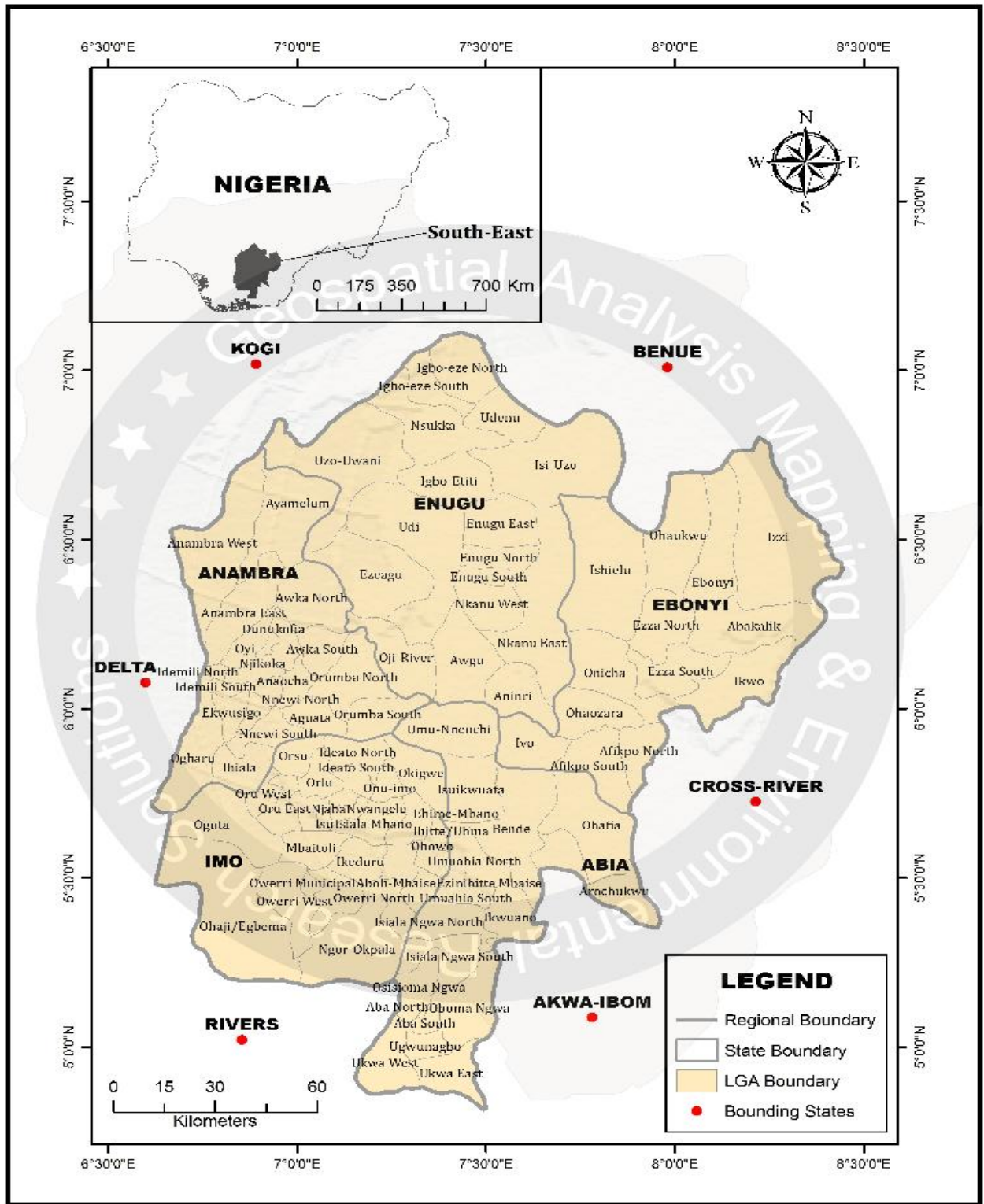


FIGURE 1.1: The five component states indicating the study area.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical Framework /Concepts

This is the theoretical basis upon which this research is built. It contains all the relevant concepts, ideas that justify the study and show that the study can be carried through. It intends to establish a theoretical framework and discuss issues related to understanding factors that constraint private real estate projects implementation which comes in form of abandonment and collapse. In addition it will explain the concepts of real estate - private, project failure, collapse, abandonment, real estate project success as well as failure, what constitutes project success, success test criterion. Some objectives of this research is to identify those factors that affect real estate projects implementation success and identify various practices by stakeholders which affect private real estate projects implementation success in the states under study. Therefore, some theories and research works done by some scholars in relation to the subject matter were reviewed.

2.1.1 Real estate and private real estate projects

Real estate can be defined as land with all the improvements created as a result of human activities e.g. buildings, homes, farms etc. It may also include natural resources such as minerals, crop and immovable improvements. Real estate is one of the largest components of wealth in many economies. It plays a critical role in moulding the economic condition of individuals, families and firms; it can substantially influence a family's ability to finance its education, health care and other important needs, (Ling and Archer, 2010).

In Nigeria, the role of real estate in national economic development is in no way different from what is obtainable in other nations; it is often described as the highest employer of labour compared with other sectors of the economy, (Olajide, 2018).

Real estate is a distinct subject, and because of its peculiar nature, it has spawned complex legal theories and very distinctive fact situations and has remained a captivating topic for centuries, (Jacobus, 2006). It is land and improvement made to the land and rights to use them, (p.13).

Udechukwu and Olusola (2016), defined real estate as the earth's surface extending downward to the centre of the earth and upward to infinity, including those things permanently attached by nature or by people. Real estate is typical land together with bundles of interest contained therein, (Babatunde, 2012).

Real estate is solely the land and its parts-landscapes, timber, water-ways, roads, fences, structures, utilities and all other permanently attached improvements and structures, (Institute of Real Estate Management, IREM, 2011).

Real estate accounts for substantial share of gross national product, the social impact that real estate has upon the economy of an area is immense, it has direct impact on the economy, community and society, (Geschwender, 2015).

Real estate as an investment has typically been a steady and appreciating means of increasing ones initial investment over time, it is a tangible investment that has the ability to change and adopt to future trend, (IREM, 2011).

Nearly three fourth (3/4) of the American's nation's wealth is directly related to real estate and residential real estate contributes to the largest number of units, in addition,

commercial and industrial buildings, factories and agricultural land contributes to this figure, (Geschwender, 2015).

Private real estate are landed property both in rural and urban centres which are purely owned by private individuals and organisations without any links with government and are primarily geared towards profit making and maximisation, (Egolum, 2002).

Real estate professional practices anchor more on building, infrastructure, facilities development and implementation success, (Nwachukwu, 2016). There cannot be management of infrastructure, property and facility without development, which take its root in real estate development. Property, facility and infrastructure management may not really function well unless there is meaningful or clear success on real estate construction projects. These all have links with human resources, so human resources management practices is an aspect that cannot be treated with kid gloves but rather needs desired attention and professional touch.

2.1.2 Real estate projects failure

Several research works has been revealing reasons behind the failure of project. According to Grefen, Pernici and Sánchez, (2012), the major indicators regarding the failure of project are defined by the lack in internal efficiency and external effectiveness. Saxena, (2016) opined that the extent of failure is not depending on only one reason rather it is a collection of inefficiency in work with individual contribution.

Project failure has become a recurrent feature of construction projects in developing countries as revealed by research works, (Nzekwe, *et al.* 2015). The Nigerian construction project industry in particular is dotted with too many cases of failed, abandoned or uncompleted projects; these include both publicly-owned facilities and private projects, (p.2). Scholars have noted that a project failure is illustrated by a failure

to achieve the four success criteria and is manifested by the lack of proven project management techniques. It has been noted that project failure features mainly as inability to deliver a project within a stipulated time, within determined cost and quality, or inability to meet consumer expectations. So when a real estate project is physically completed the question that follows is when was it actually completed? Is it completed within the stipulated time? Is there issue of cost over run? Will such real estate project stand the test of time? Can such real estate project's potential be maximally realised? What about the end user, are they satisfied? Again scholars have noted that when the answers to the above questions are positive, such real estate project is termed successful otherwise it is seen as failed.

In Nigeria there are clear evidences and testimonies that private real estate projects do not meet the conditions identified above. In some case, these real estate projects drag on for years and in some instances and when are finally completed, they appear functionally obsolete, this according to Nzekwe, *et al*, is because times are changing fast, and new innovations driving the way things are done are being introduced every day.

Some of the questions begging for answers are; why are private real estate projects failing? What can be done to solve these challenges? According to Nzekwe *et al.* (2015), the reasons for failure are numerous. They could range from technical problems associated with poor project conceptualization and design, to economic problem associated with their implementation; others include political, environmental, cultural factors, etc. The failure of real estate projects from a cost perspective is a worrisome trend as far as construction industry is concerned in South East Nigeria and this requires urgent attention.

Grefen *et al.* (2012) listed the reasons behind the failure of project to include:

1. Lack in the changing pattern in management that clearly indicates a deficiency in to encounter recognizable changes.
2. One significant reason is the lack in the communication. Deficiency in the proper maintenance of the required communication about the project with project manager incorporates the chance of failure.
3. Inadequate availability of resources increases the chance of project failure as it extends the time of completion for project.
4. The organization is not always providing necessary free hand to project managers that hindered progression of the project.
5. Lack in the development of essential structure for the project.
6. The arrangement of organization based on the top-down approach limits accessibility of the project estimation that ultimately extends the budget.
7. It is necessary to determine the associated risks with project that ensure success of the work but project managers in most of the cases not concern with the basic assignment.
8. Incompetent in the skills of the project managers
9. Change in the project objectives often results in the development of additional requirements.
10. Moreover, it is completely impractical for a project to succeed if the right assets are not accessible for the project manager.

2.1.3 Real estate project abandonment and collapse

Abandonment and collapse of real estate projects is a predominant issue in developing economies like Nigeria. Most private real estate projects collapse at construction stages; abandonment usually takes place once the execution has commences. It is a common thing to see most private real estate projects abandoned mid-way into construction. The

challenge here is the unaccountable and unquantifiable human and materials resources wasted when these projects collapse while still under construction.

Real estate project abandonment is unplanned suspension of the work progress especially at the execution/implementation stage such as failure to complete a construction after practical completion time, (Nwachukwu, 2016). Abandoned and failed real estate projects are predominantly public sector phenomenon. According to Nwachukwu, abandonment and failed projects which are more predominant in public sector litter every gamut of the nations environment including government quarters, university campuses etc. However, these cases of abandonment and failures are also common in private sectors too. The phenomenon cuts across many economic sectors including the construction and manufacturing/industrial and service sectors, adding that there have been cases when non-functional, unusable or unserviceable projects have been commissioned as completed.

Collapse of real estate projects during or under construction is a huge financial lost; it does not matter if such project is public or private sector driven. It can be likened to a situation where real estate investor digging his life savings and burying his life savings with no clear alternative investment source.

Real estate construction failure, abandonment and collapse do not encourage development and it calls for project management solutions, (Nwachukwu, 2016). Not only that it calls form management solutions, a thorough analysis of factors responsible will be right step in right direction. Though several reasons have been adduced as to why real estate projects are abandoned, yet it is still a recurring issue. The reason as to why many real estate projects and other projects alike are abandoned includes: the hike in cost of project due to inflation, difficulty experienced in mobilising/paying contractors due to

bureaucratic bottlenecks within the government circles, contractors performing below expectations, instability caused as a result of frequent changes in government, inability of subcontractors to adhere to schedules, unplanned/unscheduled increase in scope of work, change in pre-contract consultants such as Architects, poor or ineffective project finance arrangement, change in original design, indiscriminate award of contract without recourse or reference to funds availability, material scarcity, poor planning or shoddy work by relevant professionals, poor definition in terms of project requirements for materials, equipment, personnel, finance and other resources. All these listed and many more are reasons which experts have confirmed as major causes of failure and abandonment. These according to Nwachukwu, can be traced to a number of factors which includes poor or no project appraisal, top management lapses, defective contract agreements and awards, and gross failure to apply project management techniques. In all these of the striking issue has been where does human resources management practices fall in? What the place of human resources management? Human resources management is part of project management; monitoring and evaluation of real estate project is handled by human. Monitoring and evaluation is part and parcel of project management, there is obvious evidence that there is defective control system, even as system of monitoring and evaluation is completely lacking in most private real estate project implementation.

Apart from human resources management practices, has sincere efforts been made on to identify other factors? Was effort to determine the extent those factors affect private real estate projects implementation?

Also one of the major challenges in implementation of private real estate projects is the case of absence of viability and feasibility appraisals on proposed projects. Some developers embark on developments while little or no attention is made on project

viability and feasibility appraisals; one wonders what will be the fate of such project on the long run.

In many private sector projects budgetary constraints (funding) has always been major challenges militating against successful real estate project implementations, a case where developers embark on development without setting aside funds to complete the project. In some cases there is no evidence of source of funding to sustain the development.

Real estate project abandonment is frequent phenomena in states in South East Nigeria. It is also worrisome, the rate at which private sector real estate projects are abandoned in the study areas.

Project abandonment is the abandonment of contract (whether real estate project), such as refusal or failure to complete a contract before practical completion, efforts must be made to ensure that these real estate projects initiated are not abandoned.

When real estate projects are abandoned, a huge economic loss is incurred in terms of heavy cost overruns, periodic waste of resources, wastage of resources overtime and projects that metamorphose into bottomless pits gulping scarce resources with no concrete completion time in site, (Nwachukwu, 2016). If several reasons has been adduced as the major causes of abandonment yet it has continued unabated, then the answer is not far-fetched as there has not been a thorough analysis of factors responsible for such.

While abandonment is still common, the cases of collapse still abound in real estate sector. There is a challenge quantifying resources wasted when real estate projects under construction collapses, human and material resources are wasted. Real estate project collapse means a complete death of a project completion process. When building construction work collapses, it may become impossible to start another structure with the

old foundation, any new proposal cannot be a replacement of time, cost, quality, material and human resources used previously but a completely new network plan, (Nwachukwu, 2016).

2.1.4 Real estate project success

It has been stated earlier that projects do not succeed by chance; rather successful project implementation is a result of careful conceptualization, design and implementation, factoring in all the variables which may influence project success in a given locality, real estate projects cannot just succeed, emphasis must be made in all stages of its life cycle taking cognisance of the pressing issues that may affect its implementation success.

Scholars have always seen project success is among the few most frequently discussed project management concerns, yet it is the least agreed upon, this is very true as professionals in the real estate sector do not agree especially on matters relating to who handles what in during the implementation phase.

A project is termed successful when it passes four success test criteria; completion within specified time, within cost, quality standards specified and meets client's satisfaction. According to Scott (2013) the main indicator of success of the project is comprised of on time finishing of work, finish the work under predicted budget, and most significantly meet the exact desire of customers. So anything short of the above the project is seen as failed. In words of Nzekwe, *et al*, (2015) the question is, can a project which conformed to time and cost projections be adjudged as successful even when it has been poorly received by the client?

The clear definition of conditions for project success has been a thorny and contentious issue and so the subject of many reviews though many factors which ultimately affect human performance can be associated directly or indirectly with projects success, the

most essential ingredients which cannot be dispensed with should be clearly identified and factored into all considerations pertaining to the project, (Nzekweet *al.*, 2015).

2.1.5 Various activities and practices in each stage of a real estate project

Real estate project life cycle deals with the sequence of activities embarked upon by the relevant stakeholders to accomplish the ultimate goal of real estate development. Real estate project just like any other project go through a series of phases during its life. It's particularly important to note that while real estate projects go through these series of phases, there are many activities and practices which take place in each of the phase. The stages in real estate projects or life cycle have four major stages or phases:

- Phase 1 - *The conception.*
- Phase 2 – *Planning.*
- Phase 3 - *Execution or Implementation.*
- Phase 4 - *The termination/Transfer.*

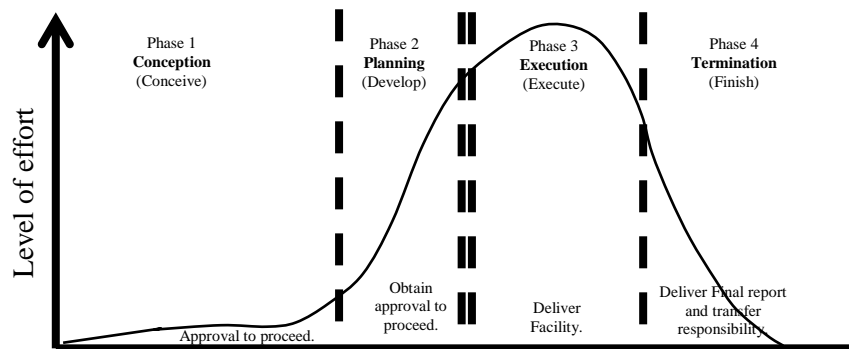


Figure 2.1 Pictorial representation of the stages in life cycle of a real estate project.

Table 2.1 Key practices/services in the project life cycle of real estate project

SACPCMP CLASSIFICATION	Conception	Pre -construction/ Planning.	Construction/Execution/ Implementation	Post Construction/Termination.
Activities / Services performed	<ul style="list-style-type: none"> • Project initiation and briefing. • Concept and feasibility. 	<ul style="list-style-type: none"> • Design development. • Tender documentation and procurement. 	<ul style="list-style-type: none"> • Construction documentation and procurement. 	<ul style="list-style-type: none"> • Project Close Out.
Deliverables	Not applicable	<p>Design Development:</p> <ul style="list-style-type: none"> • Preliminary scope of construction works. • Preliminary construction programme. • Schedule of agreed lead times required to prepare a detailed design and documentation programme. • Propose construction method statement. • Buildability and constructability statements. <p>Tender documentation and procurement:</p> <ul style="list-style-type: none"> • Construction strategy and method statement • Construction management organogram. • Procurement strategy/program for sub-contractors and suppliers. • List of proposed sub-contractors. 	<ul style="list-style-type: none"> • Health and safety plan. • Site establishment plan (site layout). • Signed sub-contract agreements. • Quality assurance plan. • Construction communication organogram. • Record of construction meetings. • Construction programme including resources. <p>Others not specified:</p> <ul style="list-style-type: none"> • Information requirement schedule. • Monthly progress payment claims (<i>Progress on periodic or daily payment claims</i>). • Construction status reports. • Financial budget/cash requirements and supply of working capital. 	<ul style="list-style-type: none"> • Contract close out. • Team feedback. • Recommendations for further action. • Post implementation review. <ul style="list-style-type: none"> • Health and safety file. • Contract closeout report – including lessons learned.

		<ul style="list-style-type: none"> • Schedule of health and requirements. • Construction programme including resource planning. 		
Management Techniques (From the seven major processes of management) – Fayol, Urwicketc	Not Applicable	Planning function: <ul style="list-style-type: none"> • Forecasting or predicting. • Planning. • Organising or preparing. Also <ul style="list-style-type: none"> • Communicating 	Executive function: <ul style="list-style-type: none"> • Monitoring and control. • Co-ordinating. • Motivating or commanding. More In-depth planning Function: <ul style="list-style-type: none"> • Planning. • Organising and preparing. Also <ul style="list-style-type: none"> • Communicating. 	
Planning tools and Techniques Used	Not Applicable	<ul style="list-style-type: none"> • Work Breakdown structure (WBS). • BAR OR Gantt Chart. • Network Analysis. • Operational Research. 	<ul style="list-style-type: none"> • BAR OR Gantt chart. • Network Analysis. 	
Monitoring and Control		Not Applicable	<ul style="list-style-type: none"> • Updates. • Management and financial reports. • Progress reports. 	
Software Used		<ul style="list-style-type: none"> • Microsoft project software. • OPERA (Risk Prediction). • Building Information Modelling 	<ul style="list-style-type: none"> • Microsoft project software. • ORACLE Primavera/Sure Trak 	

Source:Key practices/services in the project life cycle of real estate construction. *Windapo (2013).*

The conception stage (Phase 1)

The conception phase marks the beginning of the initiation of the clients dream to invest in real estate project. The space it occupied in the figure 2.1 above is small compared to planning and execution but it is the main engine of project. The activities in this stage includes: identification of the need to invest in real estate project, establishment of real estate project feasibility, ("can we do the project or embark on this real estate project?") and justification ("should we do the

project?") are addressed, identification of alternatives, preparation of proposal, development of basic budget and schedule and identification of project team.

In this phase, the developer's dream is to be examined, quantified and put on a scale to determine whether or not it will materialise. The greatest degree of risk perception about the future of the project is encountered at this stage and this calls for a pre-investment appraisal and re-appraisal.

It is at the conception stage that a developer's brief is thoroughly examined. There must be careful study on location factors. If the project is sited on a wrong place, then there is a dead loss from inception. Failure to secure a good site during the land assembly stage or failure to do so on time could render a schedule unviable.

On site selection, emphasis should be made on planning permission, accessibility, sufficient space, complementarity in terms of use etc. In case of planning permission, human relations features well here and extra care must be taken as "brown envelopes" exchange hands which may lead to challenges in course of execution of project.

It is expected that issues regarding design should be well handled. According to Nwachukwu, (2016), wrong or grandiose designs may prove costly and damaging to the viability of the project.

The design must also fulfil aesthetics, management, maintenance, safety, sanitary and other requirements. It must pass the test of flexibility and adaptability.

The planning phase (Phase 2)

The planning phase can also be referred to as feasibility phase or pre-project phase. It is the stage where the project solution is further developed in as much detail as possible and one can plan the steps necessary to meet the project's objective. Here, the team identifies all of the work to be done.

