

**THE EFFECT OF PROJECT COMMUNICATION ON PROJECT DELIVERY:  
A CASE STUDY OF THE CONSTRUCTION SECTION OF GROUPE NDUOM -  
GHANA**

By

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A thesis submitted to the Department of Construction Technology and Management,  
College of Art and Built Environment, Kwame Nkrumah University of Science and  
Technology, Kumasi in partial fulfillment of the requirement for the award degree of

**MASTER OF SCIENCE**

November 2018

## DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any another degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi, or any other educational institution, except where due acknowledgement is made in the thesis.

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## **ABSTRACT**

Communication is an essential process in the world of project management. It is difficult to master, but essential to make a good effort in achieving. Many times, on troubled projects, project team members feel that if the communication had been better, the project would have run smoother. The aim of the study is to examine the effect of project communication on project delivery using the construction section of Groupe Nduom as a case study. The study employed a survey design and adopts the quantitative research approach. Project managers/professionals (both internal and outsource) at the construction section of Groupe Nduom, Accra. The study used a sub sampling size of fifty (50). The study selected the respondents by means of convenience sampling method. Questionnaires were utilized as the fast means of getting the required information. After data obtained through questionnaires, it was prepared in readiness for analysis using Statistical Package for Social Sciences (SPSS) computer software. It was found that effective communication strategies minimized potential disputes and misunderstandings during execution of projects. The data analyzed confirmed that formal communication – email, letter, and telephone were operated by project managers in the accomplishment of projects. The findings clearly revealed that poor communication channels lead to distorted information on project delivery at project site, resulted into delays, time and cost overruns, abandonment, amongst other problems with project, affected the level of project work done on site as well as affected output on project delivery negatively. It is recommended that project communication for Quantity Surveyors, Engineers, Project Managers, Architect, Consultants, Managing Director and Contractor (construction section of Groupe Nduom) ought to include approaches and systems to build trust and

relationships among team members, as well as propagate desirable personal behaviours and clear communication rules.

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## **DEDICATION**

I wholeheartedly dedicate this thesis to the Almighty God through whose guidance, mercies and protection I have reach this far in my educational career. To my mother, Mrs. Monica Aidoo and my siblings Emily, George and Bernadine for their support and to my husband Kwamena Abbiw for his financial support and encouragement.

## **ACKNOWLEDGEMENT**

My sincere gratitude goes to my supervisor Mrs. Theodora Oduro for spending ample and quality time supervising, editing and proof reading to make this thesis possible.

I am very thankful to Prof. James Ephraim of Nduom School of Business and Technology and Arch. Abhik Mukherjee, Groupe Nduom, consultant for Nduom Fortress for their advice to pursue the Masters programme.

I would like to extend a special thanks to Mrs. Ignitia Hemans Krakue for her constructive suggestions and assistants and Nana Twum Boateng for his great contribution in putting this work together.

An extra special thanks to all Staff of Groupe Nduom, Contractors, Project Managers, Surveyors, Architects and Engineers who helped in providing the needed data for the thesis.

To all those, who might have helped in their own ways, but have not been mentioned here,

God richly you



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Effective communication remains one of the real differentiators between project achievement and disappointment. It has turned out to be progressively more essential to turn the endeavors toward more effective methods for communication. Communication is the backbone of projects and organizations (Asherov et al., 2012). Lewis (2007) said that communication covers the powerful trade and comprehension of data between parties. Müller and Turner (2010) feature that communication assume a critical part for the accomplishment of any projects. Similarly, as the heart attempts to convey oxygen all through the body, the project supervisor persistently flows project data from the outside partners to the task plan documentation, to the inner partners, to the project plan. This cycle of correspondence and data stream is intelligent and proceeds for the duration of the life of the project. Without it, partners and the project group can be left pondering where things stand and what choices have been made.

In any fruitful project where project administration gave off an impression of being done, the capacities of correspondence are the principal issue for the project achievement. It is the main route through communication that the project officers manufacture association with the partners. Effective communication is essential to the accomplishment of projects, programmes and portfolios; the correct data hosts to be transmitted to pertinent gatherings, precisely and reliably to live up to their desires. Communication ought to be valuable, clear and convenient (Plenković et al., 2008). The realism is that projects do not simply occur, and to succeed, projects require a focused exertion with respect to at least two individuals to convey successfully. It is the activity of the project supervisors to

lay the foundation for guaranteeing that great interchanges happen for the duration of the existence cycle of a project. Similarly, as strikingly, it is the activity of the project administrators to ensure that great communication proceed to the specific end of a project.

## **1.2 Problem Statement**

Communication is a fundamental strategy in the domain of undertaking organization. It is difficult to pro, anyway essential to attempt in achieving. Ordinarily, on plague ventures, venture associates feel that if the correspondence had been something more, the task would have run smoother. To ensure the achievement of a venture much information, including wants, targets, needs, resources, status reports, spending designs and purchase requests, ought to be bestowed all the opportunity to each and every genuine accomplice. Papke-Shields et al. (2010), in their study on the usage of venture organization practices and the association thereof to broaden accomplishment, find that practices related to correspondence are not given enough thought.

According to a business report source from Forbes, PricewaterhouseCoopers and Towers Watson reveals that organizations are extremely mindful of the positive effect that effective communications has on activities, projects, and portfolios (PMI's 2013). Project chiefs around the globe concur that poor correspondence add to venture disappointment. The Forbes Insights 2010 Strategic Initiatives Study "Adapting Corporate Strategy to the Changing Economy," found that the vast majority business leader trust that communications are basic to the accomplishment of their key activities, and almost 50% of respondents refer to interchanges as an indispensable and dynamic segment of their vital arranging and execution process. It is really basic for project supervisors to get the message crosswise over right the first run through. It is extremely essential for venture

chiefs to get the message across over right way through to stay away from disappointments in the communication procedure. As per BRE (2011), most deformities in the construction business is as the consequence of poor communication. The Pulse communications report (2013) measures exactly how much powerful interchanges can prompt more fruitful projects, and exactly how much incapable communications can cost an association. On account of the construction section of Groupe Nduom, Ghana, project communication is more demanding due to challenges unique to the project delivery while many projects are short-term. For example, an ineffectively itemized illustration, operative being given incorrect instruction or specialized data not being accessible. Is there a policy guideline for correspondence or correspondence procedure for the construction section? Is the policy being followed? Why are construction projects not meeting the criteria and deadlines? If the policy is being followed, why delays in project completion? Be that as it may, what is not recognized is how project managers/professionals gather and distribute opportune data when working on project delivery in the case of the construction section of Groupe Nduom. It is against this backdrop that this study seeks to examine the effect of project communication issues on project delivery using the construction section of Groupe Nduom as a case study.

### **1.3 Aim**

The aim of the study is to examine the effect of project communication on project delivery using the construction section of Groupe Nduom as a case study.

### **1.4 Research Objectives**

The objectives of this study were therefore to:

- i. Identify how construction project communication affects execution of projects.
- ii. Identify the various communication channels utilized by project managers/professionals in the implementation of projects.
- iii. Identify the causes of communication hindrances on project delivery.

### **1.5 Research Questions**

The following are the research questions:

- i. How does construction project communication affect execution of projects?
- ii. What are the various communication channels utilized by project managers/professionals in the implementation of projects?
- iii. What are the causes of communication hindrances on project delivery?

### **1.6 Significance of the Study**

The study findings will benefit the management of Groupe Nduom, project managers/professionals and construction companies in Ghana. The study will help the project managers/professionals in the company come with better effective communication strategies that will give them a competitive edge. The discoveries of the examination will likewise help project administrators/experts and different stakeholders within the construction industry to coming up with policies that will help them overcome the challenges of communication in project management as a tool for doing business.

The discoveries will likewise be profitable to future scientists and academicians as it will degree the current learning other than going about as a wellspring of reference. Additionally, the study would suggest areas for further research that future scholars and academicians can further knowledge on. In addition, investigation would recommend

further areas for additionally look into that future researchers and academicians can facilitate information.

