

## **EFFECT OF TOTAL QUALITY MANAGEMENT ON EMPLOYEE PRODUCTIVITY IN NIGERIA'S BANKING INDUSTRY**

<sup>1</sup>IORNUM, N. A., <sup>2</sup>KORVE, K. N., and <sup>1</sup>JATO, T. P. J.

<sup>1</sup>Department of Business Administration, Joseph Sarwuan Tarka University, Makurdi, Nigeria

<sup>2</sup>Department of Entrepreneurship, Mewar International University, Masaka, Nigeria

### **Abstract**

*This study determined the effect of TQM on employee productivity in the banking industry in Nigeria, with particular reference to UBA Plc, in Benue State, Nigeria. The Specific objectives of this research include to determine the effect of top management commitment on employee productivity, to ascertain the influence customer focus on achieving employee productivity, to evaluate how continuous improvement influence employee productivity, and to established how team work influence employee's productivity in the banking industry in Nigeria. Descriptive Survey research design was deployed for the study. Primary data were sourced from 85 respondents who constituted the study population. Since the population was small, census sampling method was used to collect data using research questionnaire measured on a 5-point Likert-scale. The hypotheses were analyzed using multiple regression analysis. All statistical analyses were done with the aid of SPSS version 20. The study found that there is a significant positive effect of top management, continuous improvement and teamwork on employee productivity in UBA Plc, Benue state. However, there is a significant negative effect of customer focus on employee productivity in UBA Plc, Benue state. The study recommended amongst other things that top management should be more committed to quality issues; prioritizing quality performance as a major objective in their strategic decisions in order to build trust with employees and enhance quality improvement processes. This is because the active formulation of quality plan will necessitate a clear indication of what is going to be achieved concerning quality by employees.*

**Keywords: Total quality management, Employee productivity, Commitment, Productivity.**

## **1. INTRODUCTION**

### **1.1 Background to the Study**

Quality issues have become one of the most important factors in global competition today. Increasing demand by customers for better quality of service, efficiency, accuracy, etc has encouraged many organizations to provide quality services in order to compete favorably in the marketplace. To meet the challenge of this global competition, many businesses have invested substantial resources in adapting and implementing Total Quality Management (TQM) practices in their operations.

Total quality management is an enhancement in the traditional way of doing business. For organizations to satisfy their customers, their employees must be knowledgeable about total management practices and its implementation. Total quality management which is the

independent variable can be practiced through top management commitment, teamwork, customer focus, continuous improvement, etc while employee productivity which is the dependent variable can be achieved through quality of service, volume of sales per employee, accuracy, efficiency etc.

Total Quality Management is a method by which management and employees can become involved in the continuous improvements of their products and services while employee productivity simply refers to the ways by which the performance of employees can be measured. To ensure realistic productivity, organizations must ensure that employees are knowledgeable about TQM tools, practices etc.

Carter (2014) asserts that TQM is a preventive, proactive approach to doing business and as such it reflects strategic leadership, common sense, data-driven approaches to problem solving and decision making, employee involvement and sound management practice. It has a strong focus on process measurement and controls as means of continuous improvement. It is indeed a quality initiative.

Total quality management can be defined as a holistic management philosophy that strives for continuous improvement in all functions of an organization and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale. TQM practices have been documented extensively in many studies as well as in the studies that have investigated the relationship of TQM practices to various dependent variables (Hale, 2014).

Ooi (2014) opined that TQM is a business philosophy, orientation or practice that embodies that belief that the management process must focus on the idea of customer-given quality through an organization.

In Africa, Nigeria, to be precise, Brown (2012) thought that TQM is a kind of management philosophy looking for the quality efficacy of all business processes, product and service in the organization and constant improvement. The goal therefore, was to use the participation of managerial level, employees, suppliers and customers to reach the continuous improvement in order to maintain high-quality products and manufacturing process and further accomplish the management philosophy of satisfying or even surprising the customers.

It is a management approach for an organization, centered on quality, based on the participation of all its members and aimed at long-term success through customer satisfaction and benefits to all members of the organization and to the society. It involves making constant effort to identify what the customer wants from time to time and determining how to cater for them based on the recognition of the fact that customers' needs, desires and wants normally change over time, in relation to changes which may occur in the key aspects of the environment such as social, political, economic and technological changes (Esaki,2016).

Total quality management involves an organizational cultural commitment to satisfying customers through the use of an integrated system of tools, techniques and training. It is

geared towards increasing the production of better products and services at progressively more competitive prices (Lagrosen, 2013).

Banking in Nigeria took a new dimension after the pronouncement of the former governor of the Central Bank of Nigeria professor Charles Soludo for the need to improve the banking industry in Nigeria thereby competing with other foreign banks (Tim, 2013). Many banks like United Bank for Africa Plc which is the researchers study adopted quality policy in order to provide high financial services of international standard. And this can be achieved through adoption and implementation of total management policies.

It is against the above background that this study is put in place to investigate the effect of total quality management on employee productivity using United Bank for Africa, Plc as a study.

