KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KUMASI, GHANA

ASSESSING THE TOTAL QUALITY MANAGEMENT OF THE ENGINEERING DEPARTMENT OF COCOA PROCESSING COMPANY LIMITED

By

Richard Kofi Ankomah (BSc. Mechanical Engineering)

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MASTER OF SCIENCE

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DECLARATION

I hereby declare that this submission is my own work towards the Master of Science in Project Management, 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 another degree of the university, except where due acknowledgement has been made in the text.

Richard Kofi Ankomah (PG 1156817)
Student Name & ID

……...
Signature

……
Date

Certified by:
Prof. Edward Badu
Supervisor

……...
Signature

……
Date

Certified by:
Prof. Bernard Baiden
Head of Department

……...
Signature

……
Date

ABSTRACT

Organizations which have effectively utilize Total Quality Management (TQM) have client and quality installed in their corporate system. Manufacturing companies are not the exception to this since they are companies that are not isolated from society but on the contrary, they are strongly linked to it. The purpose of the study, assesses the Total Quality Management (TQM) of the engineering department of Cocoa Processing Company Limited. The research design adopted for the study was survey design and the quantitative research approach. The population of the study was employees of the engineering department of Cocoa Processing Company Limited, Tema from which the sample size was drawn. The sampling method adopted in this research is convenience sampling method. SPSS such as mean, standard deviation, rank score and frequency distribution tables were employed to analyze the data collected. The data analyzed confirmed that the Total Quality Management (TQM) of the engineering department of Cocoa Processing Company Limited (CPCL) focus on quality and productivity improvement and team work to fix common problems in the product or process. The study discovered that every company member was focused on service quality, while there was collaboration with all departments and that with Total Quality Management (TQM) of the engineering department of Cocoa Processing Company Limited (CPCL), anyone can suggest areas for improvement, focuses on implementation of changes, and requires training to be familiar with the necessary Total Quality Management (TQM) techniques. It is recommended that, top administration and the whole staff in the Engineering Department of Cocoa Processing Company Limited (CPCL) to be focused on the change of value in all parts of their tasks.

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DEDICATION

This thesis is dedicated to my family members, especially to the memory of my late brother Jerry Duah Opoku

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Quality management is needed in any sort of business that is founded from official administration down to the most reduced level of representative. While every specific capacity inside an organization requires quality procedures modeled after its own particular extraordinary necessities, this individual quality procedure ought to be planned and built up in view of the standards of the general quality administration program. Total Quality Management is one of such quality programs. TQM has been characterized as a fused progressive effort expected to improve quality at each level (Dale, 1999). It has been broadly actualized all through the world. TQM is additionally characterized as a drive for brilliance, wellness for utilize, esteem for cash, consumer loyalty, and so on (Mohanty & Lakhe, 2004). Furthermore, numerous organisations have gone to the acknowledgment that viable TQM usage can propel their focused capacities and as well as make available strategic advantages in the marketplace (Rawlins, 2008).

Today, the manufacturing service sector is becoming competitive each day. Numerous organizations depend on Total Quality Management gain to intensive advantage within the business space and it has turned into a basic piece of each organization. Quality turns into an essential answer for the purposes of organizations in accomplishing upper hand since every one of the techniques focusing on the satisfaction of upper hand include quality contemplations (Omachonu & Ross, 2004).

Some organization in each line of business necessitates a quality administration program that is started from official administration down to the most reduced level worker. Indeed, even as every sort of capacity in an organization requires quality procedures made after its own particular sole prerequisites, this individual quality procedures should be arranged and set up in light of the estimations of the total quality administration program.

For Total Quality Management to flourish, the greater part of the segments inside the organisation must be by and large included. At first, organizations actualized Total Quality Management with the desire that adjustment in activities would handle all present productivity and quality issues. Today, TQM is significantly something other than improvements. The implications of significant worth breaker factors like best organization duty, activity, collaboration, getting ready and headway, prizes and affirmation, incorporation and reinforcing of agents et cetera (Hoyle, 2007). These fundamental segments are the foundation for transformational prologue to roll out a handy improvement culture for high ground reliably (Evans & Dignitary, 2000).

TQM necessitates that organizations preserved this quality principles in all parts of its business. This requires ensuring that things are done well and that disfigurements and waste are discarded from tasks. As per Dale (2003), changing the long-lasting conduct, traditions, practices and biases of an organization is not simple. Organizations focused on quality will endeavor persistently to enhance the nature of their products or services, and they are resolved to change, however by and large, they were envisioned to be steady and constant. Great reasons must exist either inside or outside the organization to encourage the procedure of progress and inspire administrators to perceive that they have to enhance their business. Business rivalry on a national and worldwide scale is

getting to be furious and greatness is the esteem required by organizations to survive and develop in this focused field. TQM turns into an essential answer for the aims of organizations accomplishing upper hand since every one of the systems focusing on the satisfaction of upper hand include quality contemplations (Omachonu & Ross, 2004).

1.2 PROBLEM STATEMENT

Organizations which have viably use TQM norms have customer and quality introduced in their corporate framework. Manufacturing companies are not the exception to this since they are companies that are not isolated from society but on the contrary, they are strongly linked to it. Since the1980's, the main organizations around the globe have rushed to receive the Japanese plan of action in light of quality management. Amid a similar period, a large portion of the exploration works on TQM in the scholastic research concentrated on understanding the effect of TQM as an aggressive device (Garvin, 2008). With respect to TQM as focused instrument, various investigations looked into the point of value as to its execution and the vital potential it gives to a business. Benson (1991) as cited in Mehra and Agrawal, (2002), examined the impact of an organization's quality foundation on its real quality related favorable position. As indicated by Mullings (2007), the usage of TQM by most organization has been defenseless inferable from their non-satisfaction with the training and estimations of TQM execution.

In ongoing compositions, a few writers have unequivocally contended that TQM and vital arranging are complimentary and that great quality administration is the key source to upper hand (Fynes & Voss, 2001) referred to in Mehra and Agrawal (2012). The advantages of TQM rely on viable usage. As indicated by Jeffries (2016), upgraded productivity, lessening in costs, advancement, responsibility and a helpful workplace

are the subsidiaries of successful TQM execution. Radovilski (2006) sees Total Quality Management execution issues as absence of administration responsibility, poor correspondence amongst divisions and the impression of Total Quality Management as a prevailing fashion or crusade instead of a genuine working framework. In this manner, most manufacturing companies are worried about how to fulfill their clients through enhanced quality administrations which is custom-made to meet or surpass the desire for clients. Indeed, even as organizations endeavor to encounter client's desire, there nevertheless occur a few defects in the process engaged with add up to benefit conveyance.

In the event that quality approach is not considered important by these manufacturing companies, they may in the long run drive them bankrupt. Indeed, even as a couple of organizations regulate TQM like a program which they hope to work and do the enchantment without anyone else's input, other organization have utilized a halfway hearted tactic to oversee it, by utilizing two or three random things of the standards. This has addressed the disappointment of most organizations in receiving together to their characteristic concentration from implementing this logic (Ugboro & Obeng, 2000). Although some studies have discussed related topics on TQM, it seems few study was found that comprehensively and deeply explored TQM in food processing. This study is thus being conducted to assess the Total Quality Management in the engineering department of Cocoa Processing Company Limited.

1.3 AIM

The purpose of the study assesses the Total Quality Management of the engineering department of Cocoa Processing Company Limited.

