

Effect of Total Quality Management (TQM) on Organizational Performance in ICT Firms (Staunton and Lycett Nig. Limited, Abuja)

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ABSTRACT

This research work assessed the TQM practices and its effect on organizational performance at Staunton and Lycett Nig. Limited, Abuja. A population of 60 workers comprising both senior and junior staff and also the technical staff was used for the study. The key findings showed there is a positive change in the organizational performance level of Staunton and Lycett Nig. Limited as a result of effective implementation of TQM practices. Finally, the authors recommends that the organization should enhanced the continuous implementation of TQM to increase performance.

Keywords: Total Quality Management (TQM), Organizational Performance, Quality, Service.

I. INTRODUCTION

1.1. Background of the Study

The main aim of an organization in our contemporary competitive world, is to minimize cost, maximize profit and satisfy consumers' needs through quality products and services, irrespective of competitors. This can be achieved by effective and efficient subscription to the practices of total quality management in an organization. Hence, as a manager, it is paramount to deliver quality projects, products or services to clients in order to improve customer satisfaction. thereby improving patronage. In ensuring good quality in project (products and services) delivery, different approaches have been proposed by different quality leaders, which helps to achieve project objectives without compromising on the budget. One of these approaches is the TQM approach to ensuring quality, Stanciu, Dragut and Orcheian, [32]. Enekwechi [10] as cited by Longtau, Justina, Majidadi and Makwin [22], in stressing the importance of quality on project opined that a total utility of 100%, the client places importance in the following proportions, quality (45%); Price (35%) and Time (20%). TQM is the philosophy of management that tends to link all organizational functions to focus on meeting the requirements of customers and main objective of organization Hashmi, [15].

TQM is a holistic approach in achieving the aims and objectives of an organization. It involves continuous improvement, training and re-training of staff, customers' satisfaction, top management support, defect free products at first attempt, elimination of reworks and cost effectiveness Iruobe, Ojambati, Akinpade, and Iruobe, Total [17]. quality management (TQM) is a set of management practices throughout the organization, geared to ensure the organization consistently meets or exceeds customer requirements. The key principles of TQM are: Management commitment, Employee empowerment,

fact based decision making, continuous improvement and customer focus Hashmi, [15] and is implemented through quality management methods postulated by quality leaders such as Edward W. Deming, Philip B. Crosby, Kaoru Ishikawa and Joseph M. Juran, American Society for Quality, [3].

TQM is the only tool that can improve the quality of service because it is a continuous improvement process and customer feedback is used to improve the quality of service more effectively and efficiently. TQM has become intensively used management tool and is considered as a key word in the management practices. Quality practitioners and managers considered it as a changed management quality approach, Arumugam, Keng - Boon and Fong, [4]. TQM plays an important role in development of management practices, Prajogo and Sohal, [31]. TQM is helpful for both individuals and collective behavior satisfy customers through continuous to improvement, Claver, Gasco, Llopis, and Gonzalez, [5].

The American Society Quality (ASQ) [3] defines quality as the degree to which a (product or service) set of inherent characteristics fulfils their Quality requirements. is meeting customer's requirement the first time and every time. The Department of Defense (DOD) [9] defines quality as conformance to a set of customer requirements that, if met, result in a product that is fit for its intended use. Quality is the single factor affecting an organization's long-term performance. Dr. W. Edwards Deming [7], has stated repeatedly that quality improves productivity which leads to improved competitive position and insures that the organization will stay in business. In essence, improved quality means more jobs and job security. Quality has remained in the forefront amongst factors used to determine the degree of success or failure of a project.