### **1.7 Scope of the Study**

The study was restricted to the construction section of Groupe Nduom, Accra and thus address as the effect of project communication issues on project delivery. Despite the fact that the study could not cover the other regions due to constraints relating to funding and time, the basic concept of the effect of project communication issues on project delivery in Groupe Nduom, Ghana, are the same for various regional directorates. Accordingly, it is hoped that any generalization based on findings would reflect the general trend in the other regions of Ghana. Akin to this, the study will last for three months from July 2018 to September 2018 been the time frame anticipated for the study.

### **1.8 Limitation of the Study**

Provided the constraint of fund and work schedule included, the examination would be restricted to the only Accra workplace of Groupe Nduom, Ghana. Additionally, it is foreseen that not all inquiries will be addressed effectively, a few surveys would likewise not be returned. Some respondent would likewise not disclose data. In any case, it is trust that the examination, regardless of the above foreseen issues, data got would be cross checked to guarantee that the quality and credibility of the exploration is kept up.

### **1.9 Outline of Research Methodology**

The study employed a survey design and adopts the quantitative research approach. A survey research is a procedure of gathering information with a specific end goal to answer questions in regards to the present status of the subjects in the examination. The population of the study composes of project managers/professionals (both internal and

outsource) at the construction section of Groupe Nduom, both in Accra and Elmina. The rationale of selecting these respondents was that they are the ones associated with performance of various construction and project management activities. They were therefore expected to be familiar with factors considered important in creating, applying project management practices and addressing pertinent problems. Primary data was used amassed by usage of questionnaires. The study selected the respondents by means of convenience sampling method. Questionnaires was utilized as the fast means of getting the required information. After data was obtained through feedback form Statistical Package for Social Sciences (SPSS) was used to analyses data.

#### **1.10 Organization of the Study**

The structure of the project report is made up of five distinctive chapters. Chapter one gives the introduction, problem statement, the study aims and objectives, significance of the study, scope and delimitation of the study, methodology and organization of the study. Chapter two discusses the relevant literature and outlines theoretical considerations that are used in discussing the empirical findings of this study. Chapter three highlights the research methodology and chapter four presents analysis of the data gathered and interpret it to reflect the situation examined. Chapter five summarizes the findings, conclusions, and propose recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Communication is regarded as the sensory system of any composed gatherings that grasps organization as a paste, communication capacity can be characterized as the arrangement of correspondence that consolidates financial correspondence, economic correspondence, specialized correspondence, social communication (Johannessen, 2012). Communication abilities are one of a kind fitness that recognizes the project or association from other association. In the investigation made by (Johannessen, 2012) said that, the more prominent the new innovation decreases the significance of communication capacities in a project achievement. This chapter reviews literature relevant to the research objectives. Literature builds a theoretical and empirical foundation upon which the research is based. Also, this chapter presents several scholarly debates and articles in the field of effective communication in project management.

#### **2.2 Theoretical Framework**

##### **2.2.1 Concept of Communication as an Effective tool in Project Management**

It is assessed that venture administrators and venture colleagues devote roughly 90% of their operational time occupied with some type of communication (Burke, 2014). The establishment of any project administrator's prosperity lies in compelling communication. PMBoK (in Burke and Barron, 2014) characterizes powerful communication as guaranteeing the correct person gets the correct data at the right time. The administration of project communication comprises of the procedures required to guarantee auspicious and fitting age, accumulation, conveyance, stockpiling, and

recovery and at last transfer of project data. Project administrators invest the larger part of their energy speaking with colleagues and different partners, either inside or remotely to the association (PMBOK, 2014). The procedure to follow in the administration of communication for successful projects is to:

- (i) identify partners
- (ii) plan communications
- (iii) distribute data
- (iv) manage partner desires
- (v) report execution (PMBOK, 2014).

Communication includes giving, accepting, preparing and deciphering data. Data might be passed on verbally, non-verbally, effectively, inactively, formally, casually, deliberately or unknowingly (Project Management Body of Knowledge, 2016). Successful communication is principal to project administration. Powerful correspondence makes an augmentation between arranged accomplices related with an undertaking, interfacing diverse social and various leveled establishments, unmistakable levels of dominance and distinctive perspectives and interests in the venture execution or result (PMBOK, 2014). It is assessed that venture directors and venture colleagues devote around 90% of their operational time occupied with some type of communication, be it gatherings, composing messages, perusing reports, or conversing with project partners (Burke, 2014).

Burke (2014) posited that the venture's correspondence design, status accounts, change accounts, incline accounts, earned regard accounts, unique case accounts and month to month accounts are papers that the undertaking administrator can apply as mechanisms to pass on reasonably. Clements and Gido (2012) incorporate gathering inspiration and seminar minutes as mechanisms. As shown by Kerzner (2015) great correspondence



certifies that people send the accurate data to the right individuals at the ideal time and in a knowledgeable way. Steyn (2012) states that effective correspondence is the best approach to ensure coordination and participating in ventures. Correspondence is basic for all business works out. It makes dealing with possible, and getting dealt with is a bit of the correspondence structure. Viable correspondence in and between establishments' conveys a positive commitment to construction ventures, that extension age and upgrade motivation of partners (Emmitt and Gorse, 2013). In venture organization particular levels of comprehension and obligations are typical from people included. An essential factor in the accomplishment of corporate tasks is correspondence tradition that demands clear lines of capacities and commitments (Knipe et al., 2012).

Zack (2004) specified that undertaking interchanges organization are those strategies required to gather and disseminate fitting data concerning the task of the best possible beneficiaries in an opportune way. The one zone of correspondence organization where a talented cost configuration is likely going to surpass desires is venture execution uncovering. Venture correspondence organization gives the essential interfacing of people, musings and information that is principal for advance (Rosenau and Githens, 2015). For tasks to win there is a consistent necessity for effective correspondence to issue rules, handle issues, agree, resolve encounters, and keep all accomplices required with the venture furnished with the latest data (Burke, 2014).

### **2.2.2 Communication Management Strategies**

Bilczynska-Wojcik (2014) introduced communication administration techniques utilized in the virtual groups she looked into. These incorporated the accompanying (Bilczynska-Wojcik, 2014):

- (i) Clear lines and commitments developed inside the work together front

- (ii) Regular very close get-togethers with associates – at any rate through videoconferencing
- (iii) Learning sharing and access to information for all partners – venture information center (wiki page, shared virtual space);
- (iv) Using the correct medium of correspondence depending upon the task, venture mastermind, solitary associate - a commitment of the virtual gathering's chairman;
- (v) Virtual water cooler to share easy going correspondence;
- (vi) Communication time plan – especially for bunches in different time zones;
- (vii) Monitoring correspondence, development and feedback;
- (viii) Building trust by setting up associations among partners.
- (ix) Building trust by building up connections among colleagues.

Project rulers are relied upon to figure out how to oblige with their gathering of people by embracing a technique for communication that suits them and one that would best transmit the message. For example, communication between project supervisors of various projects would be not quite the same as communication between the project director and the project individuals. The last is likewise not quite the same as the communication received with clients, partners, and financial specialists intrigued with the project (Carroll, 2012). The Project Administrator ought to have the capacity to change the tone and strategy for communication when managing every one of the gatherings previously mentioned. He/she ought to have the capacity to pass orders to the colleagues on issues of project execution and the fulfillment of project objectives, and additionally persuading speculators from outside to put resources into the project.

Numerous projects have fizzled when the project pioneer can't impart successfully in light of the common conditions. This discloses why the capacity to convey, both in discourse and in composing, is one of the prerequisites of contender to be considered for project administration. Poor settlement of communication may prompt the beneficiary of the message taking the wrong impression of the conveying party. In addition, the Project Administrator ought to likewise educate the project individuals to oblige and conform to communication (Lewis, 2017). Figuring out how to communication ought to be supported as a constant procedure that prompts appreciation and securing of the planned thought from the project supervisor to the colleagues. Intergroup communication ought to likewise be stayed away from in convenience.

### **2.3 Project Communication**

A few examinations have officially affirmed that communication in project administration adds to project achievement (PMI, 2013). In the ongoing investigation of Project Management Institute (2013) "The Basic Part of Correspondences" researchers presumed that more than the half of the cash in danger in ventures is because of poor or substandard correspondence. Lacking correspondence was alluded to as the basic driver for 33% of the task disappointments detailed as negatively affecting the accomplishment of over the half of the respondents' activities. The examination additionally finds that powerful communication prompts more effective projects and henceforth it enables organizations to wind up superior workers (PMI, 2013).