1.4 RESEARCH OBJECTIVES

In order to advance the purpose of the research, the subsequent objectives were stated:

- To identify the TQM characteristics of the Engineering Department of CPCL.
- To identify the problems faced in the implementation of TQM in the Engineering Department of CPCL
- To identify the effects of TQM in the Engineering Department of CPCL.
- To propose measures for effective TQM in the Engineering Department of CPCL.

1.5 RESEARCH QUESTIONS

The subsequent research questions based on the specific objectives devised were advanced;

- What are the TQM of the Engineering Department of CPCL?
- What are the problems faced in the implementation of TQM in the Engineering Department of CPCL?
- What are the effects of TQM in the Engineering Department of CPCL?
- What are the measures for effective TQM in the Engineering Department of CPCL?

1.6 SIGNIFICANCE OF THE STUDY

The discoveries of this investigation will be useful to organizations to help them strategize to gain increase upper hand within the business space. Organizations can utilize the discoveries of this investigation to devise procedures that will give comprehension of how total quality management can improve business outcomes. A comprehension of the different TQM utilized by the engineering department of Cocoa

Processing Company Limited would help to better the level of administrations quality handling that they offer which would affect its general business yield. The examination will by and large additionally contribute information to the field of project management and human resource management. Further, different academicians and future researchers may do additionally study on parts of the investigation's discoveries. The students of marketing will also find this research work valuable. They can have a deep understanding of the topic.

1.7 SCOPE OF THE STUDY

The study was done within the framework of assessing the Total Quality Management in the engineering department of Cocoa Processing Company Limited, Tema. The study will be limited to the employees to conveniently evaluate their observations of total quality management in engineering department of the organization. Besides, it will be a case study approach of the engineering department of the organization and does not cover different branches to reflect the whole business assessment on the subject matter. A vital assessment of state of affairs ought to have included an investigation of all or countless manufacturing organizations in Tema in any case, the extent of such investigation was past the limit and assets of the researcher.

1.8 LIMITATION OF THE STUDY

The nearness and time allotted to this examination did not consider a broad and nitty gritty investigation into the subject matter. It was anticipated that the study had staggering inferences. These expenses incorporate transportation to and from the company, cost of materials required, some of which were books needed to augment the study, electronic data, photocopying amongst others. All these will affect the study in

one-way or another. This made the researcher to minimize the study to somewhat smaller branch of the company than would have covered. Besides, the unwillingness of some of the respondents to respond to the questionnaires and the limited time prevented the researcher from covering lots of manufacturing companies.

1.9 OUTLINE OF RESEARCH METHODOLOGY

The research design adopted for the study was survey design and the quantitative research approach. This survey design was considered the most suitable for the study because it allowed the researcher to gather a lot of information from a significant populace requiring little to no effort. The population of the study was employees of the engineering department of Cocoa Processing Company Limited, Tema from which the sample size was drawn. The sampling method adopted in this research is convenience sampling method. The study used questionnaire as data collection instrument. The reason for this survey was to discover the dispositions, practices, desires, convictions and estimations of the objective populace. In order to ensure that there was high response rate, the researcher partake in the administering of the questionnaire. Data collected was analyzed using the SPSS to generate the frequency distribution tables and percentages.

1.10 ORGANIZATION OF THE STUDY

The section describes the content of the chapters. Chapter one gives overall introduction, problem statement, aims and research objectives, research questions, significance of the study, scope and limitation of the study, outline of the methodology and organization of the study. Chapter two comprises the review of theoretical and empirical literature in the field of Total Quality Management. Chapter three looks at the

procedures and approaches used in analysis the accumulation of the data gathered. Chapter four is the analysis of data and discussions of the findings from the analysis and interpret it to reflect the situation examined. Chapter five summarizes findings, conclusions, and propose recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The main aim of this review on is to situate the study into appropriate theoretical and empirical framework on total quality management in order to give the expansive comprehension of the theme under examination. More significantly, the review is predestined to offer a wide-ranging assessment of appropriate works in an effort to site the study in an apt theoretic context.

2.2 TOTAL QUALITY MANAGEMENT

This is the most raised measure of value administration. It is connected concerning the organization of esteem standard in each and every one of the parts of a business including customers and suppliers (Dale, 1994; Lockwood, 1996). Total Quality Management incorporates the utilization of value organization guidelines to entirely parts of it, incorporating clients and providers, and their blend with the key business shapes. All the more vitally, it is a well as well a tactic that incorporates consistent updating through everybody within a company. TQM is a rule which incorporates the regular joint effort of everyone that aides the business methodology of an organization and it incorporates all accomplices of an organization.

Quality is an immense part of creation or facilities in keeping the clients fulfilled. There are varying characterizations and divergent perspectives of the term quality by various individuals and the basic piece of the business meanings is that the possibility of a stock or organization infers the impression of how much the stock or organization meets the customer's wants. Crosby (1979) described quality as the conformance to basics or ends what's more endorsed that to coordinate quality satisfactorily; it should

able to be surveyed. ISO 9000: (2000) (as implied in Vorley and Tickle, 2001) depicted quality as how much an arrangement of intrinsic attributes satisfies necessities. Peters (1999) characterized quality as an 'enchantment shot' which bring down cost, higher client benefit, better merchandises and higher edges. He additionally clarified that 'quality is according to the onlooker', this mean it is the thing that the client says it is. Kondo (1997) characterized quality as a foundation of worker's enablement. To him, a significant purpose of an organization is to make itself engaging its agents and customers while making benefits for its investors. Bernard as alluded to in Stebbing (1992) saw that two kinds of qualities exist on the planet, efficiency and inefficiency. To him, capability is the thing that every senior manager should try to achieve and the adequacy in advantage is the thing that the customers would like to get. He illuminated that organisations are inefficient in light of the absence of trainings given to delegates by the organizations or the errand of undertaking to unfit workers. Whichever way quality is characterized, it is seen as a major aspect of a hierarchical culture; this ought to be comprehensive of every single distinctive feature of production.

Quality organization incorporates the enumerating of techniques, characterizing targets and focuses, masterminding and completing the plans; and using control structures for checking response and taking therapeutic exercises. An organizations' quality accomplishments are of two folds; satisfying customer's longing as well as change in the general business advantage (Dale, 1994). As said by Juran (2008), the focal target of noteworthy worth association is the trading of frustration; both in the thought and truth be told of stocks, associations and strategy. This does not simply recommend that stock, associations and strategies will fall in fulfilling their part regardless that their part was not what the customer require. Bewilderment must be stayed away from in quality organization and to manage this there should plan, masterminding and

controlling. Four times of significant worth organization were overseen by Dale (1994), this join examination, quality control (QC), quality affirmation (QA) and Total Quality Administration (TQM).

2.2.1 Quality Control

Quality control is a standard implies that organizations have utilized to direct quality. Quality control is affected concerning inspection and considering labor that has been done. This is basically completed by means of valuation of stocks and organizations (examination to guarantee that what is being made is conforming the mandatory criterion) transpire amidst and in the direction of the entire of the activity's strategy. Juran (2008) depicted quality control as the organizational strategy through which we measure that bona fide quality execution, separate it and benchmarks, and follow up on the capability. It is a more refined organisations instrument proposed at dismissing things and endeavors which don't change as per focal fundamentals from getting to the last client. Quality controls are operational systems and exercises that are utilized to satisfy quality need (ISO 8402, 1994). Fundamentally, as a measure of value, quality control at any rate is costly when seen similar to generous and vague variable cost. It could in like manner achieve the formation of substandard stock and undertakings when driven late amid the time spent amid make. As a result of the problems interrelated with quality control, organizations straightforwardly base on diverse ways or measures via which quality might be controlled attainably. Dale (1994), fights that the treatment of an issue after a nonconformance issue has been made is certainly not an attainable course towards taking out the principal driver of an issue.

