

### RESEARCH ARTICLE | OPEN ACCESS

### **Quality Management and Performance of Domestic and Industrial Plastic in South East Nigeria**

### Ukwuani Bernard Okey<sup>1\*</sup> and Udeh, Ifenyinwa Ebere

<sup>12</sup>Department of Business Administration, Enugu State University of Science and Technology, Enugu

\*Corresponding Author

#### Background

The manufacturing sector in has become the third most prominent segment of Nigeria economy due to its continuous improvement in performance through implementation of the quality management system (Khan, Kanwal, Muhammad and Mahmood, 2017). Quality as an essential element for sustainability and customer satisfaction; organizations can improve the product quality and even reduce the cost of production in any given firm by implementing quality management and performance which also, in turn, helps them to meet the needs and even exceed the customer's requirements. In a highly competitive market. and adequately implemented QMS can provide a very beneficial competitive edge over the other players in the market The (Khan et al, 2017). interference of quality management practices has brought excellent impact on the rampant organizational endeavors Quality management is any practice that produces better products while decreasing cost and increasing consumer satisfaction levels (Milanoi,

#### ABSTRACT

The study evaluated the quality management of Domestic and Industrial Plastic in South-East, Nigeria. The specific objectives are to: examine the relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria. Evaluate the relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria and determine the relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria. The study used the descriptive survey research design. The population for the study was two thousand, seven hundred, and thirty-eight (2738) which consisted of management and senior staff of ten (10) selected firms out of the thirty-nine (39) manufacturing firms of Domestic and Industrial plastic, rubber and foam Manufacturing Firms in South East, Nigeria. A stratified sampling method was adopted the sample size of the study was three hundred and thirty-seven (337) out of which two hundred and seventy-one (271) returned. The instrument for data collection used in the study was structured questionnaire. The validity of the instrument was ascertained with a proper structuring of the questionnaire and a conduct of a pre-test of every question contained in the questionnaire to ensure that they are valid. The reliability was tested using the Pearson correlation coefficient (r). The findings of the study revealed that there was positive significant relationship between customers focus and output of Domestic and Industrial Plastic manufacturing firms in South-East, Nigeria (r= .617 < .968, p<.05). There was positive significant relationship between quality control and profitability of domestic and Industrial Plastic in South-East, Nigeria (*r*= .703 < .834, *p*<.05) and there was positive significant relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria (r= . 617<.698, p<.05). The study concluded that the growth, development and quality management of organizations is highly determined through customers focus, quality control and quality continual improvement which enhances the organizations output, profitability and sales volume. The study recommends amongst others that Organizations should try as much as possible to deliver their services based on the assurance given to customers and not vice versa as this will help to retain customers and improve the organizations standard.

**Keywords**: Quality Management; Customers Focus; Continual Improvement; Domestic Plastic; Industrial Plastic; South-East Nigeria

2016). Quality has been defined as the degree to which something meets or exceeds the expectations of its consumers. Quality is a dynamic concept which is ultimately defined by customer expectations and satisfaction (Ezra, 2020).

*Citation:* Ukwuani, B. O. & Udeh, I. E. (2023). Quality Management and Performance of Domestic and Industrial Plastic in South East Nigeria. *European Journal of Finance and Management Sciences 7(3), 1-19. DOI: <u>https://doi.org/10.5281/zenodo.8246921</u> <i>Copyright:* © 2023 The Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Quality management ensures superior quality products and services. Quality of a product can be measured in terms of performance, reliability and durability. Quality is a crucial parameter which differentiates an organization from its competitors (Prachi, 2015). Quality management tools ensure changes in the systems and processes which eventually result in superior quality products and services. Quality management is essential to create superior quality products which not only meet but also exceed customer satisfaction. Customers need to be satisfied with your brand. Business marketers are successful only when they emphasize on quality rather than quantity (Prachi, 2015). Quality management is very important for organizational success and improving processes, reducing costs and delivering the best product or service to the customer are not only market demands. A quality management system makes processes better, leaner and safer, so that work is done more efficiently, always looking for the cheapest and highest quality methods for your operations. As a result, the costs of waste and rework are drastically reduced, which allows us to offer better products and services with lower investments. Therefore, when implementing a quality management system, all processes start to be registered within a standard (Sestrem, 2020). Therefore, on the background the study evaluates the quality management of domestic and industrial plastic in South-East, Nigeria.

#### **Statement of the Problem**

Quality management is a business philosophy that champions the idea that the long-term success of a company comes from customer satisfaction and loyalty. Quality management requires that all stakeholders in manufacturing firms work together to improve processes, products, services and the culture of the firms itself. It is a continual process of detecting and reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience, and ensuring that employees are up to speed with training.

Therefore, in the organization, quality is not the responsibility of anyone or department, it is everyone's job from the management to the employees. A quality product cannot be achieved if one or more areas in the organization fall short of the specific level of quality that needs to be achieved. The problems facing the study were poor customers focus; quality control; and lack of quality continual improvement. Poor customers focus can place a permanent stain on any project. To avoid this, the project manager must first determine how the client or the project sponsor defines quality--and then follow suit. Poor quality control throughout the project phases (execution, invoicing) creates loopholes for poor performance or overcharging of contractors, because low quality of work, breaching of standards and project delays are not likely to be detected. The major challenge is that management needs to be responsible & take ownership to ensure effectiveness in business and lead the total quality management approach

The process needs to be reviewed on a regular basis and issues need to be identified before overall quality starts to drop. Implementing a reliable quality management system is a positive step for businesses of all kinds. A quality management system can boost the value of organization product or service, make all team members accountable for their work and engage more actively in the business, and improve business' reputation in the industry. QM is a change management process which requires time and support from the management. The leaders need to ensure that a TQM behavior is accepted and promoted in the organization. Management needs to take the lead to build the culture around quality management and efficiency in product or service.

#### **Objectives of the Study**

The main objective of the study was to evaluate the quality management of Domestic and Industrial Plastic in South-East, Nigeria. The specific objectives are to:

- i. Examine the relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria.
- ii. Evaluate the relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria
- iii. Determine the relationship between quality Continual Improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria

#### **Research Questions**

The following research question guided the study

- i. What is the relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria?
- ii. What is the relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria?
- iii. What is the relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria?

#### **Statement of the Hypotheses**

The following null hypotheses guided the study

- i. There is no positive significant relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria
- ii. There is no positive significant relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria
- iii. There is no positive significant relationship between quality Continual Improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria

#### Significance of the Study

The study would benefit the following groups: Manufacturing company; managers, employees; and researchers

#### Manufacturing Company

The study plays a vital role in increasing revenue by minimizing the input and maximizing output. It ensures high productivity levels of an organization. This is due to the proper management of inventory control and reduction in waste.

#### Managers

Quality Management help the manager to improve customer satisfaction by having a customer focus and consistently meeting customer expectations; and it emphasizes the need for your business to clearly communicate to the customers exactly what you will deliver to avoid misunderstandings.

#### Employees

The study helps the employees to know their responsibility to identify quality defects, as well as to proactively recognize threats to quality and continuous improvement. To be able to do this, employees need to have no fear of reprimand or discipline from management for failing to achieve total quality.