In real estate project, the planning process is considered as the vehicle for accomplishment of the project. Without planning, the entire process of development would be in a mess, it will be slow and may not adapt to different environmental forces. For a real estate project to actually come into reality, it will to a large extent depend on the human process of planning. For any reasonable change to take place in any real estate project, human decision making and planning process is sacrosanct. The planning stage is the best stage to identify and try to deal with anything that might pose a threat to the successful completion of the project. It is a good time to identify all the key stakeholders in project, and to establish a communication plan describing the information needed and the best delivery method to be adopted to keep the stakeholders well informed.

Comprehensive planning is needed as it's the only means of coping with an uncertain environment. Planning phase is a vital phase in life cycle of any real estate development. Activities in planning phase of real estate project includes: implementation of schedule, conducting of studies and analysis, design systems, build and test prototypes, analyse results and obtain approval for construction. Again here is another critical issue, especially with the planning authority, several issues such as corruption, shoddy practices etc. by some staff concerned features here, most times money exchange hands, faulty designs and drawings not fully adhered to standards are approved and implementation takes place.

Execution or implementation phase (Phase3)

This phase can be referred to as materialization phase or realization phase; it depends to large extent on the organizational context within which the project is carried out. During this phase, the project plan is set into motion and performs the work of the project. It is important to maintain appreciable level of control and communicate as the need arises during implementation. Progress is closely and continuously monitored, necessary adjustments are made and recorded as variances from the original plan.

The execution phase attracts the general public especially during clearing or movement of equipment and materials, (Nwachukwu, 2016).

In real estate project, project managers spends most of their time in this phase, people carrying out specific tasks are monitored and progress information is being reported from time to time.

Implementation involves taking all necessary steps aimed at ensuring that all the activities scheduled in the project plan are completed and the outputs of the plan are produced. Majority of construction work is done in this phase; it records the highest resources effort. According to Nwachukwu, the resources effort exerted here is more 80% of the total project implementation, so any stoppage of work on site against planned schedule will mean failure and might lead to abandonment and collapse. The activities in this phase includes: procurement of materials, build and test tooling, developing support requirements, produce systems, verification of performance and modifying of the project where necessary. Throughout this phase, project sponsors and other key stakeholders must be kept informed of project status according to the agreed upon frequency and format.

Termination phase/close out (Phase 4)

At this stage, i.e. the final closure, or completion phase, more emphasis is placed on releasing the final deliverables to the client; it features official handing over of project document to the client, termination of contracts and supplies, releasing project resources and communicating the closure of the project to the relevant stakeholders. Also effort is made to review lessons learned from the execution of the project; to examine what went well and where there are few hitches.

2.1.6 Factors affecting real estate project implementation success

A number of variables constraining the successful implementation of project have long been identified by various literatures; however it was observed that some of these factors

were for general construction projects hence the need to narrow it down to specific sector under study which is the real estate. Some of the studies are as stated below:

Amponsah(2012),responding to project failures, identified the factors as indicated or outlined below:

- i. Lack of funds.
- ii. Lack of effective planning.
- iii. Lack of project management know-how.
- iv. Delay in the release of funds.
- v. Bad weather condition.
- vi. Demand on project resource.
- vii. Cost of tendering.
- viii. Lack of management support.
- ix. Inadequate team.
- x. Lack of commitment.
- xi. Lack of technical know-how.
- xii. Use of low quality materials.
- xiii. Bureaucratic procurement processes.
- xiv. Inability to do due diligence.

Nzekweet *al.* (2015), identified five most important causes of project failure in Anambra State, they includes:

- i. Increase in the price of raw materials.
- ii. Poor planning of project implementation.
- iii. Variation of Project Scope.
- iv. Award of Contract without reference to availability of funds.
- v. Political Pressure.

Emphasis on this work is on real estate projects hence the work grouped the factors affecting its implementation success has been grouped as identified in the concept postulated in figure 2.2 below:

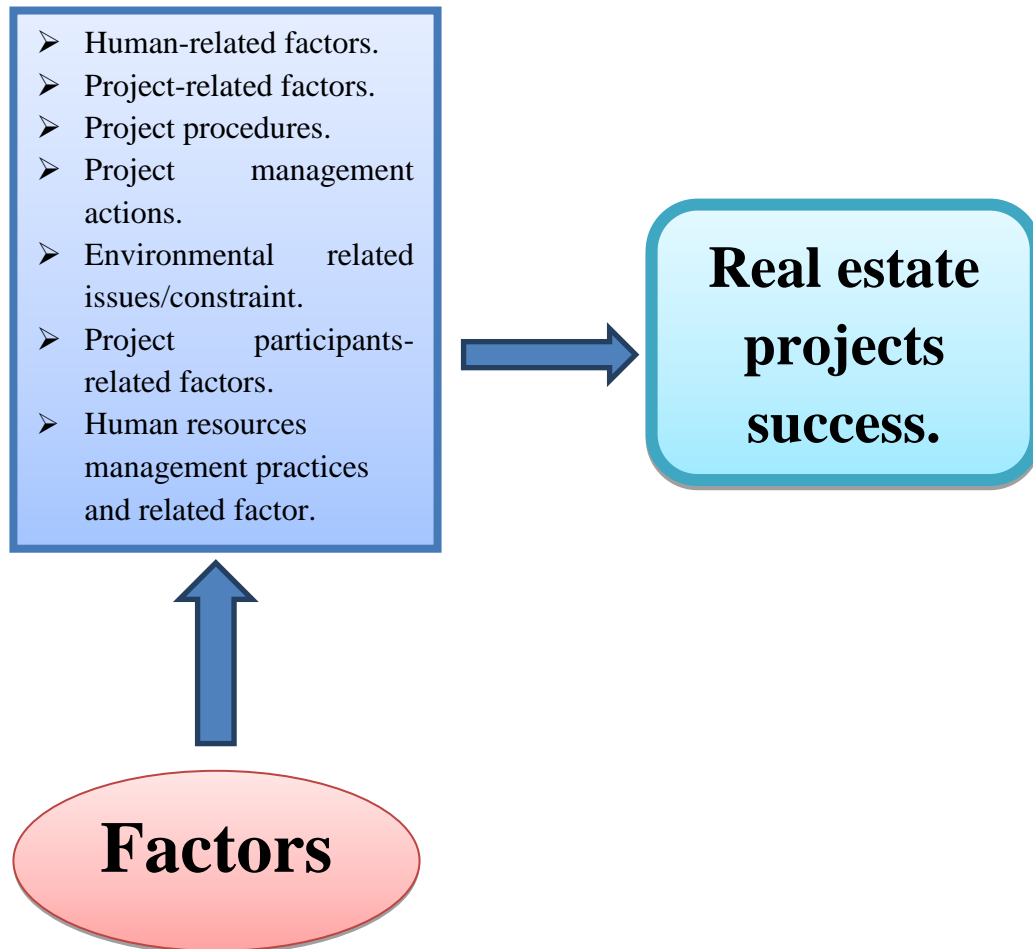


Figure 2.2 Conceptual framework on factors affecting private real estate project implementation success.

1. **Human-related factors:** The human-related factors include the following:
 - a. Nature of clients' means of funding - Lack of funds most times affects real estate development, it's necessary to consider the source of funding for such any real estate development as lack of fund may constraint implementation success. Also award of Contract without reference to availability of funds is another constraint that should be looked into before any implementation.

- b. Clients' emphasis on high quality of construction at low construction cost. Most times increase in price of materials have effect on implementation here, this affects real estate project implementation success, most time even when the prices of materials are high clients still seek for ways to cut corner leading to purchase of inferior materials.
 - i. Level of clients' experience.
 - ii. Size of the clients' organization.
 - iii. Clients' emphasis on quick construction and ability to brief.
 - iv. Clients' decision making ability and definition of roles.
 - v. Clients' contribution to design and construction.
 - vi. Management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing.
 - vii. Project team leaders experience and commitment to meet success criterion.
 - viii. Project team leaders' early and continued involvement in the project.
 - ix. Project team leaders' technical skill and adaptability to changes in the plan.
 - x. Project team leaders' working relationship with others.
- 2. Project-related factors:** The attributes used to measure this factor are type of real estate project, nature of such project, number of floors of the project, complexity of project, variation of project plan and size of project.
- 3. Project procedures:** This aspect looks at issues bothering on procurement and tendering, they are more of procurement related and tendering related issues. The scope of procurement can be defined as the framework within which construction is brought about, acquired or obtained. Therefore, two attributes are used to measure this for the design and construction of the project and tendering method procedures adopted for the selection of the project team and in particular the main contractor. Ifediora and

Obineme(2017) noted that how to procure materials is also a primary concern in real estate development as it involves humans, the process according to them is of utmost importance adding that this aspect is also critical because when not properly handled, it could create problems for project managers as most people who are involved in sale and supply of materials are engaged in sharp practices that are mostly shoddy in nature. According to them, in procurement of both human and materials resources, there are fundamental questions that should be asked: Is procurement of materials based on personal interest of the Project Manager? Based on established relationship with the client and supplier and is it based on established relationship between project manager and vendor? They noted that in appointments especially in appointing contractors/subcontractors/suppliers one should check the following:

1. Whether the appointment is based on personal interest.
2. Whether it is based on the experience of contractor.
3. Whether it is based on general or established procedure.
4. Whether it is based on established relationship between the stakeholders.

4. Project management actions: Project management action is seen as critical for project success, it has been suggested that by using the management tools, the project managers can plan and execute their construction projects to maximize the it chances of success. The variables in project management include adequate communication; control mechanisms, feedback capabilities, troubleshooting, coordination effectiveness, decision making effectiveness, monitoring, project organization structure, plan and schedule followed, and related previous management experience. A number of attributes has been observed which affect this factor, including the communication system, control mechanism, feedback capabilities, planning effort, organization structure, safety and

quality assurance program, oversee subcontractors' works, and the overall managerial actions.

5. **Environmental related issues/constraint:**Environment simply refers to everything around us, either living or non-living which includes physical, chemical and other natural forces. Stockholm declaration 1972 defined environment to include or cover all those elements which in their complex inter-relationships from the framework, setting and living conditions for mankind, by their very existence or by virtue of their impact. The word environment is believed to be one of the factors affecting the project success. The attributes used to measure this factor are economic environment, social environment, political environment, physical environment, industrial environment and level of technological development. In addition, matters relating to external and internal environments are considered, internal and external environmental factors that affect real estate projects implementation success.
6. **Political and bureaucratic related issues:** Politics and bureaucratic bottlenecks are more predominant in public sector projects and plays important roles in success or failure of any real estate project. Most times they affects release of fund, the tendering process and procedures, affects projects especially when there is variation in design and budget. So in summary factors here is bureaucratic procurement process and political interest in the said project.
7. **Project participants-related factors:** Real estate project participants are the major or key stakeholders/players in real estate project implementation, they includes: project manager, client, contractor and subcontractor, consultants, supplier, and manufacturers. The client and client's her representative exerts a great influence in most real estate projects implementation and they are seen as very significant factor as far as project construction time is concerned.

Client-related factors deals more on client characteristics, type and experience, knowledge of construction project organization, financing of project, level of clients' confidence in the construction team, owner's construction sophistication, well-defined scope, owner's risk aversion, client project management.

Designers play a crucial role as their work starts from conception to completion on a project. Factors relating to design team consist of design team experience, project design complexity, and mistakes/delays in producing design documents.

Main contractor and subcontractors resume work when the project reaches the construction stage. The issues considered here include experience of the contractor, site management, supervision and involvement of subcontracting, contractor's cash flow, effectiveness of cost control system, and speed of information flow.

The project manager is also key stakeholder in a construction project; his competence is a critical factor affecting project planning, scheduling, and communication. Here, factors consist of the skills and qualities of project managers, their commitment, competence, experience, and authority.

Construction projects require good team spirit; hence team building is important among different parties, team effort by all parties to a contract whether owner, architect, construction manager, contractor, and subcontractor is a critical element for the successful completion of a project.

- 8. Human resources management practices and related factor:** Human resource management is a strategic and coherent approach to the management of an organization's most valued assets – the human working there; they individually and collectively are committed to achievement of its objectives, (Armstrong, 2006).

There are innumerable examples of conglomerate and project crises in the construction sector that occurs as a result of human behaviour and it appears that practices of human

resources management (HRM) has the potential to eliminate more risks in the construction than any other management approach, (Loosemore, 2000).

While there are obvious evidences on literatures on human resources management practices in constructions industry, scholars have noted that these practices were not adhered to or rather delayed. According to Raidén and Dainty (2000), there are more number of academic publication on this subject area but the uptake of HRM practices in industry still delayed.

The HRM practices commonly adopted by various companies were either formal method or informal method or both and some of the issues are regarding the HR functions, employee hiring rules, firing rules, finding sources of new employees, HR plans, training, job description and performance appraisal. It noted that only few companies follow the formal practices completely and most company formal HRM systems tend to be under-utilized, (Malkani and Kambekar, 2013).

According to kokkaw and Koopai, (2012), Pfeffer, described HRM as activities that promote a sustainable path to competitiveness and should involve the following: security of employment, being selective in recruiting, high wages, payment of incentive, employee ownership, sharing of information, participation and empowerment, teams and redesigning of job, training and development of skill, cross-utilization and cross-training, symbolic egalitarianism, wage compression, promotion from within, long-term perspective, measurement of practices and overarching philosophy, (p. 3). Tiwari (2012) noted that it was later refined into employment security, selective hiring, self-managed teams/team working, high compensation contingent on organizational performance, extensive training, reduction in status difference and Sharing information.

HRM practices cuts across the following:

- i. Recruitment and selection practice.

- ii. Supervision/inspections.
- iii. Appointment of contractors.
- iv. Procurement of materials.
- v. Motivation.
- vi. Appraisal and compensation
- vii. Knowledge management.
- viii. Employment relation and communication Practices.
- ix. Talent management and retention strategies.
- x. Organization, design and development.
- xi. Job satisfaction and security.
- xii. Training, development and performance management/evaluation.
- xiii. Human resource development.
- xiv. Reward management.
- xv. Health, safety and welfare.
- xvi. Employment practices.

1. Recruitment and selection practice: This also referred to as staffing and recruitment.

Most activities revolve around hiring labour needed for executing construction works or selection of project team members. Recruitment can be defined a process of selecting most qualified labour to apply for the job and also to motivate them to fulfil the aim and mission of the organization.

Recruitment can be defined as a process of discovering the sources of manpower to meet the requirements of the staffing schedule and to employ effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient workforce(Mahapatro, 2010).

It involves the creation of pool of available human resources from which the organisation could draw upon when the need arises for selection process. Sources of recruitment could be from either *external or internal sources*, while the former entails filling from within, the later refers to filling with outside sources of recruitment.

For any real estate project to succeed, the recruitment of the human resources relevant to the project has to end with the occupation of the position by a person that possesses required skill and expertise.

In recruitment for human resources that will be part of real estate project implementation, experts should clearly consider the overall aim of the recruitment and the selection process. Quality of the employees at the minimal cost should be of paramount importance. According to (Armstrong, 2006), there are three stages of recruitment and selection. They Includes:

1. **To define requirements:**prepare job descriptions and specifications; decide terms and conditions of employment.
2. **Attracting of candidates:** review and evaluate alternative sources of applicants, inside and outside the company, advertising, using agencies and consultants.
3. **Select candidates:** sift applications, interview, test, assessment of candidates, assessment centres, offer employment, obtainreferences; prepare contracts of employment.

For real estate projects it's very important that while defining requirements, emphasis should be made on job description, the work to be undertaken should be cleared defined and specifications made. Many times people are just hired to do jobs without first clearly defining the work to be done. It is also expected that terms of such job and conditions be cleared noted before the employees takes up any work no matter how short the duration of the job is. Emphasis should also be made on the technical competence of the

individual involved, what is his behaviour like, what is his qualification? Was he really trained and what experienced in the job in question? Is he physical and mentally fit? Can he or she meet the job expectations?

The right way of sourcing for the persons is still another issue, in real estate projects development, in this part of the country the practice has always been to get to popular “ogbommanu” to pick technicians and artisans, most times they claim the to be experts in the jobs they don’t know how to go about, it’s in this area you find a carpenter claiming to be mason and the likes. A conscious effort is needed to check if these people met on this area are truly qualified for the work. Conscious effort aimed at identifying the skilled labour in a particular field is needed. One should check their experience in handling basic equipment’s, check previous records of works done somewhere, what is his relationship with people like? Is he hostile? Can he willingly take corrections?

The approach to selection process is to choose individual who possess the necessary *skills, abilities and personality* etc and or better still establish certain standards such as *physical requirement, mental ability test, experience* etc.

The selection criteria may be based on:*Education, experience, physical qualities and gender.*Basic steps step in recruitment vary from organisation to another however emphasis should be job description, analysis and specifications. Considered of importance is that recruitment should essentially considered based on:

- i. Based on lifelong learning skill.
- ii. Based on good communication skill (oral, written and listening).
- iii. Based on good leadership skill/ good time management skill.
- iv. Based on good problem solving/ decision making skill.
- v. Based on good innovation /creativity skill.

In recruitment and selection practices emphasis are also made on the following:

- i. Sources of recruitment/recruitment process.
- ii. Selection criteria/process.
- iii. Recruitment and selection practices problems.

In selection of team members, considered of critical important is the mode of selection which can be based on the following:

- i. Based on competence.
- ii. Based on qualification.
- iii. Based on position and rank.
- iv. Based on favouritism.
- v. Based on competence & qualification.

In summary, for selection to be effective, the processes must be technically sound and legal.

2. **Supervision/inspections:** The practices here includes proper supervision of human resources involved in the construction, a close check, monitoring and thorough inspections is needed here. In order to achieve business goals and continuous development, an organization is required to design and implement appropriate ways to inspects/checks human resources involved in real estate projects, or better still devise means of how to effectively supervise personnel involved in real estate project implementation.

In cases of supervision/inspections, efforts should be made and which should aim at designing appropriate ways to check/inspection the human resources involved in the construction of real estate project, implement strictly the ways designed and monitor compliance when implementing.

3. **Appointment of contractors:** Whether its appointment of contractors, subcontractors or suppliers,the entire process that leads to that requires careful and professional input. One

cannot just appoint based on familiarity. It will be wise to check if one is appointing based on interest, experience of the contractor, on general or established procedure.

Appointment of contractors following established guideline is more pronounced in public sector projects and its procedure is as outlined below according the public procurement of 2007.

Solicit for expression of interest.

Consultants are required to make proposal.

Allow consultant to request for classification.

Submit proposal.

Establish 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.

In private construction projects (real estate project), most times 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 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?

4. **Procurement of materials:** How to procure materials is also a primary concern as humans are involved in this area. The process is crucial and it critical because if not properly handled, it could create problems for project managers. Some human resources who are involved in sale, purchase and supply of materials are engaged in so many sharp practices. While this critical aspect of human resource practices is considered, the following as itemised below should be adhered to:

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

It should however be noted that the above discussed is more of public procurement that involves large scale construction (real estate) projects. In the opinion of Ifediora and Obineme (2017), noted that in practice, especially in private undertaking (private real estate projects), procurement most times does not necessarily go through that formal process. Emphasis must be laid on the 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 manager?
2. Based on established relationship?
3. Is it based on already established relationship between project manager and vendor?

5. **Appraisal and compensation:** Here emphasis is placed on appraisal of the human resources involved in real estate development; compensation and rewards comes after a thorough appraisal of work done.

Appraisal aims at evaluating how well workers (human resources) have met expected levels of accomplished task in comparism to stated standards or goals. Performance appraisal influences HR decisions on such issues as pay, promotion, training and development. Appraisal on other hand focuses on outcome measures which includes levels of quality, productivity or financial performance.

How appraisal is done is also of great importance in construction projects, appraisal should focus on:

- i. On quality of work done.
- ii. On productivity.
- iii. Financial performance.

Compensation of human resources is another important aspect human resources management. Proper compensation of human resources ensures high level of productivity in real estate development. Compensation/rewards could be in form of salaries, wages, daily pay and could be based on agreed/negotiated sum.

Compensation could be seen as a payment from the organization to the people/employees for their services based on wages and other benefits. Rewards are also considered as another form of compensation to reward the employees for their contribution to the organisation's performance. The remuneration system is a crucial system of the organisation's culture, with its rules and standards. The organization of the work and decentralization of the power within the teams requests remuneration politics that need the development of the cooperation and collective competences.

In compensation the following are taking into consideration:

- i. Type of payment.
- ii. Type of benefits.
- iii. Type of incentives.
- iv. Compensation methods problems.

In construction organizations, group-based performance payment should be emphasized; this is because employee appraisal which emphasizes group-based achievement has the capability of enhancing employees' retention and motivates them to apply their skills and expertise in group work.

6. Employment Relation and communication Practices: Employee relations consist of all those areas of human resource management that involve relationships with employees – directly and/or through collective agreements where trade unions are recognized. Employee relations are concerned with generally managing the employment relationship, (Armstrong, 2006). It looks at the aspects of information sharing (Sharing of information), knowledge management and Communication; which includes formal processes, procedures and channels of communication.

Because of the changing working environment of real estate projects, sophistications in design and technology including characteristics of multitasking, role transitions and involvement, employees need to solve conflict, and to collaborate with their colleagues. Employee relations are more concerned on the stability and cooperation, healthy relationships, commitment achievement, and mutuality development aimed at successful attainment of the goal of any construction project.