2.2.2 Quality Assurance

As demonstrated by Dale (1994), quality confirmation is an evasion-based structure, which upgrades stock and organization quality with extended proficiency by putting the complement on stock, administration and process design. Quality confirmation weights on blemish expectation, not in any way like quality control that spotlights on distortion impediment once the thing is made. Quality statement relies upon the changing development of the period of non-obliging stock and much idea is put on the activities related with the methodology of creation. Subsequently, it is an associations course of action made game plan for controlling quality constantly of age to shield quality issues from rising. The quality accreditation hypothesis opined that quality is made in the diagram orchestrate and not the control arrange and that issues related with quality are caused by poor process plot. As showed up by Lockwood (1996), to be suitable, quality affirmation must join the advancement of another working thinking and approach that is obviously proactive rather than responsive, that circuits moving and merging people in the process transversely over standard departmental obstruction. Oakland (1995) portrayed quality confirmation as comprehensively desire for esteem issues through sorted out and think works out, which combine certification.

2.3 PROBLEMS FACED IN THE IMPLEMENTATION OF TQM

Oakland (1995) distinguished components that thwart the usage of TQM. These incorporate the prospect that its usage can be tedious, bureaucratic, formalistic, unbending and indifferent. Ugboro and Obeng (2000) in their examination found that the uninterested execution of TQM is a critical clarification behind its disappointment in numerous organizations. As per them, companies are simply prepared to execute just those parts of TQM which is reinforced by existing definitive culture. Their revelations

revealed that specialists did not feel as an element of the fundamental authority process and their ability to roll out responsibilities to quality improvement were limited in view of the confined power enabled them to do their activities.

Smith (2004) posited that quality management agendas have failed in light of how they were 'exercises of the month'. According to him, executing quality all through an organization isn't the result of a formalized program anyway requires a social change in the manner in which practices is driven. Andrle (1994) on his individual valuation stated that the determination of opposite quality tactic through organizations achieves the disappointment of TQM utilization. He furthermore centered around the task of value specialist by directors may incite the change of TQM organizations that are lacking like other helpful workplaces. As shown by Wilkinson (1998) the nonappearance of duty from a certain assembling inside the company might be a honest to goodness deterrent in organization of value. Most especially the non-obligation by troughs to quality organization is a vital anticipation to the productive use of TQM. Asher (1996) showed that there is a necessity for organization to drive the conviction arrangement of TQM process remembering the ultimate objective to encourage workers to take after and moreover to exhibit to them about organization's guarantee to quality. Watchman (1996) proposed that TQM is fundamental for an organization’s proficiency and practicality; in any case, would not by any stretch of the imagination give an organization high ground over her opponents. TQM does not handle key business matters like separation and situating techniques.

McCabe and Wilkinson (1998) suggested that the disenchantment of TQM can be credited to the unseemly execution strategy embraced by the organizations utilized and not on account of the standards of TQM itself. They trusted TQM could be effective in

the event that it is sufficiently gotten ready for and actualized by design. Another explanation behind the distress of TQM is the accentuation given to singular prizes for add up to TQM exertion. This nullifies the suggestion made by Deming (1986), who contended that prizes should be attached to collaboration or division as opposed to person. The disapproval of organizations to execute the prizes to gathering may prompt inner rivalry among worker and this will negatively affect group execution which add up to quality administration advances. Staggering expense of giving quality administration is a noteworthy deterrent to the execution of TQM in organisations.

Beer (2000) expressed that TQM collapse because of disappointments in usage, not in TQM hypothesis and strategy. Top-down projects undermine the unit pioneers' dedication and their ability to lead a TQM change in their unit. It is administration's absence of ability to investigate the gaps between the TQM program and the truth of genuine practice the plain procedure of request, examination, and activity installed in TQM that causes TQM execution hindrance. The missing component in unsuccessful TQM alterations is an aggregate quality administration process for evaluating and building up a high caliber of administration at each level (Beer, 2000).

No.	Problems faced in implementation TQM	References
1.	TQM can be tedious, bureaucratic, formalistic, unbending and indifferent	Oakland (1995)
2.	Indifferent execution of TQM is an essential clarification behind its failure in numerous establishments	Ugboro and Obeng (2000)
3.	Quality management programs have flopped in light of how they were 'exercises of the month'	Smith (2004)
4.	The selection of contrary quality approach by organizations brings about the dissatisfaction of TQM usage	Andrle (1994)
5.	The absence of responsibility from a specific gathering inside the organization can be a genuine hindrance in administration of quality	Wilkinson (1998)
6.	There is a requirement for administration to drive the belief system of TQM process	Asher (1996)
7.	TQM does not handle key business issues like division as well as arranging methods.	Porter (1996)
8.	The disenchantment of TQM can be credited to the unseemly execution strategy embraced by the organizations utilized and not on account of the standards of TQM itself.	McCabe and Wilkinson (1998)
9.	The disapproval of organizations to execute the prizes to gathering may prompt inner rivalry among worker and this will negatively affect group execution which add up to quality administration advances	Deming (1986),
10.	TQM collapse because of disappointments in usage, not in TQM hypothesis and strategy	Beer (2000)

2.4 EFFECT OF TQM

The viable usage of Total Quality Management will extend buyer dedication with the administration commitments (Omachonu & Ross, 1994). Quality overhauls customer steadfastness through satisfaction; this hence can make reiterate business and provoke the interest of new customers through positive casual. The verbal correspondence will help in cost reducing. Omachonu and Ross (1994) noted will give forceful edge to the organization. TQM is an organization thinking which focuses on the devolution of

master to the front-line staff. It ensures the participation of everyone in the fundamental authority process through activities, for instance, quality cycles and joint effort. The execution of TQM ensures that each staff in the organization does his work with quality the first run through, accordingly enlightening the proficiency of movement and circumventing roughly cost related with excess. This in this manner will present progressively a motivating force to customers to the extent cost and organization quality, thusly making them satisfied (Dimitrades, 2000).

Application of Total Quality Management also ensures that organizations change how they perform practices keeping in mind the end goal to take out inefficiency, upgrade shopper steadfastness and accomplish the superlative rehearsal (Concierge, 1996). Porter saw that relentless change in the suitability of movement is fundamental, in any case not an adequate factor for organization to be gainful. As per Sila (2007), TQM makes a difference in upgrading the idea of stocks and besides reduces the piece, enhance and the necessity for pad stock by working up an unfaltering age process. He battled that TQM will reduce the cost of generation and time of creation. Diligent change which is a component of TQM is said to diminish the stock procedure length along these lines OF improving proficiency (Huang & Lin, 2002). Various other TQM hones, for instance, planning, information structure organization, organization with suppliers et cetera emphatically influence operational execution. The profitable organization treatment of these procedures will advance adequacy and no vulnerability impact the advantage of the company.

As indicated by the providers. TQM supports the aggregate quality approach in making consumer loyalty. The aggregate quality approach makes a coordinated technique for breaking down task by concentrating the procedures of production on consumer

loyalty. In this manner, it requires that quality be incorporated with every one of the procedures in order to be proficient in the general task (Andrle, 1994). Kaynak (2003) recommended that the adequacy of TQM organizations ought to be estimated by the level of joining with their provider bases since provider quality administration is a basic part of TQM. Operational adequacy is then an element of how well the different units of an organization complete their capacities with quality.

