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Team Integration on Construction Projects – The Role of the Client

By

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MASTER OF SCIENCE

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CERTIFICATION

I hereby declare that this submission is my own work towards the MSc and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

A successful construction project is one which is able to meet or deviate as minimal as possible from the estimated budget, the stipulated time and the expected standard of quality and performance with overall satisfaction from project stakeholders. Team integration as an emerging technique seeks to eliminate the fragmentation within the construction industry and its related inefficiencies. The qualitative approach was adopted in gathering and analysing data. Interviews were conducted with clients who have been involved in team integration to solicit expert opinions and these were analysed qualitatively to reach conclusions and recommendations. It can be concluded that team integration is necessary in construction projects. However, it was determined to be more useful in the project initiation and design stages, procurement and construction stages. It was concluded that factors affecting team integration include diversity of the project team, cooperation between team members, level of communication between team members, client attributes and relationship with the team members. Problems of team integration identified included the protection of professional integrity or pride and comfort in dealing within sub-groups at the expense of the project teams. It is recommended that the role of the client is key particularly in the mobilising and timely release of funds, acquiring all the relevant licenses and permits, giving clear briefing and clear objectives, supervision and interest in the project. The client should show interest in the project, integrate himself properly into the team and show leadership. Client should agree with the project team on the specifications and conditions in the early stages of the project. It is recommended for further research on the role of the client in forming a seamless or ideal integrated team for construction projects.

Key Words: *Team Integration, Client*

DEDICATION

This book is dedicated to my wife and yet to be born Children and to my Siblings (She, Lee, Lea, Leo and Allan), the entire Anzagira Family constituting a body of knowledge from which we all feed, for their support and encouragement. My Uncle, Dr. Damasus Tuurosong & Family, an inspirer and a mentor in all respects of life to who I look up to.



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After a long while and a long road, here I am now, a part of something, hopefully something noble, glamorous, and maybe a little bit glorious too. The road has not been easy, but as Jedi master Yoda said “do or do not, there is no try.” Well, I did it. However, I could not have reached my goal without the guidance, support, and sacrifices of several people to whom I will always be grateful. I thank the Almighty God for making my life useful and a blessing to many.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

All projects are unique and the inherent intricacies and underlying forces that drive most construction projects create difficulties for all project managers. Landmarks on decisions regarding the execution of projects are employed to predict outcomes whereas tools for risk management are employed in the prevention of unexpected adversities, successive repetition of processes are also undertaken to prevent recurrence of mistakes to ensure that facilities come out as is desired. However, despite all these efforts and innovations, projects do not still meet the required triumvirate of desired schedule, budget and specifications (Meyer et al., 2002).

Team integration is suddenly being recognised as a promising area. The duties of the design team seem as if to be divorcing from the management. Overwhelmingly it can be concluded that the making of detailed contract documentation is a dire factor which leads to the realization of cost, time and quality criteria of a project. It is increasingly realised that in the future clients will become powerful and central and their requirements must be reflected by the way in which things are done from the inception to completion of the project and the quality of the final product.

An integrated team is a group of individually discrete people or groups of people with functional identities working together in a consciously complimentary and continuous way to achieve a set objective through an open system of information sharing. This contributes to well-organised and productive decisions under an experienced team leader who has the capacity to achieve the objectives of the project

(Baiden et. al., 2003). Integration can be considered as the amalgamation of different professionals or organizations with different objectives, desires and social settings into an interrelated and interdependent supportive unit (Austin et al., 2002; Jaafari et al., 1999).

Information sharing is a core requirement if individuals from different organisations are to work together to attain common project goals. It also goes to imply that the different company processes and organisational ethos have to be aligned in a shared form. Improved team values and professional attitudes are necessary to realising the attainment of project objectives and team integration seeks to bring this to reality in the closest possible way (Howell, 1996; Dainty et al., 2001).

In the construction industry, integration outlines working behaviours, attitudes and values that bring about effective and efficient team work by all the individuals and groups of people within the team (Strategic Forum for Construction, 2003; Vyse, 2001; Lennard et al., 2002). It stimulates a free exchange of information between different members of the project team.

Baiden et. al., (2006) referred to an integrated project team as a group of well-organised and highly motivated professionals in charge of the design and construction of a facility. The team is composed of various skills and knowledge for the effective and efficient execution of the project removing the gap that existed between the design team and the construction team. (Achieving Excellence in Construction, 2003; Akintoye et al., 2000; Fleming et al., 1996).

In the construction industry, a client can be referred to as the individual or organization who commissions and pays for the design and construction of a structure (e.g. a building, dam, road etc). The client comes in different forms and may be (but

not always) the owner of the facility being commissioned, the user of the facility, or they (i.e. the client and user) may be separate entities.

The client as initiator and financier of a construction project is central in the design and implementation of the project. They are thus seen as the motivating force to propel the successful execution of projects in today's construction industry. Therefore, the overall objective of all stakeholders in a construction project is to meet the needs and aspirations of the client. To meet the demands of the client would require a consideration of the project organization, quality of the design, construction workforce expertise, and the quality and suitability of construction materials (Sanvido et al., 1992). Project success requires that the client be actively involved especially in project implementation and adequate and timely provision of funds (Kometa et al., 1995).

Clients' requirements are becoming the central point of concentration in the event that the industry has realised the leading role clients have to play in the construction process and realising that clients are becoming more and more complex than ever before. This has also made the industry to become concentrated at seeking to deliver best value construction products at the least possible cost (Egan, 1998).

The realisation of the importance of the client in the construction process makes the realisation of their objectives very important in order to achieve their satisfaction. The client is considered satisfied when two objectives have been met translating into a final product which matches or exceeds their expectations. These factors include the conversion of client brief into a design, which gives technical specifications, functional performance requirements and quality standards on the one hand; and also, the completion of the project within a stipulated time and within budget (Bowen et al., 1999).

The modern procurement process involves selecting the most appropriate organization for design and construction work. (Turner, 1997; Ashworth, 2002). Stakeholders need to be familiar with the various procurement options now available particularly members of the integrated client team. Even though the construction process can be divided into three main processes including design, management and construction and seen as distinct in their own right, yet in practice it can be seen that there are cooperation and interchange in most of their activities. (Masterman, 2002; Walker and Hampson, 2003).

1.2 PROBLEM STATEMENT

The construction industry is one of the rapidly changing industries in the world. Stakeholders within the industry need to be able to adapt to the change. Today's construction client now requires more from the industry in terms of a quality, performance, time and cost of the completed structure. These have now taken the centre stage in deliberations and objectives of the modern day construction client.

Clients in the construction industry are becoming very complex. This coupled with the changes going on in the construction industry has resulted in clients being at the centre of the construction process and pressing for improvement in the construction process. (Bennet et al., 1988; Latham, 1994).