Employee relations practices include job description, flexible job design and encouragement of participation. Flexible job assignments (e.g. job rotation, ability to perform job, and job enrichment) can broaden employees' knowledge, skills, abilities and behaviour, and thence, produces superior output, (Armstrong, 2006).

It is expected that project managers in real estate development should strive at ensuring that workers under them are intimated on certain trends and progress/development going on within the organisation. They should have access to necessary information within their organisation and these should come through the right channel.

How communication flows is also of great importance in human relations, one should check the pattern communication flow whether:

- i. Downward i.e. from higher management level to lower.
- ii. Upward i.e. from lower level to higher management level.

- iii. Lateral i.e. takes place at same level of hierarchy.
- iv. Diagonal i.e. between managers and employees of other work group.
- v. External i.e. between managers and external groups e.g. suppliers, vendors.

In communication, the strategy for internal communications should be based on analyses of:

- i. What management has to say.
- ii. What employees desire and would want to hear.
- iii. The challenges met in conveying or receiving information.

Approaches to employment relation practices are in the form of *adversarial, traditional, partnership and power sharing*.

- 7. Motivation:** Motive is defined as reason for engaging in an undertaking/work. Whether consciously or unconsciously felt, human motive are based on needs. Motivation on the other hands is primarily concerned with factors that influence human resources (people) to act in certain ways. Motivation is an inner state which energises, activates, moves, encourages and directs or channels behaviour towards effective and efficient goal realisation, (Nwachukwu, 2016) Motivating people deals with getting people to work in way you want them to in order to achieve result. It deals with willingness of someone which aims to exert high level of effort in attainment of firm's goals and as conditioned by the ability to satisfy individual's needs.

Actors in real estate industry is expected to try as much as possible pay attention to development of process and strategies aimed at ensuring that their employee are motivated to carry out their respective duties in line with current the best practices.

Motivation theory examines the process of motivation. It explains behaviour of people at work, why theyact the way they do in relation to efforts they make at work place and the directions they followor adopt while working. It explians what organizations

does which aims at encouraging people to apply their efforts and capabilities in a way that will help to further the achievement of the organization's visions and goals as well as satisfy their own needs. It is also concerned with job satisfaction – the factors that create it and its impact on performance, (Armstrong, 2006).

8. Talent management and retention strategies: This deals with talent planning and development. It cuts across practices aimed at encouraging talented employees by way of retaining them, engaging and sponsoring them for development of their passion. According to Armstrong, 2006), the approach should be one that emphasizes the ability of everyone to succeed and thereby 'achieve extraordinary results with ordinary people, (p. 389.). Talent management is the use of an integrated set of activities to ensure that the organization attracts, retains, motivates and develops the talented people it needs now and in the future. The aim is to secure the flow of talent, bearing in mind that talent is a major corporate resource, (p. 390). While efforts are being made to help workers develop their talents, effort should be made to retain especially if they are the type that are willing to for the organisation and are eager to put in their best. It is also necessary to encourage the greatest contribution from existing talent and to value them accordingly, (p. 397).

9. Job design and role development: For effective delivery as far real estate development is concerned there must be clarity in area of *job design and roles development*. Job design deals with detailing and specification of the contents, process and methods to be adopted in order to attain stated goals. It aims at satisfying the organisations and needs of the individuals, in case of former could mean the real estate development company and later may include the employee or artisan or technician as the case may be. Importance characteristics of job design includes; autonomy, discretion, self-control, responsibility, variety, use of abilities, feedback and belief that the task is significant.

The main approaches to job design according to Armstrong, 2016) includes:

- i. **Job rotation** could mean the movement of workforce from one job to another to reduce monotony by increasing variety.
- ii. **Job enlargement** means combining previously fragmented job into one work, again to increase the variety and meaning of repetitive duty.
- iii. **Job enrichment** goes beyond task increment to add greater autonomy and responsibility to a task and is based on the job characteristics approach.
- iv. **Self-managing teams (autonomous work groups)** are individual regulated teams who work to large extent without less or no supervision. The rationale upon which this technique is hinged on is a logical extension of job enrichment.
- v. **High-performance work design** - which deals specifically on setting up work.
 Role development is a constant process that takes place in day to day work, and it is therefore a matter between managers and the members of their teams. It involves consensus definitions of key outcomes and competency requirements as they evolve.
 While jobs are designed it is expected that those responsible for the design should take cognisance of the fact that works carried out by people is not mechanistic. The works done by an individual depends to some extent on his capabilities and motivation.
 In defining roles it's expected that actors bear in mind that role is more about people than jobs. Hence human have limits to which they can attain, over labouring them may results to wastage of resources and cause more damage.

10. Job satisfaction and security: Job security deals with degree of expectation to which an employee can stay in his/her job over an extended period of time, (Delery and Doty, 1996). Job security most cases arise from the terms of the employment, contractor labour legislation that prevents incessant lay off and contract termination. It can be enhanced by well-devised human resources planning and flexible organizational structure (Marchington and Wilkinson, 2008).

HRM practices has the capacity to raise workers overall job satisfaction and their satisfaction with pay, (Tiwari, 2012).It can also affect the level satisfaction of the workers.

11. **Training, development and performance management/evaluation:** In recent years performance management process have become a more pronounced way of providing integrated approach to managing performance than performance appraisal scheme. It is based on management principles by contract agreement as opposed to contract by command. Emphasis has been laid on development and initiation of self-managed learning plan as well as integration of individual corporate objectives.

Performance management may be seen as a methodical process for improving organizational performance by developing individuals' performance as well as team members. It is a way of attaining improved results by understanding and managing performance within an agreed framework of planned goals, standards and competency requirements. Procedures exist for the establishment of shared understanding about what is to be attained, for management and development of employees in a way that increases the probability that it may be attained in temporary and permanent basis. It aims at intimating the employees on doing the right things by clarifying their goals/objectives. It is maintained and driven by line management, (Armstrong, 2006).

Performance management aims at establishing reputable performance culture which employees at individual level and teams alike take responsibility for the regular improvement of business process and for their own skills and impacts within a framework made possible through the effort of effective leadership. Also, it aims at developing the capacity of people to meet and exceed expectations and to achieve their full potential to the benefit of themselves and the organization. It's about aligning individual objectives to organizational objectives and ensuring that individuals uphold corporate core values.

Performance management is aimed at ensuring that the support and guidance employees needed in order to develop and improve are easily available.

The aims of performance management can be summarised as follows: empowerment, motivation, reward, focusing employees to do the right things, proactively managing toward accountability and maximising the potentials of individuals and team to focus on achievement of set objectives.

Performance management does the following:

- i. Joint process through dialogue.
- ii. Regular review featuring one or more formal reviews.
- iii. Ratings less common.
- iv. Flexible process.
- v. Emphasising values and behaviours as well as objectives.
- vi. Slightly likely to be a direct link to pay.
- vii. Documentation kept to a minimum.
- viii. Owned by line managers.

Training, re-training and development of human resources are also very critical for success. Emphasis is placed on:

- i. Training and development.
- ii. Method for selecting employee.
- iii. Method of evaluation.
- iv. Problems encountered.

12. Human resource development: Human resources development cuts across issues pertaining to qualification of human resource, recruitment, selection and placement. In human resource development, emphasis is placed on time and place for seminars, workshops, training and career development programs, (Nwachukwu, 2016).

Strategic human resource development deals with introduction, elimination, modification, direction and guiding processes which also involves ways which individuals and teams alike are equipped with the best skills, knowledge and competences they require to execute current and future jobs required by the organization, (Armstrong, 2006). Strategic human resource development aims at enhancing resource capability in accordance with the belief that human capital of any organisation is major source of competitive advantage. Its specific objective is to develop intellectual capital and promote team and individual learning through the creation of learning culture environment.

13. **Reward management - Reward people:** The reward practices are underpinned by an organizational philosophy in which employees are valued and rewarded, (Armstrong 2006). If the organization pays more than its rivals, it can attract more individuals who possess superior job-related abilities. This may result in increase the quality of human resources applying for such job, and in turn motivate workers to apply their skills, knowledge and expertise in their respective activities. Reward can be financial and non-financial.

According to Armstrong, (2006), reward management is concerned with the formulation and implementation of strategies and policies, the purposes of which are to reward people fairly, equitably and must be consistent in line with the organizations value and also help the organization to attain its strategic goals. It focuses on the design, implementation and maintenance of reward systems (reward processes, practices and procedures) which seeks to meet the needs of both the organization and its stakeholders.

The aims is to reward people for values they create, motivate them and obtain their commitment, develop positive employment relationship, develop a performance culture, function consistently, attract and retain quality personnel. Good reward systems consist of

policies, practices, processes and procedure aimed at ensuring good and robust reward system is maintained.

- 14. Health, safety and welfare:** Health and safety policies and programmes are concerned with protecting employees and other persons affected by what the company produces and do against the hazards resulting from their work place or their links with the various establishments.

Occupational health programmes focuses on the prevention of ill-health resulting from working conditions. Some pertinent questions are; are these observed in real estate industry, if they are, to what extent? Is safety of the workers their priority?

Safety programmes emphasises the prevention of accidents by minimizing the resultant effect and damages to workers and their asset. They relate more to systems of work other than the work environment, but both health and safety programmes are specifically concerned with protection against hazards, and their aims and the procedures adopted are clearly inter-linked.

On a sad note, the importance of healthy and safe policies and practices is often underestimated by those concerned with management of businesses and by individual managers within those businesses. But it cannot be stressed very clearly that the prevention of accidents and elimination of health and safety hazards are a sole duty/role of management and managers in order to cut down to the barest minimum, the suffering and loss, (Armstrong, 2006).

The Management of health and safety at work place has been seen as a matter of:

- i. Developing health and safety policies;
- ii. Carrying out risk assessments which will identify hazards and at the same time an assessment of the risks attached to them;
- iii. Conduct health and safety audits as well as inspections;

- iv. Implementing occupational health programmes;
- v. Managing stress;
- vi. Preventing accidents;
- vii. Measuring health and safety performance;
- viii. Communicate to the establishment as well as to the employees the need for good health and safety practices;
- ix. Training in good health and safety.

The policy statement should consist of three parts:

- i. The general policy statement;
- ii. Detailed description of the establishment for health and safety;
- iii. Detailed arrangements for policy implementation.

Armstrong, (2006), listed typical activities where accidents happen or there are high risks as suggested by the HSE and others;

- i. Receipt of raw materials, e.g. lifting, carrying;
- ii. Stacking and storage, e.g. falling materials;
- iii. Movement of people and materials, e.g. falls, collisions;
- iv. Processing of raw materials, e.g. exposure to toxic substances;
- v. Maintenance of buildings, e.g. roof work, gutter cleaning;
- vi. Maintenance of plant and machinery, e.g. lifting tackle, installation of equipment;
- vii. Using electricity, e.g. using hand tools, extension leads;
- viii. Operating machines, e.g. operating without clear approval, or at an unsafe atmosphere and speed; not using safety apparatus;
- ix. Failure to wear protective equipment, e.g. hats, boots, clothing;
- x. Distribution of finished jobs, e.g. movement of vehicles;
- xi. Dealing with emergencies, e.g. spillages, fires, explosions;

- xii. Health hazards arising from the use of equipment or methods of working, e.g. repetitive strain injuries from poorly designed work environments or working practices.

So there is need to do always do safety audit to examine how the organisation is thriving and possibly devise means on how to move ahead. But again, do our construction firm do safety audit? Is there any effort aimed at managing health and safety during and after construction?

- 15. Employment practices:** Employment practices are primarily concerned with the fundamental issues in employment relationship. It takes note of wage, working hours and issues pertaining to part time work, the latter is very important as most teeming population of the youths engage in real estate job are on temporary or part time basis.

Employment practices need to be established in the following areas: terms and conditions and contracts of employment, mobility clauses, promotion practices, flexible working, equal opportunity, managing diversity, sexual harassment, bullying, substance abuse at work and work-life balance.

2.1.1 Review of theoretical/empirical studies

Many literatures abound in real estate sector of the construction industry, both globally and nationally. This section is devoted to identifying recent studies/literatures and some empirical studies.

Zarina, *et al*(2014), observed that critical success factors (CSFs) are inputs to project management practice which can lead directly or indirectly to project success. The study whose aim is to identify the extent of the relationship between CSFs and project performance developed conceptual framework by identifying five (5) variables for project success which are projectmanagement action, project procedures/related factors, human issues/factors, external factors/issues.

Mwai(2014), focused on four factors that have a great influence on the successful completion of property development projects: project management, finance, consultants and the contractor with the aim to establish how each of these factors influences project completion and finding out whether the following targets of project management i.e. time, cost and quality have any importance on the completion of property development project. The study findings revealed that there is a weak relationship between budgeted cost and actual cost of successful completion of property development projects and that there is a weak relationship between target completion time and actual completion time of successful completion of property development projects. The results of the regression equation showed that for a point increase in the independent variables, successful completion of development projects is predicted to have a corresponding increase, given that all the other factors are held constant. It also indicated that there was a very strong positive relationship between the variables. From the study it was evident that the variables produce statistically significant values and can be relied on explain to successful completion of development projects.

Yiman (2011) carried out a research on project management maturity in the construction industry of developing countries (the case of Ethiopian contractors).The research studied the maturity of PM in the construction industry of developing countries; it proposed a PM maturity model to address the gaps identified in course of the research and adopted it to the developing countries context. By adopting the model, the maturity assessment of Ethiopiancontractors was undertaken and, low level of Project Management maturity (Informal practice of the basic processes) was found. More so,the research also discovered that ISO certified contractors“ PM maturity to be higher than those which are not. Also,the Project Management maturity of contractors which took part in capacity building program was found to be higher than those which did not take part.Similarly,

Road PM maturity of contractors was found to be higher than that of Building contractors. It also found higher maturity level for material, procurement, cost, financial, time, and human resource management. Risk and safety management were found to be the least matured PM areas.

Nagamany (2016) carried out a study of the causes and effects of abandoned residential projects in Malaysia. The purpose was to reveal the causes relating to the phenomenon of abandoned residential projects in a structured manner and its effects from a social, economic and environmental perspective. Preliminary research on related literature review was done using content analysis; it identified the key stakeholders involved. A quantitative research methodology was conducted; data was analysed using descriptive statistics whereby the mean scores were obtained. The findings concluded that the main root causes of abandoned residential projects in Malaysia are financial closely followed by administrative/strategy and policy factors. The research confirmed the effects were majorly social and economic with some environmental effects and sub-categorised as financial, administrative and policy perspectives.

Damoah, (2015), carried out an investigation into the causes and effects of project failure in government projects in developing countries: Ghana as a case study. The study investigated the perception of the extent of project failure, causes of project failure and the effects of project failure on key stakeholders of Ghana's government projects. Literature review was conducted which led to development theoretical framework that was used to determine the extent of projects failure, causes and effects of projects failure in Ghanaian government projects. Semi-structured interviews were carried out to evaluate the perception that the participants about the extent of failure, causes and effects of Ghana government projects failure. Data obtained were analysed using content and thematic data analysis techniques. The literature reviewed and the exploratory data

identified six project failure criteria that were used to assess the extent of project failure in Ghanaian government projects. The causes and effects of project failure especially Ghanaian government were also identified. Further data were collected through questionnaire. Data analysis was done using statistical techniques which includes; descriptive statistics, Means, Spearman Rank Correlation Coefficients, and Kruskal-Wallis H test of difference in ranks. The findings indicated that all the three categories of the study's participants (contractors, project management professionals and general public) agreed that Ghanaian government projects fail on all six criteria; nonetheless, there was a difference on extent of failure as they differs from criterion to criterion. There was consensus that the worst performing criterion is meeting the projected time, cost, deliverables, and stakeholders' satisfaction, contribution to national development and contribution to the sector where the project is implemented respectively. The study also identified numerous causes of Ghanaian government projects failure adding that most of the causes of Ghanaian government projects failure were linked to leadership. The work showed that some of these effects are direct whilst others are indirect. The work revealed that the effects are interrelated and sequential. According to study, the causes and effects were not of equal importance; however, there was a high degree of agreement between the three categories of the study's participants on the major causes and effects of Ghanaian government projects failures.

Oyebanji, Liyanage and Akintoye (2017), studied critical success factors (CSFs) for achieving sustainable social housing (SSH). The aim of the study was to determine the Critical Success Factors (CSFs) for achieving Sustainable Social Housing (SSH) from perspectives of meeting of social, economic and environmental aspects of housing needs. The study employed document content analysis approach involving relevant literature resources for generating the success factors (SFs) for achieving SSH. Findings from the

approach were refined before using them in preparing a questionnaire used to gather data from housing authorities (public) and private non-profit social housing organisations in England and they were asked to rank the criticality level of the identified success factors. Data generated through relevant documents and respondents were respectively analysed using NVivo and Statistical Package for Social Science (SPSS). The research found out that some of the CSFs for achieving SSH for meeting housing includes: adequate funding and provision, affordability, efficient economic planning, appropriate construction technology, environmental protection, the use of environmental congenial materials, productive land use planning, suitable design, safety of lives and property, provision of social services and ensuring social cohesion. The paper recommended the use of efficient sustainable development (SD) strategies, legal and institutional frameworks for monitoring and evaluating the delivery of SSH.

Satankarand Jain, (2015), studied success factors for real estate construction projects. The study aimed at identifying and studying the constraints and the contribution factors which lead to the success of a project. It analysed most critical success factors by analytical network process method. The paper found out that projects usually suffer and fail due to diligence, poor project planning, poor financial management or operations oversight. It also emphasized that mistakes made in the initial phases of the property development process are responsible for certain challenges experienced and that they are usually impossible to overcome. The study noted that for these obvious reasons the initial feasibility, assessment and planning stages are the most crucial if not critical for the overall project success. The research also found that the critical success factors in construction projects have different priorities and weights. Bearing in mind their importance, the critical success factors identified are: Economic and technical assessment of the project resources required, experience and executive records of the

project manager, project strategic plan, time, cost and quality management, satisfaction, health and environmental safety, affordability on the part of the user and design consideration, cost of individual units and technology.

Ofori, (2013) carried out study on project management practices and critical success factors: a developing country perspective. The study identified and assessed the quality of project management practices as well as the critical success factors for projects in Ghana. It adopted an exploratory approach and utilized a survey method to collect data on project management practices of Ghanaian organizations. Purposive sampling was used in selecting the sample from different economic sectors. The outcome of the research indicated that the critical factors that contribute to the success of a project include top management support, effective communication, clarity of project purpose and goals, and stakeholder involvement. It recommended that documentation and dissemination of critical success factors and best practices in project management will improve the quality of project management in Ghana. The study also indicated that attention must be paid to the 4Cs – communication, commitment, competency, and coordination in order to improve project quality.

Ribeiro, Paiva, Varajão, and Dominguez (2013), conducted a study on success evaluation factors in construction project management - some evidence from medium and large Portuguese companies. The aim of the article was to contribute to the discussion on success evaluation factors in a field where little has been written i.e. the construction industry. Through a survey of medium and large Portuguese companies several factors were identified which were considered in the evaluation of project success. The results showed that the traditional factors, often referred to as the “Atkinson elements triangle” (cost, time and quality), are still the most relevant for evaluating project success, while

others, which includes customer involvement and acceptance, have gained much recognition in recent time.

Koirala (2012), studied risk in housing and real estate: construction projects study in Nepal. The overall aim of the research was to explore, analyze, and mitigate the understanding of risk management in the housings, apartments, and real estate projects. The study found out that some developers do carry out systematic risk management during preplanning or planning phase. The study discovered that the risk factors were external as well as internal and that there were different risk factors in the projects mainly legal problem, policy framework related problems, political problems, financial problems, economic related problems, technical problems, maintaining qualities problems, human resource problems, social problems, cultural problems and organizational or institutional problems. How risks are accepted, rejected, shared or reduced between the project stakeholders is largely governed by the project management option and the content of the related contract documents.

Udomiaye, Ntaji and Unyime (2018) on a study, incessant collapse of buildings in Nigeria: the implications for religious/worship centres, identified causes of building collapse in Nigeria to include poor quality of materials and inadequate structural design, changes and alterations, foundation failure, faulty construction and poor Maintenance. It concluded that issues regarding safety are a joint responsibility, hence, all parties should be held accountable right from the Church/Religious head to the regulators who should have taken reasonable steps to give professional advice and where need be, exercise their right to serve enforcement notices before a catastrophic incident happens.

Essien and Ajayi (2017) in a study; the underlying causes of building collapse in the Nigerian construction industry identified and evaluated the causes of building collapse,

and the preventive measures that can avert such occurrences with the high frequency in the number of collapsed structures scattered around the length and breadth of Nigeria. The study also identified the major causes of building collapse such as weak/faulty foundations, inefficient stringent quality control in material utilization and management, boycotting the professionals, absence of proper site investigation, and the engagement of inexperienced personnel. Some preventive measures were made as part of lasting solutions to tackle the challenges, these includes the supervision of construction works by professionals, education enlightenment on the public on the need to prevent building collapse rather than managing situations, employment of competent professionals, issue building approvals before construction commences and involvement of structural engineer in a project that goes beyond one floor. In general, this study was able to provide a comprehensive view on the causes and the preventive measures of building collapse.