Communication assumes an imperative part for the achievement of any activities. In any effective project where project administration gave off an impression of being done, the capacities of communication are the principle factor for the project achievement (Müller and Turner, 2010). Communication in projects is essential for progress, for the most part

for huge projects. The bigger activities are, the more communication is critical for the ultimate result (Olsson and Johansson, 2011). The communication procedures of projects are described by: execution report, asked for changes, gauges, authoritative process and updates (Olsson and Johansson, 2011).

As indicated by Mead and Gruneberg (2013), most projects are only here and there directed in disconnected settings, without interdependencies. Project supervisors or important colleagues need to plan, connect and deal with all project interdependencies crosswise over various periods of construction, groups, significant divisions and accessible assets to guarantee achievement (Mead and Gruneberg, 2013). With a specific end goal to accomplish this, Ramesh (2010) noticed that communication is exceptionally critical. Communication amid the execution of a program, is a fundamental administration ability that each project supervisor is required to have.

As per Cheung (2014), Singh (2001), and Lester (2013), the procedure of administration should drive both formal and casual communication at different levels inside a program or association. Both formal and casual communication ought to incorporate all exercises and practices through which applicable data and project thoughts are transferred between venture administrators and colleagues. Hielkema (2014) contend that project directors ought to successfully impart through arranging gatherings to talk about developing issues and ought to be dependably in contact with different chief partners.

Bankvall et al. (2010) contended that construction programs are very complicated in light of interdependencies between various ventures, exercises and parts, all of which should be viably and proficiently organized. Since various individuals and specialists cooperating in a group attempt these exercises, powerful communication ends up key to accomplishment in a construction program. For sure, project reliance results in data reliance, whereby people taking a shot at various projects, parts or assignments depend

on data that is passed to them from others. For example, where there is a complete to-begin reliance, the communication of data to the group whose beginning of work relies upon the consummation of an assignment or project by another group winds up indispensable for motivations behind effectiveness and fruitful finishing (Bankvall et al., 2010).

Pekerikli et al. (2013) contend that data is extremely urgent for consistent and savvy projects inside the construction business. Further, Bankvall, et al. (2010) demonstrated that real correspondence of project related data and powerful coordination of data trades between colleagues working in various projects are essential for the accomplishment of a construction program. As per Cheung et al. (2013), successful correspondence necessitates a huge level of conviction amongst and amid project directors or staff who are engaged with the execution of various segments of a project or a program. In this way, trust has a positive association with compelling communication.

## **2.4 Project Management**

As indicated by Project Management Institute's Project Management Body of Knowledge (PMBOK, 2014), communication administration is characterized by project process gatherings and learning zones. Effective communication makes an extension between project partners, associates diverse cultural and organizational basics, assorted levels of expertise and diverse points of view and interests in the project acknowledgment and results (PMBOK, 2014). As further exhibited by Payne et al. (2011), project administration has been characterized as an organized and formalized method for overseeing change thoroughly. Project administration is the applications of abilities, learning, tools, and strategies to project exercises to meet project necessities (Schleier, 2010). Project supervisors are not just responsible to oversee particular cost,

time, degree and objective of projects, however they convey the whole exercises of the projects (Schwalbe, 2011). Müller and Turner (2010) contended that project achievement relies upon persuaded project colleagues. One of their recommendations to build the inspiration is by giving them a chance to have an opportunity to enhance and create themselves; among others it very well may develop their insight, specialist and notoriety. Project supervisors are not just mindful to oversee particular cost, time, extension and objective of tasks, yet they convey the whole exercises of the activities (Schwalbe, 2011).

Müller and Turner (2010) contended that venture achievement relies upon inspired task colleagues. One of their suggestions to build the inspiration is by giving them a chance to have an opportunity to enhance and create themselves; among others it very well may develop their insight, expert and notoriety. Müller and Turner, (2010) include that interchanges assume a critical part for the accomplishment of any project. In any effective project where project administration gave off an impression of being done, the capacities of communication are the primary factor for the project achievement. Further, communication is essential on account of medium unpredictability, upkeep project and advancement process. According, it has contended that communication is a key skill for project pioneers in much engaged in data framework and authoritative change projects (Müller & Turner, 2010). They said communication may not exclusively be the communication sent by the project supervisor, at times is the support association to the load up or other senior partners.

Beneath there is a short depiction of project administration regions which emphatically advantage from compelling communications administration (PMBOK, 2014):

- a) Stakeholder administration – Recognizable proof, evaluation and inclusion of key project partners in the project through general and modified communication is imperative to guarantee regular comprehension of the fundamental project objectives, items and the key assignment to be finished. Appropriate communication with the partners forestalls acceleration of progress demands, which may rise amid the project and permits project administrator to get acknowledgment of middle of the road and last project expectations. A communication bundle arranged toward the finish of each project stage settles on the choice procedure on project continuation much smoother and straightforward.
- b) Change administration – For the project expectations to be acknowledged in the association there is a requirement for effective change administration. Data framework execution in an association is a decent case of a project which ought to be joined by dynamic and arranged change administration endeavors. A last result of such a project – created and redid IT framework – does not realize prompt outcomes. The association needs to acknowledge and figure out how to utilize the new arrangement. The principle mainstay of an effective change administration is communication led at the correct purpose of time to the correct gathering of partners – for this situation IT framework clients.
- c) Human assets administration – Successful communication is the foundation of overseeing HR on a project. Keeping in mind the end goal to accomplish the project objectives, the project administrator ought to speak with the project group all the time. Defining objectives which are reasonable, achievable and time-bound and also appointing work to proper colleagues requires consistent communication. Giving criticism is an essential factor of overseeing and inspiring

the group. Overseeing clashes and supporting the group amid the project incorporates an extensive segment of compelling communication.

- d) Project incorporation administration – As indicated by the Project Management Book of Knowledge [PMBOK] this is a space of the project supervisor. The project director needs a comprehensive view on all the project regions and the capacity to survey how changes in a single project viewpoint will impact other project angles. For instance: How expanding the extent of the project will impact project costs, time and group fulfillment? In that sense, the project administrator incorporates every one of the regions of a given project and can proactively expect and oversee project hazard.
- e) Project monitoring and control – Project observing and control is a procedure hidden every one of the periods of a project from the arranging, through execution until the point that project conclusion. Communication assumes here the part in regard to advance detailing, this may grasp: project time, costs, scope revealing. In the communication plan, the sort and recurrence of project revealing procedures should be set up. More often than not there is a week by week project status meeting and every other month or month to month Directing Panel meeting, anyway the revealing calendar is particularly reliant on the length of the project.

## **2.5 Various Communication Channels Utilized by Project**

Project communication organization ensures helpful and appropriate age, gathering, spread, storing, and state of mind of undertaking information. Open and clear correspondence are required among coordinators, implementers, and all levels of the relationship for venture accomplishment. It joins having a communication plan,



information scattering way, propel specifying and information sharing system for organization and customers (Kwak and Ibbs, 2002). Venture correspondence administration ought to likewise incorporate strategies and systems to assemble trust and connections among colleagues, and additionally spread alluring individual practices and clear correspondence rules. A few research discoveries show that, if there should be an occurrence of numerous undertakings, exercises in the field of correspondence administration are scattered, upheld chiefly by venture directors' instinct or disregarded (Paasivaara & Lassenius, 2003; Adera, 2013).

As demonstrated by Samáková et al. (2013) whose examination on venture correspondence organization in present day attempts in Slovakia revealed that, around 66% undertaking correspondence had no created file (framework, process ventures) to direct extend correspondence which has be prepared. Most of correspondence organization sharpens perceived in this written work study concerned scattered gatherings. This is essentially a result of correspondence challenges experienced by that kind of undertaking gatherings. These troubles include: partition and nonattendance of eye to eye correspondence, challenges with building trust and associations, time zone contrasts, social differentiations and nonappearance of normal rules, disarray of made substance, ignoring correspondence and nonappearance of correspondence wants (Bilczynska-Wojcik, 2014). Once in a while, moreover tongue aptitudes of planning associates are low to the point that commonplace talk is unimaginable, most strikingly in video visits (Komi-Sirviö & Tihinen, 2005). In the thought about ventures, the going with correspondence and participation devices were used (Niinimäki et al., 2012).