Performance is defined as the extent to which a company, as a social system with certain resources is able to fulfil its goal without being obliged to incapacitate its resources and means or putting excessive strain on its employee, Pike [28]. According to Estelle and Luc [11], organizational performance is generally assessed with financial indicators such as return on investment or profit per share. Also in their explanation of organizational performance, Lynch and Cross [23] opines that there is a performance pyramid's summit and operational indicators at the bottom. Within the strategic indicators, the authors includes market and financial indicators. The middle level indicators comprise quality of products or services, delivery delay, transformation delay and cost. The authors further stressed that the pyramid showed that organizational performance consist of both financial and non - financial indicators, as well as strategic and operational indicators. Furthermore, in measuring organizational performance, Kaplan and Norton's [21] proposed a balance scorecard which includes financial and non - financial indicators of four main organizational facets: Financial (how do we look to our shareholders?), customers (how do we become our targeted customers most valued supplier?), internal Process (what processes must we excel at in order to achieve our objectives?), and innovation and improvement (how can we continue to improve our processes and systems in order to create value?).

Thus, Organizational performance encompasses three specific areas of firm outcomes, which are; Financial performance (profits, return on assets, return on investments, etc.), product market performance (sales, market share, etc.), and shareholder return (Total shareholder return, economic value added, etc.). Production capacity performance may be analyzed in some cases.

Staunton and Lycett Nigeria Limited is a leading IT solutions Provider and providers of specialist technical services ranging from construction of high end ICT centers, provision of fast rollout turnkey packages, tower construction and maintenance, business applications development, virtual learning Systems, school management solutions, networking and cabling and web designs. Total quality management is a methodology by which management and employees can become involved in the continuous improvements of their products and services. It is a combination of quality and management tools aimed at increasing profit and reducing losses due to wasteful practice. A successful organization should as a matter of policy be constantly seeking opportunities to improve the quality of its products or services and processes; the company must also couple quality with a required level of productivity. TQM represents a total system and as such increasingly enhances quality circles as a broader means of addressing the demand for quality. This study investigates the effect of total quality management in Staunton and Lycett Nig. Limited.

1.2. Statement of Problem

Total quality management cannot be ignored, if meaningful goals and objectives are expected to be achieved. Quality must be controlled, as well as other resources used in ensuring quality products and services. Currently, Nigeria's major problem in quality management is the use of outdated or ^{ii.} inappropriate technology and the lack of managerial skills. An Organization may have employees that are ^{iii.} able and having appropriate equipment that leads to the increase in productivity, yet sales fall below expectation. The missing factor in many cases is the lack of effective total quality management model in an organization. A manager in an organization needs to have technical knowledge and competence about their products and services and best control model to be adopted and the best way of handling them effectively.

The establishment and achievement of acceptable levels of quality in Information Technology projects have long been a problem, but despite a significant amount of investigation already being undertaken to examine total quality management failures and their causes compromised, a minor defect in the quality standards in the case of setup, data uploads, network configuration and topology or network device setup can bring about low or no satisfaction on the path of the customers and also a whole lot of damage to properties in the case of fallen mast or devices. Thus, this can reduce the rate of performance of the organization. The significance of this research lies in the possibility of adding to the existing little information on total quality management practices in the quality of information and Technology (IT) projects in Staunton and Lycett Nigeria Limited in particular and in the country at large and as well as proposing solutions to the inherent problems associated with the non-compliance to quality standards in the management and execution of projects.

1.3. Research Questions

The study will address the following research questions:

- i. What were the challenges involved in implementing TQM practices at Staunton and Lycett Nig. Limited?
 - What measures are put in place to improve TQM practices in Staunton and Lycett Nig. Limited?What effect does total quality management have on the performance of the Organization?

1.4. Aim and Objectives

The aim of the study is to investigate the effect of total quality management in Staunton and Lycett Nig. Limited, Abuja while the specific objectives are to:

- Identify the challenges faced in the implementation of total quality management in Staunton and Lycett Nig. Limited, Abuja initially.
- ii. Identify the measures that are put in place to improve TQM practices in Staunton and Lycett Nig. Limited, Abuja.
- iii. Examine the effect of total quality management on the performance of Staunton and Lycett Nig. Limited, Abuja.

1.5. Significance of Study

It is important to evaluate quality assurance and control since it serves as a basis for checking the performance of an organization. It is for this reason, that the knowledge of total quality management as a major factor that influence the outcome of an organization's performance is to be clear to the contractors, sub-contractors, clients, consultants and the end users so that standards quality management could be enhanced. Total quality management is important in all the departments of the organization i.e Finance and Accounting Department, Project Management Department, Software development Department, Project Engineering Department. Thus, Greater understanding of how total quality management influence organizational performance would facilitate the development of Quality assurance in the organization, especially in Information and Technology (IT) firms.