## **1.2 Statement of the Problem**

From the background and empirical review sections. It is clear from the existing literature that there is no study of this nature in the focus area of this study. The researcher from personal observation over time in United Bank for Africa (UBA) observed that there is improved investment in modern technological tools, employees training, customer complaint avenues and so on. It is expected that the above claims will complement the productivity of the employees of UBA but it seems to be in the opposite direction as the employees productivity seems to be low in the areas of job completion, customers response time, attitude towards customers, service waiting time both at the automated teller machine (ATM), mobile transaction and physical interaction with the customers. This can also be observed from the banks financial statement of the past five (5) years. It is from the observation that the researcher was motivated to carry out a study of United Bank for Africa Plc Makurdi branches in order to bridge the gap.

## **1.3 Objectives of the Study**

The main objective of this study is to determine the effect of TQM on employee productivity in UBA Plc, Benue state branches. The specific objectives of the study are to:

- i. determine how top management commitment influence employee productivity in UBA Plc, Benue state;
- ii. ascertain the influence of customer focus on achieving employee productivity in UBA Plc, Benue state;
- iii. evaluate how continuous improvement influence employee productivity in UBA Plc, Benue state branch and;
- iv. establish how teamwork influence employees' productivity in UBA Plc, Benue state branch.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Framework**

A good number of theories postulated by Edward Deming, Joseph Juran, Philip Crosby, Kaoru Ishikawa among others, are related to the effect of total quality management and employee performance. But for the purpose of this study, we will consider the theory put forward by Joseph Juran. Joseph Juran's work on quality control came to prominence when

his first book, *Quality Control Hand Book* was published in 1951. His lectures emphasized that quality control should be conducted as an integral part of management control. For instance, Juran a product-quality-trilogy of quality planning, quality controlling and quality improvement and shows how they operate; like financial planning, financial control and profit managers (Juran,1986).

Juran was a pioneer in the study of quality control and his management theory also affected the quality control in engineering. His book, "Quality Control Handbook," as aforementioned, is classic, extrapolating all vistas in the field of quality control and management. Juran's quality theory, like Edward Deming's, also impacted the Japanese economy after WWII. Like Deming, he went to Japan after the war to help with re-building the economy. Juran's theory of quality management is part of other quality management theories such as Six Sigma and lean manufacturing (Pinho,2008).

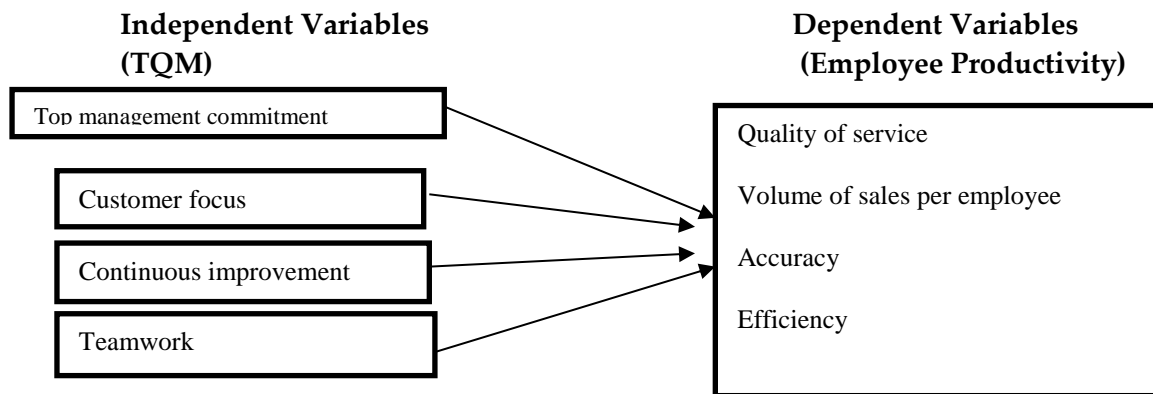
The key steps in Juran's theory on quality are Quality planning, quality control and quality improvement. To implement a company-wide quality management process, you have to identify your customers, find out their needs and work to meet those needs. You create measures of quality and organize to meet those measures consistently. And you need to create processes that work in real-life conditions. Juran's theory on quality postulates that top-level management must be sincere in its efforts to commit to quality or else all efforts as such would not work. His philosophy is based on the belief that quality must be planned. He sets out his current thought on quality planning in nine steps which includes Identify who the customers are, determine the customers' needs, translate those needs into terms that will be understood by business, develop a product that can respond to the customer's needs, optimize the products features to meet the needs of the business as well as customers' needs, develop a process that is able to manufacture the product, Optimize the process, prove the process under operating condition, determine to transfer the process to operate like Deming.

The Joseph Juran management theory is important to all businesses in the competitive, multinational climate of today's commerce. Learning his theory and applying it to business operations will aid in the global market competition. The implications of Joseph Juran are thus far-reaching and globally circulated. India and Japan are just two countries that have used the theories of Juran to re-create and build their economies.

## **2.2 Conceptual Framework**

The discussion on conceptual framework will be based on the model shown in Figure 1.

Figure 1: The Dimensions of TQM and Employee Productivity



Source: Researcher’s Model.

### 2.2.1 The Concept of Total Quality Management (TQM)

Describing the history of Total Quality Management after several consultations of many books by different authors, the term emerged from the 1980s. Formerly, it was just Quality Management (QM), but now several firms both small and large have considered their quality management as over-all because of the continuous improvement of such firms.