- (i) Internal detachment – utilized a great deal because of various preferences: casualness, high synchronicity, performing various projects capacity, supporting both synchronous and offbeat communication;
- (ii) Audio conferencing – regularly utilized in spite of the fact that tested by poor sound quality and dialect aptitudes – prompt criticism, higher image assortment than with content-based media;
- (iii) One-to-one phone calls – sometimes and viewed as non-effective, meddlesome, interruptive, expensive;
- (iv) Video conferencing – recognized albeit once in a while utilized, supporting solid social nearness;
- (v) Email – predominant communication medium in all projects, low quickness of input, low image assortment yet abnormal state of parallelism, rehearsability, and reprocessability;
- (vi) Issue trackers – organized offbeat communication and joint effort.

In a similar vein, Bilczynska-Wojcik (2014), analyzed the communication directs used by project in construction which incorporates:

- (i) Direct oral correspondence: eye to eye correspondence – used rarely, dominatingly because of high costs; videoconferencing – used once every day;
- (ii) Managing development: shared space, where gatherings can exchange information easily at whatever point (site, inside banner conveyor, groupware, venture following programming) – used genuinely consistently;

- (iii) Communication development: securing and minute access to extend correspondence and information (wiki-type site, "learning center") – used truly reliably;
- (iv) Asynchronous and synchronous correspondence – used once per day (IM, GoToMeetings, messages, sporadically phone calls);
- (v) Building trust and relationship by asking partners to share their feelings and visit calmly; using fundamental norms, for instance, perceiving an interest for information inside a particular time;

## **2.6 How Project Communication Affects Execution of Construction Projects**

Powerful communication administration inside virtual undertaking bunches is of first noteworthiness and a basic competency that, if honestly executed, it interfaces every person from a venture gathering, with the objective that they can collaborate to achieve the task's goals. In case correspondence isn't administered effectively and totally appreciated by Venture Chiefs, venture results may be in danger (Holzmann & Panizel, 2013; Niinimäki et al., 2012; Han & Jung, 2014).

Muszynska (2015) clarifies that project communication administration empowers project administrators to guarantee convenient and fitting age, gathering, dissemination, putting away, recovery and mien of project data. As shown by Muszynska (2015), Jiuguang (2015) and Emmitt (2010), open and clear correspondence channels and procedures are required among venture coordinators, executers and in all levels of a relationship to ensure viable tasks. Having powerful correspondence plans, clear information allotment ways, venture propel uncovering, and frameworks of successful sharing of information among venture organization gatherings and between venture social occasions, clients and other gigantic accomplices are fundamental (Zou and Sunindijo, 2015). As shown by

PMI's Pulse investigate, 55 percent of Undertaking Managers agree that convincing correspondence with all accomplices is the most fundamental accomplishment factor in venture organization (PMI, 2013). Ground-breaking venture exchanges ensure that the right information contacts the advantageous individual at the ideal time and for all intents and purposes. Correspondence is the best approach to keeping associates, boss, and accomplices taught and on track to look for after the venture targets, and furthermore to perceiving issues, risks, misguided judgments, and each other test to extend wrapping up. Compelling correspondence is a fundamental part of gathering amplexness, both in standard and virtual gatherings (Pitts et al., 2012).

Culo and Skendrovic (2010) battle that undertaking correspondence is the commitment of each task associate. Each task partner should have the ability to fathom the nature and progression periods of different undertakings they are wearing down and have the ability to give exact reports. Culo and Skendrovic (2010) stretch that the blueprint of the undertaking specialized technique is the commitment of the venture director, who ought to be gifted similarly as task correspondence and organizing. Quick exchange of information among different partners energizes the achievement of venture destinations and objectives (Espinosa, Nan, and Carmel, 2015).

As demonstrated by Espinosa, Nan and Carmel (2015), snappy exchange of information is fundamentally refined through development. Further, they observe that more exchange of information on venture ventures results in more prominent shared characteristic with nonstop errands; this results in high rates of powerful task realization. Intense correspondence can in like manner be refined through ensuring that information identifying with ventures is shared as speedy as could sensibly be normal; this is especially proper where there are a lot of undertaking interdependencies inside a program (Espinosa, et al., 2015).

Project groups must think of methodologies of communication that guarantee moment exchange of data to pertinent colleagues or project pioneers. In this regard, Schwalbe (2015) contends that innovation can be utilized to encourage the way toward making and dispersing project data, when used viably among project colleagues. Schwalbe (2015) additionally contends that project pioneers can arrange project records, calendars, and partner criticism and worries in electronic project administration frameworks. Schwalbe (2015) clarifies that organisations can utilize cloud benefits and have reinforcement designs, all of which encourages data exchange in a project. A decent communication plan additionally empowers the project director to lead the members to the foreseen project result. Communication is likewise required from the partners with a specific end goal to see precisely what they need and how their necessities can be met. For instance, a project that is taking a shot at programming advancement of a predefined party must discuss routinely with the customer to comprehend the coveted particulars of the project (Taylor, & Dow, 2013). A decent project director is one who goes ahead with communication until the point that the last objective of the project is achieved.

### **2.7 Causes of Communication Hindrances on Construction Project Delivery**

Inadequate project communication administration may fate a project into disappointment (Schwalbe, 2010; Mephyans-Robinson, 2010). El-Reedy (2012) contend that poor communication is one of the variables prompting project dangers. Ramjugernath (2015) and Peh and Low (2013) call attention to that communication in a construction program is spread over various fields, hierarchical levels, viewpoints, and translations, making it complex. Ceric (2012) places that distinctive groups chipping away at a project need to coordinate, share, sort out, and incorporate essentially a lot of data keeping in mind the end goal to make project progress. Accomplishing data symmetry is pivotal as far as

guaranteeing compelling communication all through a construction project lifecycle, particularly in circumstances where project and data interdependencies are generally high.

Klee (2015) and Warhoe (2013) underscore that construction is a confused synthesis of various associated forms that are arranged and actualized at various levels of subtle elements by various specialists. They contend that construction program includes the utilization of different segments that frame distinctive frameworks, which combine at interfaces. As indicated by Klee (2015) and Warhoe (2013), at the interfaces, some project parts communicate with each other, a few segments don't go together, and others require a considerable measure of time or space, fundamentally as a result of the in-situ nature of a construction program. The specialists infer that, in all these interface connections, progressing collaborations of learning and data exchange or exchange between various groups. In like manner, the data trade might be occasioned by the need to facilitate orders, legitimate references, gives an account of the status of past assignment performed, or the need to sort out some missing project data that is urgent for the execution of further projects or projects inside a construction program.

## **2.8 Empirical Review**

Aiyewalehinmi's (2013) exact investigation incorporated a factor examination of communication the construction business. The investigation found that construction profitability was emphatically associated with the sum and nature of communication that streamed between people engaged with the plan and usage of a construction project. The ramifications of this finding are that abnormal amounts of construction efficiency are inferable from huge sums communication between project colleagues. An absence of

high caliber, effective communication can result in project disappointment. Additionally, thinking about that as a construction program may have numerous projects going on, the disappointment of one anticipate may prompt the disappointment of the whole program. By and large, such a disappointment is an element of poor communication administration.

Cheung, Yiu and Lam's (2013) study demonstrated that incapable communication was an explanation behind the disappointment of numerous construction projects and organizations. Zulch (2014), recognized that a vital attribute that a construction Project Chief should have to guarantee effective communication. In this paper the contrast between the authority as a communication and communication as an initiative expertise is characterized. To deal with a project adequately three kinds of communication (vertical, even and corner to corner or horizontal communication) is required. Barrett (2006b) accentuates that as chief advances to more elevated amounts in the association, the more intricate communication requests move toward becoming. The administration communication can be of center, administrative and corporate communication. At long last, from the exploration ponder the trademark that a construction project administrator should have to guarantee effective communication positioned the most noteworthy is creating trust, cooperation and collaboration; positioned second is permitting colleagues to assume liability of their work; third is offering the vision of the project to the project group; fourth errand introduction and fifth individuals introduction.

