

Project Management: Perspective of small and medium-sized construction firms in Ghana

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ABSTRACT

Literature on construction industry has revealed the extent of importance and the need of good project management practice at a site. Efficient compliance of this project management practice by a firm within the construction sector has yielded results such as minimization of waste which turns to maximize returns of the client, ensured fruitful communication among the project teams to avoid rework and accident amongst others. The research explores how project management is practiced within small and medium-sized firms. The paper mainly focused on the execution phase of project management process; thus the construction stage. Further, the study adopted the use of the literature in project management practice primarily. The results showed that the small and medium-sized firms are mostly owned by solely one person who controls and have adapted self-style project management techniques. This nonstandardized project management practice among small and medium firms affect progress and contributes wastage. Statutory provision for small and medium-sized construction firms must be instituted to make the SMEs project management compliant to enhance project success.

Keywords: Project management, perspective, small and medium-sized firms, Ghana

INTRODUCTION

The role of small and medium-size firms (SMEs) have been characterized in the literature as a result of their contribution in terms of growth, employment and innovation (Turner *et al.*, 2010). SMEs have also been recognized around the world as a vital vehicle that stimulate poverty reduction and also assist large firms. According to Turner (2008), SMEs need project management to manage their innovativeness in a focused manner and to achieve growth and satisfy their strategic objectives. Ownens (2006) argued that SMEs have poor project management practice because they do not have systems in place to monitor and control the projects. Further, SMEs in Ghanaian construction are described as prolific job creators without being project management compliant. In Ghana, SMEs are also believed to contribute to about 70 percent of GDP and account for 92 percent of businesses (Abor and Quartey 2010). In addition, most of this construction SMEs in Ghana are family-owned businesses and, therefore, adapt self-styled management for their operations. Also, the construction SMEs do not survive within the sector after executing major projects. This may be as a result of noncompliant and lack of project management standards regarding personnel management, financial management, logistics and the managing of the entire operations of the firm thereby diminishing their profits and growth. It is against this backdrop that this study seeks to explore into how constructions SMEs embark on project management techniques and also to promote a standardized project management practice by these SMEs. The study intends to benefit Construction SMEs and other firms aspiring to enter the sector to improve on their project management method that brings

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profit to the company in the long run. The study also focused more importantly on the project execution phase.

PURPOSE OF THE STUDY

The aim of the study is to assess how project management is practiced among Construction SMEs and to highlight constraints when embarking on project management technique.

LITERATURE REVIEW

Overview of the Ghanaian Construction Industry

According to the Government of Ghana (GOG, 2010), the Ministry of Water Resource, Works and Housing (MWRWH) is responsible for formulation of and coordination of policies and programmes for the systematic development of the country's infrastructure. Further, the Ministry has a classification register which aims at the proper grading of Contractors into categories and financial classes (MWRWH, 2004). The register only permits listed Contractors to be eligible to undertake building and civil contracts awarded by the Government. Anvuur, *et al.* (2006) in the established that the Ghanaian Construction industry over the years has developed into two sectors: the formal sector and the informal. The formal sector adopts a variety of procurement systems (Anvuur *et al.*, 2006). The informal sector took an approach similar to the historical approach of master craftsman engaging labor in product delivery Well and Wall, 2003). The MWRWH has a financial classification of building and civil engineering construction firms operating within the country. Building Construction firms are placed under category D, and class K for civil engineering works with groups G and E for Plumbing and Electrical works respectively (MWRWH, 2004). There are four further sub-categories 1, 2, 3 and 4 based on the financial and equipment holding of the company. In Ghanaian Construction industry, small and medium-sized firm's falls within categories D3 and K3 for building and civil engineering works.

Definition of SMEs

Abor and Quartey (2010) affirmed that definitions of SMEs vary among countries. Some researchers use capital assets while others use skills of labor and turnover level. These essential characteristics that define SMEs need to be managed using the traditional project management practices. The Ghanaian economy is no different; literatures have defined SMEs in that same context without any universal definition. The Ghana Statistical services (GSS) considers a firm with up to 9 employees as SMEs (Kayanula and Quartey, 2000). The Construction industry is directly linked to the Ghanaian economy as Government is the biggest client that has engaged most of the SMEs with projects (Boadua *et al.*, 2015).

Project Management Practice by SMEs

White and Fortune (2002) established that project management is now a well developed and has been accepted as a core skill of professional expertise and for academic research discourse. Cheng (2005) supported that project management technique are seen in many emerging sectors including consultancy services manufacturing and service including consultancy services, manufacturing, and service industries, information Technology among others. Accordingly, the construction sector is seen as the largest and the most established sector that practice project management technique (Craford *et al.*, 2006). Murphy and Ledwith (2007) postulated that

project management is a well-established descriptive that defines in details the tools and techniques required to embark any project. Project management from the perspective of SMEs in Ghana has become an issue due to numerous of challenges encountered by these firms. Notable of these challenges includes personnel management, financial management, logistics and general management. This assertion was supported in by Addo-Abedi, 1999; Eyiah and Cook 2003 which stressed that local construction SMEs in Ghana lack managerial capacity with regard to financing, material and personnel resources. A study by Laryea (2010) further supported that contractors in Ghana stressed that there are lack qualified construction professionals with the necessary knowledge in construction works. Kayanula and Quartey (2000) maintained that lack of entrepreneurial and business management skills and know-how significant constraints are faced by SMEs in their development and growth. PMBOK, (2000), defines a project as a group of interrelated work activities by a particular scope budget and schedule to deliver capital assets needed to achieve the strategic goals. Every project has a unique characteristic that includes the scope; schedule and the budget that must be managed throughout the project lifecycle of the project.

