

Impact Of Total Quality Management On Organizational Effectiveness (A Study Of Nigerian Breweries Plc, Enugu, Enugu State, Nigeria)

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Abstract: *This study examined the impact of total quality management on organizational effectiveness of Nigerian Breweries Plc. Enugu. Total quality management is a concept that describes a management approach to long term success through customer satisfaction. Total quality management can be summarized as a management system for a customer focused organization that involves all employees in continual improvement. The research adopted the survey design, using simple random sampling techniques, descriptive statistics and inferential statistics. A total number of eighty four (84) questionnaire were issued out by the researcher to the staff and customers of Nigerian Breweries Plc. Enugu. The coefficient of determination R-square of 0.892 implied that 89.2% of the sample variation in the dependent variable, degree of relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu. The value of the adjusted R^2 was 0.889. This showed that the regression line which captured 88.9% of the total variation in degree of relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu. The F-value of 308.608 was an indication that the model was statistically significant at 5% level of significant at degree of freedom $df_1=2$ and $df_2=75$. The calculated t-statistics of 10.006 was greater than the critical value (i.e.2.000), the null hypothesis was rejected and the alternate accepted. The findings indicated that Quality control, Training and Education as a measure to TQM affect organizational effectiveness of Nigerian breweries plc. Enugu as indicated table 3.9.4 where p-value 10.006 was greater than 2.000 that was ($t_{cal} 10.006 > t_{tab} 2.000$), the researcher rejected null (H_0) and accepted the alternate hypothesis thereby concluded that Quality control, Training and education affect organizational effectiveness of Nigerian Breweries Plc, Enugu, Enugu State.*

Keywords: *Total Quality Management, Quality Control, Organizational Effectiveness, Performance.*

I. BACKGROUND OF THE STUDY

Quality refers to a parameter which decides the superiority or inferiority of a product or service. Quality can be defined as an attribute which differentiates a product or service from its competitors. Quality plays an essential role in every business. Business marketers need to emphasize on quality of their brands over quantity to survive the cut throat competition (Edwards, Joseph and Armand, 2014).

Arora (2011), Total Quality management is defined as a continuous effort by the management as well as employees of a particular organization to ensure long term customer loyalty

and customer satisfaction. One happy and satisfied customer brings ten new customers along with him whereas one disappointed individual will spread bad word of mouth and spoil several of your existing as well as potential customers (Hoang et al, 2010). According to Wikipedia, the free encyclopedia, total quality management (TQM) consists of organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to customers.

A core definition of total quality management (TQM) describes a management approach to long-term success

through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work. Total Quality Management (TQM) describes a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work (Masood, Aamna, Saif and Sidra Sharif, 2012)

Quality has been an important part of human activities since the emergence of human history. Before now, manufacturing was essentially conducted by the cottage industry and heavily relied on craftsmen. The manufacturers were merely in sellers' market. However, the trend has changed from sellers' market, to the buyer's market. The consumers have become more aware of the variety of products in the market. Thus, customers are the focus of manufacturing such that every organization has to study what customers' needs are and satisfy them in order to remain in business by offering products of desired quality.

Arora (2011) stated that quality of goods are determined by customers, customers become a key factor that can create competition among organizations and this make firms to focus more on quality to sustain their competitive advantage. This is because effective quality determines the rate of productivity and thus become an important factor in organization and also contributes to the growth of the economy.

The objective of TQM is also to make the executives learn new rules, methods and lifestyles. Total Quality Management includes the participation of the entire personnel in seven perspectives: the leading of the business and the operational philosophy, the innovation and the strategy management, the customers and the market development, the human resource and the professional skill management, the information strategy, the application and management, and the procedural management. Through these, an enterprise will satisfy or reach beyond the customers' expectations, and become an everlasting business through continuous improvements.

Meanwhile in the light of increasing complexities and the change from local to global tiers of market places, there have been constant pressures applied on the management to improve competitiveness by lowering operating cost and improving logistics. The customers are becoming increasingly aware of rising standards having access to wide range of products and services to choose from.

In conclusion, there is an ever-increasing demand for quality product and/or services and this global revolution and forced organizations to invest substantial resources in adopting and implementing total quality management (TQM) strategies. Total quality management refers to a total commitment to quality.

STATEMENT OF THE PROBLEM

Total quality management is a style of management that gives everyone in the company responsibility for delivering quality to the final consumers. Quality being described as a fitness for purpose or as a delight to the customers' needs. TQM views each task in the organization as fundamentally a

process in a customer-supplier relationship with the next process. The aim at each stage is to define and meet the customer's requirements in order to maximize the satisfaction of the final consumer at the lowest possible cost.