Furthermore, this work would give other researchers wishing to conduct research into total quality management and organization performance a framework for further research. Finally, it will also serve as a source of reference for other related research works in the future and will equally form the basis for further research study.

1.6 Hypothesis

To identify the achievements of the desired objectives, the following hypotheses are formulated:

Ho: Total quality management have Effect/ Influence on the organization's performance

H1: Total quality management does not have Effect/ Influence on the organization's performance

II. REVIEW OF LITERATURE

Most empirical studies seem to agree with those of Powell [29], Tamimi [34], Oakland [27], Hendricks and Singhal [16], Ngambi and Nkemkiafu [25] that TQM practices have a positive impact on organizational performance. In Powell's study [29], data from 166 American firms were used to show that overall performance of TQM correlated positively and significantly with both implementing TQM and its degree of advancement or organizational performance. Although, the empirical literature suggests a positive link between TQM and organizational performance, the level of contribution attributed to TQM was not large, suggesting that there could be other variables at play. Those variables could be the differences in the processes of implementing TQM with respect to economic trends, the type of industry, the business environment including technology, competitiveness and market, corporate strategy, resources of firm, etc. Another study on ISO9000 certified organizations of Taiwan performed by Jeng [18] examined the linkage between six Quality Management practices and quality performance. He found customer focus as the most powerful discriminating practice of quality performance while the remaining five practices showed low discriminating powers.

Another wave of research has focused on the study between TQM and financial performance. Demirbag, Tatoglu, Tekinkus and Zaim [8] studies show that firms that focus on improving the quality of their product and processes improve revenues and reduce costs. The research gives credence to the fact that financial performance of a firm as a result of quality initiatives can be measured by the increase in the level of sales and revenues, the level of cost reduction, the return on investment, and by the increase in market share.

2.1 Challenges of Implementing TQM

Consequently, several major research themes concerned with the successful implementation of TQM have emerged. There have been many studies that have focused on the obstacles to TQM, Ngai and Cheng [24]. Glover [13] argues that TQM failures follow one of three patterns: conceptual weakness, design flaws, or ineffective implementation. Recognizing that TQM requires a true organizational transformation, Glover explains conceptual weakness

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as failures occurring because organizations make only superficial attempts at change. Design flaws occur when TQM systems are not designed to fit the cultural circumstances of the organization. The most common reason for failure include ineffective implementation which results when TQM becomes so much extra work instead of a new way of doing things, Glover [13]. Glover also argues that without a change in management evaluation and reward policy, TQM cannot be taken seriously. He advocates managers will need to know that their evaluations and subsequent pay increases and bonuses, are dependent on having high levels of quality, satisfied staff and consumers, and successful TQM implementation in their respective areas of responsibility. In a study of companies that won the Australia Quality Award, Abraham, Crawford and Fisher [1] found the key factor in achieving a successful change to a quality culture was management support. They stated that managers must be clearly perceived to support the change through communication, resource allocation and recognition or reward.

III. RESEARCH METHODOLOGY

3.1. Research Design

In this study, the researcher's design is a framework of collecting and analyzing the data for a study. Research design answers the fundamental question of how the study subjects was brought into the scope of the research setting to yield the required data. The two approaches to research design are the case study and the survey methods. In this study survey method was used to investigate effect of TQM on organizations' performance in Staunton and Lycett Nig. Limited.

3.2. Study Area

This study was conducted in Abuja. Staunton and Lycett Nig. Limited used in this study is located at 35, Lusaka Street, Wuse Zone 5, Federal Capital Territory of Nigeria, Abuja. Staunton and Lycett Nig. Limited is owned by Engr. Olatunde Ojajuni and was formally known as "Staunton and Lycett Engineering Limited". The company was established on October 10, 2001 and was formally located at 75, Hazelwood house, Evelyn street, Deptford London, United Kingdom.