Scientific and technological innovation coupled with globalisation in today's turbulent construction industry demands that clients become the drivers to change the processes in construction. There have been major changes in the various stages of the construction process. For example, the increased use of alternative procurement systems (e.g. design and build), integrated project management teams, partnering, and other forms of contracts. The history of construction seems to serve as a basis for the

fragmentation since the client called a builder and from thence on the other members are invited but the response to client needs is changing this situation rapidly.

Most clients will require advisers (design consultants and facilities managers) who know about built solutions especially in the project initiation stage. The design of these facilities must meet the needs of clients now and in the future without any compromise.

There have been lots of studies with respect to the activities of the construction industry which have stressed the need for change in the way things are done, emphasising on greater efficiency and the need for client-led focus in the construction industry. These problems within the construction industry have tended to draw back the efficiency of the industry in the effective provision of built structures and must necessarily be solved.

The fragmented or disjointed nature of the construction industry has been blamed for the abysmal performance of the industry. This has resulted in different participants involved in the different stages of the construction process not to be able to integrate properly and hence poor coordination between the parties. (Anumba and Ebuomwan, 1997; Love et al., 1998). It is believed that the performance of the construction industry can be improved by employing techniques and approaches which bring the different project participants together by integration. Olusegun et al., 2001 postulated that it is possible to save up to 16-23 per cent of the original cost estimated by employing an arduous evaluation of the procurement procedure alone, especially in the design stages of a project.

The unorganised nature of the industry comes with it lots of forms of conflicts and antagonisms in all stages of the construction process particularly the procurement and construction stages. There are usually adversarial relationships in most contracts

because of the disjointed nature of contract forms which leads to the denigrating of the client's needs. It also serves as a setback to the project outcome as intra and inter-organisational rivalry takes the centre stage over the client's needs.

A further consequence of the fragmented industry is that the different project participants who may be unfamiliar to each other may not interact much within the various stages of the construction process. The perception by the public is that the contractors usually have the tendency to undertake illegal tendering practices including collusion and bribery which frowns on the procurement process and gives the contractors and the industry as a whole a bad image. (Gyles et al., 1992).

The disjoint among the different members of the project team makes the implementation of quality assurance programs difficult. This is because the design team is often different from the construction team and strategies which might be planned by the design team may not be adhered to by the construction team, or when implemented does not get the cooperation and support from employees (Love and Li, 2000).

The construction industry being one of the fastest changing industries in the world has led to the demand for greater accountability and high quality buildings from construction clients. It has also resulted in the need for highly professional and construction services in the industry now and is likely to increase in the future (Smith, 1998).

Globalisation and technology has contributed to a tremendous and rapid growth in the Construction industry. This has necessitated a change in the events of the industry and more pragmatic and efficient ways of doing things is required to achieve the closest minimal deviations to budgeted cost, estimated time schedules and meeting the expected or required standard quality and performance. As a result the

importance of the client as the pivot of the construction process has been brought to the fore. Team integration being one of the new and emerging techniques of construction that seeks to achieve this also has little research on it and the role the client can play in promoting team integration.

The study therefore seeks to investigate the factors affecting team integration and the role that the client could undertake to promote team integration. This research benefits the entire construction industry including clients, consultants, and contractors by examining the advantages of using team integration on construction projects.

1.3 AIM OF STUDY

The aim of the study is to investigate the role of the Client in team integration on construction projects in Ghana.

1.4 OBJECTIVES

The objectives to be met by this research in order to achieve the aim of the study are as follows:

- (i) To identify the factors influencing team integration in the construction industry
- (ii) To identify the role clients, being project initiators and financiers, could play to promote team integration.

1.5 SCOPE OF STUDY

The scope of this research will be limited to the role of the client in team integration in respect to the various phases of the project i.e. initiation or preliminary stage, design stage, procurement stage, construction stage, and commissioning phases. It will

examine existing literature on factors affecting team integration and project performance on construction projects in Ghana.

1.6 SIGNIFICANCE OF THE STUDY

Also, team integration, being an emerging system and without sufficient research in this direction, this piece of research would in addition to emphasising what others have written about the subject also explore new ideas which would be a source of additional knowledge from which other researchers can tap.

This research benefits the entire construction industry including clients, consultants, and contractors by examining the advantages of using team integration on construction projects. The role of the client in promoting team integration as well as relationship between team integration and project performance is explored. Also, team integration, being an emerging system and without sufficient research in this direction, this piece of research would be useful in the contribution of knowledge in the field.

1.6 METHODOLOGY

The methods used in the collection of data would be made up of two sources. A search through journals, articles and books relevant to the subject matter to form secondary information. Scheduled interviews with clients who have been involved with team integration would form primary data that would be solicited. The qualitative research approach would be adopted for the study. The study would employ the triangulation method of combining Word Auto Summary, Manual count and qualitative data analysis software NVivo 8 to analysis data gathered from the field. This would result in the findings from which conclusions and recommendations would be made.

1.7 COMPOSITION OF THE STUDY

This study is structured to present the development of the research and data analysis along with the presentation of results, key findings, and conclusions.

Chapter 1: Introduction examines the background to the study, the problem statement, aim and objectives of the study, the significance of the study, the research focus, the scope of the study, and the composition of the study.

Chapter 2: Literature Review of the existing research including studies by some researchers, data from papers and textbooks, which have in one way or the other investigated the use of team integration. Variable Definitions used in the analysis are introduced.

Chapter 3: Methodology of Data Analysis introduces the graphical and statistical methods used in the analysis.

Chapter 4: Results of factors affecting team integration, the role clients could play to promote team integration and factors affecting project team performance are illustrated using statistical tables. Summaries are also done to review the results.

Chapter 5: Key Findings and Conclusions are stated about the entire research analysis.

CHAPTER 2

LITERATURE REVIEW

2.1 INTEGRATION OF CONSTRUCTION TEAMS

Integration may be explained as the amalgamation of different professionals or organizations with diverse objectives, desires and social settings into an interrelated and interdependent supportive unit (Austin et al., 2002; Jaafari et al., 1999).

Information sharing is a core requirement if individuals from different organisations are to work together to attain common project goals. It also goes to imply that the different company processes and organisational ethos have to be aligned in a shared form. Improved team values and professional attitudes are necessary to realising the attainment of project objectives and team integration seeks to bring this to reality in the closest possible way (Howell, 1996; Dainty et al., 2001).

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Fleming et al., 1996).

