



Research on Project Success Factors within the Construction Industry of Ghana: Evidence from Wide Horizon Ghana Limited

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Abstract: The purpose of this investigation is to identify the key determinants of project success within the construction industry of Ghana using Wide Horizon Ghana limited as a case study. A self-administered questionnaire is used to gather primary data from relevant stakeholders within the scope of the study. The results showed that project manager's influence and leadership style, project team members' coordination, availability of resources and funds, organizational success and client's satisfaction as well as the completion of projects on time were the main project success factors in the industry. Negative influences from stakeholders among others were seen as factors that contribute to project failure. It is recommended that Construction project managers or leaders should pay more attention to these success factors to ensure project success or minimize the rate of project failure within Ghana and the West African sub-region.

Keywords: Project, Project Success, Construction Industry, Ghana

1. Introduction

Knowledge and the application of project management were widely and clearly defined during the 1980s (Jugdev and Muller 2005). In the assertion of Jugdev et al (ibid), during the beginning of the growth of project management as a discipline, much attention was given to the hard skills within the profession rather than the soft skills. Much has been said about success factors within the developed world, however, little could be said about project management success factors within the third world countries particularly Ghana in the sub-Saharan African region.

There are two main factors that affect the performance or success of construction projects, notably, administrative and technology oriented factors (Kougoulos, 2010). However, the factors that are seen to affect construction project productivity cannot be the same everywhere or overgeneralized because every project is unique and there are environmental factors that affect the success or failure of projects. Project Management practices and success factors may differ from one industry to the other and the construction industry is no exception. This is due to the fact that there is no project which is technically the same.

It is the responsibility of the project manager to have an in-depth knowledge of the feasibility study report, know and have a cordial relationship with the quantity surveyors, architects, and other relevant engineers or stakeholders and ensure that the projects are executed on time, budget, and quality which meets the customer requirements (Kougoulos, ibid). It worth noting that there are many factors that could lead to a successful execution of projects, however, the role of the project manager in achieving this success cannot be overemphasized. It is a key factor in achieving project success within every stage of the project.

There are many similarities within the management of construction projects compared with that of other projects within the field of project management and even though, management of construction project is similar to management of other kinds of projects in many respects, it has also some peculiarities that differentiate it from other projects. For example, unlike the management of many other projects, the project managers in complex construction projects are

often changed from one phase to another or some may specialize in only one phase of the construction project (Project Management Institute, 2007).

Construction projects are mainly capital intensive and demand an appreciable level of leadership and management skills, amidst the coordination of diverse experts and labor force. The main roles and responsibilities of the project managers within the construction industry are the coordination of technocrats to put up their best to achieve the project goals (Chartered Institute of Building, 2002).

Wide Horizon is a dynamic, new and visionary company setup to provide quality and affordable accommodation to the Ghanaian community. It has an objective to be the company that has a reputation for offering quality and affordable real estate properties to its clientele by developing a relationship based on sound investment decisions and trust. Wide Horizon has a strategic alliance with Blue water Associates who provides financial, business and management consultancy services. Wide Horizon identifies and packages various home accommodation solutions to the regular income workers. The Company works in association with full solutions financiers with long verifiable experiences in raising capital for investment in all sectors of the Ghanaian economy and to small and large scale businesses.

Wide Horizon has a vision of providing a range of quality and affordable apartments, countryside homes as well as high-rise office complexes. The vision of this company will be geared towards providing their clientele with "top of the range" real estate property situated at prime locations of the country at competitive prices. Their vision is to become a leader in the real estate business by meeting the specific needs of their customers by adopting a unique brand of real estate properties available to their niche in the market.

The construction industry in Ghana has faced a number of challenges regarding the prompt and successful execution of projects. Thus, what are the factors that lead to a successful execution of projects in the house construction sector of Ghana and which ones do not contribute to the success story? There is an urgent need for the main success factors or drivers within the house construction project sector to be identified so that the limited resources available can be used appropriately. Based on this background, the study sought to identify the factors that are seen to contribute immensely to the successful execution of projects, particularly, house construction projects in Ghana using Wide Horizon Ghana Limited as the study area.

2. Literature Review

According to Brown and Adams (2010), Chan and Chan (2004), project success is an elusive term and has not been clearly defined over the years, but there are several research works that attempt to develop a framework to measure and identify some success factors within the construction industry. It must be emphasized that the ambiguity in the definition of the term project success can be traced to the fact that humans see the constituents of success from different lenses. Lim and Mohammed (1999) for example observed that there are macro and micro dimensions to project success. In their explanations, the micro success factors can be traced to the execution stage of construction projects where there is a high demand for the project to meet the requirements of quality, cost, time among others. On the other hand, the macro elements of project success entail the satisfaction of project end-users and stakeholders. It can be deduced from the observations of Lim and Mohammed that, the focus of their success factors is on timely project completion and satisfaction.

