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## **BUSINESS PROCESS RE-ENGINEERING AND CUSTOMER RESPONSES IN SELECTED FOOD AND BEVERAGES COMPANIES IN LAGOS STATE**

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### **Abstract**

*Business Process Reengineering (BPR) is the method by which the existing business practices are designed and changed to achieve dramatic improvement in organizational performance. Organizational re-engineering is often directed towards customer satisfactions and retention for profitability and competitiveness. But most organizational re-engineering are often implemented without measuring customer responses in order to improve their present and future performance. This study assess customer responses in selected food and beverages industry in order to further make strategic decision for improved performance and competitiveness. Two hypotheses were tested to determine, whether: there is a significant relationship between customer satisfaction and quality product; there is a significant relationship between price and customer retention. Survey research method was adopted for the study and 2150 questionnaires were given to the respondents which were selected randomly, out of which 1900 returned duly completed and properly filled questionnaires. Correlation was used to test the hypotheses for data analysis. Findings show that provision of quality product enhances customer satisfaction and competitive prices in the industry improved customer retention. The study recommends that BPR should be used by company for production of quality product, quick service delivery, charging of reasonable price, cost reduction which result in profitability and cost savings for the company in the long run.*

**Keywords:** Business Process Re-engineering, Quality Product, Customer Satisfaction.

## **1. Introduction**

Organizations in competitive environment are forced to re-evaluate their business models and underlying business processes to cope with the changing condition. Business process re-engineering represents a core of the functioning of an organization because the company or business primarily consists of processes not product or services. In other words, managing a business means managing its processes (Groover, Jeong, Keitinger, Jeng 2011). Despite the importance, business processes have been neglected for a long time in managerial studies mainly due to the fact that departments are structured in a functional or product oriented way.

The extensive literature on business process management (e.g. Davenport, 1993, Hammer & Champy 1993; Caron, Jarvenpea, and Stoddard, 1994; Earl, Sampler and Short, 2005) suggests that organizations can enhance their overall performance by adopting a process view of business.

The corporate world has historically measured financial performance and sales volume. Measures of financial performance, sales volume and customer satisfaction are not wrong: they are merely insufficient. Many organizations fail to understand how these indicators fit within the comprehensive measurement strategy that is required to effectively re-engineer and re-design processes (Davenport, 1994). An increasing number of academics are now extolling the central role of business process re-engineering in improving organization performance.

Most importantly, Kaplan and Norton (2004) places business process re-engineering at the Centre of their approach of measuring a firm's progress in implementing strategy. In moving to

a process enterprise, manager needs to conduct a thorough analysis to determine what aspect of process performance are most directly linked to achieving the organization's overall objectives. Business process re-engineering involves the radical redesign of core business processes to achieve dramatic improvement in productivity, quality product, cycle times, quick service delivery, charging of reasonable price and quality control.

Most organizations that have used process re-engineering agree that it does indeed provide numerous benefits including cost saving, quick service delivery, more efficient execution of work, improved customer's focus and better integration across the organization to enable them satisfy their customers in order to retain them. The quality of product and price competitiveness leads to customer satisfaction and retention by the organization. This paper assesses the concept of process re-engineering. It also seeks to evaluate its integration in to organization system and how it could be implemented for organization improved performance.

### **Statement of the Problem**

The concept of Business Process Re-engineering could be traced to the Business Process Management of the 1990's. Many organizations have adopted it to be competitive as to cope with the changing condition. However, experiences have shown that companies that are adopting Business Process Re-engineering have different success level (Hammer & Champy, 1993). Individual organization success depends on established balance between organization structure and organization's environment. In other words, not all organizations have benefitted substantially from Business Process Re-engineering. Many firms have found that even dramatic level of Process re-engineering and improvements often do not translate into better business performance. Many organizations have based their application of Business Process Re-engineering on faulty methods and assumption that tend to undermine quality products, quick service delivery, competitive prices, customers satisfaction and retention. Many managers that

have adopted it lack project management re-orientation and are unaware of the organization resistance to change. The extent to which these have influenced the effectiveness of business process re-engineering in selected food and beverages companies in Lagos State is the main focus of this paper.

### **Research Questions**

- i. To what extent does quality product improved customer satisfaction?
- ii. Does reasonable price enhance customer retention?

### **Hypotheses**

Two null hypotheses were postulated:

1. There is no significant relationship between Customer satisfaction and quality product.
2. There is no significant relationship between price and customer retention.

### **Literature Review**

#### ***Goal and Objectives of Business Process Re-engineering***

The goal of business process re-engineering is to redesign and change the existing business practices or process to achieve dramatic improvement in organizational performance. Organizational development is a continuous process but the pace of change has increased in manifolds. In a volatile global world, organizations enhance competitive advantage through Business Process Re-engineering (BPR) by radically redesigning selected processes.