3.3. Population of Study

The population of the study consists of the Directors (3) of three departments (project management, software and project engineering), eleven (11) senior staff in all departments, twenty (20) junior workers and twenty-six (26) Technical workers constituted the population of the study; this made the total population of the study sixty (60).

3.4. Sampling Technique and Sample Size

The study used purposive sampling technique. Due to the fact that the population of the study was relatively small, the study used census or total enumeration to collect data from the whole population. Complete enumeration consists of using each and every unit of the population in the study.

3.5. Method of Data Collection

The researchers used the means of well-structured Questionnaires in the collection of data for the research. Before the questionnaires were administered, they were pre-tested on some workers to check whether it would help achieve the objectives of the study. It also showed whether the right responses would be provided by the respondents. It did help to clarify ambiguities and uncertainties regarding questions which were asked. After the pre-test the questionnaires were then administered.

3.6 Sources of Data

The data sources for analysis are divided into two:

- i. primary data
- ii. secondary data

3.6.1 Primary data

While the productivity rate data was taken from Staunton and Lycett's Human Resource Management department for two years, cutting across the years before the company implemented the Total quality management programs and two years after the implementation of Total quality management. The feedback survey was conducted using questionnaires administered. With these, we are able to extract the productivity rate of the company, before and after the implementation of Total quality management by the organization. These sets of data were then tested against the feedback on the TQM variables to determine the kind of relationships that exist between Total quality management and the organizational performance.

3.6.2 Secondary Data

The sources of gathering the secondary data in this study were from journals, literature review, textbooks, other relevant records from Staunton and Lycett Nig. Limited and other research works relating to this topic published and unpublished.

3.7 Research Instrument

The questionnaire of the study was made up of both close ended and open ended questions. Close ended questions constituted the basis of the structured questions. The open ended questions were generally inserted to provide a more complete picture of the respondents. The study involved sixty respondents which comprises the total population of workers in the three departments surveyed of the organization. Fifty questionnaires were retrieved and analyzed. The results were analyzed from the perception of the respondents. The questionnaire solicited key information from the following variables:

- i. Personal and company details
- ii. Challenges faced in the implementation of total quality management at the initial stage
- iii. Measures put in place to improve TQM practices
- iv. Effect of total quality management

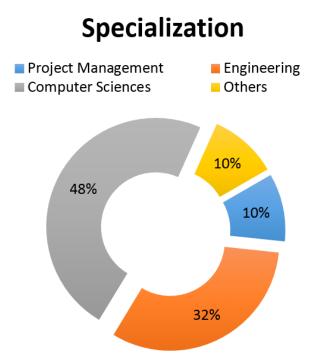
3.8 Method of Data Analysis

Both Descriptive and Inferential statistics were used for the analysis. Percentage, Frequency table, Mean and Standard deviation were used for the descriptive statistics while for the inferential statistics, Correlation coefficient was used to test the stated hypothesis.

IV. RESULTS AND DISCUSSION

4.1. Demographic information of the correspondents

The analysis showed that 56% of the correspondents were males and the remaining 44% were females. This indicates that there are more males than females working in Staunton and Lycett Nig. Limited. The age distribution of correspondents showed that 38% correspondents fall in the age bracket 20-25. 58% of the correspondents fall in the bracket 26-35 and that of 36-45 was 4%. This indicates that 98% of the correspondents are still in their youth age of 35 which can have positive effect on productivity. Also, the academic qualifications of correspondents indicated that 10% are holding OND, 8% are graduates from the polytechnics, 58% are graduates from the university, 12% are Master's Degree holders and 12% have other forms of certification. This indicates that the company is doing well to employ graduates from universities to work with, however there are still staff that are of low qualifications to OND, which if care is not taken, could lead to problems of documentation and communication. The majority of the correspondents, 48% were from the Software Department. 32% of the correspondents were from the Engineering Department, 10% were from the Project management Department and 10% were from other Departments. The number of projects handled by correspondents showed that 4% had handled between 1-5 projects, 18% had handled between 6-10 projects, 60% had handled between 11-15 projects, 8% had handled between 16-20 projects while 10% had handled above 20 projects. The majority of the respondents, 78% had handled 11 projects and above. This indicates that majority of the workers already have project experience which would make them know the reasons for ensuring quality always. The length of projects handled by correspondents indicated that 16% had handled project for between 1-5 months, 4% had handled projects for 11-15 months while 80% had handled projects for 16-20 years. The majority of the correspondents 80% had handled projects for over 15 years. The analysis also showed the length of service of correspondents and indicated that 90% had worked for between 5-15 years, 4% had worked for 16-25 years and 6% had worked for 36-50years. The majority of the respondents 40% had worked for over 10 years. This indicates that labour turnover seem to be low which implies management could be doing something right with the human resource phase of the TQM.