Onyali (2017) carried out a study on correlates of project success in the Nigerian real estate construction sector; the purpose of the correlational study was to examine how comprehension, motivation, skills, resources, and communication could lead to project success in the real estate construction sector in Nigeria. The study population was project management practitioners in the Nigerian real estate construction sector who according to the study are facing challenges in delivering real estate construction projects profitably. Data collection was through a survey instrument questionnaire called the project implementation profile. Multiple linear regression analysis confirmed a significant relationship between each of the five independent variables and the dependent variable, upholding all the alternative hypotheses. The regression model results showed that each independent variable is a significant predictor of the dependent variable.

Ogunde, Olaolu, Afolabi, Owolabi, and Ojelabi, (2017) examined the challenges confronting construction project management system for sustainable construction in developing countries: professionals' perspectives (a case study of Nigeria). The study adopted descriptive survey method and data were obtained by means of inquiries using questionnaires. A sample was taken from construction professionals. The study revealed that location of a project majorly influences Project Manager's decision making on project planning. It noted the key importance of management skills required by practitioners of construction project management. The research result identified that passive participation from Project Manager, lack of client involvement in making decisions, provision of substandard materials, design error, lack of effective communication and ill treatment of workforce were bottlenecks inhibiting the use of construction project management approaches. The study recommended that the institutionalization of construction project management practice, compulsion of adequate training and skill modification programs for construction professionals to aid the sustainability of construction project management systems in Nigeria.

Tijani and Ajagbe (2016) carried out a study on professional view on the causes and effect of construction projects abandonment in Ibadan metropolis. In the study, a structural questionnaire with likert scales design approach was administered on consultants. Analysis of data was done by a statistical formula which was used to calculate the relative importance index. Twenty three (23) important causes of abandonment of construction were identified they includes: rank causes for abandoning projects, payment remittance delay, death of the investor/client/owner, leadership instability, lack of adequate fund allocation, improper project planning and design, inconsistency in government policies, improper project estimates, improper project budgeting, change of investment purpose, project manager incompetence, unjustified

project aim or not meet, materials increasing costs and lacks, community interference, lack of project risk assessment, lack of stakeholders involvement, unplanned urbanization system, lack of proper need assessment, project mission communication lacking, land or legal disputes, improper/poor documentation of contract agreement, bureaucratic bottleneck and climatic condition. Also ten (10) main effects of construction projects abandonment were established, they includes: it results to loss of strength of structural members (steel corrosion & concrete deterioration), visual defect to surrounding/project site, hidden places for dangerous animals, pollution (abandoned projects usually trigger the creation of uncontrolled & unsupervised garbage disposal), marginalization of population, it becomes a waste of finance and materials resources, it results to loss of economic value of the area, it deprive government of the expected revenue from property tax, it results to increase in unemployment and steers conflict between public administration and private sector. It was concluded that if the incessant causes are seriously dealt with through the implementation of various measure opined to each cause in the study; project abandonment will be a forgone issue in the study area and the nation in general.

Nzekwe, Oladeji and Emoh (2015) carried out research on project failure as a reoccurring issue in developing countries: focus on Anambra state, south east Nigeria. The aim of the research was to critically analyse the factors that may lead to project failure in Anambra State, South East, Nigeria, with a view to ameliorating the high level of project failure. Structured questionnaires were distributed relevant project professionals based on the Likert-5-Point scale of responses, theses were used to capture their opinions on the reasons for project failure, while secondary information were sourced from review of literature. The Results were analysed using SPSS statistical tools i.e. the statistical package for social sciences. The results indicated that, the rate of failure of projects is

high. It established and firmly ranked the first five factors responsible for project failure in Anambra State, South East, and Nigeria. The researchers concluded that the most important factor for project failure is increase in the price of starting materials. The research recommended that the findings or the results be presented for wider audience, properly disseminated and used in community enlightenment, and in further policy guidance and regulation. The study recommended that the study be replicated to the entire South East, Nigeria in order to generate better client satisfaction in subsequent projects.

Nzekwe, Oladejo and Emoh (2015) did another study on the assessment of factors responsible for successful project implementation in Anambra State, Nigeria. The aim was to appraise the factors critical for project success in Anambra State, Nigeria, with a view to helping stem the high incidence of project failure. Primary information used in the research were sourced from a survey, structured questionnaires were used to capture the opinions of relevant professionals on the reasons for project success, while secondary source of information was from a review of related literature. Results were analysed using statistical package for social sciences (version 16.0). The study established and firmly ranked factors responsible for project success in Anambra State, Nigeria and concluded that the most important factor for project success is ability to handle unexpected crises above client commitment.

Okoye, Ngwu, and Ugochukwu (2015) carried out a study on evaluation of management challenges facing construction practice in Nigeria. The study examined the management challenges facing construction practice in Nigeria and assessed the skills and management strategies needed for managing the challenges confronting construction managers in executing construction projects. The research employed a survey research method, questionnaires were distributed to the construction practitioners (contractors and

professionals) within the South East Nigeria, through stratified random sampling. Questionnaires were distributed to the respondents and data obtained were analyzed and ranked using relative importance index (RII). The result was subjected to further statistical analyses. The result revealed that Time (Scheduling) management, Quality management, Cost management, and Safety management were the top management challenges facing construction practice in Nigeria, it also identified technical skills including management skills and strategies essential for tackling the identified bottlenecks. It was established that a statistically significance strong positive correlation exist between the rankings of the contractors and professionals. The study recommended that construction practitioners should acquire the right skills and apply appropriate management strategies in managing construction projects.

Ihuah, Kakulu and Eaton (2014) carried out a study on a review of critical project management success factors (CPMSF) for sustainable social housing in Nigeria. The study noted that current housing estate deficit faced in the country is credited to poor and inadequate housing delivery and provision by various agencies. The study analysis of data involved an extensive and investigative theoretical review of online and visual document resources, followed by an interpretative identification of categories and limits of various materials and information considered vital to the phenomenon in the study. Documents were analysed using content analysis approach under four criteria of which are how: authentic; credible; representative; and meaningful. The study revealed that 22 critical project management success factors (CPMSF) are essential for the achievement of sustainable social (public) housing estates' delivery/provision in Nigeria. These relate to: the performance of the project managers, organisation that owns the project under development, the characteristics of the team members and the external project environment. At the same time, the study revealed that these are social, economic, and

environmental factors that are associated with the triple objectives of sustainable development. This study reflection aimed at resolving or reducing to a minimum the acknowledged housing estate delivery and provision inadequacy problems in the country, and by exploring this phenomenon, best practises using project management techniques will be understood and used to provide sustainable social (public) housing estate units for the Nigerian populace.

Alamu and Gana (2014) carried out an investigation on the causes of building collapse in Nigeria. They examined the causes of building collapse in Nigeria with the objectives; to determine the general causes of some building collapse and to evaluate the extent of loss in terms of life and properties. It attributed the rising incidents of building collapse to the use of substandard building materials and incompetent professionals in construction activities, inadequate supervision, faulty building foundation, the refusal of the wider society to recognize professionalism and pay for the services and the attitude of the building contractors and other stakeholders as the major problem. The paper asserts that promoting or achieving an enduring safety culture in building involves designing, constructing and using buildings in such a manner as to make the building safe for occupation and for carrying out all desired activities. Strategies for ameliorating the trend are suggested. The paper posits that the professionals responsible for designing and monitoring construction as well as the government, manufacturers and the contractors have great roles to play in order to reduce and avert this trend.

Kamau, Mireri and Usman (2013) conducted a study on an assessment of the management systems in project performance within the building construction industry in Abuja, Nigeria. This study was set out to examine how management systems influence the performance of projects within the building construction industry in Nigeria. It aimed to assess how the life cycle management system (LCM) has influenced project

performance in the building and construction industry in Abuja, Nigeria, which has experienced exponential expansion yet it, continues to face challenges of quality with the objectives to examine the significance of LCM adoption on building project performance and to establish its effectiveness in enhancing project performance in the building industry in Abuja Nigeria, and how it influences initial process, planning, implementation and completion phases for enhanced project performance. This indicated the rejection that most contractors adopt LCM in project delivery in Abuja and that there is a significant statistical relationship between the effectiveness of LCM and project performance. The model proposed showed a significant statistical relationship at 95% level of confidence.

Ugonabo and Emoh (2013) studied the major challenges to housing development and delivery in Anambra State of Nigeria. The paper examined the major challenges militating against housing development and delivery in Anambra State of Nigeria with a view to stimulating relevant agencies of government and other stakeholders into developing suitable programme for effective housing delivery in the state. The study identified a multiplicity of factors inhibiting effective housing development and delivery in Anambra State which includes; lack of safe access to land, high cost of construction, limited means of financing, bureaucratic processes, expensive cost of land registration and titling, uncoordinated policies and implementation at Federal and State levels, ownership rights under the Land Use Act, lack of good infrastructure, affordability issues, development control challenges, harassment of developers, inelegant revocation and compensation process among others. In other address the loopholes, the study recommended the need for a comprehensive approach to housing development and delivery which will involve the Federal Government, the State Government and the private sector (both formal and informal).

Ubani, Nwachukwu and Nwokonkwo (2010) conducted a study on variation factors of project plans and their contributions to project failure in Nigeria. This study examined and analyzed the variation factors of project plan and their contributions to project failure. The methods adopted were multiple regression and correlation analyses, these were analytical tools used for the data analysis and statistical test of hypotheses. The results of the analyses indicated that design errors, management problems and resource delivery constraints are the significant variation factors of plan that contribute significantly to project failure. The study recommended evaluation of design effectiveness, prior to project implementation, adoption of material requirements planning principles, and institution of corporate policy for periodic and comprehensive human resources development programmes.

Nwachukwu, (2009) carried out a study on client's constraining factors to construction project management success in Nigeria: a systems analytical approach. The study analyzed client's related factors that constrain project management success of public and private sector construction in Nigeria. It noted that issues which concern clients in any project cannot be undermined as they are the owners and the initiators of project proposals. According to him, it is assumed that success, failure or abandonment of projects lay squarely in their hands. The study was based on empirical analysis on certain public projects. Data analyses were done based on their relative relevance indices of attribute. These research employed factor analysis, this was used to group the variables into fewer and interrelated variables. The major finding indicated that client factors exact high level negative influence to success in the construction project management in Nigeria especially in the public sector.

Chendo and Obi (2015) in an attempt to find lasting solutions to and tackle the challenges of building collapse, examined the causes of building collapse in Nigeria and enumerated

specific areas the stakeholders in the building industry and the general public are affected. The identified problems range from faulty design, negligence, incompetence, faulty construction, foundation failures, extraordinary loads and corruption. Also identified were forces of nature which was seen as part of causes of building collapse.

Ayeni and Adedeji (2015) identified many factors that contributes to continuous occurrences of building collapse which include; inadequate monitoring of construction sites by government officials as a result of the wide and speedy pace of developments in many urban centres in Nigerian; the use of substandard materials, improper soil investigations, bad design and supervision, poor quality construction and poor funding by clients. The study was specifically about the role an Architect could play both in practice and in architectural education in mitigating building collapse. The result of the study revealed that mitigation of building collapse can be achieved in Nigeria through collaborative efforts of all stakeholders involved and concludes that architectural education could serve a supportive role.

Gambo, Said and Ismail (2016) focused at assessing the relationship between major cost factors that affect technical performance of small size local government projects in Nigeria. Using proportionate stratified random sampling method, survey instruments were administered to major stakeholders in the construction industry comprising of project clients, contractors and consultants. The research in its conclusion noted that cash flow problem, fraudulent practice and nature of construction environment are the major factors affecting technical performance of local government projects in Nigeria. It also recommended the use of mediator variables such as pay for performance and advance payment policy to reduce such negative effects.

Oyeyipo, Odusami, Ojelabi and Afolabi, (2016) noted that it is generally believed that wrong bidding practice is a major contributor to the construction industry's inefficiency. In order to find out the major factors that characterise the bid/no bid decision of contracting organisations, a study to evaluate the factors that affect contractors' decisions to bid for a project and the importance of the identified factors to decision makers was carried out. The principal instrument used for collecting data from respondents was a structured questionnaire. The outcome of the analysis showed that the financial capability of clients, availability of capital and material are the most important factors that contractors consider when making a bid/no bid decision. It also revealed that competition (number and identity of competitors) does not have significant influence on contractors' bidding decisions. The research recommended that contractors should also improve on their reputations in the construction industry by acquiring technical competencies and capabilities as these qualities have become important considerations in assessing competitive capacity of contractors, in addition to being key indicators of successful tendering in construction projects.

Aje, Timo, and Nwaole (2016) focused on the study to assess the perspectives of construction professionals on factors influencing tender prices of construction works and the contribution of the factors to the success rate of contractors. It identified 15 factors in respect to contractors' tender price and success rate in Nigeria. The findings of this study based on the results of statistical analyses (mean score and chi-square) revealed that all the construction professionals (architects, builders, engineers and quantity surveyors) are of the view that availability of material, labour productivity and profit level are the most significant factors that have greater influence on the tender price of construction works and in effect influence the success rate of contractors in competitive bidding. More so, it

was discovered that government policy does not have significant effect on the rate of contractors' success on competitive bidding in Nigeria.

Ujene, Idoro and Odesola (2013) assessed 12 types of project overhead costs, 6 methods of allocation and 15 factors which affect project overhead costs in South-South of Nigeria with objective; to do a comparison on the perception of small and medium contractors regarding the allocation methods, constraints to project overhead costs and the effect of the types of project overhead costs on cost, time and quality of the projects. Data sources were through structured questionnaires which were administered to small and medium contractors and analysed using mean item score, and Mann-Whitney U test. The result revealed that contractors perceive that supervision costs, cost of rework, equipment management costs, general field expenses, and temporary works costs were prominent overheads affecting cost, time, and quality performance of projects. It was revealed that there was no difference in the perception of contractors on issues affecting overhead costs. It recommended that contractors should give adequate priority to significant project overheads and their influencing factors.

Olagunju, Aremu, and Ogundele (2013) noted that collapse in buildings could be total or partial failure of one or more components of a building leading to building not being able to perform its principal function that concerns safety and stability. In an attempt to find lasting solution to some of the causes and effects of building collapse, they study examined various kinds of collapse, some of the major causes of building collapse which are faulty design, bad construction, foundation failure, and fire problem and as well proffered solutions.

Siew (2014) carried out a study on human resource management in the construction industry-sustainability competencies. The study noted that while environmental

sustainability has been the subject of much debate in the last decade, it was not until recently that attention started to shift towards human resource management as an enabler for sustainability. The proposed a framework to measure sustainability competencies of employees within the construction industry sector. Four proficiency levels together with relevant descriptions were defined for a total of eight sustainability competencies. The suggested proficiency levels were then mapped to main construction related jobs based on the framework. An example was also given to illustrate the manner in which competencies should be assessed.

Malkani and Kambekar (2013) carried out research on management of Human Resource in construction industry, it noted that workforce is the most valuable asset for an efficient outcome of any organization and this is especially true in case of labour-intensive industries such as construction. The paper mainly focused on how to identify the different components of human resources management in the construction. A survey was conducted to identify HRM related issues within the construction company and result were analyzed keeping main focus on the human resource practices that are generally pursued in the Indian construction industry, availability of skilled labour and formal or informal method or forms commonly adopted for the management of the human resource.

Ihuah (2014) carried out a review of soft and hard approaches of human resource management and the success of real estate development in Nigeria. The study noted that many property developers/managers in organisation in the pasts, and currently, are still utilising the “hard” approach of managing human resource, and while others utilise the “soft” approach in managing their employees. The paper investigated and assessed “hard” and “soft” approaches of HRM , come up with the best practice approach to provide real estate development success in Nigeria. The findings showed that the “soft”

approach should be the best practice approach to utilise in managing the different human resources involved in real estate development processes for successful on-time completion. It recommended that since the ambiguities, discrepancies, and difficulties inherent in finding a common ground for the concept of HRM persist in the literature, more collaboration through research should be encouraged and sustained until a consensus agreement for HRM is achieved.

Rushdi (2013) conducted a study on human resources management practices and employee satisfaction in real estate business. The study aim was to observe issues regarding different condition related to employees of the organization. The key factors of the condition were salary, work-environment, dealings with colleagues, boss, management tone, organizational culture, organizational nature and some hidden matters or issues related to employees and management of the organization. The study disclosed that employees want competitive salary, pleasant work environment, good management with top management's support and inter-action, scope of presenting own views, cooperative colleagues, future safety, company in right path, regular merit based promotion, increment and bonuses, expansion of company, increasing of goodwill of the company, management's support and services, management's values for the employees and management's sharing in personal or social occasions, while on the other hand management wants good human being as employees who always want to learn. The management wants employees to be polite, obedient, efficient, truthful, loyal, devoted to work, honest, sincere and satisfied. The research indicated that, employees are dissatisfied with low salary and want to switch over from bad work environment to an environment high salary with better work. The research noted that the employees of the organization were still getting average salary but happy and feel highly satisfied due to

better work environment. This according to the research was the bottom line of the entire study.

Ifediora (2015) carried a study on the implications of human resources management (HRM) on real estate project management success in Awka South L.G.A., Anambra State. The population studied included a sample of drawn from relevant professionals in the built environment. Respondents were required to scale the practices and factors based on 5 points likert scale. Relative important index were used for ranking of individual practices. For the hypotheses proposed, data collected were subjected to non-parametric data equivalent of Analysis of Variance (ANOVA) which is the Kruskal-Wallis test statistic; this is because the observed data did not meet the assumption of ANOVA. The result indicated that the success of real estate projects is dependent on quality of Human Resources practices in Awka South L.G.A. Anambra State and HR critical success factors have significant relationship with successful real estate project execution in Awka South L.G.A. Anambra State. Also in work by Ifediora and Keke (2019), they focused on HRM practices on real estate projects, again relative importance index was used in ranking HRM practices based on 5 point likert scale, the result indicated that supervision/checks and inspection of real estate projects were ranked first and the result of the hypothesis indicated that success of real estate project is dependent on the quality of human resources practices employed or engaged in a project.

2.3 Identification of gaps/Summary of literature review.

Researches by Zarina *et al.* (2014), Mwai (2014), Yiman (2011), Nagamy (2016), Damaoh (2015), Oyebanjiet *al.* (2017), Satankar (2015), Ofori (2013), Ribeiro *et al.* (2013) and Koirala (2012) were all done outside Nigeria. Zarina *et al.* (2014), was more on critical success factors (CSFs) and more theoretical in approach, no empirical data to back up the study. The work by Mwai (2014), was done in Nairobi, and was specifically on four

factors that have a great influence on the successful completion of property development projects. These factors cannot be said to be comprehensive enough and was not even in Nigeria. In the research carried out by (Yiman, 2011), emphasis was on project management maturity in the construction industry of developing countries with focus on Ethiopian contractors. It specifically compared that of road contractors PM maturity to that of Building contractors. Hence it's not about factors private affecting real estate project implementation success. Nagamy's work was on causes and effects of abandoned projects in Malaysia and which it succeeded in finding out causes peculiar to the Malaysia residential sectors, the extent to which the identified causes were not known. Damoah's work focused majorly on investigation into causes and effects of project failure and was in Ghana; the extent was considered but differs from one criterion used to another. It was majorly on project in entirety, not specific about the type of project. Oyabanjiet *al.* concentrated of study of critical success factors in England, the study was empirical in nature as it used ranking to determine the criticality level of the identified factors, but did not determine the extent to which these critical success factors affect project implementation success, it was not about analysis of factors affecting private real estate project implementation success. Satankaret *al.* also focused on success factors for real estate construction project and was based in India, it identified variables and grouped them into four, which is majorly on factors contributing to project success, so has not addressed the issues which this work intends to study. Ofori's work was done in Ghana and was more of project management practices and projects generally this is however different from what this study tends to do. Ribeiro *et al* (2013), focused generally on construction industry in Portuguese, it was not specific about real estate and factors studied is believed to be peculiar to Portuguese whereas Koirala's work was on risk in housing and real estate in Nepal. It deals more on risk management and how to mitigate

them; hence it was not about analysis of factors affecting private real estate projects implementation success.

Udomiaye *et al.* (2018), Essien and Ajayi (2017), Onyali (2017), Ogunde *et al.* (2017), Tijani *et al.* (2016), Nzekwe *et al.* (2015), Okoye *et al.* (2015), Ihua *et al.* (2014), Alamu *et al.* (2014), Kama *et al.* (2013), Ugonabo and Emoh (2013), Ubani *et al.* (2010), Nwachukwu (2009), Chendo and Obi (2015), Ayeni and Adedeji (2015), Gambo, Said and Ismail (2016), Oyeyipo *et al.* (2016), Aje *et al.* (2016), Ujene *et al.* (2013) and Olagunju *et al.* (2013), were done in Nigeria.