Teams and stakeholders in construction projects can be integrated at various levels: delivery teams can be fully integrated, partially integrated (or fragmented), or hardly integrated at all (Baiden & Price, 2011). An integrated project team may be considered as fully integrated when it:

- a. has common objectives for the project to attain a specific aim (Evbuomwan, et al., 1998; Love, et al., 1998; Strategic Forum for Construction, 2003; Baiden et al., 2003; Anumba et al., 2002);

- b. works devoid of limitations or restriction between the various team members
(Strategic Forum for Construction, 2003; Fusion, 2001; Bromley et al., 2003; DBF, 2000);
- c. works in the hope of achieving synergetic results and ensuring support for each other such that the outcomes and successes are collectively enjoyed (Love PED et al., 1998; Strategic Forum for Construction, 2003; Baiden et al., 2003; Vyse, 2001; Dainty et al., 2001);
- d. has the tendency to forecast more precisely, time schedules and cost estimates by making use of the collective skills and experience of all members (Evbuomwan et al., 1998; Baiden et al., 2003; Anumba et al., 2002; Cornick et al., 1999);
- e. has unrestricted information flow among team members and all project stakeholders (Evbuomwan et al., 1998; Moore DR et al., 2001; Vyse, 2001; Cornick et al., 1999; Bromley et al., 2003);
- f. has a member structure that is flexible and can easily be changed within the duration of the project (Evbuomwan et al., 1998; Baiden et al., 2003; Anumba et al., 2002);
- g. has a distinct character and a project office or space is created for the project
(Strategic Forum for Construction, 2003; Bromley et al., 2003);
- h. gives all members of the project team equal prospects to contribute to the construction process (Love, 1998; Baiden et al., 2003, Moore et al., 2001; Bromley et al., 2003);
- i. has respect and impartial relationships between team members (Moore et al., 2001; Vyse, 2001; Dainty et al., 2001);
- j. and has a “no blame” culture (Evbuomwan NFO et al., 1998; Strategic Forum

for Construction, 2003; Vyse, 2001; Dainty et al., 2001; Bromley et al., 2003) A team can be considered in the light of the above practices to give an overall idea of the extent of integration of a project team.

2.2 FACTORS AFFECTING TEAM INTEGRATION

2.2.1 DIVERSITY OF THE PROJECT TEAM

A typical project team should naturally be made of different individuals (professionals in different fields) and different years of experience. Construction project teams may be described as a loose grouping of interested parties brought together for a specific construction project (Emmit and Gorse, 2007). Thus, team members should have varying skills and backgrounds more especially experience in the technologies used on the project.

Although empirical results have established no association or link between functional diversity and team performance, it is believed that differences in functions inhibit team progression (Sethi, 2000; Webber and Dohanue, 2001). It is also believed that when a team is composed of people with diverse functions it helps to boost the team's effectiveness even though it is further believed that functional differences may obstruct the social combination of members of the team. Good leadership or organisational involvement would be required if the positive effect of such diversity is to be realized.

2.2.2 RELATIONSHIP BETWEEN CLIENT AND TEAM LEADER

The client being the initiator and financier of the project usually has a lot of information up his sleeves that all other members of the team would not have. It is important that all stakeholders of the project find the client's objectives realistic whilst

also appreciating the underlying forces required to make them successful (Smith et al., 1998). Extreme confidence and collaboration is required between the client and the project team leader to fine tune the objectives and to make the other members of the project team appreciate the underlying forces. The team leader should be able to liaise with the client and seek in-depth information from the client before the brief is fully developed. Uncertain usually, is the extent to which clients are ready and willing to divulge all information leading to satisfactory answering of these questions (Smith et al., 1998). Since there is no way to find the construction of the mind in the face, the team leader unable to find all the answers to questions posed leaves the client's objectives inaccurate. This results in the project teams not satisfying the clients' requirements of the clients and a significant portion of the blame is attributed to the team. A high level of effort and patience is required by both the client and the project team to understand the briefing process to make it as effective as possible.

2.2.3 LANGUAGE/ COMMUNICATION

Communication is one of the most important factors that affects and directs activities in any sector. Construction thus is no exception. The importance of Communication to the construction sector can be likened to oil for any vehicle (O'Brien, 1997) Communication by way of the language differences would generally and seriously affect any project. Besides, the frequency of communication also has a great impact on any endeavour.

Researchers have indicated after examining the practices in a team necessary for effective team performance that necessary for the success of cross-functional teams is communication (Cohen and Bailey, 1997). There is likely to be difficulty in communication and integration when members of the team come with different professional backgrounds, experiences, principles and beliefs coupled with unfamiliar languages. Smith et al., (1994) explained that having people with diverse backgrounds and experiences in a group leads to decreased informal communication. Thus social interaction is greater when the level of informal communication is greater.

Janz et al., (1997) also studied the activities within teams particularly in respect of information sharing and helping behaviour within the team and its effectiveness. It was observed that there was substantial association between these two factors. Thus, effective and efficient information flow, support and management lead to more effective group performance.

2.2.4 TEAM COOPERATION

Team cooperation may be defined as the degree to which individual members of the team have the impression that they are doing a good job collectively. Cooperation within the team is said to be high when members turn to each other for advice with ease and vice versa. It is a situation where members of the team operate in a manner where all members feel comfortable approaching the other.

Team cooperation has been examined as a factor that facilitates the success of teams (Cohen and Bailey, 1997). When people come together in a working

environment they become acquainted to each other and this develops trust between them. When persons in a team interact repeatedly for a period of time together with other contacts in the past it results in better collaboration within the team (Flache, 1996). Team members develop skills that are essential to collaborate with other professionals having different backgrounds, language, and group persona when they continue to come into contact over a period of time (Zaccaro and Lowe, 1988). Other the other hand, it is believed that when people meet for the first time or there is no record of them meeting in the past people become sceptical dealing with others which is a major reason for poor cooperation in project teams.

A team at first give people with different characteristics (including who have patience and those who learning to collaborate) the opportunity to adjust to work well which leads to much faster team activities or processes in the future. However, team cooperation also breeds compromise in the sense that after members decipher the strengths and weaknesses of the others, they start working out ways that decreases or eliminates conflicts and antagonisms. Even though it makes tasks performed in the team being at a fast rate, it reduces considerably the quality of workmanship and the value of product alternatives (Leenders et. al., 2002).

Effective cooperation results in the team running smoothly and also brings efficiency in the team's operations and decision making. Collaboration between people is essential to link interrelated jobs together. Accordingly, collaboration across functional groups is the value of diverse functional departments or units working together to achieve a common organizational objective (Pinto and Pinto, 1990).

2.2.5 LEVEL OF TEAM INTEGRATION

Birds of the same feathers flock together. People have the affection to deal with others who have similar traits such as their interests, their backgrounds, their expertise, and a history like themselves (Leenders, 1996). In multi-functional construction project teams, professionals like to associate within their professions such that architects flock with architects and engineers go with engineers. This arises because they perceive the others as strangers along their professional lines. This creates sub-groups within the team and most of the collaboration occurs within these smaller groups at the expense of the teams (Baerveldt and Snijders, 1994).