It is worth mentioning that, some researchers like Baccarini (1999) added that the impact of projects after completion and handing over should be included in the determinants of project success. For instance, Baccarini (1999) made a distinction between project management success and product success. In his view, project management success entails the project meeting the demands of the basic requirements, project management processes, and stakeholders' satisfaction. On the other hand, product success is made up of owners' strategy, satisfaction of the user's, profitability and market share. Baccarini (ibid), however, has not differentiated the strategic dimension of project success he included within product success. Chan and Chan (2004) have proposed two groups of key performance indicators for construction project success. The first group was objective measures, which were the issues of time; cost; safety; and environment. The second group was subjective measures, which comprised quality; functionality; and satisfaction of different project participants. They have tied the performance indicators with success criteria, but those indicators were limited to operational and tactical levels and did not include the strategic stages of the project.

In an attempt to model project success, Elattar (2009) came out with a framework to measure construction project success. In his model, Elattar identified and put forward three (3) main criteria for project success. He observed the success criteria from the perspective of the project owners, the designers and the contractors. The success criteria from the owner's point of view entail: schedule, budget, a function for intended use, end result as envisioned, quality, aesthetically pleasing, return on investment, marketability, and minimized aggravation. The criteria from the designer's view is made up of: satisfied client, quality architectural product, meeting of design fee and profit goal, professional staff fulfillment, meeting of project budget and schedule, marketable product/ process, minimal construction problems, absence of liability claims, social acceptability of the project, payment by the client and well defined scope of work. The contractor's success criteria include the project meeting the schedule, profit, budget, quality specifications, the absence of claims, expectations of all parties clearly defined, client satisfaction, good direct communication, and minimal or no surprises during the project.

According to Thomsett (2002), the three dimensions of project success namely – time, budget and quality are not sufficient to measure project management success. Dimensions such as the quality of the project management process- leadership performance and the satisfaction of the Project stakeholder's expectations also need to be considered. Therefore, the traditional triangle: time + quality + cost have been extended to include the performance of the management process.

Pinto and Slevin (1989) carried out a research on 159 research and development projects to understand the factors that are critical to the success of those projects. In their research, they discovered that critical success factors change throughout the life cycle of a project. At each particular stage of the project, be it the defining, planning, executing and closing stages, there are new sets of factors that are most critical for the success of the project. In the view of Pinto and Slevin (ibid), the project success factors include project mission - clear goals and directions; top management support; a detailed specification of the tasks and the sequence of activities needed for project success. In addition, client consultation – particularly at the initial stages of the project life cycle; selection of the project team members; availability of technology and expertise to complete the required tasks and technical actions; client acceptance and the act of selling the final product to its end users; monitoring, control, feedback throughout the project implementation phase; communication among all the project stakeholders and readiness to handle the unexpected crisis and project deviation from the pre-determined plans among others.

In a description by Lim & Mohammed (1999), two main factors must be taken into consideration before answering what project success is made up of; the first distinction is the difference that exists between project success and project management success. Project success is measured against the general objective of the project, whereas project management success is measured by using the well-known measures like time, cost, and performance. The second distinction is the difference between project success criteria and project success factors.

For a long time in the literature of project success, the iron triangle (cost, time and quality) has been the measuring tool for assessing project success. However, the iron triangle as success criteria focuses only on the delivery stage of a project ignoring the other stages. The success of a project in line with cost, time and quality does not mean that the other stakeholders like customers, sponsors among others view has been taking into consideration (Pinto and Slevin 1989). It is important to note that, there is no generally accepted or defined set of project success criteria.

According to Yang, Shen & Ho (2009: 162), the unique nature of projects dictates that critical success factors identified in one industry cannot be directly transferred to other industries. This means that every project is unique on its own and no two projects are the same in nature, no matter how close they may be. Achieving project success is becoming more important in the area of project management. There have been various arguments as regarding those factors that contribute to the total success of every project. For projects to be implemented successfully, the two different components of success must be clearly defined and reviewed thoroughly. These two components are the success criteria and success factors. Factors of project success are those elements required to deliver the criteria (Wateridge 1995). In a Similar way, Belassi and Tukel (1996) grouped the success factors listed in their literature and described the impact of these factors on project performance. They grouped the factors into four areas: factors related to the project, factors related to the project managers and the team members, factors related to the organization and factors related to the external environment. They further argued that, to come up with all the possible critical factors that might affect project outcome are impossible because of the diversity of projects. Nevertheless, identification of the groups to which

the critical factors belong would be sufficient for better evaluation of projects. In their second part of the research with 57 responses, Belassi and Tukel (ibid) observed that many project manager related factors were found to be critical. In contrast with a previous finding using 91 responses, a noticeable shift in ranking from organizational factors towards factors related to project managers and team members were witnessed with project manager's related factors dominating the organizational factors. They came out with some important relationships as well. For example, when time is used to measure project success, then a project manager's skills and communication between the team members become critical.