Luka et al., (2014) prove that inadequate communication administration framework in Nigeria is the significant reason for disappointments related with construction projects conveyance. A large number of the expert respondents concurred that site gatherings are a vital channel of communication between the advisors and contractual workers in this

manner, significantly affects project conveyance. Further, every one of the players inside the business agreed that nonattendance of real correspondence organization enormously influences movement of development venture. The correspondence plan investigated routinely and adjusted winds up vital for venture triumphs. In the Nigerian development industry, there is a strong positive social affair for the centrality of task correspondence organization and its possessions inside the business. As a matter of fact, extraordinary levels and channels of exchanges have been developed inside the development business. This examination has exhibited that, the venture correspondence unequivocally impacts the execution of specialists in the development business. In this way, doubtlessly developing and managing the structures of correspondence on venture ought to constantly be on the inspiration of gathering pioneers and organization before the start of each undertaking.

In another examination by Ofori (2013) on fundamental factors that add to the accomplishment of an undertaking, the maker records 'convincing correspondence' among the four most basic components, by 'top organization reinforce', 'clarity of reason and goals' and 'accomplices' affiliation' (Ofori, 2013). Great correspondence techniques and fitting specialist styles are emphasized by Nguyen as the accomplishment factors for building and directing tip top overall virtual gatherings (Nguyen, 2013). Earlier research reports that 74% of the issues in dispersed tasks were caused by "correspondence and contacts" (Komi-Sirviö & Tihinen, 2015). The third worldwide PricewaterhouseCoopers LLC (PwC) study on the ebb and flow condition of project administration uncovers that, as indicated by officials, powerful communication is related with a 17 percent expansion in completing projects inside spending plan. Thus, the Towers Watson 2011-2012 "Change and Communication return for capital invested Study Report" demonstrates that organizations that have exceedingly powerful interchanges rehearses are 1.7 times more



inclined to outflank their associates fiscally. Plainly, organizations are exceptionally mindful of exactly how basic compelling interchanges is to the achievement of vital projects and, eventually, authoritative achievement. In any case, the Beat interchanges (2014) examine finds that just a single in four organizations can be depicted as exceptionally compelling communicators. This proposes the lion's share of organizations have chances to recognize issue regions and diagram a course to enhance the adequacy of their project communication. The Pulse communications (2014) report measures exactly how much compelling communication can prompt more effective projects, and exactly how much ineffectual communication can cost an association.

As indicated by Cheung, Yiu and Lam (2013), effective correspondence requires a basic level of trust between and among venture executives or staff drew in with the execution of different parts of a task. The experts gathered that, if the people who are related with the utilization of an undertaking trust each other, they will be simply more anxious to share essential task information among and between themselves. Trust expect an imperative part in progressing viable correspondence inside a program. There is a valuable association between trust, correspondence and venture execution. In any case, it is indispensable to observe that there are so far compelled examinations associating the three factors together. Moreover, consider is required to choose if convincing correspondence can be expert through trust and whether a positive relationship among's trust and viable correspondence will result in improved program execution.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

The present chapter portrays the strategies and techniques which were utilized in the investigation and how the questionnaire study was likewise be embraced. The section includes the examination plan, populace of the investigation, test and inspecting strategies, information sources, explore instruments, organization of the instruments, information investigation and moral thought.

#### **3.2 Research Design**

This study was conducted using the survey design using quantitative techniques to attain its specified purposes. The quantitative strategy empowered the researcher to utilize surveys to request for data or gather numeric information to accomplish the exploration targets. A survey design was chosen since it gives a precise portrayal or record of the attributes, for instance, conduct, suppositions, capacities, convictions and learning of a specific individual circumstance or gathering. This plan will be chosen to meet the targets of the investigation as it gives the researcher the chance to accumulate solid data on the assessment of the populace under examination. According to Saunders, Lewis and Thornhill (2012), survey design is more exact and precise since it included depiction of occasions in a deliberately arranged manner. Besides, descriptive design permitted perception of subjects in a totally characteristic and unaltered condition and yields rich information that prompts vital suggestions. Survey design have the advantage of providing important information for all kinds of public information and research fields such as that desired in this research.

### **3.3 Population of the Study**

The staff strength of the construction section of Groupe Nduom, Ghana as at August, 2018 was four hundred and thirty (430). This was because the organization is represented nationwide in regions and district offices; but each region or district is represented in a department at the Head Office in Accra. The total number of staff at the head office is one hundred and fifteen (115). This number constitute the population for the study.

### **3.4 Sample Size**

Out of the population of one hundred and fifteen (115), fifty-five (55) employees were sampled for this project and fifty (50) were sub sampled. This number was utilized to ensure that the project work was finished up on plan as a greater sample size would need longer period for breaking down the project work. The examiner chooses this sample size in order to successfully achieve the answers owing to work and time restrictions and also to guarantee a dynamic investigation of the occurrence under study. The size of sample was expected to be achieved in consideration of cost and precision desired.

### **3.5 Sampling Technique**

Convenience sampling was used to select the 55 respondents in this study. Convenience sampling is a type of non-probability sampling which includes the sample being drawn from that piece of the populace which is close nearby; that is, a sample populace chose in light of the fact that it is promptly accessible and helpful. Convenience sampling involves randomly selecting those respondents which are easiest to obtain for the sample i.e. based on convenience. The respondents in this examination was picked based on their advantageous accessibility to the researcher.

### **3.6 Sources of Data**

The discoveries of the investigation were enormously relied upon on primary and secondary sources. This is information that was acquired specifically from the field and collected using questionnaires. The researcher read related literature relevant to the subject before and during the study obtained from previous studies, text books, articles journals and Groupe Nduom itself.

### **3.7 Data Collection Instrument**

The researcher used questionnaires to obtained quantitative data from the field. Questionnaires were favored in the investigation because of their convenient technique since respondents can have their reactions autonomously and covertly and furthermore guaranteed expanded reaction rate because of their clearness and effortlessness. The questionnaire contained an arrangement of inquiries ordered into two noteworthy segments to be specific Section A and Section B. By this, Section A feature questions on bio-data of the respondents such as, gender, age, academic qualification, and working experience. The consideration of these factors was important as they help to group the respondents legitimately and additionally investigations their reactions. Section B of the questionnaire comprised numerous statements of assertion and closed-ended questions. These were composed essentially to give data while the assessments of respondents to these announcements of affirmation was looked for through Likert scale design which is a psychometric scale usually utilized in polls, and it is the most generally utilized scale in study explore. When reacting to a Likert survey thing, respondents indicate their level of consent to an announcement. A Likert scale typically measures the power or level of agreement by the respondent to an explanation that portrays or declares a wonder. The 5-point Likert scale to be utilized was laid out and deciphered by directs connected toward

the level of understanding viz; Strongly Agree 5, Agree 4, Undecided 3, Disagree 2 and Strongly Disagree 1. The closed ended questionnaires also provided possible answers out of which the respondent was required to select answers which reflect their views. The use of the close ended questions was meant to restrict and control the responses of respondents.

### **3.8 Data Collection Procedures**

The researcher administered the questionnaire separately to all respondents of the investigation. All the more essentially, the researcher practiced care and control to guarantee all questionnaires issued to the respondents were received and attained the desired reaction by keeping up a record of questionnaires, which were sent, and received. The survey was outlined so as to give indispensable responses to the examination questions. The idea of the investigation was disclosed to the respondents, hence the respondents' confidentiality of any information provided were assured. Respondents were given nitty gritty guidelines with respect to how the surveys ought to be finished and returned. The basis behind giving clear guidelines and guaranteeing privacy of data depends on the way this altogether lessens the probability of getting one-sided reactions. The respondents were given seven days to fill in the in the questionnaires. The researcher ensured that contacts for the participants was received from the respondents. Follow-up telephone calls were made to the respondents in order to guarantee that a high reaction rate was accomplished for the examination.