Total quality management (TQM) is a business philosophy that embodies the belief that management process must focus on integrating the idea of customer-driven quality through an organization (Alukoet al, 2010).TQM involves everyone at all levels in the organization and has an impact on every activity. TQM means that the organizations culture is defined by and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques and training. This involves the continuous improvement of organizational process, resulting in high quality products and services.

TQM is a management philosophy which emphasizes a number of concepts such as customer focus, continuous improvement, defect prevention, and recognition that quality responsibility is shared by all the organization’s members (Stevenson, 2011). TQM is regarded as an integration of various processes characterizing the behavioral dynamics of an organization. TQM has been viewed as the quest for progress and continual improvement in the areas of cost, reliability, quality, innovative efficiency and business effectiveness. However, TQM may also be viewed functionally as an integration of two basic functions: total quality control and quality management. Customer satisfaction, employee satisfaction, product or service quality assurance in all its stages, and continuous improvement and innovation, are the main ingredients of total quality control. Whereas quality management is a way of planning, organizing and directing, that will facilitate and integrate the capabilities of all employees for continuous improvement of services and products in an organization to attain quality. Thus, TQM is a philosophy which brings all members of an organization together to ensure product and service quality, improve organizational environment and attain customers’ needs.

The evolution of quality towards TQM is the outcome of four major eras of development as outlined by Garvin (2016). He illustrates the evolutionary process where quality has moved from an initial stage of inspecting, sorting and correcting standards to an era of developing quality manuals and controlling process performance. The third stage was to develop systems

for third party certification, more comprehensive manuals including areas of organization other than production, and the use of standard techniques such as SQC. The present and fourth era is primarily strategic in nature and is based on continuous improvement as the driving force. Dale *et al.* (2017) argued that TQM is the evolution of quality management which after twenty years of simple inspection activities has been replaced or supplemented by quality control, quality assurance has been developed and refined and the most progressive companies are now working towards TQM. This emphasizes that the quality management discipline has moved from a technical-orientation to a managerial orientation. Further, they described that TQM requires that the principles of quality management should be applied in every branch and at every level of the organization. TQM characteristics are the application of good practice quality management principles to the whole company, as popularized by the quality gurus, mainly the ideas of Deming (1986), Juran (1986) and Crosby (1979).

### **2.2.2 Dimensions of Total Quality Management**

There is a consensus view that organizations should follow a number of principles in an integrated way for successful TQM implementation. Furthermore, to determine critical factors of total quality management, various studies have been carried out and different instruments were developed by individual researchers and institutions such as Malcolm Baldrige Award, EFQM (European Foundation for Quality Management), Deming Prize Criteria and the Jordan business excellence model (JEBEM). Based on previous studies and models, the researcher reviewed the following TQM principles. Top management commitment, teamwork, customer focus, leadership, continuous improvement, education and training, employee involvement, fact-based management, process management and strategic quality management.

**Top Management Commitment:** Total quality is a management led process. As a result, success in its implementation depends on the demonstration of the top management's commitment in any organization. The commitment and involvement of management need to be demonstrated and visible. The commitment required from management to a Quality Management System is absolute if it is to succeed. If management is not absolute then the system will fail. Management must demonstrate their commitment in actions and words. Employees will soon see through new facts that do not have real management support. According to Magd (2014), lack of commitment from any particular group within the organization can be a serious barrier in the management of quality. This is even more so for top management as TQM must be from top to down and not the other way. Dahlgard *et al.* (2015) believe that a vital task for any management is to outline goals, quality policies and quality plans. According to them, the active formulation of quality plan will necessitate a clear indication of what is going to be achieved concerning quality. The quality policies as they observe will outline detailed guidelines of how employees are to achieve the organizations goals. While the meaningful action plans, either short-term or long-term will provide a level ground for establishing organizational goals. Since the nature and direction of global competition is sometimes difficult to determine, the idea of leaving what could be termed a major organizational competitive strategy in the hands of a central department could be assumed to be consistent with skepticism on the part of management. Unruh (1996) further notes that "it is top management that enables an organization to focus on its customers". It leads the development of a statement of purpose centered on customers, communicates the

vision constantly, and makes sure that the organization's practices stay aligned with the vision. Most importantly, top management is a role model for the rest of the company in its commitment to serving customers. Therefore, if top management staff of UBA in Makurdi branch demonstrates their commitment in actions and words with all cadres of staff it will enable them deliver better quality services.

**Customer Focus:** Several studies have reported a strong link between the delivery of high-quality goods and services and profitability through customer satisfaction (Sila & Ebrahimpour, 2005). Soltani defined Customer satisfaction as the degree to which a firm's customers continually perceives that their needs are being met by the firm's products and services (Soltani, 2015) An organization must identify customer relationship to Measure customer needs and expectations involve customers in quality improvement, determine customer satisfaction (Prajogo & Sohal, 2003). Many scholars mentioned the importance of customer satisfaction, based Deming work as "The consumer is the most important part of the production line, Quality should be aimed at the needs of the consumer, present and future" (Deming, 1986). The customer should be closely involved in the product design and development process, with input at every stage of the process; so that there is less likelihood of quality problems once full production begins and services as the case maybe (Flynn *et al.*,2014). The availability of customer complaint information to managers and the degree of the use of customer feedback to improve product quality reveal the level of customer focus in an organization. As customer expectations are dynamic, an organization needs to survey customer expectations regularly and modify its operations accordingly (Ahire *et al*, 2011). Therefore, since customers' expectations vary, the management of UBA Makurdi branch in particular should survey customers' expectations consistently in order to deliver the needed services required by customers.