#### Researchers

From the academic perspective the study contributes to the future development in this area of research, mainly in a developing country like Nigeria. The study is of immense benefit that will serves as a reference purpose to other researchers who intend to carry out research on a similar topic in the future as it will provide them the reliable imminent that is importance for educational purposes.

### **Review of the Related Literature**

#### **Conceptual Framework**

#### Quality

**Quality** is the performance upon expectations and fit for functions. A product is said to be of good quality if it satisfies the customer requirements in terms of performance, grade, durability, appearance and intended use/purpose, etc. Quality is the total composite product and service characteristics of manufacturing and maintenance through which the product and service in use will meet the expectation of the customers (TQP, 2020). Quality is very important because organizations uses a management system to determine the needs of each stakeholder, to transform these needs into internal requirements, to provide the resources needed to meet all the requirements and to review the performances (Gurau, 2020). Quality could be defined as a basic tool for a natural property of any good or service that allows it to be compared with any other good or service of its kind. Furthermore, the quality of a good or service is the perception that a customer has about it. It is a consumer's mind-set who

accepts a specific good or service and acknowledges its ability to meet his or her needs. Quality means providing value to the customer; that is, offering conditions of product use or service that meet or exceed customer's expectations, yet are still affordable. Quality also takes into account the reduction of waste that a product may cause to the environment or human society, yet still allowing the manufacturing company to maintain customer satisfaction (Enrique, 2015).

#### Management

Management is the administration of an organization, whether it is a business, a non-profit organization, or a government body. Management includes the activities of setting the strategy of an organization and coordinating the efforts of its employees (or of volunteers) to accomplish its objectives through the application of available resources, such as financial, natural, technological, and human resources (Dill, 2021). Management can be defined as the process of achieving organizational goals through planning, organizing, leading, and controlling the human, physical, financial, and information resources of the organization in an effective and efficient manner. Management not only directs but motivates people in the organization for getting their best for obtaining objectives (Boris and Jens 2018).

#### **Quality Management**

Quality management is a managerial approach geared towards in cooperating inherent managerial tendencies of planning, control and improvement. It depends on the accompanying standards: quality integration, quality first, consumer loyalty, constant change, continuous improvement, factual-based decision and workforce involvement (Milanoi, 2016). Quality management is the act of overseeing all activities and tasks that must be accomplished to maintain a desired level of excellence. This includes the determination of a quality policy, creating and implementing quality planning and assurance, and quality control and quality improvement. It is also referred to as total quality management (TQM) (Adam and Mansa 2020). Quality management focuses on long-term goals through the implementation of short-term initiatives. Quality management is the act of overseeing all activities and tasks needed to maintain a desired level of excellence. Quality management includes the determination of a quality improvement (Adam and Mansa, 2020). Quality management includes the determination of a quality policy, creating and implementing quality planning and assurance, and quality control and quality control and quality improvement (Adam and Mansa, 2020). Quality management includes the determination of a quality policy, creating and implementing quality planning and assurance, and quality control and quality improvement (Adam and Mansa, 2020). Quality management ensures that an organization, product or service is consistent. It has four main components: quality planning, quality assurance, quality control and quality improvement. Quality management is focused not only on product and service quality, but also on the means to achieve it. Quality management, therefore, uses quality assurance and control of processes as well as products to achieve more consistent quality (Shirouzu 2017).

#### Components of Quality Management that formed part of the Objectives

Quality management is a proven method for improving organizational performance and meeting or exceeding customer expectations. DeBenedetti (2021) maintained that the components of quality management include: Management Support; Customer Focus; Process Approach and Continual Improvement. Kelderman (2021) posits that the components of quality management include: Quality Policy and Objectives, Quality Manual, Organizational Structure and Responsibilities, Document Control and Management, Quality Instruments, Continuous Improvement, Customer Satisfaction with Product Quality, Processes and Data Management.

#### **Customer Focus**

Customer focus means meeting the needs and expectations of current and potential customers by developing a comprehensive understanding of customer needs and then delivering perceived value to customers, (Sharabi, 2015). The best approaches are by being more responsive and proactive, delivering on their promises, and listening and observing to gain insights and then acting on them (Schoultz, 2021). The ability for a business to serve its customers in a responsive way that is consistent with meeting or beating their expectations will prove to be the ultimate differentiator separating the winners from the losers. A great customer focus strategy enables you to form real, honest, and transparent relationships with your customers (Brummel, 2019). Customer focus can be a competitive advantage if you are able to adopt it. It is less of a process and more of a culture that needs to be adopted into your organization so that all units perform accordingly. To build a customer focus strategy, you need to facilitate direct interaction of your employees with customers. It is not just the customer facing employees who must regularly interact with the customers. Even the back-office employees should understand customers well by engaging with them contextually in a timely manner. This will infuse the customer-centric culture at all levels (Deepak, 2020).

#### **Quality Control**

Quality control guarantees the conformity of items or services through inspections and tests. Here, a quality examiner uses statistical sampling and analysis to test the output. The output could be the end-product manufactured or the service provided. The aim is to ensure that the result meets the benchmarks set up to approve or disapprove the output on the basis of quality. The activities that control the quality of products are usually voluntary in an organization. In order for quality control to be adhered to, a slew of activities is monitored. The production processes, the storage, and even transportation. This is because these activities have a direct impact on the output's quality (Sheikh, and Walk, 2020). Quality control started with the rise of manufacturing during the industrial revolution. Organizations had to deliver a product that was better than the competitors to draw in customers. But now, it has become a key aspect of the manufacturing industry. With QC's evolution, manufacturers have to stay up-to-date with the standards for product quality and safety (Sheikh, and Walk, 2020). Quality control can be defined as "part of quality management focused on fulfilling quality requirements (American Society for Quality, 2021). Quality control (QC) is a process by which entities review the quality of all factors involved in production (Praxiom Research Group Limited, 2017).

#### **Quality Continual Improvement**

Continuous Improvement is an ongoing, long-term approach to improving processes, products and services. It is also called Continual Improvement or CI, and is one of those terms which we often think we fully understand, but can actually mean many different things to many different people, (Harris, 2021). Continuous improvement is an ongoing effort to improve all elements of an organization - processes, tools, products, services, etc. Sometimes those improvements are big, often they are small. But what's most important is they are frequent. Companies that excel at continuous improvement start with the belief that success comes from: Innovating "how" they do what they do (big and small). Exploring better ways to deliver to customers and respond to changes in the external environment. Core to a continuous improvement mindset is the belief that a steady stream of improvements, diligently executed, will have transformational results, (Dewar, Doucette, and Epstein, 2019). Continuous improvement, or Kaizen, is a method for identifying opportunities for streamlining work and reducing waste. The practice was formalized by the popularity of Lean / Agile / Kaizen in manufacturing and business, and it is now being used by thousands of companies all over the world to identify savings opportunities. Many of these ideologies can be combined for excellent result, (Terry, 2021).

#### Performance

Performance is a process or the manner by which the business owner or manager executes their functions and crucial element to improving business performance in organizations (Eniola, 2014). The performance and growth any organization is the major driver and indices for the level of industrialization, modernization, urbanization, gainful and meaningful employment for all those who are able and willing to work, income per capital, equitable distribution of income, and the welfare and quality of life enjoyed by the citizenry. The performance and survival of business organization depends on the favorable policy that can drive and develop in Nigeria (Eniola, 2014). When assessing the organization's performance as a whole, a cohort of measures need to be adopted so that all components can be monitored and evaluated comprehensively. In fact, there is a conscious call to move towards a broader definition of organizational performance, one which recognizes and addresses sustainability of work processes and outcomes (Sumbul, 2020).