Incompetence on the part of employees could result to poor quality output. This undermining of the product quality affects the standard, organization repute, quality control and patronage. However, over the years organizations have witnessed different negative impacts because of substandard products or fake adulterated ones. If products are not of the required specifications, this could make the products uncompetitive both at national and international markets, money spent in the production may not be recovered or waste of resources and returns on investments will fall drastically. Often, lives are lost as a result of the consumption of products produced below specifications or sub-standard. Also inferior products affect the customer health and satisfaction. The organizations corporate image and profitability are also affected negatively, due to non-adherence to total quality management principles. It is against this backdrop that this study seeks to examine the impact of total quality management on effectiveness of Nigerian Brewery plc. Enugu

OBJECTIVE OF THE STUDY

The main objective of the study is to examine the impact of total quality management on organizational effectiveness of Nigerian breweries plc. Enugu

RESEARCH QUESTIONS

- The following question was formulated for the study;
- ✓ To what extent does total quality management impact on effectiveness of Nigerian Breweries Plc. Enugu?

RESEARCH HYPOTHESIS

For the purpose of this study, the following hypothesis was formulated thus;

H₀₁: There is no positive and significant relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu.

II. REVIEW OF RELATED LITERATURE

A. CONCEPTUAL FRAMEWORK

Total Quality Management (TQM) refers to all aspects of quality services rendered by an organization to their customers and these include quality of goods, delivery, price, or services. It therefore differs from the traditional quality concepts of quality control and Quality assurance, which are the current aspect of quality within the manufacturing industry. Total Quality Management involves preventing errors at the very point where services are rendered. As a result, it implies that every person from the Managing Director to the lowest staff in the structure of an organization is involved in Total Quality Management as it plays a great impact on operational excellence, customer intimacy and product leadership.

Customer intimacy requires market segmentation and targeting of specific customers in order to provide tailor-made-services, which exactly meet the needs of each segment.

The objective of TQM is also to make the executives learn new rules, methods and lifestyles. Total Quality Management includes the participation of the entire personnel in seven perspectives: the leading of the business and the operational philosophy, the innovation and the strategy management, the customers and the market development, the human resource and the professional skill management, the information strategy, the application and management, and the procedural management. Through these, an enterprise will satisfy or reach beyond the customers' expectations, and become an everlasting business through continuous improvements.

B. TOTAL QUALITY MANAGEMENT (TQM) AND ORGANIZATIONAL EFFECTIVENESS

In recent years, organizational effectiveness in the practical and theoretical spheres has attracted special attention. Beyond the domain of the TQM literature, there are several fields, which have contributed to the development of current knowledge, namely organizational theory, strategic management, project management, production & operation management and finance. However, we can see, most of these fields have been studied separately, which has resulted in fragmented and disputed findings. Organizational effectiveness (OE) is one of the most extensively researched topics from the early phase of development of organizational theory.

Organizational effectiveness and Performance measurement are integral part of all management processes and traditionally has involved management accountants through the use of budgetary control and the development of financial indicators such as return on investment. It is clear that TQM acts as a platform for organizations to enhance their competitiveness, still many organizations have been disappointed in the extent to which TQM has been associated with constant improvements in organizational effectiveness. Performance management systems are like cornerstone of human resource management (HRM) policies and are the basis for developing a systems oriented approach to organization effectiveness.

Theoretically, a performance management system provides a linkage between organizational and employee goals through a goal-setting process, and subsequently links employee goal achievements to a variety of human resource management decisions through a performance measurement process.



Source: Amir K., Aboutorab A., and Golamreza H., (2015).

Figure 1: Diagram of Total Quality management (TQM) & Organizational Effectiveness

C. SIX C'S OF TOTAL QUALITY MANAGEMENT (TQM)

For proper implementation of a Total quality management (TQM) following Six Cs are required

COMMITMENT: All employees of the organization must have quality improvement commitment. If a good TQM culture is to be developed in the organization, then quality improvement should become a normal part of everyone's job, a clear support and commitment from the top management must be provided. Without commitment all else fails. 'Quality' issue is not a responsibility of a single employee since this cannot create an environment for changing mindset and breaking down the barriers to quality improvement. Collective efforts can bring fruitful results.