For team integration to be effective there is the need for smooth and repeated flow of information within the team members, instead of members creating subgroups and communicating within it. People within the sub-group follow and agree more with those within the same sub-group and are likely to reach agreement within the sub-groups easily than in the team as a whole. Also, a low level of team integration also impedes the rate of flow and quality of information within the team.

Communicational frequency affects the performance of teams and particularly very high levels can impede the performance of teams in two ways. It can reduce the intensity of intellectual discourse from which ideas are assessed (Nicholas, 1994). Secondly, the minds of members of the team changes towards common beliefs and thus reduce both the number and quality of solutions to problems created by the team as a whole when the rate of communication is high (Nystrom, 1979).

The level of team integration is expressed as the degree to which the members of the project team have interactions with each other (Jan et. al., 2004). How often members interact with each other gives the average distance in communication between them. When all members of the team interact directly with each other at least once in a week, the average distance is lowest, indicating that team members are fully

integrated. On the other hand, there is no interaction between members of the project team at least once a week, the average distance is highest, meaning that there is no integration in the team.

2.2.6 TEAM STRUCTURE

The structure of the team explains the fundamental procedure of interaction and influence between the project team members. In the structure of teams are the hierarchy of the organisations and the cohesion within those organisations. Hierarchy may be explained as the extent to which an organizational structure can be carved out and whilst cohesion may be referred to the degree to which members of a team like to work together and would like to continue to work together (Maznevski and Chudoba, 2000).

Having ranks in organisations and teams outlines each person's specific role within the team. Role ambiguity leads to conflict which results in a reduction in the performance of the team. It is thus essential for hierarchy to be established in every team to decrease role ambiguity and the subsequent associated conflict, and improve the effectiveness of the team. For a construction project, it is essential to have a clear definition of each person's role in the team. Formalism is used to explain the extent to which there are formal rules, standard policies and procedures are used to regulate decisions and working relationships. It impedes the interaction and communication required to create knowledge. Flexibility brings about innovation and new ways of doing things (Lee and Choi, 2003). Formalism can also create strong or weak ties between team members depending on how people love working with each other. A team with weak ties among team members will bring about better exchange of ideas

between the members as opposed to strong ties which can be likened to red-tapism and may foster constraining behaviours.

2.2.7 EXTENT OF TECHNOLOGY USE

Technology plays a key role in strengthening the extent of integration of the project team in a construction project. The use of modern technologies such as chat, email, video conferencing and knowledge bases in the dissemination of information between team members increases the amount of information exchanged both amongst the project team members and the client team members (Dennis and Kinney, 1998).

Communication is said to be complete and successful when the receiver is able to get the message being delivered correctly and in the required form and can act upon it. Communicating the needs and objectives of the project requires a medium of transmission. Modern technology can be employed to send messages faster and bring different people virtually together widening the scope of interaction (Dennis and Kinney, 1998). Team members could even communicate when they are away from the work place.

With a higher use of technology the developing the structures in the teams will have a higher effect on the efforts of team integration. The degree to which project teams use technology affects performance significantly (Dennis and Kinney, 1998). This creates increased scope for interaction from which the effect of formalization of structure yields an increased impact on the extent of team integration.

2.2.8 CROSS-CULTURAL FACTORS

Cross-cultural factors are made up of differences in belief systems, values and perceptions of individuals from different cultures. Sometimes these values and perceptions extend into their understanding of business, their relationship and particularly deadlines and these form part of the between-teams interaction (Espinosa et. al., 2003). Having people from diverse cultures could prove to form impediments against the success of the project when they exhibit their cultural biases in the team.

These factors act among others as impediment to the smooth exchange of information and acts as a setback to the integration of the team. However, developing organisational rules, regulations and norms would eliminate the effects of these differences in culture. (Constant et. al., 1994).

2.2.9 PROJECT TEAM LEADER

The most important requirement for the success or failure of a project is the quality of the project manager. It is the responsibility of the project manager to plan, organize and control the project. It is the project manager who the client gives authority to mobilize the required resources to execute and complete a project (Belassi and Tukel, 1996). He must be able to employ interpersonal influence to enable him direct and lead the project team, using the power reposed in him together with his leadership skills to carry along the team members (Cohen and Bailey, 1997).

In construction, conflicts between members of a project team are common occurrence. The attributes of the project manager must include the duty and power to resolve all conflicts to enable the achievement of determined project strategy and quality standards. There is the need for the attention of high level of management to be drawn when basic challenging issues are encountered an expeditious resolution of

the matter (Cohen and Bailey, 1997). Thus, for a successful project, the project manager's authority must be clearly defined.

2.3 PROJECT SUCCESS/ PERFORMANCE

A construction project is said to be successful when it meets the triumvirate of cost, time and meeting required specifications with stakeholders' satisfaction. Astley et al. (1990) explained that a project is successful when it achieves results much better than was expected in terms of cost, schedule, quality, safety, and participant satisfaction.

Also, a project is regarded successful overall if it meets the technical and performance specification, and if there is a high level of satisfaction about the project's outcome among the project stakeholders (De Wit, 1988).

2.3.1 FACTORS AFFECTING PROJECT PERFORMANCE

Factors affecting the performance of construction projects are weird and varied resulting from the significantly different project objectives. Some critical factors that affect project performance include a well-organized and interconnected team; a consistent number of projects making the various specialists to interact as a team devoid of conflicts and apportioning risk and reward in the right way; involvement in similar facilities; and important and enhanced timely flow of information from team members in the planning and design phases (Sanvido et al., 1992).

The level of planning effort in regard to the design and construction, the project manager's goal commitment, competencies, scope of work, and controls systems as well as project team motivation were identified as some of the critical factors affecting project success (De Wit, 1988).

2.3.1.1 INTERPERSONAL BEHAVIOR IN PROJECT ORGANIZATIONS

While a good project manager must have good leadership qualities, all members of the project team must also learn to adapt to work together, whether they are from different departments of the same organization or from different organizations (Project Management Institute, 2000). Initially, there may be some problems of communication when the team members are not familiar with each other and their respective roles in the project team. A quick resolution of all the problems would enable the team to become an effective and functioning team.

Most of the major issues that arise in construction projects require effective interventions by individuals, groups and organisations. This is facilitated when there are good interpersonal relations among team members. However, finding ways and means of boosting communication between team members as a way of improving the interpersonal relations remains a fundamental challenge (Payne et al., 2003).