Project Execution Phase

PMBOK (2000) emphasized that project management process can be organized into five groups of processes mainly initiating, planning, executing, controlling and closing. This study, however, focused on the execution phase including control and closing. The execution phase involves the coordination of people and other resources to carry out the plan. The controlling process involves ensuring that project objectives are met by monitoring and measuring progress regulatory to identify variances from the plan so that corrective action can be affected. Closing phase on the other hand highlights on formalizing acceptance of the project and bring it to an orderly end. Figure 1 shows the flow chart of project management process.

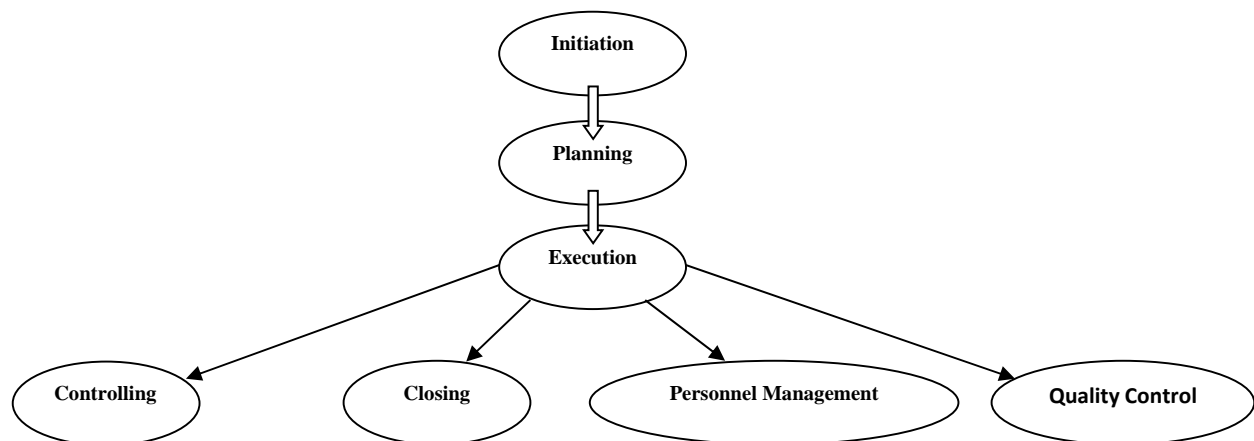


Figure 1: Depicting the flow chart of the Project management process

Source: Adapted from PMBOK (2000)

Controlling Phase

This phase of a project involves the regular review of metrics and reports that will identify variances from the project baseline (PMBOK, 2000). The differences are determined by comparing the actual performance metrics in the Execution phase against the baseline parameters

assigned during the Planning Phase. These variances are incorporated into control processes to evaluate their meaning. Accordingly, a significant difference does not explicitly require a change to the project plan but these variances should be reviewed to determine if preventative action is necessary. Eldridge (2013) postulated that Controlling also includes taking preventative action in anticipation of possible problems. Eldridge (2013) further supported that Project Control has a direct correlation to project progress and stakeholder's expectations. On the other, subsections of the Control Phase, the basic concepts of control related to scope, change, schedule, cost, risk, and contract administration will be reviewed.

Closing Phase

This is also referred to as project closure and it involves handing over the deliverables to the customer, passing the documentation to the business, cancellation supplier contracts, releasing staff and equipment, and informing stakeholders of the closure of the project (Burke, 2011). After the project has been closed, a post-implementation review is embarked on to determine the project success and identify the lessons learned out of the completed project (Morrison and Brown 2004). SMEs usually close their projects hand it over to the main contractor once all outstanding works and repairs have been made good.

Personnel management

The execution phase of a project captures human resource planning including the skills, number of employees, when their services are needed, how to motivate them and the agreed period to effect remuneration forms integral part of personnel management (Duen-Ren and Chouyin 2004). Personnel management within the construction sector becomes mandatory since different skills persons from different backgrounds are recruited. This personal management enables individual talents and competencies to be tailored towards the goal of a project as well as the entire targets of the firm. Buckley and Enderwick in as early as 1989 remarked that, the complexity and unique features associated with the construction sector profoundly influence personnel management. Accordingly, personnel management mainly revolves around the following; human resources, planning, recruitment staffing, appraisal, training and development; compensation (wage, salary, fringe benefits health & Safety and labour relations and personnel research (Burke, 2011). Logistics management as part of project can be expressed as the management of the flow of materials, tools, and equipment (and any related object) from the point of discharge to the point of use or installation (Lee and Sweeney 2001). Coordinating these three vital components between the project's principal parties would increase productivity substantially. On a construction site, these components must be properly managed to ensure a project's success (Morrison and Brown, 2004).