No.	Effects of TQM	References
1.	Viable usage of Total Quality Management will expand customer devotion with the service contributions	Omachonu and Ross, (1994)
2.	Execution of TQM ensures that each staff in the division does his work with quality the principal go through, hence upgrading the profitability of movement and additionally keeping away from some cost related with squander	Dimitrades (2000).
3.	Application of TQM ensures that deparment change how they perform practices keeping in mind the end goal to take out inefficiency, upgrade purchaser unwaveringness and achieve the best practice	Doorman (1996)
4.	TQM helps in upgrading the idea of stocks and besides decreases the piece, enhance and the prerequisite for cushion stock by working up an unfaltering generation process	Sila (2007)
5.	TQM will diminish the expense of age and time of creation. Enduring change which is a segment of TQM is said to reduce the stock method length thusly of improving proficiency	Huang and Lin (2002)
6.	TQM can limit the aggregate cost of generation through 'sole sourcing	Sila (2007)
7.	Quality be incorporated with every one of the procedures in order to be proficient in the general task	Andrle (1994)
8.	the adequacy of TQM organizations ought to be estimated by the level of joining with their provider bases since provider quality administration is a basic part of TQM	Kaynak (2003)

2.5 MEASURES FOR EFFECTIVE TQM

The best administration and the whole staff of an organization must be focused on the change of quality in all parts of their tasks (Barczyk, 2000). As indicated by Rungtunsunatham and Schroeder (1994), there ought to be a visionary authority expressing the part of best administration in characterizing a long-go quality-situated vision of an organization, actualizing an arrangement of activity and rousing and propelling the whole organization towards the satisfaction of this vision. Concerning the administration activities connected to quality practices, there ought to be satisfactory control all through the production network. In a few circumstances, it might require expansion of the organization's inventory network to incorporate inside production of some raw materials and/or segments, dependable transportation and guaranteeing convenient correspondence along the esteem chain (Mehra & Agrawal, 2003).

No.	Measures for Effective TQM	References
1.	The best administration and the whole staff of an organization must be focused on the change of quality in all parts of their tasks	Barczyk, 2000).
2.	There ought to be a visionary authority expressing the part of best administration in characterizing a long-go quality-situated vision of an organization	Rungtunsunatham and Schroeder (1994)
3.	TQM require expansion of the organization's inventory network to incorporate inside production of some raw materials and/or segment	Mehra and Agrawal (2003)

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This segment of the study focuses on the methods to be used to carry out the study. It consists of the research design, population, sample size and sample technique, sources of data, fata collection instrument, administration of the questionnaire and data analysis.

3.2 RESEARCH DESIGN

The study employed a survey kind of research design where data was collected from the employees of the engineering department of Cocoa Processing Company Limited, Tema. I interacted with the staff of in order to make it conceivable to comprehend the dynamic elements of the examination by having an immediate ordeal.

3.2.1 Research Approach

This examination was based on deductive approach as it incorporates the use of previously prevailing theories together with quantitative methods to make interpretation into the Total Quality Management of the engineering department of Cocoa Processing Company Limited. In other words, the research first analyses literature as a theoretical guide, and then gathers data from respondents After this, statistical methods were utilized to draw assorted connotations and understood within the setting of the previously prevailing theoretical framework.

3.2.2 Research Strategy

The study adopted the quantitative research approach. This category of research design was the best since it offered the researcher the opportunity to collect primary data from the engineering department of the organization and test it against what pertains in life.

3.3 TARGET POPULATION

Mugenda (2003) characterizes populace as the arrangement of all "units" of investigation in one's concern region. The population of the study was employees of the engineering department of Cocoa Processing Company Limited, Tema from which the sample size was drawn. The total number of staff at the engineering department of Cocoa Processing Company Limited is estimated to be sixty (60). Studying the entire population was unbearable to study due to tight work schedules, time constraints and inadequate funds accessible for operative management of the study. Consequently, solitary a share of the population is considered. In oder to ensure the determination of precise sample size, the arithmetical formula derived by Taro Yamane (1967) was employed. The formula states thus:

$$n = \frac{N}{1+ N(e)^2}$$

Where n = sample size

N = population of the study which is 60

e = margin of error and in this case, e = 5% (chosen by the researcher)

1 = constant

Therefore;

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{60}{1+60(0.05)^2}$$

$$n = \frac{60}{1 + 60(0.0025)}$$

$$n = \frac{60}{1 + 0.15}$$

$$n = \frac{60}{1.15}$$

$$n = 52$$

3.4 SAMPLE SIZE

Out of a population of Sixty (60) at the engineering department of Cocoa Processing Company Limited, Tema, the sample size of the study was fifty-two (52) respondents for expediency sake. The reasoning of using the number was to achieve a representation that reflects the target population. These respondents were considered to have the learning and the skill on the topic under examination.

3.5 SAMPLE TECHNIQUE

Convenience sampling was used as sampling technique. Convenience sampling is most often expended on the grounds that it is the most ideal method for getting some essential data rapidly and effectively. Convenience sampling was utilized as a part of choosing the respondents since this technique uses respondents who are accessible and prepared to be incorporated into the examination. This sampling method was chosen because the respondents were accessible and readily available and keen to answer the research questions to help achieve the stated objectives. It made use of employees who would be reachable and eager to be included in the study. This sampling technique would be more appropriate due to the tight schedules of respondents at the factory.

3.6 SOURCES OF DATA

Primary data was gathered with a specific end goal to request reactions specifically from the field through questionnaires while secondary data will be obtained from articles, journals, published books, and the organization website.

3.7 DATA GATHERING INSTRUMENT

The study was used questionnaire as data collection instrument. The reason for this questionnaire was to discover the demeanors, practices, desires, convictions and estimations of the objective populace. The questionnaires will be used to obtain objective opinion from respondents. The questionnaires were organized in light of the exploration questions. This research instrument was utilized in light of the fact that it was the best through which precise data could be gathered in an investigation of this kind where the examination theme under scrutiny requires proclamation of certainties and sincere beliefs. More importantly, the study was concise and the respondents assured of confidentiality of any information that they will make available to the study.

3.8 DATA COLLECTION PROCEDURE

With a specific end goal to guarantee that there was high reaction rate, the researcher partakes in the administering of the questionnaire. The researcher administered about fifty-two (52) questionnaires on the respondents to those who are willing to complete them with reference to the sample size and would thus wait for the respondents to complete them. Significantly, this information gathering methodology enabled the researcher to have individual communication with the respondents and to clarify the criticalness of the examination to them and furthermore a portion of the issues which required elucidation.

3.9 DATA ANALYSIS

The questionnaires were cautiously to have individual communication with the respondents and to clarify the criticalness of the examination to them and furthermore a portion of the issues which required elucidation. The responses gathered from respondents were matched and presented per the items on the different segments of the questionnaire. The outcomes acquired were verified and put in percentages using tables and charts provided in each section. Examinations was displayed utilizing SPSS keeping in mind the end goal to give depictions of the information which would be made for speculations and translation of the information.

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter brings to the fore the data presentation, analysis and discussion of results of the field work carried. The researcher administered a total of 55 questionnaires and 50 were finished and kept. This characterizes a reaction rate of 90.9%. This response rate was satisfactory to permit the researcher to persist with the analysis. The questionnaires were composed of questions that addressed the objectives of the study. Descriptive statistics such as frequencies, percentages, mean, standard deviation and rank score were utilized to scrutinize the information gathered from the field. The presentation and analysis of the collected data were carried out using descriptive statistics and analytical tools.