| Figure 1 : Correspondents' Area of Specialization |
|---|
| Source: Field Survey, 2016 |

Table 1 : Number of Projects handled by theCorrespondents

| Number of | Frequency | Percentage |
|-----------|-----------|------------|
| Projects | | (%) |
| 1-5 | 2 | 4.0 |
| 6-8 | 9 | 18.0 |
| 11 – 15 | 30 | 60.0 |
| 16 – 20 | 4 | 8.0 |
| Above 20 | 5 | 10 |
| Total | 50 | 100.0 |

Source: Field Survey, 2016

 Table 2 : Duration of Projects handled by the

 Correspondents

| | | - | |
|----------|----|-----------|------------|
| Duration | of | Frequency | Percentage |
| Projects | | | (%) |
| (Months) | | | |
| 1 – 5 | | 8 | 16 |
| 11 – 15 | | 2 | 4 |
| 16 – 20 | | 40 | 80 |
| Total | | 50 | 100 |
| | | | |

Source: Field Survey, 2016

Table 3 : Years of work experience of the

| c Years of | s Percentage | |
|---------------|-----------------|-----|
| Experience | Frequency | (%) |
| 5 – 15 | 45 | 90 |
| 16 – 25 | 2 | 4 |
| 36 - 50 | 3 | 6 |
| Total | 50 | 100 |

Source: Field Survey, 2016

4.2. Effect of Total Quality Management on Organizational performance

Table 4 presents the correspondents' view on the practices of TQM in the organization in order to know the extent to which these practices would affect the performance of the organization. Not often indicates the exercise is not always carried out, often indicates the exercise is carried out every 2-3 weeks, Moderate indicates the exercise is carried out weekly while Very Often indicates the exercise is carried out

daily. The mean rating was between 2.58 and 3.56 indicating that all the practices are carried out often with no practice left out without being carried out in 3 weeks. From Table 4, it shows that down time is monitored daily, which means very often, with mean value of 3.56. On time delivery is weekly, with mean value of 3.42 showing that it is done moderately. Proper storage of materials is weekly, which means it is done moderately with a mean value of 3.32. Record of on time delivery status is done weekly, with mean value of 3.24 showing that it is done moderately. Company's response to customers' corrective action requests is done weekly, with mean value of 3.06 showing that it is done moderately. The company organizes formalized program for maintenance of equipment weekly, with mean value of 3.02 showing that it is done moderately. Jobs are controlled to determine On-Time Scheduling weekly, with mean value of 2.76 showing that it is done moderately and proper precautions are taken during project executions in about 2-3 weeks with mean value of 2.58 showing that it is done often. This could contribute to effectiveness of TQM practices in the organization, since they are done often. Also, this would have a positive effect on the performance of Staunton and Lycett Nig. Limited, Abuja. The study is in agreement with, Talib, Rahman and Qureshi [33] which states that implementation of TQM improves the performance of the company.