**Continuous Improvement:** To achieve excellent quality results the organization must have a continuous improvement approach. Continuous improvement is a 'value system stressing that processes can be improved' and that improvement is 'an integral part of every employee's job' (Heizer & Render, 2014). The process involves every individual making some small improvement in practice to seek 'total perfection' (Heizer & Render, 2014). Continuous improvement in a banking environment means that employees must strive to achieve outcomes that 'promote better quality in services' provided (Ware, 2014). Continuous improvement is a conscience effort of knowing mistakes made and improving on the mistakes. Continuous improvement implies a 'commitment to constant examination of the technical and administrative process in place of improved processes' (Nderitu & Nyaoga, 2013). Nderitu and Nyaoga (2013) explain that customer satisfaction can be achieved through determined continuous improvement processes that can only be created by developing quality services. Therefore, the employees of UBA Makurdi branch need to towards achieving outcomes that will enhance better quality services to customers

**Teamwork:** Teamwork is essential for employees to gain a competitive advantage. According to Hough *et al* (2011), leaders must encourage effective teamwork. Teamwork 'needs to be used in a wide range of decision making and problem-solving situations' and 'must exist at all levels, across all functions of cadre of staff' (Sallis, 2002). Effective teamwork helps to solve problems that arise and creates an atmosphere for creativity and constructive contributions

(Hough et al., 2011). Employees who strive for excellence tend to work in teams. The best ideas and practices that are developed tend to come from a group of people working together. Teamwork must be made a priority (Hough et al., 2011).

Ware (2014) states that teamwork is a major contributing factor of the 'quality improvement process' and through this process quality products and services are generated. TQM involves teamwork. Employees that work in teams tend to improve on their practices, gaining ideas from each other. Poor practices are discussed and solutions to problems are identified through effective teamwork. A well-structured team will promote effective production of services through the 'integration of activities'. Teamwork is often known as a building block for success and improvement and a stepping stone for building trust and open communication to improving overall performance (Ware, 2014). Therefore, for UBA Makurdi branch in particular to continually manage delivery of quality services, there should be effective teamwork amongst the employees (staff) because best ideas and practices tend to come from a group of people working together

### **2.2.3 Concept of Employees Productivity**

Productivity is an overall measure of the efficiency or ability to convert the inputs into goods or services. More specifically, productivity is the measure that shows how efficiently the required resources are utilized to achieve the objectives in terms of quantity and quality with reference to a point of time. Productivity may also be defined as an index that measures output (goods and services) relative to the input (labor, materials, energy, etc., used to give the finished goods or services). The productivity is the ratio of output to input.

Productivity is a useful measure of actual output produced compared to the input of resources, measured across time or against common entities. Therefore, a productivity ratio expresses how efficiently resources of an organization are utilized to give output. Productivity and efficiency are the two concepts often confusing. Efficiency shows the time needed to perform a job to standard time. It can be said that the productivity is a measure of effectiveness (doing the right thing efficiently), which is outcome-oriented or result oriented.

### **2.2.4 Dimensions of Employee Productivity**

Employee productivity can be measured in several ways, depending on the industry. As more businesses try to achieve greater efficiencies with fewer employees, productivity measurement is becoming a staple labor metric for many organizations. Measurement systems lack uniformity because employees perform a variety of tasks--some routine, some complex and some that defy easy assessment. Nevertheless, employers use several approaches to measuring employee productivity. Total output could be expressed in numbers/meter/kilograms/liter etc, and total input could be

**Quality of Service:** This view believes that service quality is an important outcome of comparison between customer expectations before and after their experience of the service (Musran, 2013). If customers view that their expectations for service performance conform their perceptions of the service, this situation may lead to induce the notion of service quality (Musran, 2013). A review of the recent literature pertaining to workplace quality published in the 21st century highlights that tangible, reliability, responsiveness, assurance and empathy



are generic service quality components that are applicable to be used by researchers and practitioners to assess the effectiveness of service quality in various types of service sector such as banking, retailing, supply chain and logistics, telecommunication, hotel, aviation, defense and security, health Delivering a high quality of service results to customer retention. Employees must be noted regularly in addition to ongoing customer retention rates. A good quality of service should reveal accomplishments such as reduced complaints, found solutions to customers' problems etc.

Though measuring service productivity can be more challenging than measuring product output, accurate measurements can still be created. Some service businesses measure productivity by counting the number of customers served in a day or an hour. Other businesses measure productivity by the speed of product or service delivery, customer feedback or by individual and department self-evaluations. Some record the amount of time a service employee spends in each work duty. This can be recorded either by using the right software or by having individual employees fill out timesheets that specify work duties .customer service productivity can be measured in many ways including, how long it takes for a customer to be served (such as call waiting times or in-person waiting times),how long it takes for a customer's order to be completed The percentage of customers who return at least once (customer retention), how long those customers are retained, how many customer complaints are received in a given time period etc whatever set of criteria UBA chooses, they should create their baseline and business best service level under current conditions and measure employee productivity against that.