Quality Control management

The Construction industry, unlike many manufacturing sectors, is concerned mostly with one-off projects (Harris and McCaffer, 2001). This virtually creates difficulty for effective quality control because each new contract is often characterized by ad hoc recruitment of labor and engagement of fresh management team. Notable among quality control management is financial management and cost control, quality assurance amongst others. To manage financially or control cost is an apparent objective of managers, but it should be noted that no amount of paperwork archives this control (Lock, 2000). Harries and McCaffer (2001) argued that the element cost control system includes the following (i) observation (ii) Comparison of observation with desired standard. Small and medium-size firms are notable for having a low

level of project management techniques. As a result, most projects executed by the companies do encounter financial problems such as multi-cost overrun that affect the particular project and the entire financial standing of the enterprise. Spalek,(2014) stressed that economic assessment and appraisal of projects prior to their kick-offs are not embarked correctly by these SMEs rather they focus so much on the profit to be yielded after executing the project. Quality control involves maintaining the set standards per best practice in terms of workmanship, designed strength work and procedures.

General management

Quite naturally, contract administration control is the process of ensuring that the vendor's or section within the organization's performance meets contractual requirements (Burke, 2011). This is accomplished through the use and monitoring of a Project Plan from the vendor, estimates from performing parts, periodic progress reports, and the completion of deliverables as delineated in a project statement of work. Contract closure should be coordinated with the Contract Manager of the agency. According to Thomas and Mengel (2008) this general management is quite renowned among large firms. SMEs rarely practice this technique due to their low level of project management knowledge.

Research Methodology

In order to achieve the goal of the study, literature review was conducted. This research design made use of the relevant literature on construction SME's and project management practices using journals, conference papers, books and accredited information from the internet related to the study. This method was found appropriate as a result of the extensive literature that was established from related project management studies.

Findings and Discussions

Project Management technique is the interrelation of all the project resources for the successful delivery of the project. However, the general concept of Project management studies phases which must be properly coordinated for in order to achieve the success of a project.

Findings revealed that Project Management is a well-established technique which is mostly practiced in manufacturing sectors in the construction industry (Cheng, 2005). The study also found that project management method defines the tools and techniques required to undertake a project (Murphy and Ledwith, 2007). Generally, local construction SMEs in Ghana lacks the managerial capacity to manage (Addo-Abedi, 1999; Eyiah and Cook, 2003). The study established that every project has unique characteristics, and as such vital features include schedules, scope, and budget, these must be managed properly throughout the project life cycle.

The research concentrated on construction SMEs firms which practice project management techniques when embarking on projects. It is not commonly practiced in Ghana for SMEs to use different project management companies as a means of achieving completion of projects. However in extreme cases, the main contractor engages the services of a separate project management firm.

Construction SMEs in Ghana practiced the standardized project phase as captured in the PMBOK (2000) namely, initiation, planning, execution, controlling, and closing. However, it is not all project embarked by these SMEs that considered vividly this technique it depends on the

client need and the type of project. Although the technique of project management has been credited with numerous merits such as attaining of precisions, good communication, quality control, minimising waste, rework thereby ensuring high returns for the client amongst others, there are some inherent variables hindering good project management practiced among construction SMEs.

Inherent variables hindering good project management practices construction SMEs

- i. Poor communication of project goals and strategies to meet milestones among project teams (Abbasi and Al-Mharmah 2000)
- ii. Inadequate knowledge of PM technique among professionals (Lee and Sweeney 2001).
- iii. Conservative attitude to change by construction professionals.
- iv. The complexity of project and scarcity of human capital (*Crawford et al., 2006*).
- v. Constraints in accessing information on project management theory and practices (Koskela and Howell, 2002).

Conclusions

The study focused on the project management practices by SMEs in the construction industry of Ghana. SMEs make a significant contribution to the Ghanaian economy as a result of contributing to about 70 percent of GDP and account for 92 percent of businesses (Abor and Quartey 2010). In addition, most of this construction SMEs in Ghana are family-owned businesses and, therefore, adapt self-styled management for their operations. A Large number of the construction SMEs in Ghana does partially practice the standard Project Management techniques depending on the size and type of project. Further, SMEs need to be guided as to what tools sets they should use, not given a longer list from which they need to choose (PMBOK, 2000). Also, identify that for all firms the necessary success factors are client consultation; planning, monitoring and control; and resource allocation.

This nonstandardized project management practice among small and medium firms affect progress and contributes wastage. Statutory provision for small and medium-sized construction firms must be instituted to make the SMEs project management compliant to enhance project success.

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