### **3.9 Data Analysis**

The accumulated information was authenticated, edited and after that coded. Amid the approval procedure, the questionnaire was checked for completeness and precision. The

questionnaire was likewise examined to check for mistakes and exclusions, ambiguities, deficiencies, messy and immaterial reactions. When this was done, the information was entered into a suitable class of the SPSS PC programming which was utilized to complete the information investigation where proper in accordance with the examination goals and inquiries to empower simple translation of the discovery.

### **3.10 Ethical Consideration**

Authorization were sought from the participants before the conduct of the study. The researcher likewise made phone calls and earlier visits to administration with the goal that information gathering periods was planned at helpful hours all together not to unduly interfere with their work routines. For secrecy, no names or any identifiable data from respondents was taken in order to counteract conceivable exploitation. The respondents were educated that their info was intentional and accordingly they could quit at any phase of the exploration procedure.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND DISCUSSION OF RESULTS**

#### **4.1 Introduction**

The aim of the study was to assess role of effective communication in project delivery using the construction section of Groupe Nduom as a case study. This chapter presents the results of data collection and analysis pertaining to the research questions that guided the study. The chapter focuses on the analysis of the responses received from respondents. For the purpose of this study, a total of fifty-five (55) copies of questionnaires were distributed to Quantity Surveyors, Engineers, Project Managers, Architect, Consultant, Managing Director and Contractor (construction section of Groupe Nduom), of which fifty (50) copies were duly filled and returned; three (3) copies were filled wrongly, while two (2) were not returned. This brought the total for the analysis to fifty (50), representing a response rate of 90.9%. A response rate of 91% is considered as being very good as it would have fairly represented the views of the entire research population. With the aid of Statistical Package for Social Sciences (SPSS), descriptive statistics such as frequency distribution tables, mean, standard deviation and rank score are used to analyze the data to make interpretation more meaningful.

#### **4.2 Demographic Characteristics of Respondents**

The study collected data on demographic characteristics. Comprehensive results on each of the demographic characteristics are presented.

Participants were asked to indicate their gender by placing a tick next to the relevant option provided (male or female). Both males and females were represented by 70% and 30% respectively. This implied that most of the respondents for this study were males.



Thus, the males were 40% more than the females in this study. The proportion spreading of respondents' age of the respondent was grouped as follows, most, 42% of the respondents were above 36-40 years, 22% of the respondents were 31-35 years and 20% of the respondents were 41 years and above. Again, 8% of respondents were within the ages of 25 years and below as well as 26-30 years respectively. The age group 36-40 years has the highest percentage. For the most part, from the circulation, it demonstrates that lion's share of the respondents are the most dynamic populace who are in the age section of 31 to 41 or more.

The study sought to find out the highest level of education attained by the respondents. The analysis indicates that 10% of the respondents had professional level of education, 14% of the respondents have certificate/diploma as their highest level of education which was followed by 10% of the respondents who were HND holders, 52% of the respondents had attained university level of education and 14% were Master's Degree holders. It was also seen that 52% of the respondents had tertiary level of education (first degree) and therefore this should equip them to deliver well informed responses to the dictates of the questionnaire.

With regards to the job position of the respondents, most, 38% of them were Engineers (that is, 6 - Structural, 8 - Civil and 5- Electrical), 28% were Project Manager, 10% were Architects, 10% were Quantity Surveyors, 10% were Contractors and 2% was the Managing Director and Consultant respectively. It can therefore be deduced that majority of the respondents were Engineers. The study succeeded to comprise respondents that were at diverse job position and consequently reinforce the study given the results as it reflected the thoughts and views from diverse job position of respondents at the organization.

The working knowledge of the respondents amid the Field Study in 2018 is in Table 4.1. From the Table, the accompanying understandings can be made; 16% of the respondents had been working for less than 5 years, 38% and 22% of the respondents had been working for 5 to 10 years as well as 10 to 15 years respectively, while 24% of respondents have been working for more than 16 years. It could be observed that, about three-thirds (91) of the respondents had worked in the organization for more than five (5) years.

**Table 4.1: Demographic Characteristics of Respondents**

Variable	Percentage of Respondents
<b><i>Gender</i></b>	
Male	70
Female	30
<b><i>Age of respondents</i></b>	
Below 25 years	8
26-30 years	8
31-35years	22
36-40years	42
Above 41 years	20
<b><i>Educational Level</i></b>	
Diploma	15
HND	11.7
First Degree	46.7
Professional Certificate	11.7
Master's Degree	15
Quantity Surveyor	10
Engineer	38
Project Manager	28
Architect	10
Consultant	2
Managing Director	2
Contractor	10
<b><i>Years of service</i></b>	
Less than 5 years	16
5 – 10 years	38

10 -15 years	22
16 years and above	24

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Source: Field Study, (2018)

### 4.3 How Construction Project Communication Affects Execution of Projects

This data presents the results of how construction project communication affects execution of projects. Table 4.2 presents details of how construction project communication affects execution of project and how they ranked according to the respondents. It also shows the responses that answer the research questions administered to respondents about the subject matter. The responses were coded with a five-point Likert-type rating scale to obtain their opinions on the above stated research questions where (5) was rated as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree.

**Table 4.2: How Construction Project Communication Affects Execution of Projects**

<b>Descriptive Statistics</b>	Mean	Std. Deviation	Rank Score
Project communication allows project managers to guarantee reasonable and legitimate age, get together, conveyance, putting away, repossession and mien of venture data	3.58	1.17	5
Clear project communication approaches in all levels ensure successful execution of projects	3.83	1.06	1
Efficient project communication guarantee that the correct data contacts the perfect individual at the exact time and in a savvy way	3.60	1.22	4
Quick discussion of data amid diverse group members simplifies the attainment of venture goals and purposes	3.60	1.30	4
More exchange of information on execution of projects task results in greater commonality with progressing errands bringing about high rates of fruitful venture conveyance	3.62	1.26	3
Effective communication is realized by ensuring that data relating to execution of projects is shared as fast as possible within a programme	3.60	1.28	4
Effective communication strategies minimize potential disputes and misunderstandings during execution of projects	3.75	1.27	2

Source: Field Study, (2018)

The uppermost mean score of 3.83 with SD=1.06 was identified among respondents who indicated that clear project communication approaches in all levels ensured successful execution of projects. This was the highest score as illustrated in the Table 4.2. The element that had the least mean score of 3.58 with SD=1.17 from the respondents was “Project communication allows project managers to ensure judicious and proper generation, assembly, delivery, storing, repossession and disposition of project information.” The other elements had varied mean scores as shown in the Table 4.2. For instance, the second statement was on whether effective communication strategies minimize potential disputes and misunderstandings during execution of projects, and this had a mean score of 3.75 with SD=1.27 affirming that respondents agreed that effective communication strategies minimized potential disputes and misunderstandings during execution of projects.

The finding is reliable with that of Muszynska (2015) who showed that project communication administration empowers Project Directors to guarantee opportune and suitable age, gathering, circulation, putting away, recovery and attitude of project data. As per Muszynska (2015), Jiuguang (2015) and Emmitt (2010), open and clear correspondence channels and philosophies are required among venture coordinators, executers and in all levels of a relationship to ensure successful tasks.

A mean mark of 3.62 with SD=1.26 and 3.60 with SD= 1.30 were computed for the elements “Exchange of information on execution of projects task results in greater recognition with progressing undertakings bringing about high rates of fruitful venture conveyance”, and “Fast trade of data in the midst of various colleagues rearranged the achievement of task objectives and destinations” respectively. This showed that participants agreed that exchange of information on execution of projects task resulted in greater nature with continuous assignments bringing about high rates of fruitful task

conveyance. Likewise, fast trade of data in the midst of various colleagues disentangled the achievement of venture objectives and destinations. The discoveries of this examination were reliable with Espinosa et al. (2015), who presumed that fast trade of data is fundamentally accomplished through transport. Further, they take note of that more trade of data on venture assignments results in greater recognition with continuous undertakings; this outcome in high rates of fruitful task culmination. Viable correspondence can likewise be accomplished through guaranteeing that data relating to ventures is shared as quick as would be prudent; this is particularly material where there are abnormal amounts of task interdependencies inside a program (Espinosa, et al., 2015).