**Volume of Sales per Employee:** This dimension of measuring employees' productivity can be termed management by objective method. Here, productivity is measured by how an employee's output is contributing to the organization's goals and targets. For this to work correctly, employees must first be given clear, individual productivity goals to work towards as well as tools and information they need to meet those goals (Aluko, et al., 2010).

This quantitative method measures productivity by the number of parts, products or services an employee produces in a particular period of time such as per hour, day or month. This method works very well for small businesses but even if you are managing large groups, this kind of productivity measurement is simple and time-saving. Productivity can be quickly calculated with productivity software or on a spreadsheet, revealing the number of product/services an employee produces or contributes in a given time period. Those numbers are then averaged out to reveal productivity gains or losses over time.

Output can be measured either by the volume or quantity of products created or services rendered or by the financial value of the product or service.

**Accuracy:** To achieve best possible outcome, employees must first receive training on how to offer input that is well balanced and impartial (Al-Swadi & Mahmood, 2012).They must be trained to offer feedback that is based purely on their co-workers professional abilities, not on their personal feelings or beliefs about that employee. Accuracy involves a good number of people, all of them trained in objective feedback and all weighing in on how well the employees productivity meets their team and organizational goals.

**Efficiency:** Efficiency simply means doing things right (Hassan et al, 2014). When employees are effective, they will be able to meet up the organization's goals and objectives at a minimum cost. It also refers to the amount of resources used to achieve organization's goals (Richard et al 2010). It is based on the quantity of the raw materials, money and employees necessary to produce a given level of output. Efficiency can also be seen as the rate at which inputs are converted into outputs.

**Increase in Profit:** This can be used as an effective tool for measuring team productivity. In fact, measuring productivity purely in terms of profit gained is becoming the preferred type of measurement for many organizations. Rather than getting involved with data that tracks

An individual employee movement, measuring by profits involves watching only the bottom line. Only higher-level functions are closely watched. This method ensures that productivity measurements don't keep employees from working creatively or take a great deal of management's time. To measure results, one of the vital factors we rely on is the team effectiveness ratio. It measures how much gross profit the bank gets for every naira spent on salary. It is better than measuring profits against time because we want the team to work smarter not longer. Measuring of profit involves watching only the bottom-line higher-level functions are closely watched. This method ensures that productivity measurement don't keep employees from working creatively or take a great deal of management time (Wright, 2004).

### **2.3 Review of Related Empirical Studies**

The concept of Total Quality Management (TQM) has attracted widespread research across the globe. Many researchers and scholars have written papers, extensive theses, journals and textbooks to support the efficacy of TQM on employees' productivity.

Mohdand Norhay (2016) reviewed the effects of total quality management on the Employee performance in Malaysian manufacturing Industry. A total of 350 questionnaires have been distributed to 10 manufacturing companies in Malaysia and effective sample of 294 usable completed surveys (84.0 percent usable response rate). Reliability testing was conducted to test the questionnaire before pilot test was done. Statistical analysis and regression were used to predict and estimate the relationship. The model was assessed using Analysis of Moment Structure (AMOS) based Structural Equation Modeling (SEM). The findings showed that TQM practices have a significant impact on employee performance.

This study is related to the present because both have the same independent variable with similar methodology. The difference however is in the geographical area as the present study is in Benue state while the reviewed work is in Malaysia.

Manjunathand Kumar (2013) researched on the Impact of TQM Implementation on Productivity and Quality to determine whether the implementation of TQM leads to higher productivity and quality. The study was carried out at General Motors in India by collecting the primary data from the managers through structured questionnaire. The data was analyzed

by descriptive analysis and ANOVA technique. The result revealed that there is a significant relationship between TQM implementation and high productivity and quality.

This study is related to the present because both have the same independent variable with similar dependent variable. The difference however is in the geographical area as the present study is in Benue state while the reviewed work is in India.

Aimie (2016) analyzed the Impact of Total Quality Management on Employee Performance with mediating role of Process Innovation in Malaysia. The main aim of the study was to analyze the relationship between TQM practices, process innovation and employee performance. In the study, six critical success factors of TQM were identified namely customer focus, leadership, training, teamwork, communication and top management. Based on thorough literature review, employee a performance was measured by two constructs which are job satisfaction and workplace environment. The study used methodology of quantitative approach. The questionnaires for this study were randomly distributed to 102 employees in the selected car manufacturer companies. The respondents were choosing from management team, supervisor, technician and other workers. Results of the study supported the proposed hypotheses that there was significant relationship between TQM practices, process innovation and employee performance.

This study is related to the present because both have the same independent variable with similar respondents. The difference however is in that this study is carried out in the service industry while the reviewed work is in the manufacturing industry.