4.1.1 Respondents' Background Information (Demographic Data)

Demographic characteristics of the respondents were of importance in this study. These include age, highest level of education, and tenure. The findings are presented below

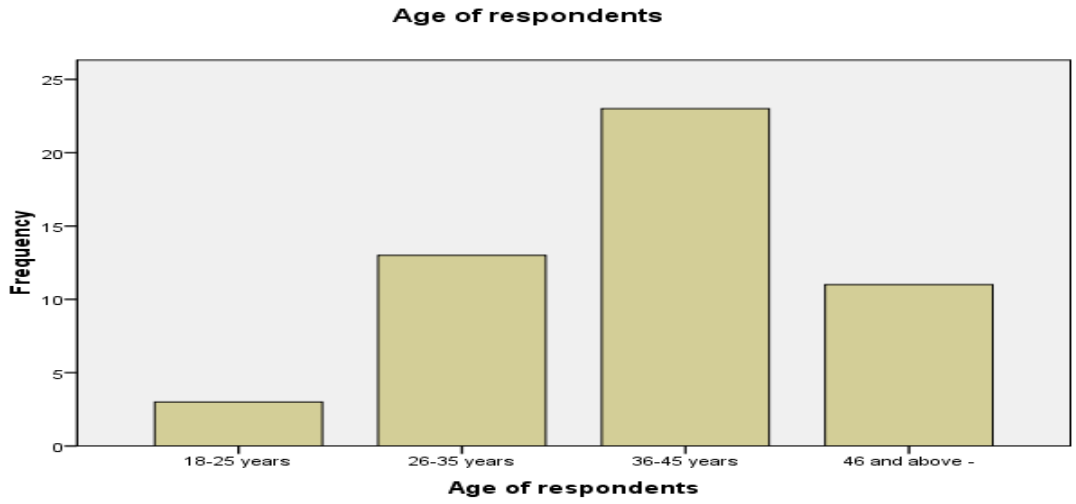

Figure 4.1: Age bracket of respondents

Source: Field Data, 2018

Study results presented in Figure 4.2 reveals that the majority of the respondents (23, 46%) were aged amid 36 and 45 years trailed by those aged amid 26 and 35 years who were (13, 26%). Another 22% (11) of the respondents were 46 years and above while only (3, 6%) of the respondents were aged between 18 to 25 years. This signfies that the majority of the respondents at the Engineering Department of Cocoa Processing Company Limited were young. This further implies that the majority of the employees from which the respondents were drawn were young with only 22% being outside the youth bracket.

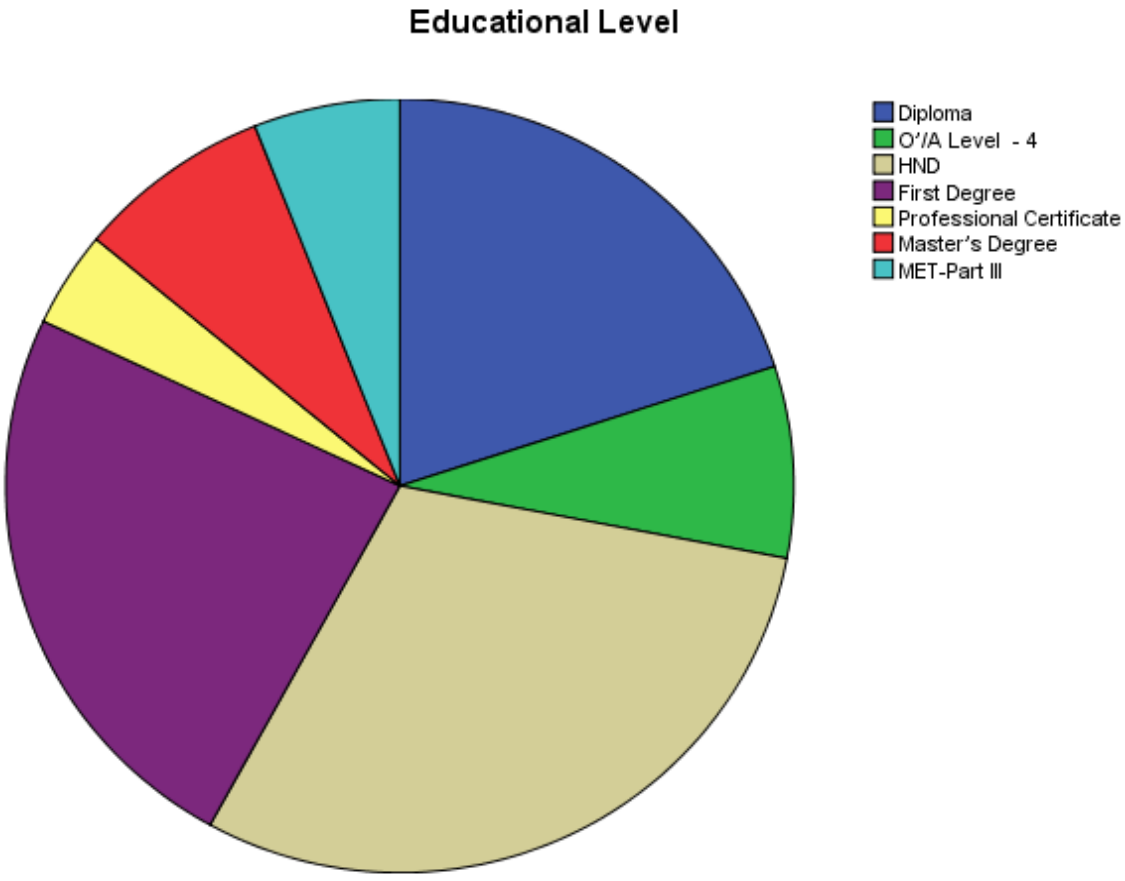

Figure 4.2: Highest Level of Education

Source: Field Data, 2018

It was important to determine the respondents' highest level of education. Study findings presented in Figure 4.2 show that (2, 4%) of the respondents had professional level of education, (10, 20%) and (4, 8%) of the respondents have certificate/diploma and O/A Level as their highest level of education which was followed by (15, 30%) of the respondents who were HND holders, (12, 24%) of the respondents had attained university level of education, (4, 8%) and (3, 6%) were Master's Degree and MET-Part III holders. It was also seen that 54% of the respondents display a knowledgeable and highly competent work force at the Engineering Department of Cocoa Processing Company Limited that would carry their roles with greatest capability.

Table 4.1: Tenure of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-3 years	5	10.0	10.0	10.0
	4 years and above	45	90.0	90.0	100.0
	Total	50	100.0	100.0	

Source: Field Data, 2018

Outcome in Table 4.2 illustrate that (5, 10%) of the participants had operated in their current work positions for a time amid 1 and 3 years. Results additional discovered that (45, 90%) of the participants had operated in their current positions for amid 4 years and above. This is an indication that most respondents at the Engineering Department of Cocoa Processing Company Limited had operated an extended era of time in their present work positions and that they were adequately positioned to answer precisely to the interrogations in connections to objectives of the study. It was there suitable to conclude that the data they provided were dependable.

4.1.2 TQM Characteristics in The Engineering Department

Presented here are the results of TQM Characteristics in the Engineering Department as ranked according to the respondents. It likewise displays the responses that answer the research questions administered to respondents on the field. The responses were coded with a five-point Likert-type rating scale to acquire their conclusions on the above expressed research questions where (5) was appraised as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree.