Mean scores of 3.60 with SD=1.22 and 3.60 with SD=1.28 were computed for "Efficient project communication guarantee that the correct data contacts the correct individual at the exact time and in a practical way"; and "Viable correspondence is realized by ensuring that data relating to execution of projects is shared as fast as possible within a programme". It was the view of the respondents that efficient project communication guaranteed that the right data contacts the correct individual at the precise time and in a financially savvy way and that viable correspondence was realized by ensuring that data relating to execution of projects was shared as fast as possible within a programme.

The finding is reliable with that of PMBOK (2014) which exhibited that compelling communication makes a scaffold between project partners, interfaces different social and authoritative foundations, diverse levels of skill and different viewpoints and interests in the project acknowledgment and results.

#### 4.4 Various Communication Channels Utilized by Project Managers/Professionals in the Execution of Projects

This data presents the various communication channels utilized by project managers/professionals in the execution of projects and how they ranked according to the respondents. The responses were coded with a five-point Likert-type rating scale to obtain their opinions on the above stated research questions where (5) was rated as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree.

**Table 4.3: Various Communication Channels Utilized by Project Managers/Professionals**

<b>Descriptive Statistics</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Rank Score</b>
Employee suggestions are utilized by Project Managers in the execution of projects	3.50	1.35	7
Site review meetings are applied by Project Managers in the implementation of projects	3.65	1.38	6
Formal communication – email, letter, telephone, fax are operated by project managers in the accomplishment of projects	3.87	1.38	1
Face to face discussion are employed through project managers in the completing of projects	3.85	1.09	2
Social gatherings are exploited by Project Managers in the finishing of projects	3.68	1.27	5
Site review meetings are utilized by Project Managers in the execution of projects	3.65	1.32	6
Noticeboards and newsletters are operated by Project Managers in the use of project	3.70	1.22	4
We always hold meetings to share information regarding performance of our project tasks	3.77	1.32	3

Source: Field Study, (2018)

The mean score of 3.87 with SD=1.38, 3.85 with SD=1.09 and 3.77 with SD=1.32 were associated with respondents who believed that formal communication – email, letter, telephone, fax was operated by project managers in the accomplishment of projects. Furthermore, face to face discussion were employed through project managers in the completing of projects, while they always hold meetings to share information regarding performance of their project tasks. The subsequent statement was on whether noticeboards and newsletters were operated by project managers in the use of project, reflected in the mean response score of 3.70 with SD=1.22 which indicated that participants agreed. Concerning whether social gatherings are exploited by project managers in the finishing of projects had a mean score of 3.68 with SD=1.27 indicating that respondents agreed to social gatherings were exploited by project managers.

Similarly, a mean score of 3.65 with SD=1.38 and 3.65 with SD=1.32 were recorded for the item “Site review meetings are applied by project managers in the implementation of projects” and “Site review meetings are utilized by project managers in the execution of projects”. This item was the 6<sup>th</sup> highest ranked among the items in this section suggesting that, site review meetings were utilized by project managers in the execution of projects. A mean score of 3.50 with SD=1.35 was computed for the item, “Employee suggestions are utilized by project managers in the execution of projects” which revealed that respondents agreed that employee suggestions were utilized by project managers in the execution of projects.

The discoveries of this investigation were anyway in help with the discoveries of Bilczynska-Wojcik (2014), who analyzed the communication diverts used by project in construction which incorporates: (i) direct oral communication: vis-à-vis communication – utilized infrequently, basically on account of high expenses; videoconferencing –



utilized once a day; (ii) Overseeing advancement: shared space, where gatherings can exchange information easily at whatever point (site, internal envoy, groupware, venture following programming) – used truly once per day; (iii) Communication development: securing and minute access to extend correspondence and information (wiki-type site, "learning center") – used truly reliably; (iv) Offbeat and synchronous correspondence – used each day (IM, GoToMeetings, messages, now and again phone calls); (v) Building trust and relationship by encouraging partners to share their feelings and visit coolly; using major rules, for instance, perceiving an interest for information inside a particular time. The responses were coded with a five-point Likert-type rating scale to obtain their opinions on the above stated research questions where (5) was rated as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree.

#### **4.5 Hindrances to Effective Communication on Project Delivery**

This data presents the causes of communication hindrances on project delivery and their ranking according to the respondents.

**Table 4.4: Causes of Communication Hindrances on Project Delivery**

Descriptive Statistics	Mean	Standard Deviation	Rank Score
Poor communication channels lead to distorted information on project delivery at project site.	4.28	5.38	1
Poor communication frequently results into delay, time and cost overruns, desertion, amid other glitches with project	4.07	2.69	2
Poor and one-sided data will affect the level of project work completed on location.	3.62	1.17	5
Immaturity clarification of work drawings can cause a failure in project building components.	3.62	1.17	5
Late distribution of data will affect productivity on project delivery negatively.	3.70	1.31	4
If correspondence is not managed well and wholly understood by project managers, project delivery outcomes could be at danger	3.80	1.13	3
Bad correspondence is one of the issues leading to project risks	3.70	1.25	4
Low level formation of standard communication practices resulted in low project delivery	3.53	1.14	6

Source: Field Study, (2018)

The mean score of 4.28 with SD=5.38, 4.07 with SD=2.69 and 3.80 with SD=1.13 were related with respondents who believed that poor communication channels lead to distorted information on project delivery at project site. Additionally, poor communication frequently resulted into delay, time and cost overruns, relinquishment, among different issues with venture, though poor and mutilated data influenced the level of undertaking work done nearby. The subsequent statement was on whether “Late

distribution of data will affect productivity on project delivery negatively.” and “Bad correspondence is one of the issues leading to project risks”, revealed in the mean response of 3.70 with SD=1.31 and 3.70 with SD=1.25 indicating that respondents agreed that late dissemination of information affected output on project delivery negatively and that bad communication was one of the factors leading to project risks.

The discoveries of this investigation were predictable with Holzmann and Panizel (2013); Niinimäki et al., (2012); Han and Jung (2014)., who inferred that if communication isn't overseen viably and completely comprehended by project administrators, project results might be in danger.

Regarding whether “Low level formation of standard communication practices resulted in low project delivery”, reflected in the mean response score of 3.53 with SD=1.14 which indicated that participants agreed. Similarly, a mean of 3.62with SD=1.17 and 3.62 with SD=1.17 was recorded for the item “Poor and misshaped data will influence the level of task work done nearby.” and "Immaturity elucidation of work illustrations can cause a disappointment in venture building parts.”. This item was the 5<sup>th</sup> highest ranked among the items in this section suggesting that, poor and mutilated data influenced the level of task work done nearby and that freshness elucidation of work illustrations can cause a disappointment in venture building parts. Discoveries of this investigation were additionally steady with Paasivaara and Lassenius (2003); Adera (2013), whose review uncovered that in the event of numerous projects, exercises in the field of communication administration are confused, bolstered for the most part by project chiefs' instinct or dismissed. Notwithstanding, Bilczynska-Wojcik (2014) said that the communication challenges experienced by project groups incorporates: separation and absence of eye to eye communication, issues with building trust and

associations, time zone contrasts, social differentiations and nonattendance of consistent rules, blunder of formed substance, dismissing correspondence and nonappearance of correspondence wants.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the findings, conclusion drawn from the study and the recommendations of the research for management of Groupe Nduom. The objectives of this research were to examine how construction affects execution of projects in Groupe Nduom and identify the various communication channels utilized by project manager.

#### **5.2 Summary of Findings**

The study was conducted in order to examine the effect of project communication on project delivery using construction section of Groupe Nduom as a case study. The study employed a survey kind of research design and quantitative research strategy where data was collected from the Quantity Surveyors, Engineers, Project Managers, Architect, Consultant, Managing Director and Contractors (construction section of Groupe Nduom). Interaction with them made it possible for them to understand the utmost importance of the research before questionnaires used for the analysis were distributed to them. With the aid of SPSS, descriptive statistics, frequency distribution tables, mean, standard deviation and rank score were employed to critically analyze the data and evaluate the study.