Another study was carried out by Joiner (2007) to explore the relationship between the extent of total quality management (TQM) implementation and organization performance, and the moderating effect of co-worker support and organization support on the TQM performance relationship. A questionnaire survey was developed and distributed to a sample of firms selected from the motor vehicle parts and accessories industry in Australia. Analysis of the data supported a strong positive relationship between the extent of implementation of TQM practices and organization performance. This study also found that co-worker support and organization support moderated the relationship between TQM implementation and organization performance. This study has important implications for managers. First, it motivates managers (and provides a justification) to invest in the time and resources to implement TQM programs. Based on the results of this study, the implementation of TQM practices is associated with enhanced organization performance. Second, evidence from this study signals the importance of developing an environment or “culture” of support to further enhance the performance outcomes of TQM implementation. If employees do not feel there is acknowledgement and support from the organization and from work colleagues, then the implementation of TQM programs may be sub-optimal. There is increasing recognition of the importance of human factors in successful TQM implementation. Within this context, no previous research has empirically examined the synergistic moderating effect of co-worker support and organization support on the relationship between TQM and performance. This study is related to the present because both have the same independent variable but differs geographically.

Raja et al. (2011) evaluated the effect of TQM practices on business performance of manufacturing firms in Pakistan. A sample of 65 managers working in the quality assurance department was taken from these manufacturing firms and their responses were collected using a structured questionnaire. Descriptive statistics were used to demonstrate the effect of different levels of TQM practices on business performance in terms of financial performance, product quality performance, customer satisfaction. The study had also considered organizational level variables like size of firm, year of existence, top management commitment as moderating variables, the results have shown that TQM was implemented only at the first three levels i.e. quality control, quality assurance and continuous improvement in the selected firms and that top management commitment is the most important variable effecting on TQM implementation which then directly effect on business performance in these manufacturing firms. This study though similar in the independent variable, dimensions and similar source of data but differs in sector and geographical area.

Another research by Nansushi (2015), being a research project for the award of a Masters of Business Administration from the University of Nairobi, 2015, titled: *The Effect of Workplace Environment on Employee Performance in the Mobile Telecommunication Firms in Nairobi City County* extrapolates the effect of work place environment on employee performance. The research states that, the work environment which encompasses several factors impacts on the way the employees perform their work. A comfortable and all-inclusive workplace environment will boost the employees' performance hence boosting the organizational performance. The objective of the study was to investigate the effect of workplace environment on employee performance in the mobile telecommunication firms in Nairobi City County. The target population was all the employees at Airtel Networks Kenya Limited, Safaricom Limited and Telkom Kenya Limited based at the headquarters. The total number was 250 from Airtel, 976 from Safaricom and 400 from Telkom. The sample size included a total of 164 employees. Descriptive research design was adopted for the study. The researcher used stratified random sampling technique in selecting the employees. The study used primary data which was collected by use of semi structured questionnaire. Data was analyzed using descriptive statistics that included frequencies mean scores, standard deviation and percentages. From the findings, the study concluded that work environmental factors that influenced employee performance were physical environment factors, reward, management/leadership style, training and development and work-life balance. The findings revealed that employees were not satisfied with the management style and promotions in their organizations. The study recommends that mobile telecommunications firms need to set up more comprehensive reward systems, change management style to transformational leadership style that is inclusive of all employees. The working conditions of employees should also be improved to motivate employees to work. The limitations of the study were that the researcher had limited time and resources to be able to do more comprehensive research across the country. The researcher recommends further studies to be carried out across the country for a broader perspective on the relationship between employee performance and work environment. This study is similar to the reviewed work because they have the same dependent variable but differ in sector and location.

Fapohunda (2012) examined total quality management as a leadership style on employee performance. The current trend of total quality management as used in work organizations

prompted the interest of this study. The objective was to establish relationship between total quality management and employee performance using a manufacturing company in Nigeria. One hundred and fifty (150) questionnaires were returned in usable condition. With the aid of chi-square statistical method, the four hypotheses formulated were tested. The findings showed a significant relationship between total quality management and employee performance; between TQM and defect prevention errors; between the success of TQM and perception of organization members; between total quality management and effective management of resistance to change performance. This study recommends that management should also provide enabling environment to implement total quality management policy with democratic leadership styles in the organization and should think of how to satisfy customers at the first time always. It concludes that a major strategy for achieving high quality is Total Quality Management (TQM) and a management system for improving performance throughout a firm by maximizing customer's satisfaction, making continuous improvements and relying heavily on employee involvement –all these should be established by work organizations irrespective of the sector involved. This study is related to the present because both have the same independent variable and geographical location but differs in the sectors.

Esin and Cemal (2010) examined the relationship between TQM practices and performances. This study investigated impacts of TQM practices on various performance measures as well as the reasons and the barriers of the TQM practices of firms in Turkey. We used a cross-sectional survey methodology in this study, and the unit of the sample was at the plant level. The sample was selected from the member firms to Turkish Quality Association and the firms located in the Kocaeli-Gebze Organized Industrial Zone. We obtained 242 usable questionnaires, with a satisfactory response rate of 48.4 percent. We conducted exploratory /factor analysis and multiple regression analysis. This study has shown that different TQM practices significantly affect different performance outcomes. Results revealed that primary obstacles that the firms in Turkey face were lack of employee involvement, awareness and commitment of the employees, inappropriate firm structure and lack of the resources. It is recommended that firms should continue to implement TQM with all variables to improve performance. Firms should improve employees' involvement/commitment/awareness to TQM, enhance firm structure, and provide resources to overcome the barriers that prevent effective implementation of TQM practices. This study is related to the present because both have the same independent variable. The difference however is in the methodology and geographical area.