Table 4.2: TQM Characteristics in the Engineering Department

Characteristics	Mean	Std. Deviation	Rank Score
Focus on quality and productivity improvement	4.6600	.47852	1
Team work to fix common problems in the product or process	4.5400	.50346	2
Every company member is focused on service quality	4.1200	.68928	3
Collaboration with all departments	4.1800	.52255	4
Anyone can suggest areas for improvement	3.8400	1.05676	5
Focuses on implementation of changes	3.7400	1.45420	6
Requires training to be familiar with the necessary TQM techniques	3.1800	1.32002	7
Valid N (listwise)			

Source: Field Data, 2018

The topmost mean score of (M=4.54; SD=.47) was recognized among respondents who indicated that focus on quality and productivity improvement. This was the maximum score as demonstrated in the Table 4.3. The element that had the least mean score (M=3.18; SD=1.32) from the respondents was “Requires training to be familiar with the necessary TQM techniques.” The other elements had wide-ranging mean scores as revealed in the Table 4.3. For example, the second statement was on whether team

work to fix common problems in the product or process, and this had a mean score of (M=4.54; SD=.50) confirming that respondents agreed that team work to fix common problems in the product or process in the department.

The finding is supported by Dale (1994); and Lockwood (1996) said Total Quality Management (TQM) fuses the usage of significant worth organization measures to every components of the organizations, incorporating customers and suppliers, and their mix with the key business outlines. Essentially more fundamentally, it is a methodology which joins relentless updating by everyone in the associations. Besides, TQM is a run which joins the standard encouraged effort of everyone that partners the business arrangement of an organizations and it consolidates all accessories of an organization.

A mean mark of (M=4.21; SD=.68), and (M=4.18; SD=.52) was computed for the elements “Every company member is focused on service quality”, and “Collaboration with all departments” respectively. This depicted that respondents agreed that every company member was focused on service quality through the collaboration with all departments.

As shown by Lockwood (1996), in order to be effective, quality confirmation must join the development of another working thinking and approach that is by all accounts proactive instead of open, that consolidates motivating and incorporating people in the process crosswise over conventional departmental blocks. Oakland (1995) described quality affirmation as broadly expectation of value issues through organized and ponder works out, which consolidate documentation. The mean mark of (M=3.84; SD=1.05) and (M=3.74; SD=1.45) were computed for elements such as “Anyone can suggest areas for improvement”; and “Focuses on implementation of changes”. It was the

understanding of the respondents that anyone at the Engineering Department of Cocoa Processing Company Limited can suggest areas for improvement and focuses on implementation of changes.

The finding is consistent with that of Andrle (1994) which demonstrated that TQM standard underscores the entirety of quality in all aspects which incorporates the providers. TQM supports the aggregate quality tactic in making consumer loyalty. The aggregate quality approach makes a coordinated technique for breaking down task by concentrating the procedures of production on consumer loyalty. In this manner, it requires that quality be incorporated with every one of the procedures in order to be proficient in the general task.

4.1.3 Problems Faced in the Implementation of TQM in the Engineering Department

Illustrated here are the results of problems faced in the implementation of TQM in the Engineering Department as ranked according to the respondents. It equally shows the responses that answer the research questions administered to respondents on the field. The responses were coded with a five-point Likert-type rating scale to acquire their conclusions on the above expressed research questions where (5) was appraised as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree.

Table 4.3: Problems Faced in the Implementation of TQM in the Engineering Department

Problems	Mean	Std. Deviation	Rank Score
Lack of Management Commitment and Support	4.4800	.64650	1
Lack of Resources and Skilled Expertise	4.5800	.64175	2
Bad attitudes and Behaviour	3.9000	.90914	3
Too much documentation required	3.8800	.91785	4
Lack of employee's commitment/understanding	3.5600	.70450	5
No developed standardized procedures	2.0200	.89191	6
Valid N (listwise)			

Source: Field Data, 2018

The mean mark of (M=4.8; SD=.64), (M=4.58; SD=.64) and (M=3.90; (SD=.90) was related with respondents who held that absence of administration obligation and backing, and absence of capitals and accomplished expertise were the problems faced in the implementation of TQM in the Engineering Department. Additionally, bad attitudes and behaviour was the other problem faced in the implementation of TQM. Porter (1996) suggested that TQM is critical for a company output as well as feasibility; notwithstanding, would not so much give an association high ground over her adversaries. TQM does not handle key business matters like detachment and arranging methods.

In the same way, a mean of (M=3.88; SD=.91) and (M=3.56; SD=.70) was documented for the item "Too much documentation required" and "Lack of employee's commitment/understanding". This item was the 4th and 5th highest ranked amongst the items in this section signifying that, too much documentation required and lack of employee's commitment/understanding were the problems faced in the implementation of TQM in the Engineering Department. McCabe and Wilkinson (1998) suggested that the disenchantment of TQM can be credited to the unseemly execution strategy

embraced by the organizations utilized and not on account of the standards of TQM itself. They trusted TQM could be effective in the event that it is sufficiently gotten ready for and actualized by design. Another explanation behind the distress of TQM is the accentuation given to singular prizes for add up to TQM exertion.

A mean score of (M=2.02; SD=.89) was computed for the item, "Bad attitudes and Behaviour" which revealed that respondents disagreed that the problem faced in the implementation of TQM in the Engineering Department was that there were no developed standardized procedures. The findings of this study are supported by Oakland (1995) who recognized parts that foil the utilization of TQM. These join the prospect that its utilization can be monotonous, bureaucratic, formalistic, inflexible and uninterested. Ugboro and Obeng (2000) in their examination found that the unconcerned execution of TQM is a fundamental elucidation behind its misstep in different association. As shown by them, associations are basically organized to execute just those parts of Total Quality Management which is reinforced by existing conclusive society. Their exposures revealed that specialists did not feel as a part of the crucial organization process and their ability to take off commitments to quality change were bound due to the kept power enabled them to do their activities.

4.1.4 Effects of TQM of the Engineering Department of CPCL

As seen here are the results of effects of TQM of the Engineering Department of CPCL as ranked according to the respondents. It similarly displays the responses that answer the research questions administered to respondents on the field. The responses were coded with a five-point Likert-type rating scale to acquire their conclusions on the above expressed research questions where (5) was appraised strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree

Table 4.4: Effects of TQM of the Engineering Department of CPCL

Effects	Mean	Std. Deviation	Rank Score
Products plan, advancement and conveyance depend on addressing the requirements of clients	4.1800	.52255	1
TQM is helping to reduce waste in my department	4.3200	.55107	2
Helping to save time spent on activities	4.1400	.78272	3
Taught to use best processes to perform activities effectively	4.1400	.57179	3
I am able to identify and eliminate unnecessary activities	4.1000	.78895	4
Customers-focused strategies and approaches are continuously reviewed for further improvement	3.0600	.79308	5
I use the best quality materials to perform my activities	3.0400	.90260	6
Valid N (listwise)			

Source: Field Data, 2018

Based on the data above, the mean score of (M=4.18; SD=.522), (M=4.32; SD=.55) and (M=4.14; SD=.78) was associated with respondents who agreed that products plan, advancement and conveyance depend on addressing the requirements of clients. Moreover, TQM was helping to reduce waste in their department, helping to save time spent on activities and had taught them to use best processes to perform activities effectively.

The succeeding statement was on whether "I am able to identify and eliminate unnecessary activities" and "Customers-focused strategies and approaches are continuously reviewed for further improvement", evident in the mean response of (M=4.10; SD=.78) and (M=3.06; SD=.79) indicating that respondents agreed that they were able to identify and eliminate unnecessary activities while customers-focused

strategies and approaches were continuously reviewed for further improvement. The findings of this study were consistent with Omachonu and Ross (1994) who said that the viable usage of Total Quality Management will expand consumer loyalty with the service contributions. Quality redesigns customer trustworthiness through satisfaction; this along these lines can make go over business and provoke the interest of new customers through positive casual. The verbal correspondence will help in cost reducing.