Differences in allegiance to common project goals as a result of people coming from different groups and backgrounds is to the extent that sometimes they prefer to expand their energy towards areas that are most advantageous to themselves instead of the project team. It should not be taken for granted that just because members of a project team are located in one place or office, there will be a harmonious working relationship. It can be held however, that good communication can be achieved only through the determination of the team members to achieve

(Project Management Institute, 2000).

2.3.1.2 PERCEPTIONS OF OWNERS AND CONTRACTORS

It is normal that owners and contractors could have varied insights into project management for construction, yet each of them must be willing to craft an environment which makes the projects successful according to the key factors of avoiding cost overruns, completing with time schedule and of meeting the performance specifications. Project Management Institute interviewed some leading contractors and owners of construction projects in 1984 on factors for successful projects (Project Management Institute, 2000).

The key factors cited for successful projects were well-defined scope, broad planning in the early stages, good leadership, management and first line supervision, positive client relationship with client involvement, proper team interaction, quick response to changes and engineering managers concerned with the total project, not just the engineering elements (Project Management Institute, 2000).

On the contrary, ill-defined scope, poor planning, poor management, communication failure between design and construction teams, schedules and budgets, many changes at various stages of progress and absence of good control in the project were identified as factors responsible for unsuccessful projects.

2.3.1.3 SOCIO-CULTURAL

Members of project team from diverse background culturally may have different belief systems and behaviours regarding work culture and deadlines in general. These contradictions could include having different meaning systems, different interpretation of power relations, strange behaviours and attitudes to time

lines (Walsham, 2001). These are brought to play when individuals from different socio-cultural boundaries come together to form a team to execute a project and may have a substantial effect on the success of the project.

2.3.1.4 INTEGRATION AND COORDINATION BETWEEN DIFFERENT PROJECT DISCIPLINES

The absence of or poor integration and coordination between the different professionals is a major factor contributing to poor performance in the construction industry (Olusegun et al., 2001). Projects must be thought through, designed and constructed by amalgamating the energies of a whole lot of different people and organisations, all of whom may have different priorities and objectives some of which may be conflicting (Love et al., 1999).

The team leader has the most intricate challenge of coordinating the members of the project team. Irrespective of how difficult the task may be, some simple principles have been identified to be exceedingly effective in managing project teams to much greater performance (Leanders et. al., 2002). It has also been observed that good teams are a pre-condition, both directly and indirectly to the smooth functioning of the team and leading to the overall success of the project (Hollander, 2001). A bad team on the other hand would lead to the collapse or failure of any project, irrespective of how exciting and promising the original idea might have been.

2.3.1.5 FORMAL LINES OF AUTHORITY FOR TEAM MEMBERS

The introduction of hierarchy in a project team makes each team member to know their specific roles. Role ambiguity often leads to conflict the work place and ultimately leads to a reduction in team performance. The introduction of hierarchy

into a workplace or team can be seen as a way of reducing role ambiguity and conflict and thus improving team performance (Austin et al., 2002). Using standard and formal rules and procedures in working relationships and taking decisions can also be employed. Whilst flexibility can lead to innovation and innovative ways of doing things, formalization reduces and hampers interactions necessary to create knowledge (Austin et al., 2002).

Similarly, problems will arise when authority is not clearly defined particularly in regards to the authority of the manager of the project team. Problems then manifest themselves as either decisions not taken at the right time or not at all, or in decisions being frequently changed leading to delay and abortive work.

2.4 THE ROLE OF THE CLIENT IN PROJECT TEAM SUCCESS/ PERFORMANCE

Project teams are composed primarily of temporary and part-time individuals with lots of concerns and needs. A very significant concern in recent time for team integration involves meeting the specialized needs of project teams and task forces (Love et al., 1998a). Firstly, the individuals are concerned with how to balance the demands of the team with the regular requirements of their real jobs, which are often times at variance. Also, of concern are the challenges of project team leaders to direct work groups who they usually do not have a direct line of authority over. Yet with their very short period of operation they still need to find ways and means to make their performance worthy of the objectives (Love et al., 1998a). Given these potential

scenarios and the fact that the client in today's construction industry is reckoned to be in the centre, the client has a major role to play in the success of project teams.

2.4.1 CLIENT BRIEFING

The inception and early design stages are very critical stages in the life of any project and the importance of decisions made during these stages cannot be over emphasised if the project is to be executed on time, to budget and to the desired quality (Love et al., 1998b). It is no doubt the reason that the pre-design stage of construction projects has become a principal consideration in design management research. This is because it is the source of problems such as rework, change orders, and contractual claims (Love et al., 1999). Indeed many agree that client briefing is a pig-headed problem that many projects battle with (Barrett et al., 1999). This is because not much attention and time is spent on considering client requirements, other parties related to the project and those of the design team.

Recent reports seem to be emphasising the need for the industry to look at the client as the centre of events in the construction industry. The 1994 Latham report emphasised this opinion and has acted as the catalyst for the industry to concentrate more on client needs. The report also emphasised the importance of clients, good client briefing and the vital need for the industry to be more client centred. Good client briefing process was identified as an important factor that would lead to the success of a project (Latham, 1994).

2.4.2 CHOOSING THE PROCUREMENT METHOD

Procurement systems in the construction industry are many and varied. The growth of the industry can be hastened through the choice of the procurement system.

Attempts to achieve increase in growth of the industry through the procurement system are based on analogous activities other than integrated design and construction activities (Huovila et.al., 1994). It is increasingly being felt that the traditional procurement methods does not serve the interest of clients and that it gives rise to cost escalating beyond allowable tolerances. It is also recognised that performance quality and safety can be improved by stakeholders working more closely together (Dixon, 1996). Clients have become conscious of events within the construction industry and have sort to request demanded improved service and methods of procurement (Bresnen et al., 1991) to improve upon performance. The goal in choosing a particular procurement route should be the need to obtain overall value for money in the whole life of the structure and should be extended to include maintenance. The design, construction and maintenance of a building are a continuous activity which should be considered as interrelated activities. It is recommended that the procurement method chosen should promote integrated project team members working together in the various stages of the construction project. It is important to involve and bring together all members of the project team early in the project to advice on the buildability of the design and to consider the future maintenance of the facility as emphasised by the integrated system (Holt et al., 2000).

2.4.3 INTEGRATION OF CLIENT INTO PROJECT'S ORGANISATION STRUCTURE

It is important for clients and project team leaders to work diligently to make clients properly integrated into the project's organization structure. According to Ward et al. (1991), it is important for clients to set clear objectives, put the objectives under careful scrutiny, choose an appropriate procurement method based on the objectives

set, communicate objectives clearly to all parties involved in the project and ensure appropriate responses to deviations is in consideration with the client objectives.