#### Components of Performance that formed part of the objectives

Performance deals with some specific areas of the outcomes in an organization. The concept compares the goals and objectives of an organization with its actual performance (Bhasin,2020). Luo (2012) who conducted a metaanalysis of organizational performance suggested that it should be measured in economic and operational terms: The **economic performance** looks at financial and market outcomes which assess the profits, sales, return on investment for shareholders, and other financial metrices. The **operational performance**, on the other hand, focuses on the observable indices like customer satisfaction and loyalty, the firm's social capital, and competitive edge derived from capabilities and resources.

#### Output

Outputs are the products, goods and/or services which result from a development intervention. These are designed to produce outcomes – the short- to medium-term effects of an intervention – and eventually impacts. Output is

the products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes (Nigel, 2017). Output refers to the total production of goods and services of a whole country over a given period – its gross domestic product. The term may refer to all the work, energy, goods, or services produced by an individual, company, factory or machine. In the world of computing, it refers to any data that has been processed by and sent out from a computer or similar electronic device (Paul, 2021).

#### Profitability

Profitability is a situation in which an entity is generating a profit. Profitability arises when the aggregate amount of revenue is greater than the aggregate amount of expenses in a reporting period. If an entity is recording its business transactions under the accrual basis of accounting, it is quite possible that the profitability condition will not be matched by the cash flows generated by the organization, since some accrual-basis transactions (such as depreciation) do not involve cash flows. Profitability can be achieved in the short term through the sale of assets that garner immediate gains. However, this type of profitability is not sustainable. An organization must have a business model that allows its ongoing operations to generate a profit, or else it will eventually fail. Profitability is one of the measures that can be used to derive the valuation of a business, usually as a multiple of the annual amount of profitability. A better approach to business valuation is a multiple of annual cash flows, since this better reflects the stream of net cash receipts that a buyer can expect to receive (Accounting Tools, 2021). Profitability is a measurement of efficiency – and ultimately its success or failure. Profitability is a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment. Although a company can realize a profit, this does not necessarily mean that the company is profitable (Horton, Potters and Munichiello, 2021).

#### Sales volume

Sales volume is the number of units sold within a reporting period. This figure is monitored by investors to see if a business is expanding or contracting. Within a business, sales volume may be monitored at the level of the product, product line, customer, subsidiary, or sales region. This information may be used to alter the investments targeted at any of these areas. A business organization may also monitor its break-even sales volume, which is the number of units it must sell in order to earn a profit of zero. Sales volume is useful when sales are contracting, so that management can determine when it should implement cost reductions (Accounting Tools 2021). Sales volume is defined as the number of units sold during a specific accounting period. Sales volume is entirely different from total sales (Bhasin, 2020). However, sales volume is an essential indicator of business health. It allows organization to track the performance of marketing campaigns, evaluate the efforts of sales representatives, and choose the best places for physical stores.

#### **Theoretical Framework**

The study was guided by two theories; theory of constraint and quality improvement theory; but was anchored on theory of constraint because it has a management pattern that views any manageable system as being limited in achieving more of its goals by a very small number of constraints.

#### **Theory of Constraints**

Dr. Eliyahu Goldratt conceived the Theory of Constraints (TOC) in the year 1984. This theory gives the strategy to characterize what to change, what ought to be changed to, and how to impact the change to persistently enhance the execution of a whole framework (Okeoma, 2019). TOC, as TQM, regards change as a progressing procedure. In any case, rather than concentrating on restricted enhancements in all zones, it assaults the one limitation or bottleneck that restrains the framework's execution. TOC can be utilized as an indispensable system to help the usage of QM. The theory of constraints (TOC) is a management paradigm that views any manageable system as being limited in achieving more of its goals by a very small number of constraints (Cox and Goldratt,1986). The theory of constraints assumes that the performance of a system is limited in achieving its goals by at least one constraint. By identifying the most limiting constraint, improvements to the performance of the system can be introduced (Eric, Debra and James, 1995).

#### **Quality Improvement Theory**

Deming, W. E. (1986) proposed the Quality Improvement Theory. This theory proposes that a component of quality management is that it places duty regarding fabricating associations decisively at the entryway of top administration (Deming, 1986). Deming (1986) noticed that no quality administration framework could prevail without top

administration duty; the administration puts resources into the procedures, makes corporate culture, chooses providers and grows long haul connections. This theory is relevant to the study in that it presents a universal knowledge of organizations (Deming, 1986). By clearly defining quality and applying the knowledge of his concepts, organizations can increase productivity and performance. Quality is everyone's responsibility, but top management has more leverage toward continuous improvement of quality. Policies can put an upper limit on quality. As leaders responsible for system change, top management is most in need of profound knowledge. Policies which demoralize employees, use fear, institute quotas, or foster competition will restrict quality. Quality is often determined in the boardroom. It occurs when the aim is clearly defined, people are trained and educated to do the job well and are provided the right tools and equipment. They must also work collaboratively to plan, implement, and measure processes to accomplish the aim (Okeoma 2019).

#### **Empirical Review**

#### The following empirical review was done according to the objectives of the study

#### The relationship between Customer focus and output of Domestic and Industrial Plastic in South-East, Nigeria

Ezenyilimba, Ezejiofor and Afodigbueokwu (2019) conducted a study on Effect of total quality management on organizational performance of deposit money banks in Nigeria. The study was carried out in Awka, Anambra State Nigeria. The specific objectives are to: ascertain the extent to which the application of total quality management practices affect customer satisfaction in Nigerian deposit money banks. The study adopted Survey research design. Data was analyzed with the aid of Statistical Package for Social Science (SPSS) version 20.0. The sample size was one hundred and thirty-five (135) bank staff of the five (5) selected banks as well as 135 customers of banks. The result shows that the application of total quality management practices affect customer satisfaction in Nigerian deposit money banks. The study concluded that total quality management practices affect customer's continuous loyalty in Nigerian deposit money banks. The study recommended that employees involvement requires should be allowed, this will create a work environment where people have the ability and confidence, to obliged and initiate necessary steps to satisfy customer requirements in order to achieve organizational values and goals.

Okeoma (2019) conducted a study on Total Quality Management and Organizational Effectiveness in Selected Breweries in South East Nigeria. The objective of the study was to ascertain the relationship between total quality management variables (customer focus, strategic quality planning, supplier quality management, and knowledge and process management) and organizational effectiveness. The study adopted survey research design and data were sourced through primary sources. The population of the study constituted two thousand and thirty-nine employees of the selected breweries. Data was analyzed using Cronbach Alpha coefficient. Frequency tables and percentage analysis were employed to analyze the questionnaire items while multiple regression analysis was employed in testing the hypotheses. The finding shows that customer focus has significant positive relationship with organizational effectiveness in the selected breweries in South East Nigeria. The study recommended amongst others that breweries in South East Nigeria should improve employee involvement/skill and firm structure and allocate sufficient resources to implement total quality management successfully.