Similarly, a mean of (M=3.04; SD=.90) was recorded for the item I use the best quality materials to perform my activities." This item was the 6th lowest ranked score among the items in this section signifying that respondents used the best quality materials to perform their activities. Findings of this study were also consistent with Dimitrades (2000) whose study revealed that the implementation of TQM guarantees that every staff inside the organization does his job with excellence the essential experience, along these lines improving the advantage of action and keeping up a vital separation from some cost related with misuse. This in like manner will provide progressively an inspiration to clients to the extent cost and organization quality, along these lines making them satisfied (Dimitrades, 2000).

4.1.5 Measures for Effective TQM of the Engineering Department of CPCL

Depicted here are the results of the measures for effective TQM of the Engineering Department of CPCL. It reveals the responses that answer the research questions administered to respondents on the field. The responses were coded with a five-point Likert-type rating scale to acquire their assessments on the above expressed research questions where (5) was rated as strongly agree, (4) Agree, (3) Undecided (2) Disagree and (1) strongly disagree

Table 4.5: Measures for Effective TQM of the Engineering Department of CPCL

Measures	Mean	Std. Deviation	Rank Score
Making preparing important to representatives' individual work circumstances	5.4400	5.58482	1
Stress management	4.7200	.45356	2
Upgrading correspondence abilities	4.4400	.50143	3
Group building and gathering focused exercises	4.3800	.49031	4
Helping representatives to figure out how to work in quality change ventures	4.3400	.68839	5
Different expertise advancement, building quality abilities with rise to center around social aptitudes	4.3400	.65807	5
Valid N (listwise)			

Source: Field Data, 2018

The mean mark of (M=5.44; SD=5.58), (M=4.72; SD=.45) and (M=4.44; (SD=.50) was related with respondents who held that making preparing pertinent to representatives' individual work circumstances, stress management and enhancing communication competencies were the measures for effective TQM of the Engineering Department of CPCL.

In the same way, a mean of (M=4.38; SD=.49) and (M=4.34; SD=.65) was recognized for the item “Group building and gathering focused exercises" and "Numerous ability advancement, building quality aptitudes with rise to center around social aptitudes”. This item was the 4th and 5th highest ranked amongst the items in this section suggesting that, the measures for effective TQM of the Engineering Department of

CPCL were group building and gathering focused exercises and multiple ability improvement, building quality aptitudes with rise to center around conduct abilities. According to Barczyk (2000), the best administration and the whole staff of an organization must be focused on the change of quality in all parts of their tasks. As indicated by Anderson, Rungtunsunatham and Schroeder (1994), there ought to be a visionary authority expressing the part of best administration in characterizing a long-go quality-situated vision of an organization, actualizing an arrangement of activity and rousing and propelling the whole organization towards the satisfaction of this vision.

A mean score of (M=4.34; SD=.68) was computed for the item, “Helping workers to figure out how to work in quality change ventures" which uncovered that respondents concurred that helping representatives to figure out how to work in quality change ventures was one of the measures for effective TQM of the Engineering Department of CPCL. The findings of this study were however in support with the findings of Mehra and Agrawal, (2003) who said that concerning the administration activities connected to quality practices, there ought to be satisfactory control all through the production network. In a few circumstances, it might require expansion of the organization's inventory network to incorporate inside production of some raw materials and/or segments, dependable transportation and guaranteeing convenient correspondence along the esteem chain (Mehra & Agrawal, 2003).

4.2 DISCUSSION OF RESULTS

The information discussed here are based on the research question in relation to the objective of the study as stipulated in chapter one of the study. The first research question was to examine the TQM of the engineering department of CPCL. The results showed that the TQM of the engineering department of CPCL focus on quality and

productivity improvement and team work to fix common problems in the product or process. Additionally, findings indicate that every company member was focused on service quality while there was collaboration with all departments. The research revealed that with TQM of the engineering department of CPCL, anyone can suggest areas for improvement, focuses on implementation of changes, and requires training to be familiar with the necessary TQM techniques.

The finding is in line with that of Kheni and Ackon (2015) who conducted a study on the effect of Total Quality Management Practices (TQMPs) on the performance of construction projects in developing countries and found that TQM practices (supplier management, process management, planning, top management leadership and commitment, human resource management, teamwork, information analysis and evaluation, quality culture and customer focus) had a positive impact on the quality performance of construction projects. However, Lu and Sohal (1993) had a study that used 9 TQM practices which included benchmarking, statistical and resources control, strategic quality management, training and education, top management commitment, design quality management, information and analysis, process quality management.

From the second research question, the study identified the problems possibly faced in the implementation of TQM in the engineering department of CPCL. It was found that absence of administration responsibility and support, absence of assets and talented skill, terrible mentalities and behaviour, too much documentation requirement, lack of employee's commitment/understanding and no developed standardized procedures were the identified the problems faced in the implementation of TQM in the engineering department of CPCL.

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The finding is supported by According to love et al (2004), who suggested that employees (predominantly site-based staffs) demonstrated some antagonistic vibe toward the starter of TQM for a large group of thought processes, which included dread of the obscure, saw loss of control, individual vulnerability, absence of comprehension of what TQM was, insufficient preparing, plan not plainly characterized; protection from information gathering (e.g. improve costs, and non-conformances material waste, and so on.). In Iraq, Hadi and Adavi (2016) did a study on the barriers in implementing TQM on construction projects. The research revealed that most organizations experiencing a lack of skillful workers in the process of TQM implementation. A critical barrier to TQM practice was found to be unskillful workers and organizations to be able to produce higher quality services and products need employees whom possess requisite knowledge to perform their jobs efficiently and effectively.

From the research question three, the study identified the effects of TQM in the engineering department of CPCL. The results showed that products design, development and delivery were based on meeting the needs of customers. The outcome showed that TQM was helping to reduce waste in the department and saved time spent on activities. The study deduced that respondents were able to identify and eliminate unnecessary activities. It was observed that customers-focused strategies and approaches were continuously reviewed for further improvement.

The finding is supported by Ke et al. (2013) who indicated that the higher quality of relationships at the project implementation process always leads to significantly client satisfaction and good project quality with the construction process. Ashokkumar (2014) affirmed that customers demand improves the quality service, innovations in technology and faster buildings.

Research question four examined measures for effective TQM in the engineering department of CPCL. It was revealed that making preparing significant to representatives' individual work situations. The results showed that stress management and Enhancing communication competencies most be enhanced. It was discovered that Group building and gathering focused exercises and different aptitude advancement, building quality abilities with equal focus on behavioural skills must be augmented. The study further revealed that helping workers to figure out how to work in quality change ventures was the other measure according to the respondents.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter encompasses of the summary and conclusion of and it provides necessary recommendations based on the findings to guide management and guide policy.

5.2 SUMMARY OF FINDINGS

The objective of this study assessed the TQM of the engineering department of Cocoa Processing Company Limited. Moreover, the study was made up of four specific objectives, which include, to examine the TQM of the engineering department of CPCL; to identify the problems possibly faced in the implementation of TQM in the engineering department of CPCL; to identify the effects of TQM in the engineering department of CPCL and finally to propose measures for effective TQM in the engineering department of CPCL. As a result of this, the study adopted survey design and the quantitative research approach where the study used questionnaire as data collection instrument. Descriptive statistics such as frequencies, percentages, mean, standard deviation and rank score were used to scrutinize the information gathered from the field.