Rateb *et al* (2019) studied the relationship between TQM implementation and employee performance from the perspective of top managers within Emirati airline companies in united Arab Emirate(UAE). The data was collected using questionnaires that were distributed, employing the convenience sampling, to 144 employees from four Emirati airline companies. The researcher reached that there is a positive relationship between TQM and the employee performance. The study recommends that holding more training courses, seminars and workshops on the importance of the TQM implementations, practices and tools will increase the performance of both employees and organization as a whole. Additionally, the airline companies should seek the path of TQM in reaching the quality award systems like the ISO certification, which will play a huge role in increasing their market share. This study is considered one of the very few empirical studies that examine the effect of TQM and EP within

Emirati airline companies. This study has the same independent variable with the reviewed work but they were both carried out in different countries.

Chukwu *et al's* (2016) study investigated the impact of total quality management on performance of Nigerian Brewery Plc and Nigerian Bottling Company Plc, Enugu State, Nigeria. Most Nigerian organizations perform abysmally because of non-implementation of Total Quality Management. They are ignorant of the programme, which reduces defect rate, and cost. Total quality management streamlines efficient and cost-effective system and process that reduces overhead and improve performance. It also emphasizes error prevention in place of error correction that increases cost. The data collected from the questionnaire instrument were analyzed using percentage and multiple regressions. The research findings show that a significant and positive relation lie between the independent variable, error prevention, quality improvement, cost reduction, fewer delays and the dependent variable organizational performance. This is consistent with the literature. We recommend that organizations implementing TQM should not pay lip service to error prevention in order to avoid costs associated with error correction. And also, that management must focus on integrating customer driven quality. The two studies have the same independent variable, same method of data collection and carried out in the same country but differ in case studies.

### **3. METHODOLOGY**

#### **Research Design**

This research adopts a descriptive survey research design. This is because the coverage area is wide and expected to isolate a representative sample and assesses the effect of independent variable on the dependent variable. The independent variable for the study is Total Quality Management while the dependent variable is Employee Productivity.

#### **The Study Area**

The area of the study includes all UBA Bank Branches in Makurdi metropolis, Benue State. UBA bank is used due to its full adoption of Total Quality Management.

#### **Target Population of the Study**

The population of the study comprises of the staff of UBA Bank branches in Makurdi metropolis, Benue State. This study is intended to provide findings on the role of Total Quality Management of Employee Productivity. The target population for the study is shown in Table1.

*Table 1:Population distribution of Respondents*

SN	BRANCH	Mgt Staff	Jnr Staff	TOTAL
1	28, Otukpo Road Makurdi	8	22	30
2	OgiriOko Road, Opposite CBN Makurdi	10	22	32
3	Makurdi Road Junction, Northbank Bridge Makurdi	8	15	23
<b>TOTAL</b>				<b>85</b>

*Source: Survey,(2021).*

### **Instrument for Data Collection**

The study adopted a closed ended structured questionnaire measured on five (5) Likert Scale from strongly disagree to strongly agree. Hence, 85 copies of the questionnaire were administered to the target respondents, the questionnaire was printed in excess so as to cover the sample size if there is any default because any shortage in the sample size will make untrue representation of the population.

### **Validity and Reliability of the Instrument**

Face validity and content validity approaches were used to assess, and ascertain the appropriateness of the instrument to ensure that items measure what they intend to measure. The content validity focused more in ensuring that all the concepts were covered. In terms of reliability, a pilot test was conducted on thirty (30) copies of the questionnaire were administered to respondents in bank branches in Makurdi metropolis in Benue State to test the reliability and consistency of the measurement instrument using Cronbach Alpha coefficient analysis. Table 2 shows the results and the overall reliability coefficient of the questionnaire is 0.875, this implies that the instrument was reliable for use in data collection.

*Table 2:Reliability Result of Measuring Instrument*

Sn	Variables	Cronbach Alpha Coefficient
1	Top Management Committee (TMC)	0.710
2	Customer Focus (CF)	0.699
3	Continuous Improvement (CI)	0.708
4	Teamwork	0.782
5	Employee Productivity	0.734

**Source:** Authors *Computation Using SPSS(2021)*

### **Model Specification**

The model specification for this study establishes the relationship between the dependent and the independent variables of the study. In order to examine the effect of Total Quality Management on Employees Productivity, a multiple regression model is used and is stated implicitly as;

$$EP = f(TQM) \tag{1}$$

Where:

EP is Employee Productivity

TQM is Total Quality Management

Total Quality Management can be decomposed as shown in the following;

$$EP = f(TMC, CF, CI, TW)(2)$$

Where,

TMC = Top Management Commitment

CF = Customer Focus

CI = Continuous Improvement

TW = Team Work

In explicit form, the model is restated as;

$$EP = \beta_0 + \beta_1 TMC + \beta_2 CF + \beta_3 CI + \beta_4 TW + e_t(3)$$

Where,

$\beta_0$  = the intercept (constant)

$\beta_1 - \beta_4$  = Regression Coefficients

Apriori Expectations: the signs for all the estimated variables in the model ( $\beta_1 - \beta_4$ ) are expected to be positive.