Nnadi, Akawnonu & Okafor (2018) conducted a study on An Empirical Analysis of Quality Control Techniques and Product Quality in Manufacturing Firms in South East Nigeria. The objective of the study aimed to examine the effect of inspection technique on relationship between quality control technique and product designing was used in this study. The total population used for this study is nine thousand two hundred and eighty-five (9,285) personnel, but utilized a total sample size of five hundred and sixty-four (564) which constitute the actual number of staff that issued questionnaire. Data collected were presented in table and the statistical tools used for data analysis is the Pearson Correlation with the aid of Statistical Package for Social Sciences (SPSS). The result of the study revealed that inspection technique has a significant positive effect on product designing. The study concluded that quality control refers to an activity in manufacturing industries which aim to establish quality standards check that they are being adhered to take corrective action where necessary and set improved standard where possible. The study recommends that inspection technique has to be maintained to facilitate the utilization of best practices, and total and also because of globalization quality control technique has to gain way for best practices in global manufacturing.

## The Relationship Between Quality Control and Profitability of Domestic and Industrial Plastic in South-East, Nigeria

Marire, Nwankwo and Agbor (2014) sought to evaluate The Problems of Quality Control in the Manufacturing Sector A Study of Nigeria Breweries Plc, Enugu. The study adopted survey research design. Data were collected through distribution of questionnaires and the use of textbooks, newspapers, magazines, and journals. The finding shows that quality control practice in manufacturing firms encountered problems as a result of the following; nonawareness of quality control techniques, inability to understand the need of customers, cost of application and management attitude. The study concluded that manufacturing firm has some quality objectives they want to achieve through quality control practice. The study recommended that training and seminars should be organized for the entire workers always, strict compliance to the established standard must be ensured and that job description should be properly done to help every staff know his or her role towards the achievement of the firm's quality goals.

Chang (2017) conducted a study on an empirical analysis of quality, productivity and profitability. The study was carried out at Montclair State. The study sought to examine the relationship between quality, productivity and profitability receive a lot of attention. The study adopted regression analysis techniques. The finding shows that there is a positive and highly significant relation between the company's work in process turnover and productivity. The study concluded that quality influence a productivity by way of both direct (via nonconformance costs) and indirect (via quality-related operational efficiency) impacts. The study recommended that the use of defect loss rate to better reflect the case company's quality performance. In reality, the financial impact of poor quality is better received by the management while the nonfinancial indicators (defect rate, customer complaint rate) provide employees with clearer guidance for future improvement.

Nnadi and Nwonye (2018) conducted a study on an evaluation of the relationship between quality control techniques and product quality in selected manufacturing firms in South East Nigeria. The objective of the study aimed to assess the effect of follow-up technique on production control and ascertain relationship between quality control technique and process designing. The descriptive survey research design was used in this study. The total population used for this study is two hundred and eighty-five (9,285) personnel, but utilized a total sample size of five hundred and sixty-four (564) which constitute the actual number of staff that issued questionnaire. Data collected were presented in tables and the statistical tools used for data analysis is the Pearson correlation, with the aid of statistical package for social sciences (SPSS). The result revealed that follow-up techniques had a positive effect on production control and that quality control technique has a significant positive effect on process designing. The study concluded that Quality production is not independent of itself but positively in relation with control which refers to the process of measuring the actual result of the operation of an organization in relation to the result which was planned for the organization either as a whole of direction and action accordingly. The study recommended that follow-up technique has to be maintain to facilitate the utilization of best practices, and that total quality management (TQM) being the management focus on the knowing the needs and wants of customers and on being capable of fulfilling those needs and wants must be taken as responsibility of top executives in all aspect of the overall management function that determines and implements the quality policy.

# The Relationship Between Quality Continual Improvement and Sales Volume of Domestic and Industrial Plastic in South-East, Nigeria

Chukwuma, Ezenyilimba & Aghara (2018) conducted a study on Effect of Product Packaging on the Sales Volume of Small and Medium Scale Bakery Firms in South East Nigeria. The study sought to assess the effect of product packaging on the sales volume of small and medium scale bakery firms. Survey research design (with the combination of both qualitative and quantitative approaches) was been adopted for this study among 197 management of bakeries in five (5) Eastern States. Data collected using questionnaire was analyzed and presented using linear regression at 5% level of significance. The result revealed that Product packaging has a significantly affect the sales volume of small and medium scale bakery firms in South East of Nigeria. The study concluded that marketing strategy in form of product packaging adopted in bakery firms influences the performance of small and medium scale bakery firms influences the performance. The study recommended that management of bakeries within the south east of Nigeria, should engage the services of professionals who are knowledgeable about customer reactions towards images, colors and texts in order to continuously develop and improve on their packaging so as to boost their performance was recommended.

Chukwuma and Nnabuko (2018) conducted a study on Effect of advertising activities on the sales volume of sme bakeries in South East, Nigeria. The study sought to investigate on the impact of advertising strategy on the performance of small and medium scale bakery firms in South-Eastern part of the country. The survey research design was adopted for in the study. The sample size was 196 management staff of bakeries in five (5) South Eastern

States. Data collected with the aid of questionnaire, was analyzed and presented using linear regression. The result of the study revealed that advertising does not significantly affect the sales volume of small and medium scale bakery firms in South East of Nigeria. The study concluded that the level of influence is dependent on the type, intensity and reach of the advertising strategy that is deployed in the business. The study recommended that the management of bakeries within the South Eastern Nigeria should look at adopting other advertising strategies that are accompanied with product qualities that might influence existing and potential customers to patronize their products.

Egwakhe, Akoma, Egbuta and Akinlabi (2021) conducted a study on Small and Medium Enterprises Innovation and Sales Volume in Selected Manufacturing SMEs in Ogun State, Nigeria. The objective of the study was to examine innovation effect on firm performance in selected manufacturing firms in Ogun State, Nigeria. Survey research design approach was adopted, 126 SMEs were purposively selected with 434 owners and managers as respondents. The analysis was based on inferential statistics with emphasis on multiple regression. The findings show that innovation in form of product, system, embedded input affected sales volume of the surveyed SMEs. The study concluded that innovations that match SMEs' pre-existing system, product and inputs require fewer coincidental changes and are easy to assess drive but more unlikely to bring dramatic change sales volume. The study recommended that owners and managers should selectively embrace and adopt innovations that are bet-fit to enhance and strengthen their sales volume.

#### Gap in Knowledge

Quality management is a set of policies, processes and procedures required for planning and execution (production/development/service) in the core business area of an organization (i.e., areas that can impact the organization's ability to meet customer requirements). Quality management plays a vital role in increasing revenue by minimizing the input and maximizing output. Most of the empirical review carried out in South-East, Nigeria were Okeoma (2019) conducted a study on Total Quality Management And Organizational Effectiveness In Selected Breweries In South East Nigeria; Nnadi *et al* (2018) conducted a study on An Empirical Analysis of Quality Control Techniques and Product Quality in Manufacturing Firms in South East Nigeria.; and Chukwuma *et al* (2018) carried a study on Effect of advertising activities on the sales volume of SME bakeries in South East, Nigeria while some done outside the state were; Egwakhe *et al* (2021) carried out a study on Small and Medium Enterprises Innovation and Sales Volume in Selected Manufacturing SMEs in Ogun State, Nigeria; Chang, C. (2017). An empirical analysis of quality, productivity and profitability; and Ezenyilimba, E; Ezejiofor, R. and Afodigbueokwu, Hillary E (2019) conducted a study on Effect of Total Quality Management on Organizational Performance of Deposit Money Banks in Nigeria. Therefore, the aimed at evaluating quality management and performance of domestic and industrial plastic in South-East, Nigeria in order to fill up this gap.