It is believed that clients should be taking an even more proactive stance in the execution of projects. The owner of a project must provide clear directions to the project and his decisions must be timely. He must also assist the project management team to successfully execute the project. The client has the responsibility to select the members of the project team and must accept the risk associated with the project. He must also be pragmatic in dealing with risk and defending the project in the political and public arenas (Thompson, 1991). Understanding and skill is needed in the scheme of integrating the client and the project team as this is seen as an important factor in the success of any project.

2.4.4 STRUCTURE OF THE CLIENT ORGANISATION

A construction project will tend to recognize its client as the body that pays for the cost of the project, the form that the project has to take and its timing (and who pays the fees). The project team will find it simpler if all these authorities are vested in one body but frequently this is not so in practice. For example, central government may allocate funds for a project to a local authority, which will be responsible for developing the project, but it may reserve the right of final approval of both expenditure and aspects of the design. A similar situation can occur between head office and regional office of a private client. If there's a difference between the commissioner of the project and the end-user or beneficiary, it will be the responsibility of the commissioner of the project to satisfy that client (end-user or beneficiary) (Bresnen and Haslam, 1991). Nevertheless, in some instances, the project sponsor for various reasons may wish to involve that third party in approval of the design and this can further complicate identification of the client for the project team.

The members of the project team need to have the ability to understand the structure of their client's organization and their relationship to others with an interest in the project. Of particular importance is the decision making mechanism of the client's organization and who wield the authority for decisions. This will enable the project team to obtain accurate and useful information to effectively develop an appropriate brief for the proposed project. Client with an in-house architectural team enhances the effectiveness and performance of the project team (Bresnen and Haslam, 1991).

However, in many traditional contract forms, members of the project team do not get the opportunity to meet the client as the project team leader acts as surrogate client (National Economic Development Office, 1975) and the team members know the client's requirements only from the leader.

2.4.5 SELECTION OF PROJECT TEAM MEMBERS

Clients also have important responsibilities to fulfil which cannot be delegated to the project team. The National Economic Development Office (1975) emphasized, in respect to public sector clients, the strategic role of the client in the area of selection of project team members, setting key dates, brief development and monitoring of the project.

The best projects and the best clients put time into getting the right project team. The client has to consider the attributes of the individuals, their ability to work together and their experience before bringing them together. Waste reduction, improved quality and innovations are some of the end results when the client and the project team work closely together (Cornick, 1997). It also introduces better working relationships eliminating adversarial encounters which are prevalent in fragmented

relationships. Team work should be a core requirement for every facet of any and all projects. The benefits of putting team work into practice far outweigh any perceived disadvantages but the difficulty is getting real commitment from all the parties related to the project.

2.4.6 CLIENT ATTRIBUTES

Certain attributes of clients contribute to a successful project performance through the manner in which clients' attributes influence the performance of consultants. These attributes include financial stability, feasibility of the project, past performance of the client, the nature of the project and client duties (which did not include integration) (Kometa et al., 1994). This is concerned with the substance of the client body rather than management. Kometa et al. (1994) also found that clients themselves and also consultants perceived project definition, planning/ design, project finance, and project implementation as the four most important client responsibilities but with different rank orders. It is also alleged by researchers that the degree of responsibility clients accept is a function of their experience with the industry. According to Walker (1994), project team confidence in the client and the client's representative rather than vice versa reflects the difficult role a client's representative has to play as a link-pin between a multi-dimensional client with diverse and conflicting goals and the project team.

2.4.7 SETTING CLEAR OBJECTIVES

In construction, clients would like a project completed within the time, costs and quality standards, and these become the core values for setting the goals. Leung and Liu (1998) and Liu and Leung (2002) postulated that goal setting is a critical

management process, as clear goals would provoke appropriate actions and hence lead to desired outcomes. The assumption by project teams is that the client has identified the best means to achieving the project objectives, and analysed the nittygritties the project in regards to the spatial, technical and performance requirements before they start developing the projects.

Evaluation and internal politics of the client organisation can cause problems for the project team. Lack of an objective evaluation will lead to unrealistic objectives and bad internal politics of the client organization lead to a lack of objectivity, distortion of objectives and cause problems for the project team.

CHAPTER THREE

RESEARCH METHODOLOGY AND DATA COLLECTION

3.0 METHODOLOGY

The chapter is made up of the methods used in the collection of data. A search through journals, articles and books relevant to the subject matter formed secondary information which was confirmed by primary data solicited. The qualitative research approach was adopted for the study. In this approach, face to face interviews were adopted as the main data collection method.

3.1 LITERATURE REVIEW

The study started with a search through literature for relevant information on the role of Clients in Project Team Integration on construction projects. It also looked at the relevant factors affecting project Team integration. The internet was the primary resource centre for articles and journals and then textbooks for other information relevant to the subject matter.

3.2 DATA COLLECTION

3.2.1 SAMPLE SIZE

The study pinned its concentration on the clients who have used project team integration in the construction of buildings in Ghana and particularly in the north. In all, a total of seven (7) clients were identified. Of this number only five (5) were still in operation as the others had folded up for they had limited periods of operation.

3.2.2 SAMPLING

Collection of data for the study employed a combination of snowball, purposive and accidental (convenient) sampling techniques. The researcher contacted Consultants within the study area who were involved in team integration and they pinpointed the clients who had used team integration in their projects and who had the experience and knowledge of the subject (snowball sampling). The scope of the study was limited to the clients because they as project initiators and financiers are at the centre of the problem and are the best people to state the role of clients in team integration (purposive sampling). Clients who were easily available, accessible and willing to grant the interview were those interviewed (accidental/ convenient sampling).

The medium of communication for the interview was English since all of them were literates and could speak English fluently. The conversation was recorded and later transcribed by the interviewer. Each of the interviews was held for about one hour and was conducted at the offices of the interviewees.

3.3 DATA ANALYSIS

The study employed the summative content analysis using a triangulation method of manual summary, word auto summary and qualitative data analysis software NVivo 8. The information from the interviews was imported verbatim into a qualitative data analysis software package, NVivo 8. This software is designed for qualitative researchers who need deep levels of analysis for small or large volumes of data and has always set the standard in qualitative analysis and proved efficient in previous studies. (Bergin, 2011; Bazeley, 2007).

CHAPTER FOUR

SURVEY RESULTS, ANALYSIS AND DISCUSSIONS

4.1 INTRODUCTION

The chapter which is perceived as the main engine of the research work deals with the methods of analysis adopted for the purpose of interpreting the information gathered to derived appropriate results on the role of the client in team integration and the factors affecting team performance.

The study employed the summative content analysis using a triangulation method of manual summary, word auto summary and qualitative data analysis software NVivo 8. The information from the interviews was imported verbatim into a qualitative data analysis software package, NVivo 8. These have been summarised into tables and charts as below.