### Data Analysis Technique

This study adopted a descriptive statistical technique to analyze the data that was collected. Frequency tables were used to interpret the nominal data while the results of the hypotheses were obtained using multiple regression analysis. Data analyses were done using the Statistical Package for Social Sciences (SPSS) to enhance the robustness of the result.

## 4. RESULTS AND DISCUSSION

A total of eighty-five (85) questionnaires were distributed to the sampled population and were duly completed and returned for the purpose of the study. The analyses presented are based on the responses obtained from the eighty-five questionnaires duly completed and returned.

*Table 3: Analysis of Variance (ANOVA)*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1027.721	4	256.930	80.586	.000 <sup>b</sup>
	Residual	271.002	85	3.188		
	<b>Total</b>	<b>1298.722</b>	<b>89</b>			

a. Dependent Variable: Employee Productivity

b. Predictors: (Constant), Teamwork, Continuous Improvement, Top Management Commitment, Customer Focus

Source: SPSS Result, 2021



The significance value in the ANOVA in Table 3 is 0.000 which is below the 5% level of significance for a two tailed test ( $p < 0.05$ ). This shows that the model is statistically significant in determining the effect of the independent variables (top management commitment, Customer focus, continuous improvement, and teamwork) on the dependent variable (employee performance).

## Regression Analysis

**Table 4: Coefficients Results**

	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	8.958	2.390		3.748	.000
Top Management					
Commitment	.305	.095	.273	3.206	.002
Customer Focus	-.497	.097	-.498	-5.152	.000
Continuous					
Improvement	.365	.073	.406	4.975	.000
Teamwork	.742	.096	.728	7.706	.000

a. Dependent Variable: Employee Productivity

Source: Researcher's Computation, 2021

***Influence of top management commitment on employee productivity in UBA Plc, Benue State***  
 Result from the regression analysis reveals that Top Management Commitment (TMC) with t-value of 3.206, and p-value = 0.002 ( $p < 0.05$ ) have a positive significant contribution to explaining the dependent variable (employee's productivity). From the results, Top Management Commitment (TMC) significantly has effect on employees' productivity. Thus, the null hypothesis which states that Top Management Commitment (TMC) has no significant influence on employee productivity in UBA Plc, Benue State branch is rejected at 0.05 significant levels.

### ***Effect of customer focus on achieving employee productivity in UBA Plc, Benue State***

On the other hand, with regards to the contribution of the independent variables as presented in Table 4, customer focus with t-value of -5.152, and p-value = 0.000 ( $p < 0.05$ ) have a significant contribution to explaining the dependent variable (employees' productivity). This implies that customer focus has an effect on employees' productivity. Thus, the null

hypothesis which states that customer focus has no significant effect on employee productivity in UBA Plc, Benue state branch is rejected at 0.05 significant levels.

#### ***Influence of continuous improvement on employee productivity in UBA Plc, Benue State***

In the same vein, with regards to the contribution of the independent variables as presented in Table 4, continuous improvement with t-value of 4.975, and p-value = 0.000 ( $p < 0.05$ ) have a positive significant contribution to explaining the dependent variable (employee productivity). This implies that continuous improvement effect on employee productivity. Thus, the null hypothesis which states that continuous improvement has no significant effect on employee productivity in UBA Plc, Benue State branch is rejected at 0.05 significant levels.

#### ***Influence of teamwork on employees' productivity in UBA Plc, Benue State***

With regards to the contribution of the independent variables as presented in Table 4, teamwork with t-value of 7.706, and p-value = 0.000 ( $p < 0.05$ ) have a positive significant contribution to explaining the dependent variable (employees' productivity). This implies that teamwork has effect on employee productivity. Thus, the null hypothesis which states that teamwork as a practice has no significant effect on employee productivity in UBA Plc, Benue State branch is rejected at 0.05 significant levels.

## **5.0 CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

Considering the findings of this study, this study concluded that top management commitment significantly affects employee productivity. Similarly, there is a positive significant effect of continuous improvement on employee productivity. In the same vein, there is a positive and significant effect of teamwork on employee productivity. However, there is a negative effect of customer focus on employee productivity.

### **Recommendations**

Going by the findings of this study, it is hereby recommended that:

- i. Top management should be more committed to quality issues; prioritizing quality performance as a major objective in their strategic decisions in order to build trust with employees and enhance quality improvement processes. This is because the active formulation of quality plan will necessitate a clear indication of what is going to be achieved concerning quality by employees.
- ii. Implementing Total Quality Management (TQM) should involve everyone at all levels in the organization since TQM impact on every activity. This means that TQM process should become a culture that supports the constant attainment of continuous improvement of organizational process, resulting in high quality products and services.
- iii. To ensure success and continuous performance by employees, the management of banks and other service companies must take Quality Management System as absolute. This is because if the management is not absolute then the system will fail. Hence, management must demonstrate their commitment in actions and words.
- iv. Top management should formulate quality policies and practices that will outline detailed guidelines of how employees are to achieve the organizations goals.

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