#### Methodology

The study was on the quality management of Domestic and Industrial Plastic and rubber manufacturing firms in South-East, Nigeria. The study employed the descriptive survey design. The areas of the study were the five states that made up the south eastern part of Nigeria. South East, Nigeria is one of the six geopolitical zones in the country. The target population of the study consisted of management and senior staff of ten (10) selected firms out of the thirty-nine (39) manufacturing firms of Domestic and Industrial plastic, rubber and foam Manufacturing Firms in South East, Nigeria. The population for the study was two thousand, seven hundred, and thirty-eight (2738). A stratified sampling method was adopted. The sample size of the study was three hundred and thirty-seven (337) using Freund and Williams formula. Two hundred and seventy-one (271) returned their questionnaire and accurately filled. The instrument for data collection used in the study was structured questionnaire. The validity of the instrument was ascertained with a proper structuring of the questionnaire and a conduct of a pre-test of every question contained in the questionnaire to ensure that they are valid. The reliability was tested using the Pearson correlation coefficient (r). It gave a reliability co-efficient of .73. Data were presented and analyzed by mean score (3.0 and above agreed while below 3.0 disagreed) and standard deviation using Sprint Likert Scale.

#### Data Presentation, Analyses and Interpretation

#### The Relationship Between Customer Focus and Output of Domestic and Industrial Plastic in South East, Nigeria

**Table 2:** Shows the Relationship Between Customer Focus and Output of Domestic and Industrial Plastic in South

 East, Nigeria

**Table 2:** Responses on the relationship between customer focus and output of domestic and industrial plastic in

 South East, Nigeria

		5	4	3	2	1	$\sum FX$	-	SD	Decision
		SA	Α	Ν	DA	SD		X		
1	My firm meets the needs of	610	300	72	32	34	1048	3.87	1.376	Agree
	the customers.	122	75	24	16	34	271			
		45.0	27.7	8.9	5.9	12.5	100%			
2	The value of expectations of	585	288	78	44	34	1029	3.80	1.396	Agree
	current and potential	117	72	26	22	34	271			
	customers are perceived and	43.2	26.6	9.6	8.1	12.5	100%			
	delivered									
3	My firm is responsive and	365	520	51	40	31	1007	3.72	1.258	Agree
	proactive delivering on their	73	130	17	20	31	310			
	promises.	26.9	48.0	6.3	7.4	11.4	100%			
4	There is consistence with	735	160	81	52	31	1059	3.91	1.433	Agree
	meeting and beating our	147	40	27	26	31	271			
	expectations.	54.2	14.8	10.0	9.6	11.4	100%			
5	There are transparent	350	580	45	45	26	1046	3.80	1.168	Agree
	relationships with our	70	145	15	15	26	271			
	customers	25.8	53.5	5.5	5.5	9.6	100%			
	Total Grand mean and							3.820	1.326	
	standard deviation									

#### Source: Field Survey, 2022

Table 2, 197 respondents out of 271 representing 72.7 percent agreed that the firm meets the needs of the customers. with mean score of 3.70 and standard deviation of 1.392. The value of expectations of current and potential customers are perceived and delivered with 189 respondents representing 69.8 percent agreed with mean score of 3.80 and standard deviation of 1.396. The firm is responsive and proactive delivering on their promises with 203 respondents representing 74.9 percent agreed with mean score of 3.72 and standard deviation of 1.258. There is consistence with meeting and beating our expectations with 287 respondents representing 69.0 percent agreed with mean score of 3.91 and 1.433. There are transparent relationships with our customers with 215 respondents representing 79.3 percent agreed with a mean score of 3.80 and standard deviation of 1.168.

## The Relationship Between Quality Control and Profitability of Domestic and Industrial Plastic in South- East Nigeria

Table 3 Shows the relationship between quality control and profitability of Domestic and industrial plastic in South-East Nigeria

**Table 3:** Responses on The Relationship Between Quality Control and Profitability Of Domestic And Industrial Plastic

 In South- East Nigeria

		5 SA	4 A	3 N	2 DA	1 SD	∑FX	- X	SD	Decision
1	The stability of operations in the firms increases income generations.	345 69 25.5	492 123 45.4	48 16 5.9	78 39 14.4	24 24 8.9	987 271 100%	3.64	1.25 1	Agree
2	The maintenance of the status quo brings in more earns.	410 82	420 105	36 12	96 48	24 24	986 271	3.64	1.31 5	Agree

		30.3	38.7	4.4	17.7	8.9	100%			
3	Improving on the quality of products attracts more customers.	320 64 23.6	408 102 37.6	78 26 9.6	100 50 18.5	29 29 10.7	935 271 100%	3.45	1.31 8	Agree
4	Application of the strong techniques increases better services to increased numbers of people.	250 50 18.5	540 135 49.8	15 5 1.8	96 48 17.7	33 33 12.2	934 271 100%	3.45	1.30 7	Agree
5	There is freedom from deficiencies that enhanced our gross margin.	350 70 25.8	420 105 38.7	45 9 3.3	96 48 17.7	39 39 14.4	950 271 100%	3.44	1.41 0	Agree
Sour	Total Grand mean and standard deviation <i>ce: Field Survey, 2022</i>							3.524	1.32 0	

Table 3, 192 respondents out of 271 representing 70.9 percent agreed that The stability of operations in the firms increases income generations with mean score of 3.64 and standard deviation of 1.251. The maintenance of the status quo brings in more earns with 187 respondents representing 69.0 percent agreed with mean score of 3.64 and standard deviation of 1.315. Improving on the quality of products attracts more customers with 166 respondents representing 61.2 percent agreed with mean score of 3.45 and standard deviation of 1.318. Application of the strong techniques increases better services to increased numbers of people with 185 respondents representing 68.3 percent agreed with mean score of 3.45 and 1.307. There is freedom from deficiencies that enhanced our gross margin with 175 respondents representing 64.5 percent agreed with a mean score of 3.44 and standard deviation 0f 1.410.