While Udomiaye's work was more theoretical, it lacks empirical data to buttress or address the causes of building of building collapse, its emphasis was more on religious center and not even in South East Nigeria where this study is domiciled. Essien and Ajayi (2017) identified a number of major causes of building collapse. Even though it employed empirical data in their analysis, the extent to which some of these factors identified affect private real estate projects implementation success were not known. Onyali's study was on real estate but specifically on correlates of project success, it concentrated the study on how comprehension, motivation, skills, resources and communication can predict success in Nigerian real estate construction sector. It was not how these factors affect implementation success and the extent. For Ogunde *et al.* (2017), even though it was empirical in approach was more on examining challenges confronting project management, it was not specific about the type of construction project. It also identified challenges affecting Project management but the extent they affect PM was not known. The research by Tijani *et al.* was specifically on professional view on the causes and effect of construction project abandonment in Ibadan; again it was not specific about the type of construction project, the extent to which the causes identified were not known and it was on abandonment alone. In separate studies by Nzekwe *et al.* (2015), they

identified factors for project failure and the second study was that of assessment of factors responsible for successful project implementation in Anambra State, both studies were not specific about the type of project and the extent they affect project implementation success, hence it was not about analysis of factors affecting private real estate project implementation success. For Okoye *et al.* (2015), the paper addressed the issues of management challenges facing construction practice in Nigeria, it was not specific about the nature or type of construction projects even when it identified the management challenges, it failed to address the issue of the extent to which they affect construction practices. Ihuahet *et al.*'s research was majorly on critical project management success factors on sustainable housing and analysis were mainly based on documentary evidence according to the research. The study suggested further empirical investigation which means the study is purely theoretical.

In study by Alamu and Gana (2014) they attributed the rising incidents of building collapse to a number of factors. The study identified a number of collapsed project and possible causes, but there was no evidence of empirical data to determine the extent the identified factors affect private real estate project success. Kamau *et al.* (2013) work was in Abuja and specifically on how life cycle systems influenced project performance; it was not specifically about real estate projects and not in line with what this study tends to carry out. Ugonabo and Emoh, (2013) work was done in Anambra State, in their study, they identified a multiplicity of factors inhibiting effective housing development and delivery, it was not about the factors private affecting real estate project implementation success and the extent was not known, the study also lacked empirical evidence. Ubaniet *et al.* (2010) was more on variation of building plan and its contribution to project failure, this is not the only factors that constrain real estate project implementation success, again it failed to determine the extent this factor contribute to project failure. Nwachukwu,

(2010), concentrated on client constraining factors to construction project, client constraining factor is not the only factors, and his work did not consider other factors which this study seeks to explore. Chendo and Obi (2015) examined the causes of building collapse in Nigeria and succeeded in enumerating specific areas the stakeholders in the building industry and the general public are affected. Ayeni and Adedeji (2015) merely identified many factors that contribute to continuous occurrences of building collapse and were specifically about the role an Architect could play both in practice and in architectural education in mitigating building collapse. It was purely an Architects view. It failed to capture other stakeholders view. Gambo *et al.* (2016), major focus was on assessing the relationship between major cost factors that affect technical performance of small size local government projects in Nigeria. Oyeyipo *et al.* (2016) was specific on issues relating to bidding and no bid decision and was not about factors affecting private real estate projects implementation success. Ajeet *et al.* (2016) focused only on the study to assess the perspectives of construction professionals on factors influencing tender prices of construction works and the contribution of the factors to the success rate of contractors, it was not about analysis of factors which this current work is being proposed even though it looked at the perspectives of construction professionals. Ujene *et al.* (2013) was specifically to compare small and medium contractors' perception of the methods of allocation, factors affecting project overhead costs and the effect of the types of project overhead costs on cost, time and quality of the projects did not address any issue relating to real estate projects implementation success. Olagunju *et al.* (2013), work appears more theoretical and lack empirical evidence to express or explain those causes of abandonment and even identified causes were not detailed enough and only touched aspect of collapse.

Siew (2014), Malkani and Kambekar (2013), Ihuah (2014), Rusdi (2013), were on human resources management. Ifediora (2015), and Ifediora and Keke (2019) deal on human resources management practices and human resources critical success factors. Siew's work focused mainly on HRM practices and did not consider other factors. Malkani and Kambekar (2013) was on management of human resources in construction industry, it focused on identifying different components of HRM in construction industry. It did not specify the aspect of construction industry it focused on. While Rusdi's work was more on employee's satisfaction in real estate business, the extent to which employees' satisfaction affect implementation success is not known. The work by Ifediora (2015) even though was on real estate projects was in just one local government in Anambra State and was specifically on human resources management practices and human resources critical success factors, so it was very limited in scope.

In summary, the identified gaps are as follows;

1. Most research conducted so far concentrated on construction projects generally and were not narrowed or dedicated to private real estate projects.
2. Some were basically on review of related literatures and lacks empirical evidence where as some that have empirical evidence to justify their studies were either on abandonment or building collapse.
3. The studies conducted paid less attention to analysis of factors affecting private real estate projects implementation success in South East States of Nigeria.
4. The studies done so far did not show the extent of engagement of the relevant professionals in the private real estate projects implementation.
5. The views of the relevant professionals involved were not captured in almost all works reviewed.

6. None of the studies has been able to find out if there are tussles/claim by various professionals on who is more qualified to carryout implementation of private real estate projects if there is any, the reasons behind same.
7. Again none of the studies so far has been able to address the extent to which the identified factors affectprivate real estate projects implementation from the perspectives of the professionals involved.

These gaps is what this research filled hence, this work was devoted to identifying the factors, rank the impact of these factors, determinethe extent these factors affect private real estate project implementation success in the study area, find out if feasibility and viability studies are carried and as well find out if there are tussles/consensus of opinion of relevant professionals especially from the perspectives of the professionals involved.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This section focused on the researcher's blueprint of selection of the different research methods that were successfully used for the completion of the research project, i.e. the various means that were used in achieving the aim and objectives of the study was the focus of this chapter. The research was proposed to analyse the factors which affects private real estate projects implementation success in Abia, Anambra, Ebonyi, Enugu, and Imo States, South East Nigeria. It discussed the research design, sample population, the sample frame, the sample technique, sample size, questionnaire design, data sources, the instrument for data collection and method of data analysis and more importantly the validity, reliability of data collection instrument (questionnaire) and method of data analysis. The study was specifically on the perspectives of professionals involved in private real estate projects with emphasis on their respective firms. The study identified major factors affecting private real estate projects implementation success, activities in each stage of real estate project implementation. It reviewed relevant literatures in the subject areas and as well identified gaps that exist in the literatures. The work employed field survey approach which involved firms of professionals in private real estate project implementation and as well featured physical distribution of questionnaires for responses in Abia, Anambra, Ebonyi, Enugu, and Imo State. The study is more of parametric and descriptive which involved collection of data; this includes distribution of questionnaires. Descriptive analysis was used to summarise the data collected. Tables and simple percentages including ranking were also used.

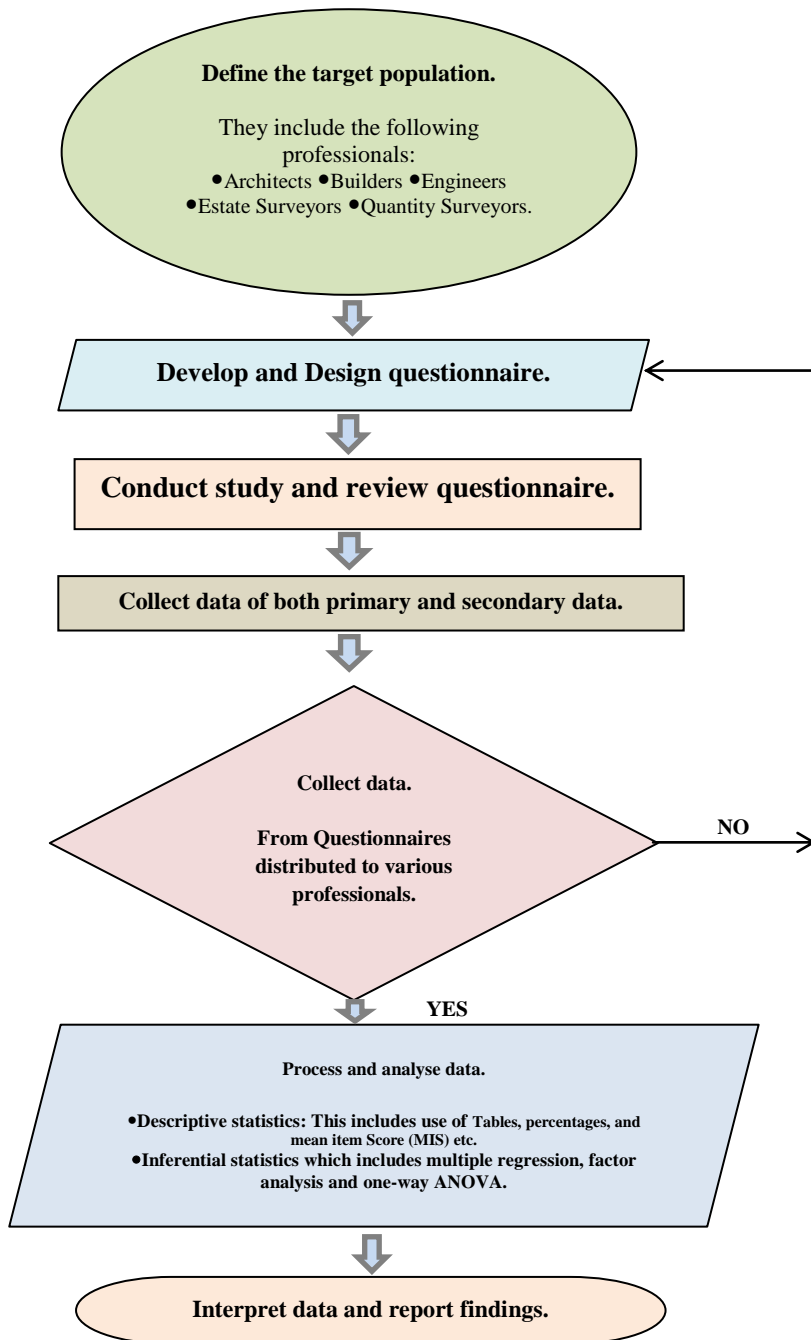


Figure 3.1 Flowchart of the Research Design

The figure 3.1 above shows step by step of the methodology of the research. It starts by identifying the target population, development and design of questionnaires, conducting

and review of questionnaires, collection of data, processing and analysis of same and finally interpretations of the result.

3.2 Population of the Study

The firms of professionals involved in private real estate projects implementation which includes Architects, Builders, Engineers (civil), Estate Surveyors and Quantity Surveyors who are directly involved in private real estate project implementation are the major focus of this work and are target the population. The websites of the various professionals like Nigerian Institution of Estate Surveyors and Valuers (NIESV) and Nigerian Institute of Quantity Surveyors (NIQS) were major sources of information on the population of firms for that of Estate Surveyors and Quantity Surveyors. That of Architects was based on Architects Registration Council of Nigeria (ARCON) register of Architectural firms entitled to practice in the Federal Republic of Nigeria 2017 edition available on their website. For Builders, branch chairmen of the states under study were contacted who gave an estimate/idea of number of firms professional in their states. That of Engineers (Civil), the number of members licenced to practice for the year 2019 on Council for regulation of Engineering (COREN) website was the source.

3.3 Sample Frame

A sample frame is the list of sampling units or non-theoretical population from which samples are drawn. It is a population the researcher can use in determining sample size. The sample frame of this study includes the firms of professionals who are involved in real estate projects implementation, these were extracted from; ARCON register of Architectural firms entitled to practise in the Federal Republic of Nigeria 2017 edition, reliable information from branch chairmen of the Nigerian Institute of Builders and Nigeria directory (list of building construction companies/renovations), COREN website – members licenced to practice 2019, for that of Civil Engineers in the states under study

and NIESV firms directory, was the source of Estate Surveyors and Valuers. The respective sources indicated a total 419 practicing firms.

Table 3.1 Table showing the population sample

Professionals in Real estate project industry.	Number of firms.				
	Anambra	Enugu	Imo	Abia	Ebonyi
Architects.	8	61	16	5	2
Builders.	27	21	16	24	5
Engineers (Civil).	30	50	20	17	5
Estate Surveyors and Valuers.	14	41	13	14	-
Quantity Surveyors.	4	17	9	-	-
Total	419				

Sources: ARCON website - register of architectural firms entitled to practice, States branch Chairmen, Nigeria directory, COREN website - members licenced to practice 2019, NIESV website - online firm directory 2019 and NIQS website - practicing firms and companies' directory 2017.

3.4 Sampling Technique

Total population sampling was used in this study. Total population sampling is a type of sampling technique which involves the examination of the entire population (i.e., the total population) that have a particular set of characteristics (e.g., experience, knowledge, skills, exposure to specific work or project, etc.). It is a type of purposive sampling technique one chooses to examine the entire population i.e., the total population that have a particular set of characteristics.

In sampling, units are the things that make up the population. Units can be people, cases (e.g., organizations, institutions, countries, professional practitioners etc.), pieces of data, and so forth. When using total population sampling, it is most likely that these units will be people. In case of this study it comprises of peoples, (professionals who are into private real estate projects implementation).

In any piece of research, units usually have certain characteristics that can help in defining them. For example, if the units of interest are people, they can be defined by certain attributes/traits e.g., occupation, (specifically the population here are all professionals involved in private real estate projects implementation, etc.), experiences (e.g., could be the years of experience in real estate industry as well as practice, etc.). Here samples may be defined by a small/large number of characteristics.

In the case of total population sampling, the units of interest tend to have some characteristics that are not very common in which case the major interest here is development of private real estate projects and more importantly focusing on factors affecting its implementation success. So this study focused more in studying factors that affect private real estate projects implementation success whose professionals involved can attest to the fact, that there are certain factors that actually affect the private real estate implementation success.

Total population sampling was adopted in this study hence, the professionals that formed the population of the study are not evenly distributed amongst states under the study and they vary in number and relatively considering their size. The reasons also behind choosing this is sampling method is that they share a particular practical experience (Characteristics) and this is in line with the principles or conditions for adopting total population sampling.

Due to the relatively small population and the uncommon characteristics of populations that make up a total population sample, it makes more sense to adopt the entire population for sound study and for more accurate results.

This method affords researcher the opportunity to get deep insights into the phenomenon which one is interested in. Having wide coverage of the population of interest, helps to

reduced risk of missing potential insights from members that are not included and the use of total population sampling make it possible to make analytical generalizations about the population being studied.

3.5 Questionnaire Design

This research featured a close ended question in addition to matrix which is also a form of close ended questionnaire. Here question were arranged to form a table with identical response options placed on top. Options were given to respondents to choose from. For each of research question, respondents were required to tick the box provided against a particular question. Also respondents were also required to tick a box based on 5 point likert scale and other provided options as the case maybe.

3.6 Data Sources

Data sources were from Architects, Builders, Engineers(Civil), Estate Surveyors and Valuers and Quantity Surveyors professionals' firms; they formed the source of primary data. The primary data served as the first hand information that were obtained from field, questionnaire distribution, as well featuring interviews while secondary materials were that of already published information such as journals, textbooks etc., which further applied to the research. These secondary materials were specifically for review of related literature and empirical studies were very useful in identification of gaps.

3.7 Instrument for Data Collection

This research involved both primary and secondary data. Validated structured questionnaires and interviews were used to gather primary data from respondents. Survey was conducted using copies of the questionnaire, administering it on the principal consultants of firms involved in private real estate project implementation which includes

the Architects, Builders, Engineers (Civil), Estate Surveyors and Valuers and Quantity Surveyors. This was done in the five states under study.

3.8 Validity Testing

According to Umeh, (2018), Researchers require academic and industry experts to edit their questionnaires before a survey can be carried out. Part of the effort made by the researcher to ensure validity is by first having the proposed questionnaire in the appendix of this work at proposal level, examiners had to make inputs on the proposed questionnaires which led to some adjustments and some doubts were also cleared especially as it relates to specific areas of the questionnaires that requires further clarity. Also the supervisors of this work read through the proposed questionnaire and made necessary adjustments and subsequently the questionnaire was also subjected for scrutiny by a statistician, adjustments inputs were also made before the distribution of same to the relevant professionals firms.

3.9 Reliability Testing

Reliability is a measure of internal consistency and confidence reposed on the result obtained by administering an instrument repeatedly, (Umeh, 2018). It can also mean how well a test measures what it should. The reliability test of the questionnaire was done using Cronbach's Alpha. Cronbach's Alpha, α (or coefficient alpha), developed by Lee Cronbach in 1951, measures reliability or internal consistency. Cronbach's Alpha tests to see if multiple-question likert scale surveys are reliable, it will tell one if the test designed is accurately measuring the variable of interest. The rule of thumb for results is as follows:

$\alpha \geq 0.9$ = Excellent, $0.9 > \alpha \geq 0.8$ = Good, $0.8 > \alpha \geq 0.7$ = Acceptable, $0.7 > \alpha \geq 0.6$ = Questionable, $0.6 > \alpha \geq 0.5$ = Poor and $0.5 > \alpha$ = Unacceptable.

The result of the reliability test is shown in table 3.2 below:

Table 3.2 Reliability Test

Cronbach Alpha	No of Items
.916	85

Computation: SPSS ver.21

The result revealed that the instrument was reliable, hence the alpha coefficient for the 85 items is .916 which suggests that the items have high internal consistency been that a reliability coefficient of .70 or higher is considered acceptable.

3.10 Method of Data Analysis

According to Umeh, (2018), researchers are expected to plan how raw data (or past processed data) obtained from field should be analysed to come up with the sought answers (information) in their studies. Method of data analysis is plan of statistical (or analytical) tools a researcher were used in analysing the primary and secondary data in order to achieve each of the objective stated in that study.

In this study, descriptive and inferential statistical tests were employed. Descriptive statistical tools includes the tools for presentations such as tables, charts, graphs and the tools for analysing data such as measures of central tendencies, dispersion, skewness, kurtosis, mean item score (MIS) etc., however the tools used in work included tables, simple percentages and mean item scores. Inferential on the other hand draw conclusion that extend beyond immediate data, they have ability to testhypothesis, they include Chi-square, Student test, man-whitney, krus-wallis test, ANOVA, etc.The inferential tools used for analysis in work include, multiple regression analysis, factors analysis and one-way ANOVA.

For research questions 1 and 2,likert scale was used and Mean item score (MIS)were used in the analysis using for ranking the impact of the identified factors. Specifically in

research questions 1 and 2 and part of 4 and 5, 5 points likert scale were used to determine respondents' agreement with the identified affecting private real estate projects implementation success which ranges from strongly disagree to strongly agree and was presented in tabular form as well as the extent the variables that makes up each individual identified factors affect private real estate projects implementation success, this was done using a likert scale of range from 1 to 5 with options like, none, a little, a moderate amount, a lot, and a great deal.

Mean item Score (MIS) is the weighted averages of responses to a question for each of the variables considered in any study, here researcher have assigned number scales to serve as weight to different response options, (Umeh, 2018). Here 5 point likert scale question is used as detailed in the formula below;

$$MIS = \frac{5m_1+4m_2+3m_3+2m_4+m_5}{m_1+m_2+m_3+m_4+m_5} \dots\dots\dots(3.2)$$

Or

$$MIS = \frac{5m_1+4m_2+3m_3+2m_4+m_5}{N} \dots\dots\dots(3.3)$$

Where **N** represents the number of sampling units that responded and **m_i** represents number of times an option was selected or marked by respondents.

For research question 3 table and simple percentage were used to analyse the data, for research question 4, a combination of table and simple percentage and likert scale such as always, very often, sometimes, rarely and never were used to analyse the question and for research question 5 likert scale was used to analyse the question as well tables and simple percentages.

For the test of two hypotheses proposed, the statistical package for the social sciences (SPSS version 21) was used for the analysis, it is a software package used in

statistical analysis of data. It was developed by SPSS incorporated and acquired by IBM in 2009.

Factor analysis is a statistical method that is very useful in describing the variability among observed and correlated variables of a potentially lower number of unobserved variables known as factors (Abbas and Alqaraghuli, 2019). For instance, it is possible that variations say in seven observed variables mainly reflect the variations in two unobserved (underlying) variables. Hence it searches for such joint variations in response to unobserved latent variables. Observed variables in factors analysis are often modelled as linear combinations of the potential factors, including "error" terms. Factor analysis aims at finding independent latent variables. The theory behind it is that the information gained about the interdependencies between observed variables can be much later reduced to the set of variables in a dataset. Factor analysis is designed to identify certain unobservable factors from the observed variable. In its analysis, researchers make assumption that an underlying causal model exists. Factor analysis has been successfully applied where adequate understanding of the system permits good initial model formulations. It may help to deal with data sets where there are large numbers of observed variables that are thought to reflect a smaller number of underlying/latent variables. It is one of the most commonly used inter-dependency techniques and is used when the relevant set of variables shows a systematic inter-dependence and the objective is to find out the latent factors that create a commonality. The factor analysis was done using AMOS (Analysis of moment structures) statistical software which stands for analysis of a moment structures. AMOS is an added SPSS module, and can be used for path analysis, structural equation modelling and confirmatory factor analysis. It is known also as analysis of covariance or causal modelling software. AMOS is a visual program for structural

equation modelling (SEM). AMOS enables one to draw models graphically using simple drawing tools. It quickly performs the computations for SEM and displays the results.

For Hypothesis one (1), **multiple regression analysis** was used, multiple regression generally explains the relationship between multiple independent or predictor variables and one dependent or criterion variable. A dependent variable is modelled as a function of several independent variables with corresponding coefficients, along with the constant term. Multiple regressions require two or more predictor variables, and this is why it is called multiple regressions.

The multiple regression equation explained above takes the following form:

$$y = b_1x_1 + b_2x_2 + \dots + b_nx_n + c. \quad \dots\dots\dots(3.4)$$

Here, b_i 's ($i=1,2,\dots,n$) are the regression coefficients, which represent the value at which the criterion variable changes when the predictor variable changes.