CULTURE: Organization must develop and follow a modern culture for quality improvement on a regular basis. Training on regular basis is very essential for bringing a change in culture and attitudes. Management accountants, too often associate 'creativity' with 'creative accounting' and associated negative perceptions. It can be changed to encourage individual contributions and to make 'quality' a normal part of everyone's job.

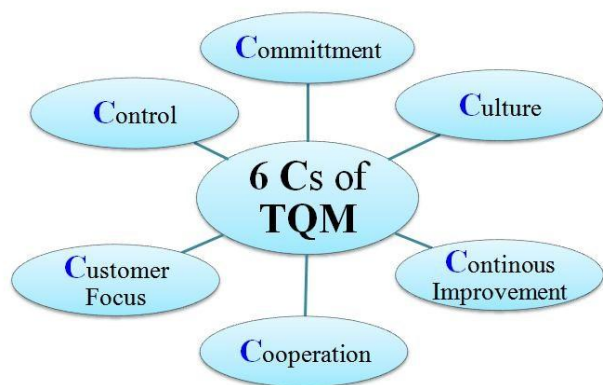
CONTINUOUS IMPROVEMENT: There must be continuous improvement in all policies, procedures and activities laid down by top management for the company. Recognition that TQM is a 'process' not a 'programme' necessitates that we are committed in the long term to the never-ending search for ways to do the job better. There will always be room for improvement, however small.

COOPERATION: Cooperation among employee and experience of employees must be utilized for improving strategies and enhancing performance. The application of Total Employee Involvement (TEI) principles is paramount. The on-the-job experience of all employees must be fully utilized and their involvement and co-operation sought in the

development of improvement strategies and associated performance measures.

CUSTOMER: For long-term survival of the business, organisation must focus on customers' requirements and satisfaction of their expectations. The needs of the customer are the major driving thrust; not just the external customer (in receipt of the final product or service) but the internal customer's (colleagues who receive and supply goods, services or information). Perfect service with zero defects in all that is acceptable at either internal or external levels. Too frequently, in practice, TQM implementations focus entirely on the external customer to the exclusion of internal relationships; they will not survive in the short term unless they foster the mutual respect necessary to preserve morale and employee participation.

CONTROL: There must be effective control for monitoring and measuring the real performance of the business. Documentation, procedures and awareness of current best practice are essential if TQM implementation is to function appropriately. The need for control mechanisms is frequently overlooked, in practice, in the euphoria of customer service and employee empowerment. Unless procedures are in place improvements cannot be monitored and measured nor deficiencies corrected. Difficulties will undoubtedly be experienced in the implementation of quality improvement and it is worthwhile expounding procedure that might be adopted to minimize them in detail.



Source: Amir K., Aboutorab A., and Golamreza H., (2015).

Figure 2: Diagram of 6 Cs of Total Quality Management (TQM)

D. FACTORS INFLUENCING TOTAL QUALITY MANAGEMENT (TQM) IN AN ORGANIZATION

Desai and Erubothu (2010) have classified factors influencing TQM into:

- ✓ **EXTERNAL FACTORS:** Business Environment, Market Conditions, Market Competitiveness, Economic Policy, Technical Situation, Socio-Cultural Condition, Legal Environment.
- ✓ **INTERNAL FACTORS:** Top Management Policy, Leadership, Corporate Planning, Monitoring and Execution, Customer Focus, Human Resources Management, Quality and Process, Information and Analysis. Also they have listed Employee Satisfaction,

Product and Service Quality, Process Quality and Vendor Performance as Performance Metrics. Sink and Keats (1982) has claimed that there exists a direct relation between productivity and quality. They also state that if efforts toward improvement of quality are efficient and effective then there will be a critical impact on productivity of a firm.

Mefford (2011) has discussed three points that highlight the linkage between quality and productivity:

- ✓ By reducing scraps and defective processes and by proper use of resources productivity of a firm is improved.
- ✓ Any improvement in quality results in rise of productivity and vice versa.
- ✓ Motivation plays a vital role in TQM.

Employees with high morale can maintain quality levels, thus maximizing the output. Desai and Erubothu (2010) rules out the theory of single best approach in implementing the TQM philosophy. An approach unique to the needs of customer and culture of the organization must be developed. Sohal and Terziovski (2012) has discussed that Total Quality is somehow linked to organizational culture. The term "Total Quality Culture" is very frequently used in the available literature but there still exists a disagreement on whether TQM involves changing a culture to achieve total quality or whether it means using the existing culture. Reeves and Bednar (2014) has emphasized problems associated with achieving a flexible, adaptable and committed workforce in organizations for organizational excellence. This is because they lack a dominant and coherent culture, in which values, commitments and approaches are likely to diverge, which can present a barrier to co-operation, joint action and problem solving across the organization. Thus, managers should periodically analyze the relevance of corporate values to the evolving organizational environment. As a result, enabling managers to adapt and nurture the constructs that support the development of an aspired organizational culture.