| Correspondent's view | Mean | Standard | Extent |
|-----------------------|------|-----------|--------|
| on Effect of TQM on | | Deviation | |
| Organization's | | | |
| Performance | | | |
| How often is | 3.56 | 0.907 | Daily |
| Downtown | | | |
| Monitored? | | | |
| How often the | 3.42 | 1.071 | Weekly |
| Company does on time | | | |
| delivery? | | | |
| How often are | 3.32 | 0.957 | Weekly |
| materials stored in a | | | |
| manner so as to | | | |

| preclude damage or | | | |
|-------------------------|------|-------|--------|
| corrosion? | | | |
| How often does the | 3.24 | 0.981 | Weekly |
| company record it's on | | | |
| – time delivery status? | | | |
| How often does the | 3.06 | 1.202 | Weekly |
| company respond to | | | |
| customer corrective | | | |
| action requests? | | | |
| How often the | 3.02 | 1.204 | Weekly |
| company does | | | |
| organized formalized | | | |
| program for | | | |
| maintenance of | | | |
| equipment? | | | |
| How often are jobs | 2.76 | 1.098 | Weekly |
| controlled to | | | |
| determine on – time | | | |
| scheduling? | | | |
| How often are | 2.58 | 1.012 | 2 – 3 |
| Precautions taken | | | weeks |
| during Project | | | |
| Executions? | | | |

Source: Field Survey 2016.

4.3. Challenges faced in the implementation of Total Quality Management initially

Table 5 presents the Correspondents' view on the challenges faced in the implementation of Total Quality management in the company at the initial stage. The mean rating was between 3.52 and 4.50 indicating that initially, Staunton and Lycett used to have problems with the implementation of some TQM practices which are required to improve the organization's performance. According to Glover [13], the most common reason for failure include ineffective implementation which results when TQM becomes so much extra work instead of a new way of doing things. The analysis recorded that problem of maintenance and utilization of quality manuals was very high with mean value of 4.50, that of market survey was very high with mean value of 4.46, quick

response problem was very high too with mean value of 4.44, that of the use of system to assure traceability both to receiving records and usage records was also very high with mean value of 4.38, the problem of quick supply of equipment was very high with mean value of 4.32, that of exchange rate was very high with mean value of 4.18, that of inadequate method of measuring the quality of products and services was very high with mean value of 4.08, inadequate method of monitoring downtime was high with mean value of 3.62 and incomplete record of on time delivery status was high too with mean value of 3.52.

This shows that with constant implementation of TQM, the organization have improved drastically in these areas and no longer have much problems with them. The study is in agreement with Ahire, Golhar and Waller [2] that in order to implement TQM strategies successfully, organizations have to be customer focused, maintain competent, reliable and flexible suppliers, and ensure full employee participation through training and empowerment.

Table 5: Correspondents' view on the challengesfaced initially, in the implementation of Total Qualitymanagement

| | Mean | Std. |
|------------------------|------|-----------|
| | | Deviation |
| Maintenance and | 4.50 | .789 |
| Utilization of quality | | |
| manuals | | |
| Market survey | 4.46 | .952 |
| Quick response | 4.44 | .733 |
| Use of system to | 4.38 | .805 |
| assure Traceability | | |
| both to receiving | | |
| records and usage | | |
| records | | |
| Quick Supply of | 4.32 | 1.096 |
| equipment | | |
| Exchange Rate | 4.18 | .873 |
| Inadequate method | 4.08 | .829 |

| 3.62 | 1.338 |
|------|-------|
| | |
| | |
| 3.52 | 1.015 |
| | |
| | |
| | |

Source: Field Survey, 2016

4.4. Measures put in place to Improve Total Quality Management Practices

Table 6 shows Correspondents' view on measures putin place to improve Total Quality ManagementPractices.

The mean rating are between 3.94 and 4.60 indicating that the measures put in place to improve TQM practices is done on a high level, meaning the measures are performed every time.

The Analysis shows that the level of storage of materials in a manner so as to prevent mixing and to ensure traceability throughout the life cycle of a project is very high (mean=4.60), prompt notification of customers, when it is discovered that discrepant product is already delivered is very high (mean=4.56), proper monitoring of services is also very high (mean=4.54), control Of materials in such a fashion so as to prevent mixing and to ensure traceability throughout the lifecycle of a project is very high (mean=4.48), certifications/test report required from subcontractors high (mean=4.46), is very subcontractor survey is very high (mean=4.38), proper precautions taken during project executions is very high (mean=4.36), written procedures for the control of purchased materials is very high (mean=4.30), identification of defective materials is also very high (4.30), segregation of defective materials is very high (mean=4.24) and the indication of acceptance or rejection of product in the records is high

(mean=3.94). This implies that the performance level will keep improving and there will be reduction in cost and increment in revenue.

