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An Investigation of the Impact of Project Management Planning Principles and Dynamics on the Project Success of Real Estate Construction Projects in Anambra State.

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ABSTRACT

Projects across the world are continuously improving in terms of new development, innovations and technology. As a third world country, Nigeria is not left out in the improving systems and innovations. Planning requires setting up activities, schedule and budget for the project from the onset. These activities if properly adhered to can make or mar a project. Therefore, a project without proper planning may lack consistency and have many deficiencies that may lead to inability to make the completion time. Planning includes a framework of activities for project execution therefore requires proper supervision and adherence in order to reach the intended pinnacle. Therefore, the focus of the article is to investigate the impact of the project management planning principles and dynamics on the project success of real estate construction projects in Anambra state centered around the Hill view estate construction projects taking into cognisance variables which includes time, cost and quality. We are to review key factors in project management implementation taking a holistic approach as applicable in developing countries like Nigeria. Questionnaires were distributed to key professionals while both primary data and secondary data were utilized. The study however highlights the importance of adequate planning towards the realization of a successful project.

Keywords: Project Management, Project Success, Planning, Construction projects, Projects.

1.0 INTRODUCTION

Project management as a discipline is gradually gaining grounds across the globe and forms the very backbone through which projects are executed. It is not rocket science that almost every organization/project requires proper management, project management however is an essential prerequisite for every organization especially in real estate construction. Construction projects have a major role in the economy of many countries especially in developing countries (Ibrahim and Cross, 2020). The real estate construction sector of Nigeria is a significant part of the economy and plays a vital role in infrastructure development, job creation and housing need of the masses. Nwachukwu (2016) opined that real estate construction is like a catalyst that not only serves as an engine that energizes every other sector of the economy but gives impetus to the developmental rating of the environment. The National bureau of Statistics (2022) reported an increased GNP of 8.9trn (contributing 10.16% to nominal GDP) in the

fourth quarter of 2022 for real estate construction sector of Nigeria despite high-interest rates, inflation, cost of building materials amongst other challenges faced that year. They further reported a growth by 37.71% for the first quarter of 2023 which was higher than the fourth quarter of 2022 and shows the pace of development in the real estate construction sector.

Ibrahim and Cross (2020) citing Ameh and Odunsami (2010) stated that the construction industry in Nigeria comprises a group of heterogenous and fragmented firms and, within firms, there is often a great diversity of activities. In Anambra State, a lot of housing construction projects are ongoing to carter for the housing needs of the masses. The government have provided several initiatives and projects recently which includes the ongoing Hillview estate at Nkwelle, the awarded low cost housing estate housing project at Umunya and the recent award by the Governor at Isiagu to several developers. The state have several abandoned projects but our focus for this paper is mainly on residential projects geared towards the impact of planning on project success. It is worthy to note that the success or failure of any project begins from the planning stage.

According to PMBOK (2013), a project lifecycle consists of five (5) distinct phases including project initiation, project planning, project execution, project monitoring and project closure that combine to turn a project idea into a working product. The planning stage is at the heart of the project lifecycle and tells everyone involved where they are going and how to get there (Watt, Baron and Baron, 2011). This stage of the project requires complete diligence as it lays out the project roadmap and unless using a modern project management methodology like agile project management, this second phase spans throughout the project lifecycle and includes identifying technical requirements developing a detailed project schedule, creating a communication plan and setting up goals/deliverables (kissflow, 2023). I believe that planning stage should be embedded as the first stage especially in such cases where the initiator have to source for such projects which invariably entails that planning was initiated at the inception. In such cases, the initiator have to identify the potential project and also conceptualize the project. Hence, identification and conceptualization of project plan leads to analysis and feasibility studies which depends on complexity and how much is known of the proposal which in turn leads to more advanced planning (Bendola ., 2007). From the above, it could be seen that project management planning is a core pre-requisite for successful project management, this is because the growth of any nation is essentially dependent on successful execution of critical development project and