E. BENEFITS OF TOTAL QUALITY MANAGEMENT

Egboh (2011) identifies the following benefits of total quality management.

- ✓ **EFFECTIVENESS:** The goal of total quality management system is to improve the effectiveness of the organization in achieving targets and to continuously improve the quality of production and client satisfaction.
- ✓ **EFFICIENCY:** The total quality management ensures a high efficiency through improving the quality of resources, using inputs and outputs without increasing capital volume.
- ✓ **QUALITY CHAINS:** Every member of staff is part of quality chains i.e. supplier of products/ services to customers. The product of one unit of an organization is an input (raw material) to another unit. Thus, every staff in the quality chains should know his/her customer and supplier expectations.
- ✓ **QUALITY COSTS:** These costs are an indication of success if they are low poor quality costs money.

F. THEORETICAL FRAMEWORK

a. DEMING'S THEORY

Deming's theory of Total Quality Management rests upon fourteen points of management he identified, the system of profound knowledge, and the Shewart Cycle (Plan-Do-Check-Act). He is known for his ratio - Quality is equal to the result of work efforts over the total costs. If a company is to focus on costs, the problem is that costs rise while quality deteriorates.

Deming's system of profound knowledge consists of the following four points:

- ✓ *System Appreciation* - an understanding of the way that the company's processes and systems work
- ✓ *Variation Knowledge* - an understanding of the variation occurring and the causes of the variation
- ✓ *Knowledge Theory* - the understanding of what can be known
- ✓ *Psychology Knowledge* - the understanding of human nature

By being aware of the different types of knowledge associated with an organization, then quality can be broached as a topic. Quality involves tweaking processes using knowledge. The fourteen points of Deming's theory of total quality management are as follows:

- Create constancy of purpose
- Adopt the new philosophy
- Stop dependencies on mass inspections
- Don't award business based upon the price
- Aim for continuous production and service improvement
- Bring in cutting-edge on the job training
- Implement cutting-edge methods for leadership
- Abolish fear from the company
- Deconstruct departmental barriers
- Get rid of quantity-based work goals
- Get rid of quotas and standards
- Support pride of craftsmanship
- Ensure everyone is trained and educated
- Make sure the top management structure supports the previous thirteen points.

Plan-Do-Check-Act (PDCA) is a cycle created for continuous improvement. In the planning phase, objectives and actions are outlined. Then, you do your actions and implement the process improvements. Next, you check to ensure quality against the original. Finally acting requires that you determine where changes need to occur for continued improvement before returning to the plan phase.

b. CROSBY'S THEORY

Philip Crosby is another person credited with starting the TQM movement. He made the point, much like Deming, that if you spend money on quality, it is money that is well spent. Crosby based on four absolutes of quality management and his own list of fourteen steps to quality improvement.

Crosby's four absolutes are:

- We define quality as adherence to requirements
- Prevention is the best way to ensure quality

- Zero Defects (mistakes) is the performance standard for quality
- Quality is measured by the price of nonconformity

G. EMPIRICAL FRAMEWORK

Marcel, (2017), investigated the impact of Total Quality Management (TQM) on Organizational Performance. Data were collected from manufacturing firms in the republic of Cameroon. Variables used to capture Total Quality Management (TQM) are management commitment through leadership, Quality control, inspection, employee training, customer focus, benchmarking as the basis for enhancing product quality. Organizational performance is measured by Customer Satisfaction, Corporate Social responsibility, Cost Reduction, and Employee Satisfaction. The researcher carried out series of multiple regressions of organizational performance variables on explanatory variables defining TQM. Our results showed that only employment training and empowerment has a significant impact on financial performance and corporate social responsibility; leadership commitment, quality control and inspection have a significant impact on cost reduction. However, none of the TQM practices appear to have a significant effect on customer satisfaction

Omogbiya and Addah, (2016), investigated the impact of total quality management on performance of Brewery industry in Nigeria: An empirical study of selected breweries in Lagos State, Nigeria. TQM is a management approach which aims at incorporating awareness of quality in organizational process. A set of structured questionnaire was used as the instrument for data collection and administered to respondents of the Brewery's industries understudy randomly selected using Yaro Yemane formula. Applying this formula, the sample size from a population of 70 is 60 respondents at 95% confidence level. Data analysis was made and the hypotheses formulated were tested using Krustal Wallis one-way analysis of variance by rank. The findings revealed that positive and significant relationship exists between the application of total quality management in increasing organizational return on investment, lowering the level of product wastage and increases in customer satisfaction. It was concluded that adopting and implementing TQM principles enhanced the organizations overall performance.