The key findings of the study are summarized as follows:

1. From Objective One; it was found that clear project communication approaches in all levels ensured successful execution of projects. The study deduced that effective communication strategies minimized potential disputes and misunderstandings during execution of projects. Again, more exchange of

information on execution of projects task resulted in more nature with progressing undertakings bringing about high rates of effective task conveyance. The investigation additionally found that speedy trade of data in the midst of various colleagues disentangled the accomplishment of venture objectives and destinations. The study found that effective communication was realized by ensuring that data relating to execution of projects was shared as fast as possible within a programme.

2. From the Objectives Two, the study revealed that formal communication – email, letter, and telephone was operated by project managers in the accomplishment of projects. The study deduced that face to face discussion were employed through project managers in the completing of projects. Results from the study revealed that participants always hold meetings to share information regarding performance of their project tasks. It was observed that noticeboards and newsletters were operated by project managers in the use of project.
3. From the Objective Three, the study found that poor communication channels lead to distorted information on project delivery at project site, resulted into delay, time and cost overruns, abandonment, amongst other problems with project, affected the level of project work done on site as well as affected output on project delivery negatively. It was again deduced that bad communication was one of the elements prompting venture dangers and that if correspondence was not overseen well and completely comprehended by venture chiefs, venture conveyance results could be at threat.

### **5.3 Conclusion**

There is no doubt that given today's evolving project communication landscape, it is understandable that effective communication remains one of the real differentiators between venture achievement and disappointment. It has grown slowly more critical to turn the endeavors toward more successful methods for correspondence. In any productive task where venture administration appeared to be done, the skills of correspondence are the key factor for the undertaking achievement. It is genuinely basic for venture chiefs to get the message crosswise over right the first run through to stay away from disappointments in the correspondence procedure. Undertaking administrators impart by utilizing differing mediums to pass on a message. The imperative elements include imparting how the venture will be overseen, including how data will stream all through the undertaking. There ought to be additionally an unmistakable and compact correspondence intend to address venture duties and the kinds of correspondence that will occur. It incorporates the procedures required to guarantee auspicious and adept age, gathering, conveyance, stockpiling, recovery, and extreme demeanor of venture data.

In this study, the effect of project communication on project delivery is investigated using the construction section of Groupe Nduom as the case study. Questionnaires were used as the means of collecting information. Furthermore, the information was analyzed and based on the analysis clear project communication approaches in all levels ensured successful execution of projects. Again, formal communication – email, letter, and telephone was operated by project managers in the accomplishment of projects while poor communication channels lead to distorted information on project delivery at project site.

## 5.4 Recommendations

Based on the conclusions, the study recommends the following:

1. Project communication for Quantity Surveyors, Engineers, Project Managers, Architect, Consultants, Managing Director and Contractor (construction section of Groupe Nduom) ought to include approaches and systems to enhance trust and connections among colleagues, and also proliferate alluring individual practices and clear correspondence rules.
2. Clear data dispersion ways, venture advance revealing, and instruments of successful sharing of data among Quantity Surveyors, Engineers, Project Managers, Architect, Consultants, Managing Director and Contractor (construction section of Groupe Nduom), clients and other significant stakeholders should be paramount.
3. There ought to be likewise an unmistakable and compact correspondence intend to address venture obligations and the sorts of correspondence that will happen at the construction section of Groupe Nduom.
4. Again, different stakeholder groups utilize dialect diversely and tailor interchanges in like manner therefore, Quantity Surveyors, Engineers, Project Managers, Architect, Consultants, Managing Director and Contractor (construction section of Groupe Nduom), need to have a clear vision for their task and, eventually, authoritative achievement.



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**APPENDIX**  
**QUESTIONNAIRE**

KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI  
INSTITUTE OF DISTANCE LEARNING, ACCRA CENTRE  
DEPARTMENT OF BUILDING TECHNOLOGY

**RESEARCH TOPIC: The Effect of Project Communication on Project Delivery: A  
Case Study of the Construction Section of Groupe Nduom**

**INTRODUCTION**

I am an MSc Project Management student of Kwame Nkrumah University of Science and Technology, undertaking a study on the effect of project communication on project delivery: a case study of the construction section of Groupe Nduom. This study is being carried out to find out from the stakeholders how communication is being carried out and its effect on project outputs and outcomes within Groupe Nduom.

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Please note that the strictest confidentiality is assured with respect to answers given as facts. Please tick the alternative information that is most appropriate and it take 5-10 minutes to respond to these questionnaires. Thank you for participating in my study.

### **Section A: Demographic Data**

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**Please tick (√) the appropriate box or write in the space provided**

1. Gender

Male

Female

2. Please indicate your age group?

25yrs and below

26-30yrs

31-35yrs

36-40yrs

41 years and above

3. What is your academic qualification?

Diploma

HND

First Degree

Professional Certificate

Master Degree

Others (please state).....



4. Which of the following describes your position?

- Quantity Surveyor
- Engineer ( ) structural ( ) Civil ( ) Electrical
- Project Manager
- Architect
- Consultant
- Managing director
- Contractor

5. How many years of experience do you have in the construction industry?

- Less than 5years
- 5 years to 10year
- 10 years to 15 years
- 16 years and above

### **Section B: How Construction Project Communication Affects Execution of Projects**

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Please indicate the extent to which you agree or disagree with the following statements.

Answer by ticking (✓) **only one** answer in each case. Use the scales below as a guide.

1. Strongly Disagree (SD)
2. Disagree (D)
3. Neutral (N)
4. Agree (A)
5. Strongly Agree (SA)

S/N	Questions	SD	D	N	A	SA
1.	Project communication allows project managers to ensure judicious and proper generation, assembly, delivery, storing, repossession and disposition of project information					
2.	Clear project communication approaches in all levels ensure successful execution of projects					
3.	Efficient project communication guarantee that the correct information reaches the right person at the accurate time and in a cost-effective manner					
4.	Quick exchange of information amid different team members simplifies the attainment of project goals and objectives					
5.	More exchange of information on execution of projects task results in more familiarity with ongoing tasks resulting in high rates of successful project delivery					
6.	Effective communication is realized by ensuring that data relating to execution of projects is shared as fast as possible within a programme					
7.	Effective communication strategies minimize potential disputes and misunderstandings during execution of projects					

**Section C: Various Communication Channels Utilized by Project Managers/Professionals in the Execution of Projects**

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Please indicate the extent to which you agree or disagree with the following statements.

Answer by ticking (✓) **only one** answer in each case. Use the scales below as a guide.

1. Strongly Disagree (SD)
2. Disagree (D)
3. Neutral (N)
4. Agree (A)
5. Strongly Agree (SA)

S/N	Questions	SD	D	N	A	SA
1.	Employee suggestions are utilized by Project Managers in the execution of projects					
2.	Site review meetings are applied by Project Managers in the implementation of projects					
3.	Formal communication – email, letter, telephone, fax are operated by project managers in the accomplishment of projects					
4.	Face to face discussion are employed through project managers in the completing of projects					
5.	Social gatherings are exploited by Project Managers in the finishing of projects					
6.	Site review meetings are utilized by Project Managers in the execution of projects					

7.	Noticeboards and newsletters are operated by Project Managers in the use of project					
8.	We always hold meetings to share information regarding performance of our project tasks					
9.	Meetings help overcome communication barriers and increase project success level					

#### Section D: Causes of Communication Hindrances on Project Delivery

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Please indicate the extent to which you agree or disagree with the following statements.

Answer by ticking (√) **only one** answer in each case. Use the scales below as a guide.

1. Strongly Disagree (SD)
2. Disagree (D)
3. Neutral (N)
4. Agree (A )
5. Strongly agree (SA)

S/N	Questions	SD	D	N	A	SA
1.	Poor communication channels lead to distorted information on project delivery at project site.					
2.	Poor communication frequently results into delay, time and cost overruns, abandonment, amongst other problems with project					

3.	Poor and distorted information will affect the level of project work done on site.					
4.	Inexperience interpretation of work drawings can cause a failure in project building components.					
5.	Late dissemination of information will affect output on project delivery negatively.					
6.	If communication is not managed well and wholly understood by project managers, project delivery outcomes could be at danger					
7.	Bad communication is one of the factors leading to project risks					
8.	Low level formation of standard communication practices resulted in low project delivery					