# The Relationship Between Quality Continual Improvement and Sales Volume of Domestic and Industrial Plastic in South East, Nigeria

**Table 4**: Responses on the relationship between quality continual improvement and sales volume of domestic and industrial plastic in South East, Nigeria

	,	5 SA	4 A	3 N	2 DA	1 SD	$\sum FX$	- X	SD	Decision
1	The consistent level quality in our product has attracted more sales.	610 122 45.0	300 75 27.7	72 24 8.9	32 16 5.9	34 34 12.5	1048 271 100%	3.87	1.376	Agree
2	The positive reputation in our product increases the number of sales.	585 117 43.2	288 72 26.6	78 26 9.6	44 22 8.1	34 34 12.5	1029 271 100%	3.80	1.396	Agree
3	The reliability of our produce and services improves the sales volume.	365 73 26.9	520 130 48.0	51 17 6.3	40 20 7.4	31 31 11.4	1007 271 100%	3.72	1.258	Agree
4	Our produces attract more priorities to customers that makes them to come for more.	735 147 54.2	160 40 14.8	81 27 10.0	52 26 9.6	31 31 11.4	1059 271 100%	3.91	1.433	Agree
5	The internal system of checks and balances for the quality of our product induces more customers to come.	350 70 34.8	584 145 47.1	45 15 4.8	30 15 4.8	26 26 8.4	1035 271 100%	3.80	1.168	Agree
Sour	Total Grand mean and standard deviation <i>ce: Field Survey, 2022</i>							3.820	6.631	

Table 4 197 respondents out of 271 representing 72.7 percent agreed that the consistent level quality in our product has attracted more sales with mean score of 3.70 and standard deviation of 1.392. The positive reputation in our product increases the number of sales with 189 respondents representing 69.8 percent agreed with mean score of 3.66 and standard deviation of 1.414. The reliability of our produce and services improves the sales volume with 203 respondents representing 74.9 percent agreed with mean score of 3.64 and standard deviation of 1.322. Our produces attract more priorities to customers that makes them to come for more with 187 respondents representing 69 percent agreed with mean score of 3.84 and 1.498. The internal system of checks and balances for the quality of our product induces more customers to come with 215 respondents representing 81.9 percent agreed with a mean score of 3.95 and standard deviation of 1.161.

### Table 5: Contingency Table of Research Question One

**Test of Hypotheses** 

**Test of hypothesis one:** There is no positive significant relationship between quality planning and output of Domestic and Industrial Plastic in South-East, Nigeria

Table 5: Contingency Table of Research Question One

		SA	A	Ν	DA	SD
1	My firm meets the needs of the customers.	122	75	24	16	34
2	The value of expectations of current and potential customers are perceived and delivered	117	72	26	22	34
3	My firm is responsive and proactive delivering on their promises.	73	130	17	20	31
4	There is consistence with meeting and beating our expectations.	147	40	27	26	31
5	There are transparent relationships with our customers	70	145	15	15	26
	Total	529	462	109	99	156

**Table 6**: Pearson Correlation on There is no positive significant relationship between Customers focus and output

 of Domestic and Industrial Plastic in South-East, Nigeria

Correlations						
		My firm	The value of	My firm is	There is	There are
		meets	expectations	responsiv	effective	transparent
		the needs	of current	e and	budgetin	relationships
		of the	and	proactive	g can turn	with our
		customer	potential	delivering	resources	customers
		s.	customers	on their	into	
			are	promises.	revenue.	
			perceived			
			and			
	<u> </u>		delivered.	770**	700**	670**
My firm meets the	Pearson	1	.968**	.778**	.700**	.679**
needs of the	Correlation		000	000	000	000
customers.	Sig. (2-tailed)	274	.000	.000	.000	.000
	N	271	271	271	271	271
The value of	Pearson	.968**	1	.775**	.737**	.682**
expectations of	Correlation	000		000	000	000
current and	Sig. (2-tailed)	.000	074	.000	.000	.000
potential	Ν	271	271	271	271	271
customers are						
perceived and delivered						
Well-articulated	Pearson	.778**	.775**	1	.774**	.617**
programme in	Correlation	.778	.775	T	.//4	.017
the firms boost	Sig. (2-tailed)	.000	.000		.000	.000
future.	N	271	271	271	271	271
My firm is	Pearson	.700**	.737**	.774**	1	.648**
responsive and	Correlation	.700		.,,,	-	.040
responsive and	conclation					

proactive	Sig. (2-tailed)	.000	.000	.000		.000
delivering on their promises.	N	271	271	271	271	271
There are transparent	Pearson Correlation	.679**	.682**	.617**	.648**	1
relationships	Sig. (2-tailed)	.000	.000	.000	.000	
with our customers.	N	271	271	271	271	271
	**. Correl	ation is signific	ant at the 0.01 le	evel (2-tailed).		

Table 6 show the Pearson correlation matrix on customers focus and output of Domestic and Industrial Plastic showing the correlation coefficients, significant values and the number of cases. The correlation coefficient result values range from .617 < .968. This value indicates that correlation is significant at 0.05 level (2 tailed) and implies that there was positive significant relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria (r=.617 < .968). The computed correlations coefficient is greater than the table value of r = .000 at alpha level for a two-tailed test (r=.617 < .968, p<.05).

#### **Decision Rule**

The decision rule is to accept the null hypothesis if the computed r is less than the tabulated r otherwise rejects the null hypothesis.

#### Decision

The computed r = .617 < .968 is greater than the table value of .000, we reject the null hypothesis. Therefore, we concluded that there was positive significant relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .617 < .968, p < .05).

**Test of Hypothesis Two:** There is no Positive Significant Relationship Between Quality Control and Profitability of Domestic and Industrial Plastic in South-East, Nigeria.

#### Table 7: Contingency Table of Research Question Two

		SA	А	N	DA	SD
1	The stability of operations in the firms increases income generations.	69	123	16	39	24
2	The maintenance of the status quo brings in more earns.	82	105	12	48	24
3	Improving on the quality of products attracts more customers.	64	102	26	50	29
4	Application of the strong techniques increases better services to increased numbers of people.	50	135	5	48	33
5	There is freedom from deficiencies that enhanced our gross margin.	70	105	9	48	39
	Total					

Correlations						
		The stability of operation s in the firms increases income generatio ns.	The maintena nce of the status quo brings in more earns.	Improvin g on the quality of products attracts more customer s.	Application of the strong techniques increases better services to increased numbers of people.	There is freedom from deficiencies that enhanced our gross margin.
The stability of operations	Pearson Correlation	1	.829**	.703**	.794**	.747**
in the firms increases	Sig. (2- tailed)		.000	.000	.000	.000
income generations.	N	271	271	271	271	271
The maintenance	Pearson Correlation	.829**	1	.748**	.767**	.833**
of the status quo brings in	Sig. (2- tailed)	.000		.000	.000	.000
more earns.	N	271	271	271	271	271
Improving on the quality of	Pearson Correlation	.703**	.748**	1	.855**	.736**
products attracts more	Sig. (2- tailed)	.000	.000		.000	.000
customers.	N	271	271	271	271	271
Application of the strong	Pearson Correlation	.794**	.767**	.855**	1	.834**
techniques increases	Sig. (2- tailed)	.000	.000	.000		.000
better services to increased numbers of people.	N	271	271	271	271	271
There is freedom from	Pearson Correlation	.747**	.833**	.736**	.834**	1
deficiencies that	Sig. (2- tailed)	.000	.000	.000	.000	
enhanced our gross margin.	N	271	271	271	271	271
**. Correlation i	s significant at t	he 0.01 level (2	-tailed).			

**Table 8:** Pearson Correlation on there is no positive significant relationship between quality control and profitability

 of Domestic and Industrial Plastic in South-East, Nigeria

Table 8 represents the Pearson correlation matrix on quality control and profitability of Domestic and Industrial Plastic showing the correlation coefficients, significant values and the number of cases. The correlation coefficient result values range from .703 < .834. This value indicates that correlation is significant at 0.05 level (2 tailed) and implies that there was positive significant relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria (r=.703 < .834). The computed correlations coefficient is greater than the table value of r = .000 at alpha level for a two-tailed test (r= . 703 < .834).