Norah, Sabah and Azrilah, (2015), investigated the impact of Total Quality management (TQM) practices and strategies on organizational performance. TQM is defined as a strategy that essentially aimed to establish and deliver high quality products and services that cover all customers' demands and achieve a high level of customer satisfaction. This paper discussed the implementation of total quality management in Pakistan and explores the relationship between the effective implementation and organizational performance. TQM in Pakistan was implemented in three categories of implementation methods which are; quality control, quality assurance and continuous improvement. The findings indicated that TQM has two organizational performances, either is TQM practices effect the organizational performance, or it hinders organizations to achieve their goals in which this will negatively affect the organizational performance.

Amir, Aboutorab and Golamreza, (2015), conducted a study on the importance of quality in organizations and increased intention to it, different views are presented about ways and a means of reaching it. Total quality management is one of systems by which organizations can control the goods and services, as well as their sales process or present them. Its effects on the functioning of the system, tested repeatedly and verified. Therefore, in the study tried to assess the role of the pivotal organizational intermediary market, create systematic view to quality discussion and identify the combination effect of both management and organizational performance approach. The aim of this study was to evaluate and anticipate the impact of total quality management (TQM) on the performance of organization with a view to the pivotal market in dairy companies is of Pegah. It was an applied research with survey approach that were done cross-sectional on a sample of 40 numbers of experts and managers of Pegah Company. In order to achieve the goal of research first gathered the necessary information and then questionnaire was designed that their validity was approved by supervisors and a group of experts and the reliability were obtained 0.81 by SPSS software using Cronbach's alpha. After collecting data through questionnaires in order to analyze them t-test was used.

The results of this study confirmed a positive effect of the two approaches to TQM and market orientation on the performance.

III. METHODOLOGY

A. RESEARCH DESIGN

The researcher adopted the survey research design which suits the research due its descriptive nature.

B. SOURCES OF DATA

Both primary and secondary source of data were utilized in gathering the information relevant for this work.

PRIMARY DATA: Primary data consists of the use questionnaire.

SECONDARY DATA: Secondary data were also used in this research work. Some of the secondary sources utilized included textbooks, lecture material, seminar paper and related articles in academic journals and from the internet.

C. POPULATION OF THE STUDY

The population of this study comprised one hundred and eighty (106) staff of Nigerian Breweries Plc. Enugu (Field Survey, 2020).

D. SAMPLE SIZE DETERMINATION

The researcher derived the sample size statically by using Taro Yamani (Abdullahi, 2012) as follow;

Using the formula;

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

Where;

n = Sample size

N = Population (106)

e = Margin of error (0.05) Thus, the sample size is:

$$n = \frac{106}{1 + 106(0.05)^2}$$

$$n = \frac{106}{1 + 106(0.0025)}$$

$$n = \frac{106}{1.27}$$

$$n = 83.46$$

$$n = 84 \text{ approximated}$$

$$n = 84 \text{ approximated}$$

$$n = 84 \text{ approximated}$$

Therefore, the sample size for this study was 84 staff of the company.

E. SAMPLING TECHNIQUE

This study adopted simple random sampling technique which made it possible for all the workers to have equal opportunity of being selected as the representative sample based on the total population of the two hundred and ten, a normal confidence level of 95% and error tolerance of 5% was used.

F. DESCRIPTION OF THE INSTRUMENT

The instrument for collection of data for this research study was questionnaire. The extent of existence for all variables in the research area was measured on a five-point Likert scale ranging from Undecided to Strongly Agree, ranging from 0-4. Where Undecided (UD) =0; Strongly Disagreed (SD) =1; Disagreed (D) = 2, Agree (A) = 3 and Strongly Agree (SA) = 4.

G. RELIABILITY OF THE INSTRUMENT

The researcher used Test-Retest reliability to test the consistency of different administrations and also to determine the coefficient reliability of this research. The same test was administered to different groups on at least two separate occasions. Through this, the researcher achieved some level of reliability and validity through the various methods and techniques that was employed in collecting and analyzing data. The Test-Retest reliability was used and computed through Statistical Package for Social Science (SPSS) version 22.0.