Multiple regressions in SPSS are done by selecting "analyze" from the menu. Then, from analyse, select "regression," and from regression select "linear."

Assumptions:

- There should be proper specification of the model in multiple regressions. This means that only relevant variables must be included in the model and the model should be reliable.
- Linearity must be assumed; the model should be linear in nature.
- Normality must be assumed in multiple regressions. This means that in multiple regressions, variables must have normal distribution.
- Homoscedasticity must be assumed; the variance is constant across all levels of the predicted variable.

Terminologies:

The beta value is used in measuring how effectively the predictor variable influences the criterion variable, it is measured in terms of standard deviation.

R is the measure of association between the observed value and the predicted value of the criterion variable. R Square, or R^2 , is the square of the measure of association which indicates the percent of overlap between the predictor variables and the criterion variable. Adjusted R^2 is an estimate of the R^2 if you used this model with a new data set.

For hypothesis two (2), One-Way ANOVA (analysis of variance) was used. This tool compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. One-Way ANOVA is a parametric test and inferential type of statistics. It is also known as One-Factor ANOVA, One-Way analysis of Variance or between subjects ANOVA. The variables used in this test are known as the dependent variable and independent variable (also known as the grouping variable, or *factor*). This variable divides cases into two or more mutually exclusive *levels*, or groups. The One-Way ANOVA is often used to analyze data from Field studies, Experiments and Quasi-experiments. One-Way ANOVA is commonly used to test the Statistical differences among the means of two or more groups, the means of two or more interventions and the means of two or more change score. Data requirements for one way ANOVA includes, Dependent variable that is continuous (i.e., interval or ratio level), Independent variable that is categorical (i.e., two or more groups), Random sample of data from the population, Normal distribution (approximately) of the dependent variable for each group (i.e., for each level of the factor), Homogeneity of variances (i.e., variances approximately equal across groups) etc.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter discussed data presented and analysed which includes the use of tables, simple percentages and mean item scores for ranking or and factor analysis. The hypotheses were tested using statistical package for social science (SPSS) version 21 while factor analysis was done using AMOS (Analysis of moment structures). The analysis was presented section by section and proposed hypotheses tested were discussed accordingly.

4.1 Analysis of distributed questionnaires

This section specifically captured distribution of questionnaires, its retrieval, as well as the percentage of the questionnaires returned/retrieved from respondents. It also covers professional membership status, various professionals (respondents) and number of years of practice. Further details can be seen in tables; 4.1, 4.2, 4.3 and 4.4. These tables were also followed by further explanations.

Table 4.1 Details of questionnaires distributed and returned

S/N	Professional Firms	Total numbers of the questionnaires distributed to firms state by state and numbers retrieved.									
		Anambra		Enugu		Imo		Abia		Ebonyi	
		Distributed	Retrieved	Distributed	Retrieved	Distributed	Retrieved	Distributed	Retrieved	Distributed	Retrieved
1	Architecture	8	6	61	46	16	12	5	3	2	1
2	Building	27	21	21	15	16	12	24	18	5	2
3	Engineering	30	21	50	37	20	15	17	13	5	3
4	Estate Surveyors and Valuers	14	11	41	32	13	9	14	11	-	-
5	Quantity Surveyors	4	3	17	13	9	7	-	-	-	-
		83	62	190	143	74	55	60	45	12	6
Total number of questionnaires distributed.							419				
Total number of questionnaires retrieved.							311				
Success rate in percentage.							74.22%				

A total number of 419 questionnaires was distributed across the 5 (five) professional firms identified and in the five (5) states in South East Nigeria which comprises of Anambra, Enugu, Imo, Abia and Ebonyi, a total number of 311 were retrieved representing 74.22%. The breakdown of the distribution and retrieval according to each profession (course studied) is as detailed in the table 4.1 above.

Table 4.2 Data Presentation on professional membership status

S/N	Professional membership status	No of respondents	Percentage (%)
1	Probationer	16	5
2	Associate	180	58
3	Corporate	87	28
4	Fellow	28	9
	Total	311	100

The table 4.2 captures presentation on the professional membership status of the professional involved in private real estate project implementation success in the study area. It showed data presentation on the professional membership status by respondents, a total of 16 respondents representing 5% are probationers, a total of 180 respondents representing 58% are Associate members, a total of 87 respondents representing 28% are corporate members and a total of 28 respondents representing 9% are Fellows of their respective institutes/institution.

Table 4.3 Data presentation on various professionals (respondents)

S/N	Professionals	States					Total	N (311)	%
		Abia	Anambra	Ebonyi	Enugu	Imo			
1	Architects	3	6	2	46	22	68	311	21.86
2	Builders	18	21	2	15	12	68	311	21.86
3	Engineers	13	21	3	37	15	89	311	28.62
4	Estate Surveyors	11	11	-	32	9	63	311	20.26
5	Quantity Surveyors	-	3	-	13	7	23	311	7.40
		45	62	6	74	55	311	-	100

The table 4.3 captures the response in terms of questionnaire distributed to firms of the professionals who were involved in private real estate project implementation success and in with respect to each state to which the studies were carried out. It shows data presentation on the professional (respondents) who were part of the research; they formed the formed population sample for this study. It could be observed that out of the total population sample of 311 respondents, Architects constitutes 68 representing 21.86% of the study population and this is for the entire 5 South-East states. Also, 68 Builders representing 21.86%, 89 Engineers representing 28.62%, 63 Estate Surveyors and Valuers representing 20.26% and 7 Quantity Surveyors representing 7.40% represented each of their discipline respectively. When the result from this table is compared with that of distribution in table 4.1, one would notice that there is appreciable positive number of response from respective firms in relation to questionnaire distributed. This is considered is fair enough for the research and analysis of same.

Table 4.4 Data Presentation on the number of years of practice

S/N	Number of years	No of respondents	Percentage (%)
1	0-5	90	29
2	6-10	128	41
3	11-15	59	19
4	16 and above	34	11
	Total	311	100

This represents the number of the years of practice for respondents which were involved in private real estate project implementation success in the study area as well as range of the years of practices for respondents in relation to their respective professions. It shows data presentation on the number of years of practices by respondents, a total of 90 respondents representing 29% indicated that they have been in practice between 0-5, 128 respondents representing 41% indicated that they have been in practice between 6-10 years, 59 respondents representing 19% indicated that they have been in practice between 11-15 years while a total of 34 respondents representing 11% indicated that the years of their practicing for 16 years and above.

4.2 Data presentation on factors that affect private real estate projects implementation success.

This section captured data on factors that affect private real estate project implementation success which is in line with objective 1. It discussed the data and as well ranks of the identified factors, the data presented as a detailed in table 4.5.

Table 4.5 The factors that affect private real estate project implementation success.

S/N	The factors that affects private real estate project implementation success	N	SD	D	N	A	SA	SUM	MEAN	RANK
			1	2	3	4	5			
1	Project management actions.	311	8	11	22	177	93	1265	4.08	1 st
2	Human-related factors.	311	10	21	53	93	134	1253	4.02	2 nd
3	Project-related factors.	311	10	30	53	165	53	1154	3.71	3 rd
4	Project participants-related factors.	311	9	31	75	134	62	1142	3.67	4 th
5	Project procedures.	311	13	59	84	62	93	1096	3.52	5 th
6	Environmental related issues/constraint.	311	23	62	38	125	63	1072	3.44	6 th
7	Human resources management practices and related factor.	311	58	21	32	139	61	1057	3.40	7 th

This table captures the factors that affect private real estate project implementation success in the study area as it relates to research objective 1, it shows the options using 5 points likert scale which were used to get response from the respondents on the identified factors as well as the sum, mean and rank. The analysis in table 4.5 above shows the factors that affects private real estate projects implementation success in the study area. Out of the seven identified factors, project management action was ranked the highest (first) with a mean score of 4.08 followed by human related factors with a mean score of 4.02. Others factors identified were; project-related factors, project participants-related factors, project procedures, environmental related issues/constraint and human resources management practices and related factor with means

scores of 3.71, 3.67, 3.52, 3.44 and 3.40. They were ranked third, fourth, fifth, sixth and seventh respectively. This finding of this result is in line with the objectives 1 and 2 as well as research questions 1 and 2. The implication of the finding is that the identified factors affects private real estate project implementation success and are critical to the success of the private real estate project success in the South-East Nigeria.

4.3 Factor analysis on the factors that affects private real estate projects implementation success.

This section focused on factor analysis (confirmatory analysis), the idea is to reduce the number of variables and focus on more critical factors. The details are as shown in table 4.6 and which was followed by further explanations.

Table 4.6 Confirmatory Factor Analysis: Standardized Regression Weights

Factors		Items descriptions	Estimate
Human related1	<---	Nature of clients' means of funding.	.895
Human related2	<---	Clients' emphasis on high quality of construction at low construction cost.	.923
Human related3	<---	Level of clients' experience.	.921
Human related4	<---	Size of the clients' organization.	.944
Human related5	<---	Clients' emphasis on quick construction and ability to brief.	.940
Human related6	<---	Clients' decision making ability and definition of roles.	.929
Human related7	<---	Clients' contribution to design and construction.	.949
Human related8	<---	Management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing.	.942
Human related9	<---	Project team leaders experience and commitment to meet success criterion.	.891
Human related10	<---	Project team leaders' early and continued involvement in the project.	.955
Human related11	<---	Project team leaders' working relationship with others.	.915
Human related12	<---	Project team leaders' technical skill and adaptability to changes in the plan.	.855
Human related13	<---	Harassment of developers by the locals.	.940
Project related 1	<---	Type of real estate project.	.976
Project related 2	<---	Nature of such project.	.840
Project related 3	<---	Number of floors of the project.	.947
Project related 4	<---	Complexity of project.	.968
Project related 5	<---	Variation of project plan and size of project.	.826
Project related 6	<---	Project financing.	.859
Project procedure 1	<---	Non adherence to procurement principle and procedures.	.988
Project procedure 2	<---	Wrong and inability to strictly adhere to tendering rules and procedures.	.869
Project procedure 3	<---	Absence of feasibility and viability appraisal of proposed project.	.960
procedure.4	<---	Non engagement of the right professional at the appropriate stage.	.817
Project procedure 5	<---	Poor/non adherence to structural details of the proposed projects.	.948
Project management action1	<---	Wrong application of good communication channels.	.940

Project management action 2	<---	Faulty/wrong feedback mechanism.	.949
Project management action 3	<---	Wrong application of control mechanisms.	.958
Project management action 4	<---	Ineffective/wrong coordination process.	.878
Project management action 5	<---	Effort devoted to planning.	.917
Project management action 6	<---	Absence of or poor safety and quality assurance program.	.948
Project management action 7	<---	Organization structure.	.941
Project management action 8	<---	Control of subcontractors' works.	.949
Project management action 9	<---	The overall managerial actions.	.939
Project management action 10	<---	Inefficient development control.	.946
Environmental related 1	<---	Economic environment and issue relation to economy in relation prices of building materials.	.897
Environmental related 2	<---	Social environment and matters relating to culture and tradition.	.962
Environmental related 3	<---	Political environment.	.888
Environmental related 4	<---	Physical environment and matters relating to geography and weather conditions.	.958
Environmental related 5	<---	Level of technological advancement.	.975
Environmental related 6	<---	Economic environment and issue relation to economy in relation prices of building materials.	.960
Project participants 1	<---	The type of client and his experience and construction sophistication.	.959
Project participants 2	<---	Knowledge of construction project organization.	.966
Project participants 3	<---	Client confidence in the construction team.	.898
Project participants 4	<---	Well-defined scope.	.913
Project participants 5	<---	Owner's risk aversion.	.973

Project participants 6	<---	Design team experience.	.926
Project participants 7	<---	Project design complexity.	.958
Project participants 8	<---	Mistakes/delays in producing design documents.	.975
Project participants 9	<---	The level of contractor's experience.	.925
Project participants 10	<---	Site management.	.965
Project participants 11	<---	Contractor's cash flow.	.963
Project participants 12	<---	Effectiveness of cost control system.	.971
Project participants 13	<---	Speed of information flow.	.944
Project participants 14	<---	The skills and characteristics of project managers.	.960
Project participants 15	<---	The commitment, competence, and experience of the participants.	.966
Project participants 16	<---	Team effort by all parties to a contract.	.962
HR.1	<---	Wrong recruitment and selection practice.	.829
HR.2	<---	Absence/poor supervision/inspections of workers involved in projects implementation.	.958
HR.3	<---	Faulty or wrong way of appointment of contractors.	.944
HR.4	<---	Faulty ways of handling procurement of materials.	.918
HR.5	<---	Absence of motivation for actors involved in implementation.	.808
HR.6	<---	Poor appraisal system and absence of compensation packages for deserving participants.	.953
HR.7	<---	Faulty knowledge management system.	.950
HR.8	<---	Poor employment relation and communication Practices.	.974
HR.9	<---	Faulty talent management and retention strategies.	.964
HR.10	<---	Poor organization, design and development.	.904
HR.11	<---	Absence of job satisfaction and security.	.952
HR.12	<---	Absence/poor training, development and performance management/evaluation.	.950
HR.13	<---	Poor or absence of human resource development programme.	.974
HR.14	<---	Faulty or absence of reward management.	.952
HR.15	<---	Absence of health, safety and welfare programmes.	.953
HR.16	<---	Faulty employment practices.	.933

This explains the factor analysis (confirmatory analysis) – showing the variability among observed and correlated variables of a potentially lower number of unobserved variables known

as factors, i.e. the factors that are critical to success of private real estate project implementation. The idea behind factors analysis is to reduce the number of factors (variables) and concentrate on critical success factors. The factor analysis was done using AMOS – Analysis of moment structures. In this study, 7 independent variables were examined using the Confirmatory Factor Analysis tool, to determine the validity of the various constructs that measured each factor. To do this, we examined the parameter estimate (factor loadings) for each construct to determine their fit into the model. Generally, parameter estimates should be equal to or greater than 0.707 for good convergent validity (Gefen, Straub and Boudreau, 2000). However those below 0.707 cannot be said to be good convergent validity hence are not critical factors. The confirmatory factor analysis shows that the factor loadings for all the items in the seven factors loaded, yielded significant results. In other words, all the items yielded results greater than 0.707, which implies that the factors have good fit for the factors examined, in other words are critical factors.

4.4 The impact of the identified factors affects private real estate projects implementation success.

In this section, the impacts of the critical success factors were examined. The tables 4.7, 4.8, 4.9, 4.10, 4.11, 4.12 and 4.13 shows the details of each identified critical success factors and their impact on private real estate project implementation. Each factor is discussed individually as indicated in their respective tables and the extent to which the identified critical success affect private real estate project were also discussed.

Project procedures: One of the critical success factors that affect private real project implementation is the project procedure factors. The detail of the variables that makes up this factor including its impact is as shown in the table 4.7.

Table 4.7 The impact of project procedures factors

S/N	Project procedure factors	N	1	2	3	4	5	Sum	Mean	Rank
1	Non engagement of the right professional at the appropriate stage.	311	0	0	63	41	207	1388	4.46	1 st
2	Poor/non adherence to structural details of the proposed projects.	311	0	0	31	165	115	1328	4.27	2 nd
3	Absence of feasibility and viability appraisal of proposed project.	311	0	22	11	163	115	1304	4.19	3 rd
4	Non adherence to procurement principle and procedures.	311	0	31	22	144	114	1274	4.10	4 th
5	Wrong and inability to strictly adhere to tendering rules and procedures.	311	10	22	51	197	31	1150	3.70	5 th

This table captures research objective 2 and it is specifically on the extent to which project procedures affect private real estate projects implementation success in the study area. The table 4.7 showed data presentation on the extent the variables under project procedure factors as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that non engagement of the right professional at the appropriate stage ranked the

highest or First with a mean score of 4.46 followed by Poor/non adherence to structural details of the proposed projects in that order. This means that non engagement of the right professional at the appropriate stage of project implementation affects private real estate projects implementation success to a great extent. Judging from the number of respondents, a total 207 respondents went for a great deal.

Project-related factors:Project-related factors is one of the critical success factors that has impact on private real estate project implementation, the table 4.8 shows the detail of the variables that makes up this factor including its impact.

Table 4.8 The impact of project-related factors

S/N	Project-related factors	N	1	2	3	4	5	Sum	Mean	Rank
1	Project financing.	311	0	21	10	62	218	1410	4.53	1 st
2	Variation of project plan and size of project.	311	0	0	83	187	41	1202	3.86	2 nd
3	Type of real estate project.	311	13	22	72	102	102	1191	3.83	3 rd
4	Nature of such project.	311	13	1	62	195	40	1181	3.80	4 th
5	Complexity of project.	311	40	22	73	62	114	1121	3.60	5 th
6	Number of floors of the project.	311	31	22	62	146	50	1095	3.52	6 th

This table captures research objective 2 and it is specifically on the extent to which project related factors affect private real estate projects implementation success in the study area. The table 4.8 showed data presentation on the extent the variables under project related factors affects private real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that Project financing ranked the highest (first) followed by variation of project plan and size of project in that order, this was also in line with studies by Nzekweet *al* (2015) which identified variation of project scope and design, insufficient capital (finance), as factors that affect project implementation success even though it did not apply the mean item score tool in determining its ranking. Also Fummey (2016) identified project design complexity which can be seen to be collaborated by this work even though it applied relative important index as a tool in its ranking as against the mean item score which was employed in this work based on the extent they affect implementation success. The above statistics especially that which shows 218 respondents went for project

financing thus; it implies that respondents were convinced that project financing affects private real estate projects implementation success to a great extent.

Project participants-related factor: project participants-related factor is one of the identified critical success factors that affect private real estate project implementation within the study area. The detail of the variables that makes up this factor including its impact is as shown in the table 4.9.

Table 4.9 The impact of project participants-related factors.

S/N	Project participants-related factors	N	1	2	3	4	5	Sum	Mean	Rank
1	Well-defined scope.	311	0	0	83	144	84	1245	4.00	1 st
2	The level of contractor's experience.	311	11	11	104	31	154	1239	3.98	2 nd
3	Owner's risk aversion.	311	0	31	71	104	105	1216	3.91	3 rd
4	Project design complexity.	311	0	31	93	71	116	1205	3.87	4 th
5	Mistakes/delays in producing design documents.	311	11	21	71	104	104	1201	3.86	5 th
6	Site management.	311	11	21	71	125	83	1181	3.80	6 th
7	Contractor's cash flow.	311	0	61	53	93	104	1173	3.77	7 th
8	The commitment, competence, and experience of the participants.	311	20	52	33	81	125	1172	3.76	8 th
9	The skills and characteristics of project managers.	311	21	9	83	116	82	1162	3.74	9 th
10	Knowledge of construction project organization.	311	11	40	52	125	83	1162	3.74	10 th
11	Client confidence in the construction team.	311	0	11	105	154	40	1153	3.71	10 th
12	Effectiveness of cost control system.	311	21	62	41	71	116	1132	3.64	11 th
13	Team effort by all parties to a contract.	311	48	17	51	104	91	1106	3.56	12 th
14	The type of client and his experience and construction sophistication.	311	31	21	105	61	93	1097	3.53	13 th
15	Design team experience.	311	0	61	92	105	53	1083	3.48	14 th

This table captures research objective 2 and it is specifically on the extent to which project participants-related factors affect private real estate projects implementation success in the study area. The table 4.9 showed data presentation on the extent the variables under project

participants-related factors affects private real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that well-defined scope the highest (first) followed by the level of contractor's experience which was ranked second, in that order. This was also in line with the study carried out by Fummey (2016) which also identified design team experience, project design complexity among others as critical factors under design team related factors. These factors were also ranked using relative important index, which showed how important these factors were. From analysis in the table 4.9 above the result implied that well-defined scope affect private real estate projects implementation success to great extent.

Human-related factor: Human-related factor has been identified as one of the critical success factors that affect private real estate project implementation within the study area. Further detail about its impact is as shown in the table 4.10.

Table 4.10 The impact of human-related factors.

S/N	Human-related factors	N	1	2	3	4	5	Sum	Mean	Rank
1	Nature of clients' means of funding.	311	0	0	21	134	156	1379	4.43	1 st
2	Project team leaders experience and commitment to meet success criterion.	311	18	11	23	103	156	1301	4.18	2 nd
3	Clients' emphasis on high quality of construction at low construction cost.	311	7	9	54	116	125	1276	4.10	3 rd
4	Project team leaders' working relationship with others.	311	21	11	31	125	123	1251	4.02	4 th
5	Level of clients' experience.	311	10	8	61	139	93	1230	3.95	5 th
6	Project team leaders' technical skill and adaptability to changes in the plan.	311	9	2	53	190	57	1217	3.91	6 th
7	Clients' emphasis on quick construction and ability to brief.	311	2	23	115	93	78	1155	3.71	7 th
8	Management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing.	311	53	23	23	93	119	1135	3.65	8 th
9	Project team leaders' early and continued involvement in the project.	311	11	58	59	126	57	1093	3.51	9 th
10	Harassment of developers by the locals.	311	0	87	92	91	41	1019	2.28	10 th
11	Clients' decision making ability and definition of roles.	311	3	83	119	53	53	1003	3.23	11 th
12	Size of the clients' organization.	311	25	113	26	94	53	970	3.12	12 th
13	Clients' contribution to design and construction.	311	44	95	84	83	5	843	2.72	13 th

This table is in line with the research objective 2 and it is specifically on the extent human-related factors affect private real estate projects implementation success in the study area. The

table 4.10 showed data presentation on the extent the variables under human-related factors affects private real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that nature of clients' means of funding was the highest (first) based on the ranking and was followed by project team leaders experience and commitment to meet success criterion which was ranked second, respectively in that in that order. This means that nature of clients' means of funding affects private real estate projects implementation success to a great extent. This can be confirmed from the number of respondents, a total 156 respondents went for a great deal.