This study is in agreement with Demirbag *et al* [8] and Fotopoulus and Psoma [12] that firms that focus on improving the quality of their product and processes improve revenues and reduce costs.

Table 6 : Correspondents' view on measures put inplace to improve Total Quality Management Practices

| Measures | Mean | Std. Deviat ion |
|---------------------------------|------|-----------------------|
| Storage Of Materials in a | 4.60 | .700 |
| manner so as to prevent mixing | | |
| and to ensure traceability | | |
| throughout the life cycle of a | | |
| project | | |
| Prompt Notification of | 4.56 | .884 |
| customers, when it is | | |
| discovered that discrepant | | |
| product is already delivered. | | |
| Proper Monitoring of services | 4.54 | .676 |
| Control Of Materials in such a | 4.48 | .909 |
| fashion so as to prevent mixing | | |
| and to ensure traceability | | |
| throughout the lifecycle of a | | |
| project | | |
| Certifications/test report | 4.46 | .762 |
| required from subcontractors | | |
| Subcontractor survey | 4.38 | .697 |
| Proper Precautions taken | 4.36 | .802 |
| during project executions | | |
| Written Procedures for the | 4.30 | .789 |
| control of purchased materials | | |
| Identification of Defective | 4.30 | 1.035 |
| Materials | | |
| Segregation of defective | 4.24 | .771 |
| materials | | |
| Indication Of Acceptance or | 3.94 | .843 |

| rejection | of | product | in | the | |
|-----------|----|---------|----|-----|--|
| records | | | | | |

Source: Field Survey, 2016

4.5. Hypothesis testing

In order to test the hypothesis, the Pearson product correlation coefficient was employed in establishing the relationship between Total quality management and organizational performance. The coefficient of correlation (r), showed a positive correlation (r=0.345) and coefficient of determination (r^2 = 0.119) which shows that (11.9%) change in organizational performance can be explained by a unit change in Total quality management. The correlation analysis is presented in table 7 below.

| | | Total quality managemen t | Organizational Performance |
|-----------------------------|------------------------|------------------------------------|-------------------------------|
| Total Quality management | Pearson Correlation | 1 | .345** |
| | Sig. (2-tailed) | | .002 |
| Organization al | Pearson Correlation | .345** | 1 |
| Performance | Sig. (2-tailed) | .002 | |

Source: Field Survey, 2016

V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary of Findings

The study discovered that 98% of the correspondents are still in their youth age of 35 which can have positive effect on productivity. The company is also doing well to employ graduates from universities to work with and majority of the correspondents were from the software department and minority from the project management department. Majority of the respondents had worked for over 10 years, which gives credence to their answers based on experience. Also, TMQ practices in the organization, are done often and this would have a positive effect on the productivity as implementation of TQM improved the performance of the company. Initially, Staunton and Lycett had problems with the implementation of some TQM practices which are required to improve the organization's performance and now, the measures put in place to improve TQM practices is done on a high level, indicating improvement in Performance. Also, there is 11.9% increment in organizational performance level of Staunton and Lycett Nig. Limited as a result of effective implementation of TQM practices.

5.2. Conclusion

TQM is the only tool that can improve the quality of service because it is a continuous improvement process and customer feedback is used to improve the quality of service more effectively and efficiently. TQM as a strategic Management tool can be used in improving the competitiveness, effectiveness, efficiency and viability and flexibility of the whole organization which sums up its performance.

5.3. Recommendations

Based on the findings, the following recommendations were proposed:

- Efforts must be made to keep implementing those TQM practices which are being effectively practiced at Staunton and Lycett Nig. Limited so as to help improve on organizational performance.
- Workers who are not project management professionals, should register for a short-term course on project management. This will increase their knowledge on how to manage projects.
- iii. Trust should be built amongst the staff, so as to improve team work. Team work will enhance

productivity and also improve upon employee involvement which is a key TQM practice employed to improve upon organizational performance.

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