infrastructure (Nick., Igwe and Ude, 2018). Time, effort, energy, and resources are invested in several projects yearly, which rarely meet the completion time. Statistics show that 50% of companies had at least one (1) failed project during the year. On the average, companies lose about 109 million for every one (1) billion invested in projects. Success is measured by providing the deliverables on time and having the required features. Therefore, for a project to succeed the level of planning must correlate to project success therefore adequate planning is paramount in every project success. Project success is measured by project efficiency and project effectiveness while efficiency deals more in comparing the outputs of a project to its inputs, effectiveness focuses more on how the construction process contributes to increased value for the owners and users (Cross, O.D., 2020). The study aims at investigating how effective project planning impacts positively on project success in an environment where modern project management principles are not applicable. The researcher also wants to investigate not just its applications in a developing environment but also the practice obtainable recently while discussing the current modern planning principles with possible factors that lead to project success. Though a lot of real estate construction projects are currently ongoing in Anambra state, it is important to find out how far the project management principles are being embedded in the project while introducing new ways as obtainable globally. The research will be relevant to project managers and other profession in the real estate construction sector of Anambra State.

1.1 Statement of the Problem

Project planning is an essential pre-requisite to meeting the project completion time. Overtime even though plans are made at the inception of the project and laid down procedures formulated, these plan are affected by some factors like increased cost of building materials, supplies of inferior construction materials, high number of stakeholders with influence on the project, resource availability including physical infrastructure and the location of resources, unavailability of finances (untimely provision of finances), dogma attitude of employees, etc. these experiences have seriously affected projects in the Anambra State in addition with the project plan and current project management practices not being inculcated in project processes.

Bender (2009) stated that for each project undertaken, the project planning stage is an essential constituent since it necessitates the project team to lay down fundamental project activities and how such activities are to be

carried out using available resources. Activities in the planning stage of the project propels activities of other stages of a project (Aishehhi, 2013) hence if not properly coordinated affects the entire project. In reality, especially in the east, project plans are made but the influencers and project team are not just aware of the importance of the new project management principles, the importance of core professional involvement and the fact in (Aishehhi 2013) citing (Reiss 2007) that project planning in a significant manner affects the overall outcome of the entire project.

Ibrahim and Cross (2020) believes that a lot of critical decisions are made in the planning phase of real estate construction projects which can cause the project to be successful. This means that the project team must possess decision-making skills and must employ professionalism in every aspect of the project management processes so that the delivery time of the project will not be affected in addition to quality and service provision. Therefore, it is of utmost important that better approaches are adopted in order to ensure effective planning as well as success of real estate construction projects.

2.0 THEORETICAL FRAMEWORK

2.1 PROJECT PLANNING

Planning generally is a term that denotes a thinking process which leads to achievement of desired goals. Ibrahim and Cross (2020) quoting PMI (2013) stated that planning is regarded as the second phase of a project, following initiation and prior to execution and closure. They further stated that project planning stipulates a set of decisions concerning the ways that things should be done in the future. Wiki (2024) however relates planning as involving the use of logic and imagination to visualize not only a desired result, but the steps necessary to achieve that result. Planning however begins at the conception stage, this highlights the importance of planning in each stage of the project. At the planning phase of a project, the time duration of project implementation is developed to avoid problems associated with time overrun (Irfan, Khurshid, Anastasopoulos, Labi & Moavenzadeh, 2011). To conceive a project idea requires a careful well laid out plan, each step within the various stages of a project, however requires efforts, thoughts and clear objectives to be achieved. Hence, planning ensures that the defined objectives are certainly asserted so that they serve as a model for determining what actions should be taken and in which directions (Byju's, 2024). Planning not only ensures the achievement of project success but is also geared towards timely delivery, monitoring, management of the projects budget and successful implementation at the various phases of a project. Proper planning therefore ensures that the various project risks are

prioritized and tackled at each phase to ensure efficiency and successful completion. Cross (2020) quoting Idoro (2012a) stated that project planning and project performance are two complementary activities in project management and the basis of project success or failure is defined in project planning. The plans are however documented and written by the project team with the project manager as the lead. The PMBOK guide defined a project plan as a formal, approved documents to guide both project execution and project control. The planning document therefore is a written well laid out documents which includes detailed steps and guide on each step to effectively follow in order to ensure the successful execution of the project for which the plan is prepared for. This may also include financing, budget, the project team required and the implementation strategies. Planning in project management requires the following steps:

- Inception Stage: This initial step at planning typically occurs at the inception of a project plan. Its worthy to note the importance of this stage as proper planning at the initiation stage leads to success in every other stage of the project and involves a feasibility and viability appraisal to determine the viability of the project in terms of cost and benefits. Even though initiation is seen as the very first phase of a project planning, planning starts at the very beginning as each phase requires a well laid out documented plan to facilitate its development.
- The Project Teams/Stakeholders: the project team selection and key project stakeholder's determination. This step involves careful layout plan as selection of the right professional team will ensure that the needs and the expectation of the project are met.
- Project Scope/Specifications/Breakdown structure: this involves further planning and documentation of well laid out plan by the selected project team to ensure breakdown of roles and responsibilities in addition to developing charts and designs to be incorporation into the project. This may also incorporate costing and budgeting which are very critical and fundamental to success.
- Project Scheduling: In addition to deliverables, scheduling is equally an important aspect of planning and ensures proper mapping out of the projects timeline.
- Project plan proper/Contingency plans: After working out the plans and the project work flow and other project activities in the right order, there is a

need for additional plans which may apply as the project progresses.

From the ongoing, it could be seen that the planning phase requires due diligence as it lays out the project roadmap unless you are using a modern project methodology like agile project management, this second phase takes up almost the entire project lifespan/timespan and includes identifying technical requirements, developing a detailed project schedule creating a communication plan and setting up goals/deliverables.

2.2 PROJECT SUCCESS AND MEASUREMENT CRITERIA

Project success is achieved in the construction parlance when a project meets the set goals and standards within a defined time and budget. Historically, PM4DEV (2024) defined project success as a project that meets its objectives under budget and under schedule. However, the measurement criteria may be the overall performance and the rate of planning which is essential for success at each stage of the project. To achieve project success in construction, the following are important. See the figure 1 below:

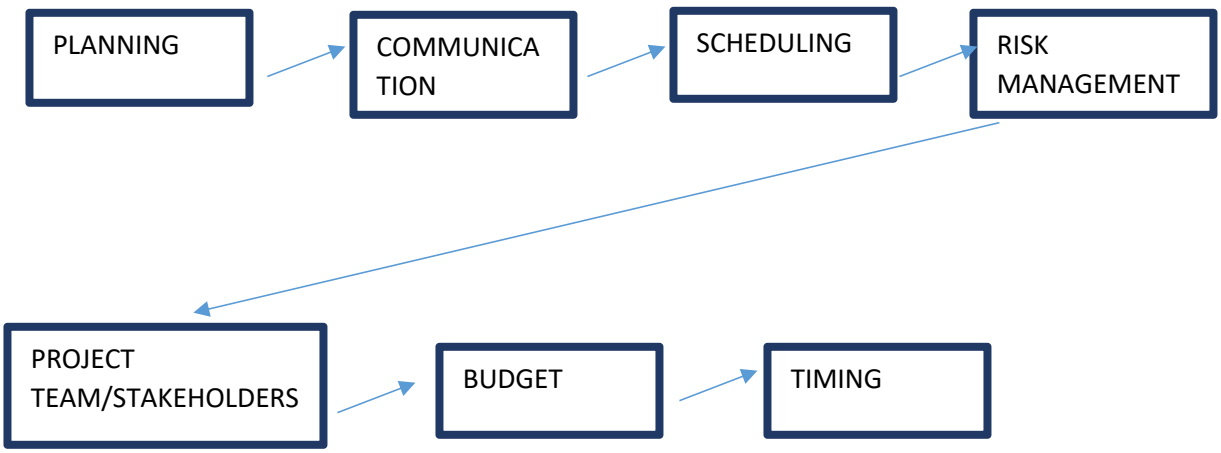


Fig.1: Important Factors of Project Success

The above depictions are important addition that leads to project success, but are not measurement criteria for project management success achievement. I believe that of all the important additions that may lead to project success as recorded by various authors, planning is the most important, though success criteria may include client satisfaction, stakeholder's satisfaction, quality, effective timing, cost and profitability, the role of each of the factors are evident and ensures successful and timely project completion. Apart from the above listed success criteria, several scholars including Ramlee, Tammy, Raja, Musir, Abdul, Chan and Mohd (2023) stated cost,

time and quality as the major construction project success measuring factors. Success however is a major topic in construction project as a project without success is termed a failed project. Ramlee et al (2023) however stated that in modern construction projects there are significant challenges for both the clients and contractors to deliver the project successfully due to increasing complexity in design and the involvement of stakeholders. Therefore, a successful project must defy all visible challenges and is considered as such when completed within record time, within budget and quality. See figure 2 below:

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Fig. 2: Components of a Successful Project

It is also vital to note the place of proper planning in the successful achievement of the overall success factors as application of the above cannot be achieved if proper planning and implementation are skipped. Planning however may be a function of setting clear goals and effective organization from the onset. Ramlee et al (2023) however defined "the concept of project success as being developed with criteria and standards to help construction project participants to complete projects with the most desirable results. However, according to their article, the concept remains somewhat of an enigma as there is no agreement on what should be the critical success criteria on construction projects despite several studies. A project however is considered an overall success when the project achieves the technical performance specifications and missions, also a high level of satisfaction concerning the project outcome among organization, project team and users. The successful accomplishment of cost, time, and quality objectives were regarded as project management success which is directly; project success deals with the final project objectives". The final project objective accomplishment is however defined by the processes and the plans successfully initiated effectively from the inception of the construction project. Therefore, the final outcome is dependent on the step by step processes applied throughout the period of the project implementation and this involves the various contributions of the project team. The project team selection, their qualification and roles at the various stages may however impact directly on success. The measurement criteria however differ for several areas as various authors idea about success measurement for

projects are not same but mostly includes the three main project success measurement factors above. For projects in Anambra state, the case may be different as even though the major success measurement factors may be employed, such projects often lack proper planning implementation strategies incorporation and proper recording of project management implementation procedures in addition some of the project management team members lacked the expertise as required in the current world project management procedures generally. This might be evident in their process of management style and non- incorporation of appropriate budgeting, scheduling including timing through incorporation of current world practices in day to day construction project management. The above results to an increased budgeting, extended project completion time and increased costing for the project. The numerous challenges are very visible in several construction projects across the state and this leads to numerous challenges when measuring project success. The question here however will include whether measurement of such projects will be rated the same as that of other projects where proper planning implementation strategies were incorporated using global standard practices. Anton (1988), likened "the general success factors as an essential part of project control which should not be confused with measuring project success. He however, made a distinction between project success and project management effort which according to him are related but different. Project management was linked to project objectives, however, if one defines success in terms of the achievement of objectives, then the answer depends on whether the objectives for the project and for the project management activity are the same or not". Prabhakar (2008) stated the various views of several scholars on project management success including a list of possible success factors while linking project success as a function of the project process. Though several authors and articles have several view and success determining factors, it is worthy to note that this article specifically relates proper planning as being the major project success determinant while incorporating the three major project success measurement factors. In the long run, each phase and step requires planning, the level of planning implementation incorporated will however determine project success. Finance availability is also a major measurement criterion, though budgeting and costing may have been properly designed to suite a particular project in Anambra State, its non-availability may pose a serious threat to success and truncate the whole project plan leading to failure. It is however important to plan the whole process to

avoid unavailability of finance while making provision for additional resultant expenses.