Human resources management practices: This is one of the critical success factors that affect private real estate project implementation within the study area. Further detail about its impact and its extent is as shown in the table 4.11.

Table 4.11 The impact of human resources management practices

S/N	Human resources management practices and related factor	N	1	2	3	4	5	Sum	Mean	Rank
1	Wrong recruitment and selection practice.	311	0	0	11	83	5	1450	4.66	1 st
2	Absence/poor supervision/inspections of workers involved in projects implementation.	311	0	0	31	135	145	1358	4.37	2 nd
3	Poor organization, design and development.	311	0	11	31	134	135	1326	4.26	3 rd
4	Faulty or wrong way of appointment of contractors.	311	0	41	62	145	63	1163	3.80	4 th
5	Absence of health, safety and welfare programmes.	311	0	35	83	123	70	1161	3.73	5 th
5	Faulty employment practices.	311	0	62	34	150	65	1151	3.70	6 th
6	Absence/poor training, development and performance management/evaluation.	311	0	31	113	114	53	1122	3.61	7 th
7	Faulty ways of handling procurement of materials.	311	41	20	33	156	61	1109	3.57	8 th
8	Poor appraisal system and absence of compensation packages for deserving participants.	311	10	23	123	94	61	1106	3.55	9 th
9	Absence of motivation for actors involved in implementation.	311	20	31	106	123	41	1077	3.46	10 th
10	Absence of job satisfaction and security.	311	11	33	125	85	57	1077	3.46	10 th
11	Poor or absence of human resource development programme.	311	33	43	65	107	63	1057	3.40	11 th
12	Faulty or absence of reward management.	311	4	73	82	117	35	1039	3.34	12 th
13	Poor employment relation and communication Practices.	311	21	73	81	63	73	1027	3.30	13 th
14	Faulty talent management and retention strategies.	311	10	73	93	93	42	1017	3.27	14 th
15	Faulty knowledge management system.	311	11	105	61	62	72	1012	3.25	15 th

This table is in line with the research objective 2 and it deals on the extent human resources management practices and related factor affect private real estate projects implementation success in the study area. The table 4.11 above showed data presentation on the extent the variables under human- resources management practices and related factor affects real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that wrong recruitment and selection practice was the highest (first) based on the ranking and was followed by absence/poor supervision/inspections of workers involved in projects implementation second, respectively in that in that order. This study however supports the work by Ifediora and Keke (2019), which also identified hiring/staff recruitment as top ranked in the ranking according to relative importance index even though this study used MIS to determine the ranking. Also this work collaborated that by Ogunde, *et al* (2017), especially as it identified external factors under which treatment of workforce, motivation and job security were amongst the top ranked in the order of importance. The analysis showed that wrong recruitment, selection practice, and absence/poor supervision/inspections of workers involved in private real estate projects implementation to a great extent affects projects implementation success even as they are ranked among the highest.

Project management action: A project management action is one of the critical success factors that affect private real estate project implementation within the study area. Further detail about its impact and extent to which it affects private real estate project implementation success as well as variables that makes up same is as shown in the table 4.12.

Table 4.12 The impact of project management actions.

S/N	Project management actions	N	1	2	3	4	5	Sum	Mean	Rank
1	Ineffective/wrong coordination process.	311	11	0	42	176	82	1251	4.02	1 st
2	The overall managerial actions.	311	0	21	62	123	105	1245	4.00	2 nd
3	Wrong application of good communication channels.	311	0	11	93	114	93	1222	3.92	3 rd
4	Wrong application of control mechanisms.	311	0	32	82	124	73	1171	3.77	4 th
5	Organization structure.	311	11	21	61	156	62	1170	3.76	5 th
6	Inefficient development control.	311	11	21	124	82	73	1118	3.59	6 th
7	Absence of or poor safety and quality assurance program.	311	0	82	53	103	73	1100	3.54	7 th
8	Control of subcontractors' works.	311	21	21	123	93	53	1069	3.44	8 th
9	Faulty/wrong feedback mechanism.	311	0	74	82	103	52	1066	3.42	9 th
10	Effort devoted to planning.	311	82	11	42	145	31	965	3.10	10 th

This table is in line with the research objective 2 and it deals on the extent project management actions affect private real estate projects implementation success in the study area. The table 4.12 showed data presentation on the extent the variables under project management actions affects real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was discovered that ineffective/wrong coordination process was the highest (first) based on the ranking and was followed by the overall managerial actions, which was ranked second, respectively in that in that

order. This means that ineffective/wrong coordination process affects private real estate projects implementation success to a great extent as this can be confirmed from the number of respondents, a total 82 respondents went for a great deal and 176 respondents went for a lot in the table 4.12 presented above.

Environmental related issues/constraints: This can be seen as things around us. It is one of the critical success factors that affect private real estate project implementation within the study area. Further detail about its impact and extent to which it affects private real estate project implementation success as well as variables that makes up same is as shown in the table 4.13.

Table 4.13 The impact of environmental related issues/constraints

S/N	Environmental related issues/constraint	N	1	2	3	4	5	Sum	Mean	Rank
1	Economic environment and issue relation to economy in relation prices of building materials.	311	0	0	21	156	134	1357	4.36	1 st
2	Political environment.	311	11	32	21	104	143	1269	4.08	2 nd
3	Social environment and matters relating to culture and tradition.	311	0	93	83	93	42	1017	3.27	3 rd
4	Physical environment and matters relating to geography and weather conditions.	311	21	83	52	124	31	994	3.20	4 th
5	Level of technological advancement.	311	73	73	40	73	52	891	2.86	5 th
6	Issues regarding internal and external environments.	311	93	32	61	104	21	861	2.77	6 th

The table 4.13 above showed data presentation on the extent the variables under environmental related issues/constraint affects real estate projects implementation success as well as the ranking, while the likert points 1 to 5 represent the scales i.e. N – None, AL – A Little, AMA – A moderate amount, ALT - a lot and AGD – A great deal. From the findings it was economic environment and issue relation to economy in relation prices of building materials was the highest (first) based on the ranking and was followed by political environment which was ranked 2nd, respectively in that in that order. This work to some extent in line or similar to that by Fummey (2016) which also identified political environment/factor, economic and physical environment as critical success factors while political environment/factor was also ranked second in order of importance under business and work environment related factor using relating

important index. This table is in line with the research objective 2 and it deals on the extent environmental related issues/constraint affect private real estate projects implementation success in the study area.

4.5 Data presentation engagement of relevant professionals and extent in respect to private real estate projects implementation.

This section discussed the research objectives 3, the extent of engagement of relevant professionals in the implementation of private real estate project and as well the satisfaction rate. The tables 4.14 and 4.15 presents the data captured from the field and as well discussed them.

Table 4.14 Non-engagement of relevant professionals.

Options	No of respondents	Percentages (%)
Yes	303	97
No	8	3
Total	311	100

This table is in line with the research objective 3 and it is deals on the extent of engagement of the right professional on proposed private real estate projects in the study area. The analysis in table 4.14 above shows that 303 respondents representing 97% are of the view that non-engagement of the relevant professional in each state of real estate project implement has impact on its success. The implication is that good number of respondents i.e. majority of the respondents were of the opinion that non-engagement of relevant professionals in real estate projects implementation in each stage of real estate development affects its implementation success. The result here answers the proposed research question 3.

The satisfaction rate:In finding out the extent of engagement or non-engagement of the relevant professionals in private real estate project implementation success, it is important to also consider the impact of the non-engagement of same including the extent of satisfaction of same assuming the relevant professionals were engaged. Table 4.15 captures the extent of satisfaction.

Table 4.15 The extent of satisfaction

Options	No of respondents	Percentages (%)
Highly satisfactory	43	14
Satisfactory	51	16
Not Satisfactory	217	70
Total	311	100

The analysis in table 4.15 above indicated that 43 respondents representing 14% were highly satisfied on the level of engagement of the relevant professional, 51 respondents representing 16% are satisfied with the level of engagement of the relevant professionals and 217 respondents representing 70% of the respondents are not satisfied on the level of engagement of the relevant professionals. This still shows the extent of satisfaction by the relevant professional indicating that most professionals were no satisfied with the extent of engagement of the right professionals. The result here answered the proposed research question 3, hence confirming one of the identified gaps in chapter 2 of this dissertation - summary of the identified gaps numbers 4, which noted that most research has not been able to find out from the opinions of professionals involved the extent of engagement of the relevant professionals in the implementation of private real estate projects in the study area. This table is in line with the research objective 3 and it is deals on satisfied the professionals were on the engagement of the right professional on proposed private real estate projects in the study area.

4.6 Data presentation whether feasibility and viability studies/appraisals are carried out on proposed private real estate projects.

This section captured the research objectives 4;whether feasibility and viability studies/appraisals are carried out on proposed private real estate projects.It also looks at the how often these appraisals were carried out. The findings were presented in tables 4.16 and 4.17 and were further discussed.

Table 4.16 Determining whether feasibility and viability studies/appraisals are carried out on proposed private real estate projects

Options	No of respondents	Percentages (%)
Yes	301	97
No	10	3
Total	311	100

The analysis in table 4.16 above indicated 301 respondents representing 97% affirmed that failure to carry out feasibility and viability studies/appraisals on proposed real estate project has impact on its implementation success while 10 respondents representing 3% went for no option which implies that that failure to carry out feasibility and viability studies/appraisals on proposed real estate project has no impact on its implementation success.This result no doubt has been able to answer the research question 4 and by implication being able to fill one of the gaps identified; that most research conducted has not been able to find out from the view of the professionals involved in private real estate projects implementation if feasibility and viability studies are being carried out on proposed private real estate projects.This table is in line with the research objective 4 and it is deals on finding out if feasibility and viability appraisal were carried by professional Estate Surveyors and Valuer or if they have been invited to carryout same on proposed private real estate projects in the study area.

The frequency at which study is carried out:The frequency or how often private real estate developers go for in feasibility and viability studies/appraisals on proposed private is major aspect of the research objective and its important such is discussed hence, the findings were presented in the table 4.17 and was discussed.

Table 4.17 The frequency at which private real estate developers carry out feasibility and viability studies/appraisals.

Response/scales					Sum	Mean
Always	Very often	Sometimes	Rarely	Never		
1	2	3	4	5		
23 (7%)	55 (19%)	21 (6%)	161 (52%)	51 (16%)	1095	3.5

This table is in line with the research objective 4 and it is deals on frequency to which feasibility and viability appraisal were carried by professional Estate Surveyors and Valuer on proposed private real estate projects in the study area. The analysis in table 4.17 showed that majority of developers rarely go for feasibility and viability studies/appraisals on proposed real estate projects this is confirmed by the total number of respondents amounting to 161 and which represents 52% went for rarely and total number 51 respondents representing 16% went for never. This result of this finding has been able to further provide answer to the research question 4 which deals with finding out whether feasibility and viability studies were carried on proposed real estate projects as it deals specifically on the frequency at which same is carried out.

4.7 Data presentation on opinion of professionals as to who is more qualified to handle private real estate project implementation and the extent of consensus in their opinion.

This section discussed opinion/claim by relevant professionals on which professional is more qualified to implement private real estate project hence, it's imperative to find out if there is tussle amongst relevant professionals and reasons why there is such. Also it is necessary to find out the implication of the absence of consensus in their opinion. Tables 4.18, 4.19 and 4.20 presented tables on same and further discussed them.

Table 4.18 Opinion/Claim by professionals on which professionalis more qualified

Response/scales					Sum	Mean
Strongly Disagree	Disagree	Undecided	Agree	Strongly agree		
1	2	3	4	5		
23 (7%)	55 (18%)	64 (21%)	106 (34%)	63 (20%)	1064	3.42

This table is in line with the research objective 5 and it is deals on finding out the opinion of professionals on who is more qualified to handle proposed private real estate projects in the study area. The table 4.18 above showed that 106 respondents representing 34% of the respondents agreed and 63 respondents representing 20% strongly agreed that each professional(s) lays claim or claims to be the sole/right professional fit or in charge of implementation of real estate project. This result no doubt has been able to answer the research question 5 and by implication being able to fill one of the gaps identified; that most research conducted has not been able to find out from the view of the professionals involved in private real estate projects implementation if there are tussles or claim as to who is more qualified to handle implementation of proposed private real estate project implementation success in the study area.

Table 4.19 Reasons why there are tussles or lack of consensus

Reasons	No of respondents	Percentage (%)
Level of experience in the constructions industry.	61	20
Level of education and training.	91	29
Lack of adequate knowledge of sister professions role in the real estate industry.	159	51
Total	311	100

This table is based on the research objective 5 and it is deals on finding out the reasons why there are tussles or lack of consensus of opinion professionals on who is more qualified to handle proposed private real estate projects in the study area. The analysis on table 4.19above showed the reasons as to why there is lack of consensus in the opinion, 61 respondents representing 20% identified level of experience in the constructions industry, 91 respondents representing 29% says its level of education and training while 159 respondents representing 51% went for lack of adequate knowledge of sister professions role in the real estate industry. Others reasons as identified by respondents include: lack of general body controlling, supervising and overseeing all the professions within the industry and economic issues and struggle to earn better living. The implication of this presentations is that the reasons that were identified as responsible includes; level of experience in the constructions industry, level of education and training and lack of adequate knowledge of sister professions role in the real estate industry.

Table 4.20 The extent to which absence of consensus affects private real estate project implementation success

Response/scales					Sum	Mean
None	A little	A moderate amount	A lot	A great deal		
1	2	3	4	5		
21 (7%)	33 (10%)	42 (14%)	180 (58%)	35 (11%)	1108	3.6

This table is based on the research objective 5 and it is deals on the extent to which tussles or lack of consensus of opinion professionals on who is more qualified to handle proposed private real estate projects in the study area affect it implementation success. The analysis on table 4.20 above showed that 35 respondents representing 11% were of the view that absence of consensus in opinion of relevant professionals on factors affecting real estate projects implementation success affect that to a great deal, 180 respondents representing 58% say it does affect that a lot, while 42, 33, and 21 respondents representing 14%, 10% and 7% respectively went for a moderate amount, a little and none. This result no doubt further provided answer to the research question 5 and by implication being able to fill one of the gaps identified in summary number 6 of identified gaps in chapter 2 of this dissertation ; that most research conducted has not been able to find out from the view of the professionals involved in private real estate projects implementation if there are tussles or claim as to who is more qualified to handle implementation of proposed private real estate project in the study area.

4.8 Test of hypotheses using statistical package for social science (SPSS, 21)

H₀₁: The identified factors have no significant impact on private real estate projects implementation success in the South-East Nigeria.

This section discussed the proposed hypotheses of the research. This was used to provide an answer to a question or phenomenon, in this case an there was need to prove that identified critical success factors have no significant impact on private real estate projects implementation in the South-East Nigeria and that there exist no significant difference in the opinion of real estate professionals with regards to impact of the identified factors on private real estate projects implementation success in the South-East Nigeria. The tables 4.21, 4.22 and 4.23 further provided more detailed explanation on the hypotheses proposed.

Table 4.21 Summary of multiple regression analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.	R ²
1	Regression	394.068	7	56.295	88.511	.000 ^b	.672
	Residual	192.717	303	.636			
	Total	586.785	310				

a. Dependent Variable: Success of private real estate projects implementation.

b. Predictors: (Constant), human resources management practices and related factors, project-related factors, project management factors, environmental related issues/factors, project procedures, project participants related factors, human resource management practices and related factors.

The table 4.21 is a Summary of multiple regression analysis showing the impact of the selected factors that affects private real estate projects implementation.

Table 4.22 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.426	.329		25.607	.000
- Human-related factors	-1.245	.152	-.980	-8.182	.000
- Project-related factors	-.502	.058	-.353	-8.684	.000
- Project procedures	-.310	.115	-.275	-2.701	.007
- Project management factors	-.675	.155	-.422	-4.341	.000
- Environmental related issues	.856	.106	.762	8.071	.000
- Project participants related	-.263	.145	-.190	-1.808	.072
- Human resources management practices and related factors	.882	.119	.882	7.387	.000

a. Dependent Variable: Success of private real estate projects implementation.

The multiple regression statistics was run to test the impact of 7 selected independent variables on the success of private real estate projects implementation in the South East Nigeria. All the independent variables combined, have a statistically significant impact on the dependent variable (i.e. success of private real estate projects implementation), $F(7, 303) = 88.511, p = 0.000, R^2 = 0.672$. The relative impact of the independent variables on the dependent variable was also tested using the coefficient values. As contained in the coefficient table, with the exception item 6 (i.e. project participants related factors), all other factors have a statistically significant impact on the success of real estate projects implementation in the southeast Nigeria. Based on these tests, the stated hypothesis is rejected and it is concluded that the selected variables have a statistically significant impact on real estate projects implementation, with the exception of project participants' related factors.

This test of hypothesis further shows that identified factors which are critical to success of private real estate projects implementations success in South-East Nigeria which are human resources management practices and related factors, project-related factors, project management factors, environmental related issues/factors, project procedures and human resource management practices and related factors hence, it has been able to fill a gap in summary of the identified gaps numbers 1 and 2 in chapter 2 of this dissertation. It further shows that the

research has been able to narrow down or focus on private real estate projects implementation in South-East Nigeria and with emphasis on the perspectives or views of the professionals involved. Also, this work has been able to provide empirical evidence which further which further validates the research with the analysis of this hypothesis using multiple regression analysis.

H₀₂: There is no significant difference in the opinion of real estate professionals with regards to impact of the identified factors on private real estate projects implementation success in the South-East Nigeria.

Table 4.23 Summary of One-Way ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	42.062	5	8.412	6.117	.000
Within Groups	419.436	305	1.375		
Total	461.498	310			

This table is based on the proposed research hypothesis 2 and it deals on determining if there is difference in opinion of real estate professionals on the impact of identified private real estate projects implementation success in the study area. The Table 4.23 is Summary of One-Way ANOVA showing the difference in the opinion of real estate professionals on the impact of identified factors on private real estate projects implementation.

Contrary to the stated null hypothesis, the result of one-way ANOVA indicates that a statistical difference exists in the opinion of real estate professionals with regards to the impact of the identified factors on private real estate projects implementation success in the South-East Nigeria, ($F(5, 307) = 6.117, p = 0.000$). Hence, the decision rule is to reject the null hypothesis if the test statistics from the table is greater than the F critical value with k -1 numerator and N-K denominator degrees of freedom. This finding implies that there is significance difference in the opinion of real estate professionals on the notion that the identified factors affect private real

estate projects implementation in the South-East Nigeria, i.e. alternative hypothesis was accepted.

4.9 Contributions to Knowledge

The key Contributions to the body of knowledge in this study include;

- i. The study has provided deep and detailed understanding of the factors that affects private real estate projects implementation success in South East Nigeria, the factors identified are; project-related factors, project procedure factors, human-related factors, project participants-related, human resources management practices, project management actions and environmental related factors.
- ii. The work has shown the extent to which the identified factors affects private real estate projects implementation success in the study area.
- iii. The factors which were identified and their variables were confirmed to be critical factors even as factors analysis conducted suggested so.
- iv. The study has revealed that the most of the private real estate developers within the study area do not carry out feasibility and viability studies/appraisals on proposed private real estate projects.
- v. The study has exposed the key constraints to successful implementations of most private real estate projects within the study area.
- vi. The study has also shown that the identified factors affect private real estate projects implementation success in South East Nigeria.
- vii. The study has shown/indicated that a statistical difference exists in the opinion of real estate professionals with regards to the impact of the identified factors on private real estate projects implementation success in the study area.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This work which concentrated on the analysis of factors private affecting real estate projects implementation success in South East Nigeria: Professionals' perspectives, highlights the major findings as obtained from the analysis of the result are as follows:

- i. That amongst the identified factors which affects private real estate projects implementation success in South East, that project management action was ranked the highest (first) in terms of the extent its affects implementation success followed by human-related factors, project-related factor, project participants-related factors, project procedure, environmental related issues/constraint, human resources management practices and related factor.
- ii. The identified factors which affect private real estate projects implementation success in South East Nigeria were considered critical on implementation success as the factors analysis done for independent variables using confirmatory factor analysis tool indicated they are critical.
- iii. The confirmatory factor analysis done to determine the validity of the various constructs that measured each factor, the factor loadings for all the items in the seven factors loaded, yielded significant results implying that the factors have good fit for the factors examined and seen as critical factors.
- iv. Also, non-engagement of the right professional at the appropriate stage, project financing, well-defined scope, nature of clients' means of funding, wrong recruitment and selection practice, ineffective/wrong coordination process, economic environment and issue relating to economy in relation prices of

building materials were ranked highest (first) in each of the factors they fall under.

- v. Most of the respondents were not satisfied on the level of engagement of the relevant (right) professionals in implementation of private real estate projects and were of the view that non-engagement of the right professionals on same has impact on the project success.
- vi. Failure to carry out feasibility and viability studies/appraisals on proposed private real estate projects affects their implementation success.
- vii. There is tussle/claim on who is more qualified to handle implementation of private real estate projects in the study and reasons adduced were; lack of adequate knowledge of sister professions role in the real estate industry was also identified as one of the reasons as to existence or claim show of superiority on who is the right professional to be in charge of private real estate projects implementation.
- viii. On test proposed hypothesis one(1), the result indicates that the variables under study which are project management action, human-related factors, project related factor, project procedures, environmental related and human resources management practices have significant impact on private real estate project implementation success.
- ix. The hypothesis number two (2) showed that there is no consensus among the real estate professional on the notion that the identified factors affect private real estate projects implementation in the South-East Nigeria.