Another approach developed by Kerzner (2001) states that in the past (at least 20 years ago) project success was related to the completion of project activities in the due term, budget, and expected quality. Later the understanding of project success has been altered by including the limitation of minimum changes in the scope of activities without interruptions in the workflow, without shifts in the corporate culture, and with full acceptance of results by the project clients.

3. Methodology

To carry out this research and respond appropriately to the research questions, the study made use of both primary and secondary sources of data. However, since the study is largely narrative and descriptive, secondary sources of data were largely used. This is because of the availability of the secondary source of data and the fact that they stood the test of time. The qualitative data were obtained from in-depth interviews and relevant documents from Wide Horizon among others. The quantitative information was obtained from the survey questionnaire, which was self-administered to a purposive sample size of fifty employees within a population of about eighty (80) project team members. This was a cross-sectional study limited by the constraints of time and responsive respondents. The use of purposive sampling assists the researcher to use his or her technical knowledge of the research problem being studied to select people who can help him/her understand and gain insight into the phenomenon being studied (Berg, 2004). SPSS version 23 was used to code the data and run the analysis.

4. Result and discussion

The data gathered was coded and screened for incomplete responses and omissions using count blank and standard deviation functions in Microsoft Excel. The required assumption tests were carried out and below are the description of the respondents and the analysis of results.

4.1 Descriptive Statistics

58% representing 29 respondents are between the ages of 31 to 40, 32% representing 16 respondents are between ages 41 and above, whereas 10% representing 5 respondents are between ages 21 and 30. Owing to the fact that the highest age range here is in the youthful years or category, we can say that construction projects are attractive to the age group of 31-40. Respondents who were male numbered 32 out of 50 respondents representing a vast majority of 64.0%. The females were 18 in number also representing 36.0%. This observation suggests that males are more in the construction industry in Ghana than females. For the various positions of the respondents, out of 50 responses 20%, representing 10 of the respondents were top level managers, 16% representing 8 respondents were field engineers, 30% representing 15 were project managers, 20% representing 10 respondents were contractors and in other positions other than the one on the questionnaire. The majority of the respondents were holders of bachelor's degree constituting 22 out of 50 forming 44%, this is followed by higher national diploma, which forms 14 out of 50 constituting 22%. 7 representing 14% are holders of master's degree and other qualifications also formed 14%.

4.2 Discussions

The first objective of the study was to look out for those key success factors that contribute to the success of house construction related projects in Ghana. To begin with, the first question on the questionnaire asks whether project manager's influence on project was important, 23 (46%) strongly agreed to that, 14 (28%) agreed, 7 (14%) was not sure or remain neutral, 5 (10%) disagreed and 1 (2%) strongly disagreed. In this regard, it can be realized or agreed upon that the influence of the project manager is a major contributing factor to the success of projects in the construction industry of Ghana. This confirms the research by Scott-Young and Samson (2004) which identified the "people management" side of project management showing the project manager as a factor for success in any project. Secondly, as to whether client's satisfaction was a major success factor of projects, 45 (90%) strongly agreed to that, 5

(10%) agreed, none was neutral, none disagreed and zero strongly disagreed. This means that there is no way a project can be successful if the client is not satisfied at each stage of the project cycle. This is in line with the findings of Pinto & Slevin (1988) that client satisfaction with the result of a project will determine whether the project is a success or a failure. Thirdly, considering the aspect of project team member's coordination as a success factor, 40 (80%) strongly agreed, 10 (20%) agreed, none for neutral, none disagreed while none strongly disagreed. The important thing here to note is that proper team coordination and encouragement from team members with the spirit of oneness is a motivating factor for achieving project goals. Furthermore, most respondents supported the question of resource availability as a success factor. 35 (70%) strongly agreed, 15 (30%) agreed, none was neutral; none disagreed whereas zero strongly disagreed. This goes to show that no project can move on smoothly and be completed on time without the availability of resources. Also, the company's image, as well as the success of the organization, was seen to be contributing factors to Wide Horizon's project success in Ghana. From the analysis, 10 (20%) strongly agreed, 25 (50%) agreed, 5 (10%) were neutral, 7 (14%) disagreed, and 3 (6%) strongly disagreed to the former. About the latter, 15 (30%) strongly agreed, 10 (20%) agreed, 15 (30%) was neutral, 5 (10%) disagreed while 5 (10%) strongly disagreed also. This shows that clients would want a company that is seen to be effective to handle their projects but that is not of the highest priority. On the other hand, the success of the organization is a morale booster for them in the execution of any project. In so doing, every company wants to create a good image in the eyes of the public to receive many contracts. This means that how well the company has carved an image for itself and the success they have chalked in the public eye contributes to the success of its projects. Considering the issue of the project manager's leadership style as a success factor, most respondents asserted that it is very important for project success; 30 (60%) strongly agreed, 20 (40%) agreed, zero was neutral, zero disagreed and none strongly disagreed. Construction oriented projects like the ones undertaken by Wide Horizon are seen to be very complex, and for that reason, requires a project manager with diverse skills and techniques to lead the whole construction process.