The data analyzed confirmed that the TQM of the engineering department of CPCL focus on quality and productivity improvement and team work to fix common problems in the product or process. The study discovered that every company member was focused on service quality while there was collaboration with all departments and that with TQM of the engineering department of CPCL, anyone can suggest areas for improvement, focuses on implementation of changes, and requires training to be familiar with the necessary TQM techniques. Findings from the study clearly revealed

that absence of organization obligation and backing, absence of capitals and skilled expertise, bad attitudes and behaviour, too much documentation requirement, lack of employee's commitment/understanding and no developed standardized procedures were the identified the problems faced in the implementation of TQM in the engineering department of CPCL.

The outcome showed that that TQM was helping to reduce waste in the department and saved time spent on activities while customers-focused strategies and approaches were continuously reviewed for further improvement. The result of the findings showed that making preparing applicable to representatives' individual work circumstances. The results showed that stress management and Enhancing communication competencies most be enhanced. It was discovered that group building and gathering focused exercises and various expertise improvement, building quality abilities with meet spotlight on conduct aptitudes must be augmented.

5.3 CONCLUSION

In light of empirical data presented, analyzed and discussed culminating in the findings stated above, it was concluded that in assessing the Total Quality Management of the engineering department of Cocoa Processing Company Limited, authority is the crucial issue. The best organization must consider the purposes of the association, those moves that should make set up, quality fiscally, and resources, (for instance, organization resources) that are critical for achieving all parts of value. Subsequently, for enhancing the quality in the Engineering Department of CPCL, obligation and learning of the activity must be the underlying advance. Starting there ahead, a culture must be existed in light of some middle qualities. Further to this, client center implies that organizations

must realize what client requires precisely, and attempt to satisfy client needs and desires by delivering the correct item and administration.

Keeping in mind the end goal to have an accomplishment in quality issues it is important to give a circumstance that raises investment of all gatherings because of consumer loyalty with a nonstop quality change. On alternate words, the responsibility of everyone in the Engineering Department of CPCL ought to be more in centered. Accordingly, every one of the workers must feel submitted and in charge of doing the activity in a decent way. For enhancing quality, it is a constructive point to care of investment of all included individuals and make them happy with their activity condition.

The study concludes that the TQM characteristics in the Engineering Department of CPCL focused on quality and productivity improvement and team work to fix common problems in the product or process. The study concluded that with TQM of the engineering department of CPCL, anyone can suggest areas for improvement, focuses on implementation of changes, and requires training to be familiar with the necessary TQM techniques.

5.4 RECOMMENDATIONS

The study would recommend the following for implementation:

It is recommended that, top administration and the whole staff in the Engineering Department of CPCL to be focused on the change of value in all parts of their tasks.

To furnish workers with rules, the company ought to create quality norms that can be utilized for examination in quality control and estimation.

Total Quality Management (TQM) ought to incorporate the use of significant worth organization guidelines to all parts of the organization, incorporating clients and providers, and their joining with the key commercial shapes. It is a methodology which fuses constant change by everyone in the association. Finally, the execution of TQM ought to guarantee that each laborer in the Building Branch of CPCL does his job with excellence the initial run through, consequently improving the effectiveness of activity and staying away from some cost related with misuse. This consequently will offer increasingly a motivation to customers with respect to cost and organization quality, thusly making them satisfied.

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APPENDIX

SURVEY QUESTIONNAIRE

TOPIC: ASSESSING THE TOTAL QUALITY MANAGEMENT OF ENGINEERING DEPARTMENT OF COCOA PROCESSING COMPANY LIMITED

My dear respondents

I am carrying out research for academic purposes on assessing the total quality management of engineering department of Cocoa Processing Company Limited. An understanding of the various TQM employed by Cocoa Processing Company Limited would aid to better the level of services quality management that they offer which would impact on its overall business output.

In order for me to complete my study, I kindly request you to fill this questionnaire. Your responses will be used only for research purposes and shall be treated with supreme confidence.

Thank you for your participation in the success of my studies.

Yours faithfully

Researcher

Contact Information:

Researcher: Richard Kofi Ankomah
E-mail: richard.ankomah@outlook.com
Tel: 0244112303/0263564030

Supervisor: Prof. Edward Badu
E-mail: edwardbadu@yahoo.com
Tel: 0244986843

Section A: Demographic Data

1. Gender?

   a. ( ) Male - b. ( ) Female –

2. Age of respondents?

   a. ( ) 18-25 years b. ( ) 26-35 years

   c. ( ) 36-45 years d. ( ) 46 and above

3. What is your academic qualification?

   a. ( ) Diploma b. ( ) O'/A Level

   c. ( ) HND d. ( ) First Degree

   e. ( ) Professional Certificate f. ( ) Master's Degree

Others (please state)……MET part III .....MVT part II - .....

4. How long have you worked for your organization?

   a. ( ) Less than a year - b. ( ) 1-3 years -

   c. ( ) 4 years and above -

Section B: TQM Characteristics in The Engineering Department

Please indicate the extent to which you agree or disagree with the following statements that examine the TQM characteristics in the engineering department. 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 (D) 5-Strongly agree (SA)

No.	TQM CHARACTERITICS	RANKING				
		1	2	3	4	5
1	Every company member is focused on service quality	-	-	-	-	-
2	Requires training to be familiar with the necessary TQM techniques	-	-	-	-	-
3	Anyone can suggest areas for improvement	-	-	-	-	-
4	Focus on quality and productivity improvement	-	-	-	-	-
5	Focuses on implementation of changes	-	-	-	-	-
6	Team work to fix common problems in the product or process	-	-	-	-	-
7	Collaboration with all departments	-	-	-	-	-

Section C: Problems Faced in the Implementation of TQM in the Engineering Department

NO.	PROBLEMS FACED IN THE IMPLEMENTATION OF TQM	RANKING				
		1	2	3	4	5
1.	Lack of Management Commitment and Support	-	-	-	-	-
2.	Lack of Resources and Skilled Expertise	-	-	-	-	-
3.	No developed standardized procedures	-	-	-	-	-
4	Bad attitudes and Behaviour	-	-	-	-	-
5	Too much documentation required	-	-	-	-	-
6	Lack of employee's commitment/understanding	-	-	-	-	-

Section D: Effects of TQM of the Engineering Department of CPCL

	EFFECTS OF TQM OF THE ENGINEERING DEPARTMENT OF CPCL	1	2	3	4	5
1.	Products design, development and delivery are based on meeting the needs of customers	-	-	-	-	-
2.	TQM is helping to reduce waste in my department	-	-	-	-	-
3.	Customers-focused strategies and approaches are continuously reviewed for further improvement	-	-	-	-	-
4.	Helping to save time spent on activities	-	-	-	-	-
5.	I am able to identify and eliminate unnecessary activities	-	-	-	-	-
6.	Taught to use best processes to perform activities effectively	-	-	-	-	-
7.	I use the best quality materials to perform my activities	-	-	-	-	-

Section E: Measures for Effective TQM of the Engineering Department of CPCL

	MEASURES FOR EFFECTIVE TQM OF THE ENGINEERING DEPARTMENT	**RANKING**				
		1	2	3	4	5
1.	Multiple skill development, building quality skills with equal focus on behavioural skills	-	-	-	-	-
2.	Team building and group centred activities	-	-	-	-	-
3.	Enhancing communication competencies	-	-	-	-	-
4.	Helping employees to learn how to function in quality improvement projects	-	-	-	-	-
5.	Stress management	-	-	-	-	-
6.	Making training relevant to employees' individual work situations	-	-	-	-	-