2.3. PROJECT MANAGEMENT PLANNING PRINCIPLES AND DYNAMICS

Project management planning principles may include key universally acceptable principles which may be incorporated in project management especially within the planning phase in order to ensure that the objectives of the project are realized. Gurnov (2024) stated that the principles of project management are the fundamental rules that should be followed for the successful management of projects. The rules however are a depiction of well laid out rules which may depend on the type or nature of the project. However, PMBOK does not currently contain an official list of principles, whilst many researches have several listed rules and principles which relate to project management. According to Gurnov (2024) nine principles were recorded which includes formal project management structure, Invested and engaged project sponsor, clear and objective goals and outcomes, documented roles and responsibilities, strong change management, risk management, mature value delivery capabilities, performance management baseline, communication plans. These principles may seem similar to already listed planning steps and success criteria determinants, this however makes the importance of planning principles in project management obvious and may include accountability. However, project management dynamics on the other hand may refer to the various factors that may impact project success which may include the project scope, resource constraints, project team, risk management and stakeholder expectation, the factors however align with each other and may relate to other already mentioned factors, therefore understanding the factors may positively influence the project to ensure timely delivery within budget and with the desired quality. Raul (2023) stated that project management dynamics may be necessary as they provide the project managers with a framework for understanding and managing the factors that can impact project success, it's evident that both the planning principles and dynamics are effective applications to project management. Both principles play an important role in construction project management and an effective adoption of the principles may lead to project management success. For constructions in Anambra State, even though practically universally accepted principles and rules may not apply, the traditional rules however are applicable. Proper planning and dynamics may have not been applied which may have adverse effect on

project completion, this does not entail that success may not be recorded, however completion time and quality may experience negative effect leading to an increased cost for the project but not all success factors may be applicable. Constant improvement and regular changes to budgeting may influence the project dynamics, this includes proper and effective communication and application of other project methodologies.

2.4. CONSTRUCTION PROJECTS IN ANAMBRA STATES AND PROJECT SUCCESS

Construction projects in Anambra state are mostly comprehensive development, complex and involves several resources. Construction projects however requires knowledge and the various project techniques to meet the project requirement. These projects require effective and proper planning as its foundation to achieve success. Despite the various global established methodologies currently being practiced which may include the use of tools like PERT, lean six sigma, scrum, Agile, as is the practice around the world. Construction projects in Anambra state are usually devoid of such methodologies as project managers job are mainly that of supervision and procurement. The world global standard practice is unknown to various project managers across projects as many are unqualified in every ramification and do not possess the necessary qualifications to function as project managers. This also evident in the ongoing Hill view construction project where members of the team lacked the necessary qualifications as required and the planning principles are not adequately employed. Effective and proper recording and effective communication however are not employed as the team lacked discipline in most cases as a function of not heeding to instructions as is required. This leads to additional costs and thereafter affects the project completion time. Construction projects are also affected by financing, and lacked orderliness as a result of the nature of the contract and the hierarchy, team management and stakeholder management. Project managers can however identify risks and issues that could impact the project and develop ways to tackle them. This however is impracticable as the project manager may not possess such powers to effect changes or influence certain decisions in a project. The project manager's authority is however limited as stakeholders might not hand over absolute authority to them which however adversely affects several projects within the state. Hillview estate is an outstanding project but is affected by non-effective planning, this however does not indicate that the project is devoid of planning entirely. Modern planning principles are however not applied during the execution phase