Again, 32 (64%) strongly agreed, 18 (36%) agreed, zero for neutral, zero for disagreed and zero strongly disagreed to the fact that projects being completed within the scheduled or stipulated period of time are another factor for project success. This means that, when the projects are completed within the period scheduled, it even enables the team members to work even harder looking at how quick they have been able to execute the project. If it happens that there is any delay along the line, it demoralizes team members, which does not encourage them to work harder. It is, therefore, an important factor to be considered for success.

The second objective of this study was to look out for those possible factors that may hinder the progress or success of projects by Wide Horizon. The first question was based on whether the cultural setting was a contributing factor to failure. 0 (0%) strongly agreed, 5 (10%) agreed, 25 (50%) remained neutral, 15 (30%) disagreed and 5 (10%) strongly disagreed. It could be realized from here that the views cut across and so there is no concrete view or a strong point on the issue of the cultural setting as a hindrance to project success. However, owing to the fact that 30% of the respondents disagreed, we can evidently say that cultural setting has little to contribute to project failure in Wide Horizon projects. This could partly be because there is a lot of diversity within the team members working on each project in the company. Regarding project team members' contribution to failure, 35 (70%) of respondents strongly agreed, 15 (30%) agreed, 0 (0%) were not sure, 0 (0%) disagreed and none strongly disagreed. From here, it is realized that in as much as project team members can contribute to success, they can also contribute largely to project failure when they are not properly coordinated. Furthermore, looking at the issue of too much competition in the industry as a contributing factor to failure, 0 (0%) strongly agreed, 0 (0%) agreed, 0 (0%) remained neutral, 20 (40%) disagreed while 30 (60%) strongly disagreed. From the responses, it could be seen that too much competition in the industry is obviously not a hindrance to project failure. Based on the questions asked it was agreed upon that lack of funds and resources are major contributing factors to project failure in Wide Horizon. From the analysis, 30 (60%) strongly agreed that lack of funds contributes to failure, 20 (40%) agreed, 0 (0%) was not sure, 0 (0%) disagreed, and 0 (0%) strongly disagreed. Considering lack of resources as contributing to failure, 35 (70%) strongly agreed, 15 (30%) agreed, 0 (0%) were not sure, 0 (0%) disagreed, and 0 (0%) strongly disagreed. The view of the majority is in line with the study by Belassi, W., and Tukel, O.I., (1996), the availability of resources is a further critical factor to the success of projects. Further analysis showed that inexperience on the job was found to be another cause of project failure. 5 (10%) strongly agreed, 15 (30%) agreed, 2 (4%) were not sure, 20 (40%) disagreed, while 8 (16%) strongly disagreed. This may be due to the technical nature of construction projects. The data also showed that client's influence on the project is another cause of project failure. With this, 15 (30%) strongly agreed, 10 (20%) agreed, 20 (40%) were not

sure, 5 (10%) disagreed while 0 (0%) strongly disagreed. This means that negative influences from stakeholders is a cause of project failure.

Finally, it was established that project cost and schedules are factors that affect project success. From the analysis, 10 (20%) strongly agreed, 20 (40%) agreed, 10 (20%) were not sure, 10 (20%) disagreed whereas 0 (0%) strongly disagreed. This means that if the cost of the project is too high with inaccurate schedules there is a high possibility for project failure.

5. Conclusion

Throughout the study, it is realized that construction industry projects are unique but not so different from those in other sectors. From the findings, it is established that the main factors that contribute to success in Wide Horizon Ghana Limited are: project manager's influence and leadership style, project team members' coordination, availability of resources and funds, organizational success and finally client's satisfaction as well as the completion of projects on time. Respondents did not view factors such as cultural setting, company prestige, too much competition in the industry as factors that hinder project success. Construction project managers can pay more attention to these factors to ensure project success or minimize the rate of project failures within the West African sub-region.

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