5.2 Conclusion

While real estate industry is that sector which houses majority of the manufacturing activities, failure to successfully implement most private real estate projects has become a

concern to the stakeholders especially the professionals in the built environment. Failed private real estate projects are typical fall out of unsuccessful projects implementation and they abound in South East Nigeria as noted earlier. The amount of finance devoted to the development of all private real estate projects is very huge hence actors (stakeholders) should try as much as possible to avoid wastages of human and material resources devoted to its implementation. There exist many factors which are critical and affects private real estate projects and this often result to either abandoned or collapse. More so, several factors which affect private real estate projects implementation success has been identified, which the findings suggest they are critical. Therefore, urgent steps must be taken in order to minimise their impact on implementation success. Actors in real estate industry particularly those involved at the implementation stage must work hard to ensure that private real estate projects are successfully implemented. Identified also in this research is the extent the identified factors affects implementation success, so it's important to state that stakeholders should as a matter of important take these factors seriously to avoid cases of failed private real estate projects which have continued to feature in the study area.

5.3 Recommendations

Based on the findings and conclusion, the following recommendations were made;

- i. Developers and relevant professionals involved in implementation of private real estate projects must work to ensure that they carefully take note of the identified factors while implementing private real estate project especially the high ranked and as well the critical factors.
- ii. Relevant and qualified professionals must be engaged in implementation of private real estate projects.

- iii. Valuers should try as much as possible through awareness and sensitisation inform clients and developers on the need to carry out feasibility and viability studies/appraisals on any proposed private real estate project and dangers associated with non-compliance.
- iv. Government officials who grant approvals for proposed real estate projects should also demand for feasibility and viability studies/appraisals reports on such projects before approval is granted.
- v. A synergy is needed amongst professionals involved in private real estate projects implementation, this will help them familiarise themselves with each other's role. Doing so will enable each profession know boundaries/limits. Also as identified by some respondent that lack of general body controlling, supervising and overseeing all the professions within the industry is one the reasons as to why there is absence of consensus in opinions of the professionals involved in real estate development, its noteworthy to state that there is need for an umbrella body that will bring all the professionals within the industry together. This when established will be saddled with the responsibility of organising workshops and seminar with view to harmonising the roles of all the relevant professionals involved.

5.5 Limitations

The study was limited to South East Nigeria, which focused on the firms of professionals that are involved in private real estate projects implementation. It concentrated more on the views of professionals, hence the questionnaires were distributed to relevant firms, and each firm did not get more than required or due.

Also, some limitations encountered were especially during the development of questionnaire and collection of the data. Most of the respondents were not willing to fill

the questionnaires; however in those cases efforts were made repeatedly to contact them through calls, text messages, as well as via emails.

Some principal consultants also directed the respondent to their subject, those ones that not even experienced to answer the questions but through appeals and personal contacts; those principal consultants were meant to understand the need to fill or answer the questionnaires.

To some respondents even visited to collect the filled questionnaires, the response was “I cannot find the questionnaires again” some instantly demand for another one. Efforts were made too to get them fresh copies which they filled.

Some didn't even complete the questionnaires given to them i.e. they filled the questionnaire half way and gave back to us upon request. To remedy such, there was appeal on our appeal on our part to them to spare us little time for on the spot kind of interview which helped us get their opinion and as well in completing the questionnaire.

In summary, some respondents are not eager/willing to help out, some are negligent while some are hostile and all these are part of the limitations witnessed in course of the research but the limitations were tackled effectively as explained before.

5.5 Suggestions for Further Research

An investigation or further study into the following areas itemised below is required:

- i. Similar research should be carried out on the same subject in other geographical zones of the country; such research may either expose any flaw if any or further validate the findings of this work.
- ii. A similar study is also necessary on other types of real estate project like public, commercial, industrial etc.
- iii. A study of which will identify the extent of compliance of real estate projects developers especially as it concerns carrying out of feasibility and viability

studies/appraisal on proposed real estate projects and its impact on implementation success is needed.

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APPENDICES

APPENDIX I

Questionnaire

**Department of Estate Management
Nnamdi Azikiwe University, Awka
Anambra State.**

Dear Sir/Madam

REQUEST TO PARTICIPATE IN RESEARCH

I am a PhD student of the above named Department and Institution carrying out a research on the topic **“analysis of critical success factors affecting private real estate projects implementation in south east Nigeria: professionals’ perspectives”** as part of requirements for PhD in Estate Management.

I hereby solicit your support and assistance in filling the questionnaire. This is purely for academics exercise and all views/opinions expressed herein shall be treated with utmost confidentiality.

Thank You.

Yours Sincerely.

Ifediora, Christian Osita
ositaifediora@gmail.com, co.ifediora@acu.edu.ng
08033470435, 08063498835

Part one (Respondent information) please tick (✓) as appropriate

1. Name (optional)
2. Gender: (a) Male (b) Female
3. Highest academic qualification attained: (a) HND/BSc (b) Post Graduate

4. Please indicate the course you studied: Architecture Building Technology Engineer Estate Management Quantity Surveying Urban and regional Planning
5. Please indicate your professional membership: (a) NIA (B) NIOB (c) NIQS (d) NIESV (e) NSE NITP Others specify
6. Please indicate your professional membership status: (a) Probationer (b) Associate (c) Fellow Others, specify.....
7. How long have you been into practice? (a) 0 – 5 years (b) 6 – 10 years (c) 11 – 15 years (d) 16 above
8. Identify your state of practice: Anambra Enugu Imo .

Part Two Factors affecting real estate projects implementation success

1. Rate the factors affecting real estate project according to the 5 points scale: **SA – Strongly agree, A – Agree, N – Neutral, D – Disagree, SD – Strongly disagree**

S/NO	The factors that affects real estate project implementation success	SA	A	N	D	SD
1	Human-related factors.					
2	Project-related factors.					
3	Project procedures.					
4	Project management actions.					
5	Environmental related issues/constraint.					
6	Project participants-related factors.					
7	Human resources management practices and related factor.					

2. Please rate the extent to which each group of identified factors affects real estate project implementation success using **AGD – A great deal, ALT - a lot , AMA – A moderate amount, AL – A Little and N – None**

- (a) **To what extent do you think human-related factors affects real estate projects implementation success?**

S/NO	Human-related factors	AGD	ALT	AMA	AL	N
1	Nature of clients’ means of funding.					
2	Clients’ emphasis on high quality of construction at low construction cost.					
3	Level of clients’ experience.					
4	Size of the clients’ organization.					
5	Clients’ emphasis on quick construction and ability to brief.					
6	Clients’ decision making ability and definition of roles.					
7	Clients’ contribution to design and construction.					

8	Management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing.					
9	Project team leaders experience and commitment to meet success criterion.					
10	Project team leaders' early and continued involvement in the project.					
11	Project team leaders' working relationship with others.					
12	Project team leaders' technical skill and adaptability to changes in the plan.					
13	Harassment of developers by the locals.					

(b) **To what extent do you think project-related factors affects real estate projects implementation success?**

S/NO	Project-related factors	AGD	ALT	AMA	AL	N
1	Type of real estate project.					
2	Nature of such project.					
3	Number of floors of the project.					
4	Complexity of project.					
5	Variation of project plan and size of project.					
6	Project financing.					

(c) **To what extent do you think project proceduresaffects real estate projects implementation success?**

S/NO	Project procedure related factors	AGD	ALT	AMA	AL	N
1	Non adherence to procurement principle and procedures.					
2	Wrong and inability to strictly adhere totendering rules and procedures.					
3	Absence of feasibility and viability appraisal of proposed project.					
4	Non engagement of the right professional at the appropriate stage.					
5	Poor/non adherence to structural details of the proposed projects.					

(d) **To what extent do you think project management actions affects real estate projects implementation success?**

S/NO	Project management actions	AGD	ALT	AMA	AL	N
1	Wrong application of good communication channels.					
2	Faulty/wrong feedback mechanism.					
3	Wrong application of control mechanisms.					
4	Ineffective/wrong coordination process.					
5	Effort devoted to planning.					

6	Absence of or poor safety and quality assurance program.					
7	Organization structure.					
8	Control of subcontractors' works.					
9	The overall managerial actions.					
10	Inefficient development control.					

(e) **To what extent do you think environmental related issues/constraint affects real estate projects implementation success?**

S/NO	Environmental related issues/constraint	AGD	ALT	AMA	AL	N
1	Economic environment and issue relation to economy in relation prices of building materials.					
2	Social environment and matters relating to culture and tradition.					
3	Political environment.					
4	Physical environment and matters relating to geography and weather conditions.					
5	Level of technological advancement.					
6	Issues regarding internal and external environments.					

(f) **To what extent do you think project participants-related factors affects real estate projects implementation success?**

S/NO	Project participants-related factors	AGD	ALT	AMA	AL	N
1	The type of client and his experience and construction sophistication.					
2	Knowledge of construction project organization.					
3	Client confidence in the construction team.					
4	Well-defined scope.					
5	Owner's risk aversion.					
6	Design team experience.					
7	Project design complexity.					
8	Mistakes/delays in producing design documents.					
9	The level of contractor's experience.					
10	Site management.					
11	Contractor's cash flow.					
12	Effectiveness of cost control system.					
13	Speed of information flow.					
14	The skills and characteristics of project managers.					
15	The commitment, competence, and experience of the participants.					
16	Team effort by all parties to a contract.					

- (g). **To what extent do you think human resources management practices and related factor affects real estate projects implementation success?**

S/NO	Human resources management practices and related factor	AGD	ALT	AMA	AL	N
1	Wrong recruitment and selection practice.					
2	Absence/poor supervision/inspections of workers involved in projects implementation.					
3	Faulty or wrong way of appointment of contractors.					
4	Faulty ways of handling procurement of materials.					
5	Absence of motivation for actors involved in implementation.					
6	Poor appraisal system and absence of compensation packages for deserving participants.					
7	Faulty knowledge management system.					
8	Poor employment relation and communication Practices.					
9	Faulty talent management and retention strategies.					
10	Poor organization, design and development.					
11	Absence of job satisfaction and security.					
12	Absence/poor training, development and performance management/evaluation.					
13	Poor or absence of human resource development programme.					
14	Faulty or absence of reward management.					
15	Absence of health, safety and welfare programmes.					
16	Faulty employment practices.					

3. There aretussles or issues as to who is most qualified/preferred profession to handle real estate projects implementation impact on implement success? Strongly agree Agree Undecided Disagree Strongly disagree
4. If yes to question no 3 above, to what extents do you think it affects real estate project implementation success? A great deal , A lot , A moderate amount , A Little , None

5. The identified factors listed in 2 (a – g) have significant impact on real estate projects implementation success Strongly agree Agree Undecided Disagree Strongly Disagree
6. To what extent will you rate the significant level of significance of the identified factors? Highly significant Slightly significant Not significant
7. Do you think there is consensus in opinions of relevant professionals as to the major factors affecting real estate projects implementation success? Yes No
8. To what extent do you think absence of consensus in the opinions of relevant professionals affect real estate projects implementation success? A great deal , A lot , A moderate amount , A Little , None
9. Which of the following do you think could be the reason for absence of consensus
 - (a) Level of experience in construction industry .
 - (b) Level of education and training .
 - (c) Lack of adequate knowledge of sister professions role in real estate industry .
 - (d) Others, specify.....
10. Do you think failure to conduct feasibility and viability studies of proposed project to certain extent affect its implementation success? Yes No
11. How often do real estate developers go for feasibility and viability appraisal? Always Very often Sometimes Rarely Never
12. Do you think non engagement of relevant professional in each stage of real estate development has impact on implementation success? Yes No
13. Please rate the extent engagement of services of professionals by private developers. Highly Satisfactory Satisfactory Not satisfactory
14. To what extent do you think that non engagement of relevant professional in real estate project implementation has impact or impacts on its success? A great deal , A lot , A moderate amount , A Little , None

APPENDIX II

DATA FROM FIELD

1. Gender:

Gender	No of respondents
Male	302
Female	9
Total	311

2. Highest academic qualification:

Highest academic qualification attained	No of respondents
HND/BSc	237
Post Graduate	74
Total	311

3. Professional Membership status:

Professional Membership status	No of respondents
Probationers	16
Associates	180
Corporate	87
Fellows	28
Total	311

4. Number of years in practice:

Number of years in practice	No of respondents
0-5	90
6-10	128
11-15	59
16 and above	34
Total	311

5. Factors affecting real estate projects implementation success according to the 5 points scale: **SA – Strongly agree, A – Agree, N – Neutral, D – Disagree, SD – Strongly disagree** with total number of respondents

S/NO	The factors that affects real estate project implementation success	SA	A	N	D	SD

1	Human-related factors.	134	93	53	21	10
2	Project-related factors.	53	165	53	30	10
3	Project procedures.	93	62	84	59	13
4	Project management actions.	93	177	22	11	9
5	Environmental related issues/constraint.	63	125	38	62	23
6	Project participants-related factors.	62	134	75	31	9
7	Human resources management practices and related factor.	61	139	32	21	58

6. The extent to which human-related factors affects real estate project implementation success using **AGD – A great deal, ALT - a lot , AMA – A moderate amount, AL – A Little and N – None**

S/NO	Human-related factors	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Nature of clients' means of funding.	156	134	21	-	-
2	Clients' emphasis on high quality of construction at low construction cost.	125	116	54	9	7
3	Level of clients' experience.	93	139	61	8	10
4	Size of the clients' organization.	53	94	26	113	25
5	Clients' emphasis on quick construction and ability to brief.	78	93	115	23	2
6	Clients' decision making ability and definition of roles.	53	53	119	83	3
7	Clients' contribution to design and construction.	5	83	84	95	44
8	Management skill of the project team leaders which includes planning, organizing, coordinating, motivating and directing.	119	93	23	23	53
9	Project team leaders experience and commitment to meet success criterion.	156	103	23	11	18
10	Project team leaders' early and continued involvement in the project.	57	126	59	58	11
11	Project team leaders' working relationship with others.	123	125	31	11	21
12	Project team leaders' technical skill and adaptability to changes in the plan.	57	190	53	2	9
13	Harassment of developers by the locals.	41	91	92	87	-

7. The extent to which project-related factors affects real estate projects implementation success

S/NO	Project-related factors	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Type of real estate project.	102	102	72	22	13
2	Nature of such project.	40	195	62	1	13

3	Number of floors of the project.	50	146	62	22	31
4	Complexity of project.	114	62	73	22	40
5	Variation of project plan and size of project.	41	187	83	-	-
6	Project financing.	218	63	10	21	-

8. The extent which project procedures affects real estate projects implementation success

S/NO	Project-related factors	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Non adherence to procurement principle and procedures.	114	144	22	31	-
2	Wrong and inability to strictly adhere to tendering rules and procedures.	31	197	51	22	10
3	Absence of feasibility and viability appraisal of proposed project.	115	163	11	22	-
4	Non engagement of the right professional at the appropriate stage.	207	41	63	-	-
5	Poor/non adherence to structural details of the proposed projects.	115	165	31	-	-

9. The extent project management actions affects real estate projects implementation success

S/NO	Project management actions	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Wrong application of good communication channels.	93	114	93	11	-
2	Faulty/wrong feedback mechanism.	52	103	82	74	-
3	Wrong application of control mechanisms.	73	124	82	32	-
4	Ineffective/wrong coordination process.	82	176	42	-	11
5	Effort devoted to planning.	31	145	42	11	82
6	Absence of or poor safety and quality assurance program.	73	103	53	82	-
7	Organization structure.	62	156	61	21	11
8	Control of subcontractors' works.	53	93	123	21	21
9	The overall managerial actions.	105	123	62	21	-
10	Inefficient development control.	73	82	124	21	11

10. The extent environmental related issues/constraint affects real estate projects implementation success

S/NO	Environmental related issues/constraint	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Economic environment and issue relation to economy in relation prices of building	134	156	21	-	-

	materials.					
2	Social environment and matters relating to culture and tradition.	42	93	83	93	-
3	Political environment.	143	104	21	32	11
4	Physical environment and matters relating to geography and weather conditions.	31	124	52	83	21
6	Level of technological advancement.	52	73	40	73	73
7	Issues regarding internal and external environments.	21	104	61	32	93

11. The extent project participants-related factors affects real estate projects implementation success

S/NO	Project participants-related factors	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	The type of client and his experience and construction sophistication.	91	61	105	21	31
2	Knowledge of construction project organization.	83	125	52	40	11
3	Client confidence in the construction team.	40	154	105	11	-
4	Well-defined scope.	84	144	83	-	-
5	Owner's risk aversion.	105	104	71	31	-
6	Design team experience.	53	105	92	61	-
7	Project design complexity.	116	71	93	31	-
8	Mistakes/delays in producing design documents.	104	104	71	21	11
9	The level of contractor's experience.	154	31	104	11	11
10	Site management.	83	125	71	21	11
11	Contractor's cash flow.	104	93	53	61	-
12	Effectiveness of cost control system.	116	71	41	62	21
13	Speed of information flow.	62	103	104	21	21
14	The skills and characteristics of project managers.	82	116	83	9	21
15	The commitment, competence, and experience of the participants.	125	81	33	52	20
16	Team effort by all parties to a contract.	91	104	51	17	48

12. To extent human resources management practices and related factor affects real estate projects implementation success

S/NO	Human resources management practices and related factor	AGD 5	ALT 4	AMA 3	AL 2	N 1
1	Wrong recruitment and selection practice.	217	83	11	-	-
2	Absence/poor supervision/inspections of workers involved in projects implementation.	145	135	31	-	-
3	Faulty or wrong way of appointment of	63	145	62	41	-

	contractors.					
4	Faulty ways of handling procurement of materials.	61	156	33	20	41
5	Absence of motivation for actors involved in implementation.	41	123	106	21	20
6	Poor appraisal system and absence of compensation packages for deserving participants.	61	94	123	23	10
7	Faulty knowledge management system.	72	62	61	105	11
8	Poor employment relation and communication Practices.	73	63	81	73	21
9	Faulty talent management and retention strategies.	42	93	93	73	10
10	Poor organization, design and development.	135	134	31	11	-
11	Absence of job satisfaction and security.	57	85	125	33	11
12	Absence/poor training, development and performance management/evaluation.	53	114	113	31	-
13	Poor or absence of human resource development programme.	63	107	65	43	33
14	Faulty or absence of reward management.	35	117	82	73	4
15	Absence of health, safety and welfare programmes.	70	123	83	35	-
16	Faulty employment practices.	65	150	34	62	-

13. Tussles/claim as to who is most qualified/preferred profession to handle real estate projects implementation impact on implement success

Options	Number of respondents
Yes	238
No	73

14. There is this tussles/claim as to who is the right/most qualified/preferred profession to handle real estate projects implementation.

Response/scales				
Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5
23	55	64	106	63

15. The extent these tussles/claim regarding the most qualified/preferred profession to handle real estate projects implementation impact on implement success.

Options	Number of respondents
A great deal	63
A lot	106
A moderate amount	64
A Little	23
None	55

16. The identified factors listed in **No 5 of appendix II** have significant impact on real estate projects implementation success

Options	Number of respondents
Strongly agree	157
Agree	97
Undecided	15
Disagree	17
Strongly disagree	25

16. The significant level of significance of the identified factors that affects real estate project implementation success.

Options	Number of respondents
Highly significant	107
Slightly significant	165
Not significant	39

17. There is consensus in opinions of relevant professionals as to the major factors affecting real estate projects implementation success

Options	Number of respondents
Yes	197
No	114

18. The extent the absence of consensus in the opinions of relevant professionals on factors affect real estate projects implementation affect its success

Options	Number of respondents
A great deal	35
A lot	180
A moderate amount	42

A Little	33
None	21

19. The reasons why there is absence of consensus

Reasons	No of respondents
Level of experience in construction industry	61
Level of education and training	91
Lack of adequate knowledge of sister professions role in real estate industry.	159

20. Failure to conduct feasibility and viability studies of proposed project to certain extent affect its implementation success

Options	Number of respondents
Yes	301
No	10

21. The frequency at which real estate developers undertake feasibility and viability appraisal/studies for their proposed projects

Options	Number of respondents
Always	23
Very often	55
Sometimes	21
Rarely	161
Never	51

22. Non engagement of relevant professional in each stage of real estate development has impact on implementation success

Options	Number of respondents
Yes	303
No	8

23. The extent engagement of services of professionals by private developers.

Options	Number of respondents
Highly Satisfactory	43
Satisfactory	51
Not satisfactory	217

APPENDIX III

TOTAL NUMBER OF PROFESSIONAL FIRMS IN EACH STATE

S/N	Professionals	TOTAL NUMBER OF PROFESSIONAL FIRMS IN EACH STATE				
		ANAMBRA	ENUGU	IMO	ABIA	EBONYI
1	Architects	8	61	16	5	2
2	Builders	27	21	16	24	5
3	Engineers(Civil)	30	50	20	17	5
4	Estate Surveyors	14	41	13	14	-
5	Quantity Surveyors	4	17	9	-	-
Total						
Grand Total		419				