with no visible well laid out written plan. The project however is one of the best construction project recently even though the completion time was not met. Proper planning leads to a timely completion of a project leading to success. Planning however is a function of success. A construction project success may exceed meeting budget and schedule goals including meeting the expectations of beneficiaries. The case study project currently experiences complaints from beneficiaries. This experience might not be directly related to the developer and is more of function of the funding by stakeholders. Success however is difficult to evaluate due to lack of adequate funding which lead to the project not meeting the completion time. Funding and budgets for a project however should be adequately planned creating room for additions should the prices of materials increase. Projects plans should create rooms for additional funding which may directly affect the project success. Project success in this scenario may only be evaluated years after the completion as many resultants factors directly affected the success of the project. Limitations however should be effectively clarified while rooms should be created to tackle risks and overruns creating rooms for inclusions especially in budgeting and funds to manage work progressions and delivery time. However, the major determinant of success is adequate planning as it plays a role to reduce excesses if properly done at inception. The project planning team is therefore a very important part of any construction project and must possess the necessary expertise as their role in project delivery and success cannot be skipped. Oyedele (n.d) stated that the project management profession is not controlled in Nigeria by any organization and is challenged by lack of government support. He further stated that the high level of corruption in Nigeria environment may not allow project management practices to reign as project management thrives in an environment devoid of corruption. The above however is a major challenge in the construction industry and posed a big treat to project success with many recorded abandoned projects with funding and planning as major issues.

2.5. METHODOLOGY

The study area, Hill view estate is situate in Nkwelle Ezunaka, Anambra State which is a notable area currently experiencing rapid urbanization as several business owners from Onitsha are currently shifting to the area as a dwelling place. Several areas in Onitsha are marked by rowdiness with incessant population increase. Nkwelle Ezunaka and environs became an area where families requiring serenity moved to enjoy more comfort and luxury which hill view estate is known for. The study reviewed about twenty-five (25) professionals in the built environment which includes project managers,

builders, architects, quantity surveyors, estate surveyors and civil engineers. The various professionals who are partakers at the various stages of the projects were adopted with questionnaires distributed. Primary and secondary data were adopted with information variously retrieved from the respective professionals.

2.6. FINDINGS

The results of the findings stated that project management involves planning, controlling, organizing, supervising and directing of a project in order to realize the project objectives. A project manager however should possess absolute power and the necessary qualification in order to professionally lead the team members to timely success. The various professionals agreed on the importance of planning in the overall project management process and its role towards project success achievement. A project manager according to Bucero (2015) should be able to influence the project team members through addition of finesse and quality to the project process. The project team however must incorporate project planning from the onset as this will ensure that the project purpose is met and hence ensure success. Planning and success goes hand in hand and may be determined based on the environment or country processes through application of world accepted methodologies which are currently not incorporated in projects across Nigeria especially in Anambra State. The project manager should however be conversant with the modern project methodologies and tools and should be able to prepare and analyze a project charter, a document detailing the project purpose, plans, overview and deliverables (Oyedele, (n.d), Raul (2023)).

Budgeting and financing should also be incorporated in the project plans from the inception in order to realize the target time though this may truncate timely success and may increase the project budget which may result from inflation and increased cost of materials. It is pertinent to create room for additions and from the onset as this may lead to project abandonment as is the case in various projects across the state. A professional and qualified project planning team is an essential requirement in order to be able to tackle additional unforeseen risks which may be encountered at some point during the project execution. The results also indicate the effect of corruption even with adequate plans in place. Tackling the above at the onset may reduce the various issues that may be encountered which may directly affect success. Success is however linked to adequate planning throughout the project period. Even though planning is generally referred to as the second stage, plans are however introduced from the onset as every stage of the project should be adequately planned in order for timely success to

be recorded. Projects across Anambra state needs to be completely overhauled with practicable global practices incorporated to ensure that practitioners are at par with their counterparts in other countries. This involves incorporating the right project team with adequate qualifications and trainings to ensure adequate success. In addition, global standard planning practices should be practiced as this will enhance the overall project process and ensure timely completion.

2.7. CONCLUSION

Project planning principles and dynamics are key complex additions to project managements with the role to ensure timely project completion. Effective incorporation of the procedures leads to not just success but ensures mitigation of risks, regulating changes and ensures proper project budgeting, all these factors are strategies to ensure a successful project. The role of planning in the overall success of a project is very evident in projects across the state. Project stakeholders are advised to imbibe adequate planning and also incorporate the right team. This however, calls for a need to have a deeper look into the current nature of the construction industry and encourage investors to select a more qualified team for their development project throughout the construction period to mitigate risks and ensure adequate planning.

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