#### **Decision Rule**

The decision rule is to accept the null hypothesis if the computed r is less than the tabulated r otherwise rejects the null hypothesis.

#### Decision

The computed r = .703 < .834 is greater than the table value of .000, we reject the null hypothesis. Therefore, we concluded that there was positive significant relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .703 < .834, p < .05).

**Test of Hypothesis Three:** There is no Positive Significant Relationship Between Quality Continual Improvement and Sales volume of Domestic and Industrial Plastic in South-East, Nigeria

Table 9: Contingency Table of Research Question Three

		SA	Α	Ν	DA	SD
1	The consistent level quality in our product has attracted more sales.	122	75	24	16	34
2	The positive reputation in our product increases the number of sales.	117	72	26	22	34
3	The reliability of our produce and services improves the sales volume.	73	130	17	20	31
4	Our produces attract more priorities to customers that makes them to come for more.	147	40	27	26	31
5	The internal system of checks and balances for the quality of our product induces more customers to come.	70	145	15	15	26
	Total					

 Table 10: Pearson Correlation on There Is No Positive Significant Relationship Between Quality Continual

 Improvement and Sales Volume of Domestic and Industrial Plastic in South-East, Nigeria

			Correlations			
		The	The	The	Our	The internal
		consisten	positive	reliability	produces	system of
		t level	reputation	of our	attract	checks and
		quality in	in our	produce	more	balances for the
		our	product	and	priorities	quality of our
		product	increases	services	to	product induces
		has	the	improves	customer	more customers
		attract	number of	the sales	s that	to come.
		more	sales.	volume.	makes	
		sales.			them to	
					come for	
					mor.	
The consistent	Pearson	1	.968**	.778**	.700**	.679**
level quality in	Correlatio					
our product has	n					
attract more	Sig. (2-		.000	.000	.000	.000
sales.	tailed)					
	Ν	271	271	271	271	271
The positive	Pearson	.968**	1	.775**	.737**	.682**
reputation in our	Correlatio					
product increases	n					
the number of	Sig. (2-	.000		.000	.000	.000
sales.	tailed)					
	Ν	271	271	271	271	271

The reliability of our produce and	Pearson Correlatio n	.778**	.775**	1	.774**	.617**
services improves the sales volume.	Sig. (2- tailed)	.000	.000		.000	.000
	N	271	271	271	271	271
Our produces attract more priorities to	Pearson Correlatio n	.700**	.737**	.774**	1	.648**
customers that makes them to	Sig. (2- tailed)	.000	.000	.000		.000
come for mor.	Ν	271	271	271	271	271
The internal system of checks and balances for	Pearson Correlatio n	.679**	.682**	.617**	.648**	1
the quality of our product induces	Sig. (2- tailed)	.000	.000	.000	.000	
more customers to come.	N	271	271	271	271	271
**. Correlation is sig	gnificant at the	0.01 level (2-ta	ailed).			

Table 10 is the Pearson correlation matrix on quality continual improvement and sales volume of Domestic and Industrial Plastic showing the correlation coefficients, significant values and the number of cases. The correlation coefficient result values range from .617<.698. This value indicates that correlation is significant at 0.05 level (2 tailed) and implies that there was positive significant relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria (r=.617<.698). The computed correlations coefficient is greater than the table value of r = .000 at alpha level for a two-tailed test (r=.617<.698, p<.05)

#### **Decision Rule**

The decision rule is to accept the null hypothesis if the computed r is less than the tabulated r otherwise rejects the null hypothesis.

#### Decision

The computed r = .617 < .698 was greater than the table value of .000, we reject the null hypothesis. Therefore, we concluded that there was positive significant relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .617 < .698, p < .05).

#### **Discussion of Findings**

The Relationship Between Customers Focuses and Output of Domestic and Industrial Plastic in South-East, Nigeria From the result of hypotheses one, the computed r = .617 < .968 is greater than the table value of .000, The study concluded that there was positive significant relationship between quality customers and output of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .617 < .968, p < .05). These result shows that the increase in organizations output is totally dependent on the effort of the employees and the plans of the organizations management. Employees involvement should be allowed in the organization as it will create a work environment where people have the ability and confidence, to obliged and initiate necessary steps to satisfy customer requirements in order to achieve organizational values and goals. Quality planning is implemented as a means of "developing the products, systems, and processes needed to meet or exceed customer expectations (Nanda, 2016).

# The Relationship Between Quality Control and Profitability of Domestic and Industrial Plastic in South-East, Nigeria

The result of test of hypotheses two shows the computed r = .703 < .834 is greater than the table value of .000, The study concluded that there was positive significant relationship between quality control and profitability of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .703 < .834, p < .05). In line with the hypotheses Horton, Potters and Munichiello, (2021) asserts that profitability is a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment. Although a company

can realize a profit, this does not necessarily mean that the company is profitable. Profitability arises when the aggregate amount of revenue is greater than the aggregate amount of expenses in a reporting period.

# There is No Positive Significant Relationship Between Quality Continual Improvement and Sales Volume of Domestic and Industrial Plastic in South-East, Nigeria

The result of hypotheses three revealed that the computed r = .617 < .698 was greater than the table value of .000, The study concluded that there was positive significant relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .617 < .698, p < .05). This result shows the importance of hiring and recruiting of skilled and experience employees who have the ability of delivering quality service which is one of the key strategies to customer retention, increase in profitability and output. Quality Assurance prevents mistakes and defects in products and helps in avoiding problems during the delivery of products or services to customers. In support of these hypotheses, Sheikh, and Walk (2020) noted that quality assurance system intends to build and maintain an organization's credibility and trust with the customer base. It also improves work procedures and effectiveness that empowers an organization to better compete with others.

#### Summary of Findings

#### The Following Findings Were Made by The Study

- i. Hypotheses one, there was positive significant relationship between customers focus and output of Domestic and Industrial Plastic in South-East, Nigeria with the probability value of (r = .617 < .968, p <.05).
- ii. There was positive significant relationship between quality control and profitability of domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .703 < .834, p < .05).
- iii. There was positive significant relationship between quality continual improvement and sales volume of Domestic and Industrial Plastic in South-East, Nigeria as reported in the probability value of (r = .617<.698, p <.05).</p>

#### Conclusion

Quality management is important in organization and should be a must in the organizations aim and objective. The study on quality management and performance of domestic and industrial plastic manufacturing firms therefore concludes that the growth, development and quality management of organizations is highly determined through quality planning, quality control and quality assurance which enhances the organizations output, profitability and sales volume. The course of action of quality management involves a contribution or guiding principle that are developed by a team member in the organization to ensure that products and services are of excellent values and fit for a specified purpose.

#### Recommendation

From the findings of the study, the following recommendations were made

- i. For customers focus in the organizations, all individuals should be allowed to contribute their opinion either directly or indirectly on how to improve the organizations product quality because no know ledge is a waste.
- ii. Organizations should try as much as possible to deliver their services based on the assurance given to customers and not vice versa as this will help to retain customers and improve the organizations standard.
- iii. The management of organizations should also try and establish customer relationship which will enable customers to reveal the assessment of the organizational products

#### References

AccountingTools (2021). Profitability definition. Retrieved from https://www.accountingtools.com/articles/2017/5 /14/profitability

- AccountingTools (2021). Sales volume definition. Retrieved from https://www.accountingtools.com/articles/whatis-sales-volume.html.
- Adam, B. and Mansa, J. (2020). Quality management. Retrieved from https://www.investopedia.com/terms/q/qua lity-management.asp.