4.2 DATA ANALYSIS

Table 4.1 – Showing Interview results from Respondents

S/N	Analysis Method	Major issues emerging	Respondents	Themes

1	Word Auto summary	Significant stages of the work team integration is very useful <ul style="list-style-type: none"> • Client briefing • Design stage • Procurement • Construction stage • Commissioning 	5 5 2 5 1	Significant stages of the project that requires team integration
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		Well composed project team <ul style="list-style-type: none"> • Clear roles • Good communication • Good relationship/ cooperation between team members • Meetings well facilitated • Less quarrelling/ antagonism 	5 5 5 5 1	Qualities of well composed project team
		Factors affecting team integration <ul style="list-style-type: none"> • Availability of professionals for meetings • Cooperation between team members • Individual organisational structures • Social interactions/ level of communication • Relationship between client and team members • Client attributes • Team leader attributes • Ability to solve problems 	5 5 3 5 5 5 5 5	Factors affecting team integration
		Problems of team integration <ul style="list-style-type: none"> • Lack of funds 	5 5	Problems of team integration

		<ul style="list-style-type: none"> • Difference in professions • Different expectations • Personal differences • Disputes in regards to payment • Variation of the design <p>Role of the client in the success of the project</p> <ul style="list-style-type: none"> • Availability and timely release of funds • Acquire all relevant licenses and permits • Give clear briefing • Setting clear objectives • Sharing his vision • Selection of team members • Supervision & interest in the project • Insisting on timelines • Having good relationship with team members • Exercising good leadership 	3 5 3 5 5 5 3 5 3 5 5 5 5 5	
1	Manual count	Significant stages of the work team integration is very useful		Significant stages of

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		<ul style="list-style-type: none"> • Client briefing 	5	the project
		<ul style="list-style-type: none"> • Design stage 	5	that
		<ul style="list-style-type: none"> • Procurement 	2	requires
		<ul style="list-style-type: none"> • Construction stage 	5	team
		<ul style="list-style-type: none"> • Commissioning 	1	integration
		Well composed project team		Qualities
		<ul style="list-style-type: none"> • Clear roles 	5	of well
		<ul style="list-style-type: none"> • Good communication 	5	composed
		<ul style="list-style-type: none"> • Good relationship/ cooperation between team members 	5	project team
		<ul style="list-style-type: none"> • Meetings well facilitated 	5	
		<ul style="list-style-type: none"> • Less quarrelling/ antagonism 	1	
		Factors affecting team integration		Factors
		<ul style="list-style-type: none"> • Availability of professionals for meetings 	5	affecting team
		<ul style="list-style-type: none"> • Cooperation between team members 	5	integration
		<ul style="list-style-type: none"> • Individual organisational structures 	3	
		<ul style="list-style-type: none"> • Social interactions/ level of communication 	5	
		<ul style="list-style-type: none"> • Relationship between client and team members 	5	
			5	

KNUST



		<ul style="list-style-type: none"> • Client attributes 	5	
		<ul style="list-style-type: none"> • Team leader attributes 	5	
		<ul style="list-style-type: none"> • Ability to solve problems 		
		Problems of team integration	5	Problems of team integration
		<ul style="list-style-type: none"> • Lack of funds 	5	
		<ul style="list-style-type: none"> • Difference in professions 	3	
		<ul style="list-style-type: none"> • Different expectations 	5	
		<ul style="list-style-type: none"> • Personal differences 	3	
		<ul style="list-style-type: none"> • Disputes in regards to payment 	5	
		<ul style="list-style-type: none"> • Variation of the design 		
		Role of the client in the success of the project		
		<ul style="list-style-type: none"> • Availability and timely release of funds 	5	
		<ul style="list-style-type: none"> • Acquire all relevant licenses and permits 	5	
		<ul style="list-style-type: none"> • Give clear briefing 	3	
		<ul style="list-style-type: none"> • Setting clear objectives 	5	
		<ul style="list-style-type: none"> • Sharing his vision 	3	
		<ul style="list-style-type: none"> • Selection of team members 	5	
		<ul style="list-style-type: none"> • Supervision & interest in the project 	5	
			5	

		<ul style="list-style-type: none"> • Insisting on timelines • Having good relationship with team members • Exercising good leadership 	5	
--	--	--	---	--



1	NVivo 8	<p>Significant stages of the work team integration is very useful</p> <ul style="list-style-type: none"> • Client briefing 5 • Design stage 5 • Procurement 2 • Construction stage 5 • Commissioning 1 <p>Well composed project team</p> <ul style="list-style-type: none"> • Clear roles 5 • Good communication 5 • Good relationship/ cooperation between team members 5 • Meetings well facilitated 5 • Less quarrelling/ antagonism 1 <p>Factors affecting team integration</p> <ul style="list-style-type: none"> • Availability of professionals for meetings 5 • Cooperation between team 5 	<p>Significant stages of the project that requires team integration</p> <p>Qualities of well composed project team</p> <p>Factors affecting team integration</p>
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		members	3	
		<ul style="list-style-type: none"> Individual organisational structures Social interactions/ level of communication Relationship between client and team members Client attributes Team leader attributes Ability to solve problems 	5 5 5 5 5	
		Problems of team integration	5	Problems of team integration
		<ul style="list-style-type: none"> Lack of funds Difference in professions Different expectations Personal differences Disputes in regards to payment Variation of the design 	5 3 5 3 5	
		Role of the client in the success of the project		
		<ul style="list-style-type: none"> Availability and timely release of funds Acquire all relevant licenses and permits 	5 5 3 5	

	<input type="checkbox"/> Give clear briefing <input type="checkbox"/> Setting clear objectives <input type="checkbox"/> Sharing his vision <input type="checkbox"/> Selection of team members <input type="checkbox"/> Supervision & interest in the project <input type="checkbox"/> Insisting on timelines <input type="checkbox"/> Having good relationship with team members <input type="checkbox"/> Exercising good leadership	3 5 5 5	
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4.3 DISCUSSION

4.3.1 CRITICAL STAGES THAT REQUIRE TEAM INTEGRATION

From the data analysis, it is revealing that team integration is very important for construction projects. However difficult it was in identifying the three most critical stages for which team integration is required, the clients identified client briefing, design and construction stages respectively as the most critical stages that require team integration.

4.3.2 FACTORS AFFECTING TEAM INTEGRATION

Disputes and antagonism, diversity of the project team, cooperation between team members, extent of technology use, qualities of the project team leader, qualities of the client, relationship between the client and project team members were identified by clients as factors affecting team integration.

Indeed, a project team is composed of individuals of diverse professions, years of experience and cultural, social and religious backgrounds. However, the diversity of the professions and years of experience must be pertinent to the project in particular. Differences in cultural, social and religious backgrounds may however hinder the social integration of team members.