H. METHOD OF DATA ANALYSES

Data for the study were analyzed using frequency distribution table, and percentages, while simple regression and correlation with the use of SPSS were used to analyze the hypothesis.

I. DATA PRESENTATION/ RESULTS AND DISCUSSION

A total number of eighty four (84) questionnaire were issued out by the researcher to staff of Nigerian Breweries Plc. Enugu. The table below presented the distribution of the questionnaire to the sampled respondents. The generated data

were presented and analyzed in the subsequent sub-heading below.

Total copies of questionnaire	Respondents	Percentage (%)
Total distributed	84	100
Total valid returned	78	92.9
Total invalid returned	2	2.4
Total not returned	4	4.8
Total	84	100

Source: Field survey, 2020

Table 3.9.1: Distribution of questionnaire and response rate

IV. RESULTS AND DISCUSSION

Regression results showing the relationship between total quality management and efficiency of Nigerian Breweries Plc. Enugu

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944 ^a	.892	.889	.259682

a. Predictors: (Constant), Quality control and Efficiency, Training and Education on Efficiency

Table 3.9.2

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	41.622	2	20.811	308.608	.000 ^b
Residual	5.058	75	.067		
Total	46.679	77			

a. Dependent Variable: Quality mgt system and efficiency

b. Predictors: (Constant), Quality control and Efficiency, Training and Education on Efficiency

Table 3.9.3

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.390	.130		2.998	.004
	Training and Education on Efficiency	.807	.081	.827	10.006	.000
	Quality control and Efficiency	.105	.067	.130	1.572	.120

a. Dependent Variable: Quality mgt system and efficiency

Table 3.9.4

INTERPRETATION

R	= .944
R-Square	= .892
Adjusted R-Square	= .889
F – Statistic (df1=2 & df2=75)	= 308.608
T - Statistics	= 10.006

Table 3.9.2 above showed the regression results between total quality management and effectiveness of Nigerian Breweries Plc. Enugu. The regression results showed that the estimated coefficient of the regression parameter have a positive sign and thus conform to our a-priori expectation. The implication of this sign was that the dependent variable effectiveness of Nigerian Breweries Plc. Enugu, was affected by training/education and quality control of the Nigerian Breweries Plc, was positively affected by degree of relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu. The coefficient of determination R-square of 0.892 implied that 89.2% of the sample variation in the dependent variable, degree of relationship between relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu, was explained or caused by the explanatory variable while 10.8% was unexplained. 10.8% could be caused by other factors or variables not built into the model. The high value of R-square was an indication of a very good relationship between the dependent and independent variable. The value of the adjusted R² was 0.889. This showed that the regression line which captured 88.9% of the total variation in degree of relationship between relationship between total quality management and effectiveness of Nigerian breweries plc. Enugu, was caused by variation in the explanatory variable specified in the model with 10.8% accounting for the stochastic error term. The F-statistic was also used to test the overall significant of the model. The F-value of 308.608 was an indication that the model was statistically significant at 5% level of significant at degree of freedom df1= 2 and df2= 75.

TEST OF HYPOTHESES

HYPOTHESIS ONE

H₀: There is no positive and significant relationship between relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu.

H₀ =B₁=0. Test the hypothesis that all slope coefficients are equal to zero.

H₁≠B₁≠0. Test the hypothesis that not all slope coefficients are equal to zero.

With reference to table above, the calculated t-statistics of 10.006 was greater than the critical value (i.e.2.000), the null hypothesis was rejected and the alternative accepted. This means that there was positive and significant relationship between relationship between total quality management and effectiveness of Nigerian Breweries Plc. Enugu.

V. CONCLUSION

It is concluded that any organization that has a low level in Quality control, Training and Education, would not only have barriers to organizational effectiveness but would experience lack of quality control, un-trained and uneducated staff/workers, with the attending consequences of poor performance and organizational failure in actualizing its goal(s) and objective(s).

The empirical findings and analyses conducted in Nigerian breweries plc. Enugu showed that Quality control, Training and Education affect organizational effectiveness.

VI. RECOMMENDATIONS

The study recommended that;

- ✓ The Nigerian Breweries Plc should control Quality and Process, Information and Analysis in order to achieve organizational effectiveness.
- ✓ Nigerian Breweries Plc should ensure good training and education of its employees' as part of total quality management measures through top effective management policies.

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