- American Society for Quality (2021). Quality assurance & quality control. Retrieved from https://asq.org/quality-resources/quality-assurance-vs-control.
- Bhasin, H. (2020). What is Sales Volume; Definition and Data Calculation. Retrieved from https://www.marketing91.com/sales-volume/

Boris, K. and Jens, G. (2018). The concept of management: In search of a new definition. HR Governance pp 3-26.

Brianna, W. (2021). Quality planning defined. https://study.com/academy/lesson/what-is-quality-planning-definition-process-tools.html

- Brummel, J. (2020). The importance of customer focus. Retrieved from <u>https://www.zendesk.com/blog/what-is-</u> <u>customer-focus/</u>
- Chang, C. (2017). An empirical analysis of quality, productivity and profitability. *Global Journal of Accounting and Finance*,1(2);1-15.
- Chron, C. (2020). Why is quality planning important in project management; Retrieved from https://smallbusiness.chron.com/quality-planning-important-project-management-81402.html
- Chukwuma, A. I. and Nnabuko, J. O. (2018). Effect of advertising activities on the sales volume of sme bakeries in South East, Nigeria. *International Journal of Marketing and Management Research*,9(5);1-17.
- Chukwuma, A. I., Ezenyilimba, E., & Aghara, V. N. O. (2018). Effect of product packaging on the sales volume of small and medium scale bakery firms in South East Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 988–1001.

Cox, J. and Goldratt, E. M. (1986). *The goal: a process of ongoing improvement*. [Croton-on-Hudson, New York]: North River Press. ISBN 0-88427-061-0.

- DeBenedetti,J.,(2021) Components of Good Quality Management. https://smallbusiness.chron.com/theories-total-quality-management-55715.html
- Deming, W. E. (1986). *Out of crisis*. Cambridge, M. A: MIT Centre for Advanced Engineering Study.
- Deepak, S. (2020). What is customer focus: 7 ways to build a customer-focused culture. Retrieved from https://www.smartkarrot.com/resources/blog/customer-focus/.
- Dewar, C., Doucette, R., and Epstein, B. (2019). Continual Improvement. <u>https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-organization-blog/how-continuous-improvement-can-build-a-competitive-edge</u>

Dill, K. (2021). Your next boss: More harmony, less authority. Wall Street Journal, 1:1-4.

- Egwakhe, J. A., Akoma, L. O., Egbuta, O. U. and Akinlabi, B. H. (2021). Small and Medium Enterprises Innovation and Sales Volume in Selected Manufacturing SMEs in Ogun State, Nigeria. *International Journal of Managerial Studies and Research*, 9(4);127-136.
- Eniola, A. A. (2014). The role of SME firm performance in Nigeria. *Arabian Journal of Business and Management Review*, 3(12);1-15.
- Enrique, D. (2015). What is your definition of quality? Retrieved from https://www.gbnews.ch/what-is-your-definition-of-quality/.
- Eric, N; Debra, S. and James, T. M. (1995). *The Theory of Constraints and its implications for Management Accounting.* North River Press.
- Ezenyilimba, E; Ezejiofor, R. and Afodigbueokwu, H. E. (2019). Effect of total quality management on organizational performance of deposit money banks in Nigeria. *International Journal of Business & Law Research* 7(3):15-28.
- Ezra, K. (2020). The 9 core elements of a quality management system. Retrieved from https://www.qualio.com/blog/the-9-core-elements-of-a-quality-management-system.
- Gurau, A. (2020). Why is Quality so important for an organization? Retrieved from https://www.cmcglobal.org/content/why-quality-so-important-organization
- Horton, M; Potters, C. and Munichiello, K. (2021). *The difference between profitability and profit*. Retrieved from https://www.investopedia.com/ask/answers/012715/what-difference-between-profitability-and-profit.asp
- Kelderman, E., (2021) The 9 Core Elements of a Quality Management System

https://www. qualio.com/blog/the-9-core-elements-of-a-quality-management-system

- Khan, M.I; Kanwal, I.K; Muhammad, S. and Mahmood, S. 2017). Impact of quality management practices on the performance of manufacturing sectors. *Abasyn Journal of Social Sciences*, 1(4);1-17.
- Kreismann, D. and Talaulicar, T. (2021). Business ethics training in human resource development: A Literature Review. *Human Resource Development Review*, 20(1), 68-105.
- Marire, M.I; Nwankwo, B.E. and Agbor, N.S. (2014). The problems of quality control in the manufacturing sector A Study of Nigeria Breweries Plc, Enugu. *Journal of Business and Management*, 16(12);96-107.

- Milanoi, M.E. (2016). Quality management and organizational performance of manufacturing firms in Nairobi County. Research for the award of the degree of Master of Business Administration (MBA), school of business, university of Nairobi, 1-63.
- Nanda, V. (2016). Quality management system handbook for product development companies. CRC Press. p. 352.

Nigel, S. (2017). Outputs, outcomes and impact. Retrieved from https://www.intrac.org/wpcms/wpcontent/uploads/2017/01/Outputs-outcomes-and-impact.pdf.

- Nnadi, C. F. and Nwonye, A. C. (2018). An evaluation of the relationship between quality control techniques and product quality in selected manufacturing firms in South East Nigeria. *Scholars Journal of Economics, Business and Management*, 1(2);1-12.
- Okeoma, V. C. (2019). Total quality management and organizational effectiveness in selected breweries In South East Nigeria. *International Journal of Business & Law Research*,7(4):59
- Paul, G. (2021). What is output? Definition and meaning. Retrieved from https://marketbusinessnews.com/financia I-glossary/output-definition-meaning/
- Prachi, J. (2015). *Importance of quality management*. Retrieved from https://www.managementstudyguide.com/i mportance-of-quality-management.htm.
- Sestrem, T. (2020). Why is quality management important for business success? Retrieved from https://www.genebraquality.com/2020/11/why-is-quality-management-important-for-business-success/.
- Sharabi, M. (2015). Entry, "Customer Focus", in Su MiDahlgaard-Park(Ed.) Encyclopedia of Quality and the Service Economy, Sage Pub. (114-118).
- Sheikh, S.S.and Walk, G. (2020). An introduction to quality control and quality assurance. Retrieved from https://www.greycampus.com/blog/quality-management/quality-control-and-quality-assurance
- Shirouzu, N. (2017). *China carmakers narrow quality gap on global rivals: Report. Reuters*. Archived from the original on 17 February 2018. Retrieved 16 February 2018.
- Schoultz, M. (2021). *Why is customer focus important*? Retrieved from https://digitalsparkmarketing.com/custome r-focus/.
- Sumbul, T. (2020). Why you should care about organizational performance? Retrieved from https://www.ckju.net/en/organizational-performance-what-it-is-how-to-measure-and-improve-it
- Terry, J. (2021). Continuous improvement, https://www.planview.com/resources/guide/lean-principles-101/whatis-continuous-improvement/ Continuous improvement,
- TQP (2020). What is quality? Quality definition | quality meaning. Retrieved from <u>https://techqualitypedia.com/quality/</u>