Cooperation between team members makes team members feel they are doing a good job together. It makes them feel comfortable dealing with one another soliciting information as well as voluntarily contributing information. Team cooperation also facilitates the success of cross-functional teams (Cohen and Bailey, 1997). Also, repeated interactions also help team members develop the skills necessary to cooperate with other professionals with different backgrounds, language, and personality (Zaccaro and Lowe, 1986). Even though team cooperation leads to faster work output, it sometimes leads to compromises and decreases the quality of the product alternatives (Leenders et.al., 2002).

A good level of communication over and between team members makes a good level of team integration. A good level of team integration is necessary to avoid persistent sub-groups (Leenders et.al., 2002). The level of team integration could be measured by calculating the degree to which the members of the project team have communicational contact to each other. (Jan et.al., 2004).

The attributes of the client was identified as a very important factor that affects team integration on construction projects. The client is the centre and focus of the project and if the centre cannot hold things would necessarily fall apart. A client with good leadership qualities would bind the team together, show the way, articulate clearly his vision, make team members share in his vision, and stimulate the team into

action. A good client would be able to nib in the bud any perceived and real conflicts between team members.

The relationship between the client and the team members would determine the way and manner in which work is done. Bearing in mind that it is the responsibility of the client to choose or appoint team members. If an adversarial relationship develops between the client and the team members it would derail the gains of the project and lead to the development of sub-groups which hinders the integration of the team and affects performance.

4.3.3 ROLE OF CLIENT IN PROJECT SUCCESS

Availability and timely release of funds, clear client briefing, clear objectives, adherence to specifications allowing team members share the vision, non-interruption in the work of the team, supervision and interest in the project and good leadership roles were identified by respondents.

Every project starts with the belief that the funds for the project are secured by the client. Payment schedules and procedures are usually drawn and agreed with all members of the team including the contractor in their conditions of contract and contract agreement. Any change in the schedule and or procedure likely affect the success of the project.

It is generally agreed that a badly conceived project is most likely to fail. Decisions made during the formative and early design stages in the life of a project are seen as critical factors that must be taken into account if a project is to be delivered on time, to budget and to the desired quality (Love et.al., 1998b). Clear briefing by the client tends to give the nitty-gritty's of the client's expectations and when properly factored or consider in the design would most likely avoids variations and the

consequent latter changes needed to meet the client's expectations. This also leads to minimal or no interruptions in the work of the team by way of changing specifications and alterations in design because of a change of mind.

The client's ability to make the team members share the vision of the client would lead to the success of the project. A member who does not share the vision of the client is not likely to work harmoniously with the team and may seek to undermine or work in ways that leads to the failure of the project.

The client must trust and rely on the ability of the team to implement the project to realise the goals of the project. Personal interest by the client in the execution of the project was identified and agreed as an important factor that drives the success of a project. This makes the client to insist on timelines set by the team members for various task and the overall work as a whole.

Good leadership attributes by the client serves as a serious driver to the success of any project. Various leadership theories have stipulated various ways of making teams work effectively and this is seen as a catalyst to propel a team's work. A client that has very good relationship with the team members and more especially the team leader would earn the respect of the all team members. This makes the client able to motivate the team members and is also able to detect potential disputes and solve them early before it eats into the fabric of the team.

Leung and Liu (1998) and Liu and Leung (2002) postulated that goal setting is a critical management process, as clear goals would provoke appropriate actions and hence lead to desired outcomes.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to investigate the role of the Client in team integration on construction projects in Ghana. This chapter therefore presents the conclusions drawn as well as recommendations on the role of the client in project team integrations.

5.2 CONCLUSIONS

The study revealed that team integration is important for all stages of the project. However, critical to the success of any project team integration should be employed in the client briefing stage, design stage and construction stage respectively of the project.

The study also revealed that factors affecting team integration on construction projects include diversity of the project team, cooperation between team members, level of communication between team members, client attributes and structure, and the relationship between the client and team members.

From the study it is evident that bringing individuals with professional backgrounds and personalities have a lot of problems. Some of the problems that were identified were clash of professions (every individual protecting his professional integrity), lack of funds, different expectations, personal differences, disputes in regards to payment, and variation of the design.

The study also concluded that the role of the client in team integration includes the availability and timely release of funds, acquiring all relevant licenses and permits, giving clear briefing, setting clear objectives, making the team members

share his vision, supervision and interest in the project, insisting on timelines, having good relationship with team members and exercising good leadership.

5.3 RECOMMENDATIONS

The study revealed that the client is the pivot to the success of any team and in particular any project and thus recommends that:

The client must secure funds before starting the project and not rely on promises or pledges of funds from any sources. This would prevent project hitting rocks after start due to lack of funds.

The client must also acquire the land; acquire the various licenses and permits before undertaking the project. There are many construction projects in Ghana which gets the funds to execute and all processes are done and when it gets to the construction stage the project cannot be executed for one reason or the other in respect of the land or the licenses and permits.

Client briefing must be very much detailed together with agreement on the specifications and conditions in the client briefing and design stages. This would prevent persistent changes or variations from the client and other team members which have repercussions on the project execution.

It is further recommended that the client should not only rely on the team's ability to execute the project but also show interest in the project, integrate himself properly into the team and show leadership in all matters.

It is also recommended that further research can be undertaken on the role of the client in forming a seamless or ideal integrated team for construction projects.

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APPENDIX

TEAM INTEGRATION ON CONSTRUCTION PROJECTS – THE ROLE OF THE CLIENT

INTERVIEW GUIDE TO CLIENTS

1. Were you meeting regularly as a team during the implementation of your project?
2. How often?
3. At what times of the project did you meet?
 - Client Briefing
 - Design stage
 - Procurement Stage
 - Construction stage
 - Commissioning stage
4. Which of these stages was the meeting more useful

5. What are some of the problems that are usually created or that arise when different people from different backgrounds come together to execute a project
6. How can the client facilitate their working relationship
7. How can the client influence their performance
8. What were some of the problems of team integration identified
9. Did the meetings influence the time of completion of the project
10. Did the meetings influence the cost of the project
11. Did the meetings help in arriving at your satisfaction
12. Did the meetings alleviate any problem that you had not envisaged before
13. What in your opinion is the role of the client in seeing to it that the project team work well
14. What in your opinion do you consider to be a project completed successfully
15. What in your opinion is the role of the client in making sure that the project is completed successfully
16. Which of these would you say are the three most significant ones
17. What in your opinion are factors that would affect the integration of the project team
18. Which of these would you say are the three most significant factors that would affect the integration of the project team
19. When in your opinion would you say that the team is properly integrated
20. In your opinion what could be done to improve upon the performance of the team

Thank you for your responses