Sharma (2006) posited that business process re-engineering implies transformed processes that together form a component of a larger system aimed at enabling organization to empower themselves with contemporary technologies business solution and innovations. Organizational effective performance has become a watchword in modern business; as a result there are inexorable pressures for Business Process Re-engineering. The rampant and rapid expansion of competition across markets and geographic raises important questions such as:

- How should work be redesigned?
- Who does it?
- Where do they do it?
- How to get it performed?

These questions necessitate venturing of Business Process Re-engineering into the overall strategy for sustained competitive advantage, check costs, and differentiate products and effective price management with greater intensity and then flawless execution (Groover, et al 2011). At this juncture, it is pertinent to ask what is “Business Process” and as well as “Business Process Re-engineering.”

According to Stoddard and Jarvenpea (1995) Business Process are simply a set of activities that transformed a set of inputs into a set of outputs (goods or services) for another person or process using people and equipment’s. Business process entails set of logically related tasks performed to achieve a defined business output or outcome. It involves a wide spectrum of activities procurement, order fulfillment, product development, customer service and sale (Sharma 2006). Thus, Business Process Re-engineering becomes an offshoot of Business Process. Hammer and Champy (1993) argued that “the fundamental reconsideration and radical redesign of organizational process, in order to achieve drastic improvement of current performance in cost, service and speed enjoys a fair measure of consensus. One can then assume

that Business Process Re-engineering connotes the analysis and design of workflows and processes within and between organizations (Davenport and Short 1990).

### **Basic Assumptions of Business Process Re-engineering.**

Business Process Reengineering relies on a different school of thought. It believes in continuous process improvement, re-engineering assumes that current process is irrelevant and there is need to commence another one. Such a clean slate perspective enables the designers of business process to focus on new process. This is to project oneself on

- What should the process look like?
- How do my customers want it to be like?
- How do best-in-class companies do it?
- What we might be able to do with no technology?

Business Process Re-engineering in the actual sense, have mixed successes therefore, business process reengineering projects aimed at transforming inefficient work process. Henceforth, organizations such as food and beverages industry and other manufacturing industries need to optimize results from this model in real business situations.

### **Application of Business Process Re-engineering in Nigeria Food and Beverages Industry.**

Food and beverages industry comprises of companies that are in to the production of soft drinks, beer, wine, table and sachet water, cocoa beverages, fast foods, etc.

In Nigeria, the changing dynamics of food and beverages and other manufacturing industries market forced players at all levels to re-engineer. The food and beverages industry operations and functions were redesigned to meet emerging challenges of diversification, slashing operating cost, outsourcing, portfolio investment, production and manufacturing systems. The change brought about by re-engineering in food and beverages industry are reflected in product and services to give a new form or structure by introducing product and service scheme such as sachet beverages of different price range. In order to survive and flourish in a global economy business must respond to major trends reshaping markets. Hence, the dynamics of the underlying forces at work require a renewed thrust on BPR in food and beverages industry to contribute to management and diversification of growth horizons by impacting on productivity and profitability (Aremu & Saka, 2006).

Acting on this conviction, BPR has continuously improved organizational performance in Nigeria and the manufacturing sector has in recent times witnessed tremendous reengineering process in Nigeria. The modern business is characterized by stiff competition both locally and globally, hence, reengineering process becomes a veritable engine of organizational survival. Besides an organization which relies on arm chair business process risks redundancy or even extinction in the face of modern technological order.

The multiplier effects of BPR provide an impetus to the industry through impressive success across companies.

Several authors have provided their own interpretation of the changes being applied to the organization, Davenport and Short (1990) have described BPR as the analysis and design of work flows and processes within and between organizations. Hammer and Champy (1993) have promoted the fundamental rethinking and radical design of business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost reduction, quality product, quick service delivery. Sharma (2006) has focused on the rethinking,

restructuring and streamlining of the business structure, processes, methods of working, management systems and external relationships through which value is created and delivered.

Keitinger and Groove (2004) on the other hand, believe that BPR involves the concurrent redesign of processes, organizations and their supporting information systems to achieve radical improvement in time, cost quality and customer's regard for the company's products and services. While Robert (2007) describes the fundamental rethinking and design of operating processes and organizational structure, the focus is on the organization's core competencies to achieve dramatic improvements in organizational performance, as BPR's essential components.

Although the definition by the Davenport and Short (1990) is much narrower, their description of the concept is as far reaching. In practice, both TQM and BPR have focused on the definition and operation of business processes to produce products and services within a defined business scope. However, neither TQM nor BPR have focused on strategic business direction setting or planning but of course this may be necessary components in achieving this vision. Also each methodology, in its own right, does not have the intention or the capability of reinventing business or industry. More importantly only one of these definitions refers to information systems. It can thus be said that BPR is not necessarily dependent on IT solutions. This is general agreement that IT can be powerful enabler, with the "radical improvements sought more a function of organizational process redesign rather than IT implementation" (Davenport & Beer, 1995; Hammer and Champy, 1993). While IT specialists insists that new systems are central to BPR, the challenge is increasingly one of organizational change and the visioning involved in that change rather than the technology itself (Earl, et al, 2005).

### **Theoretical framework**

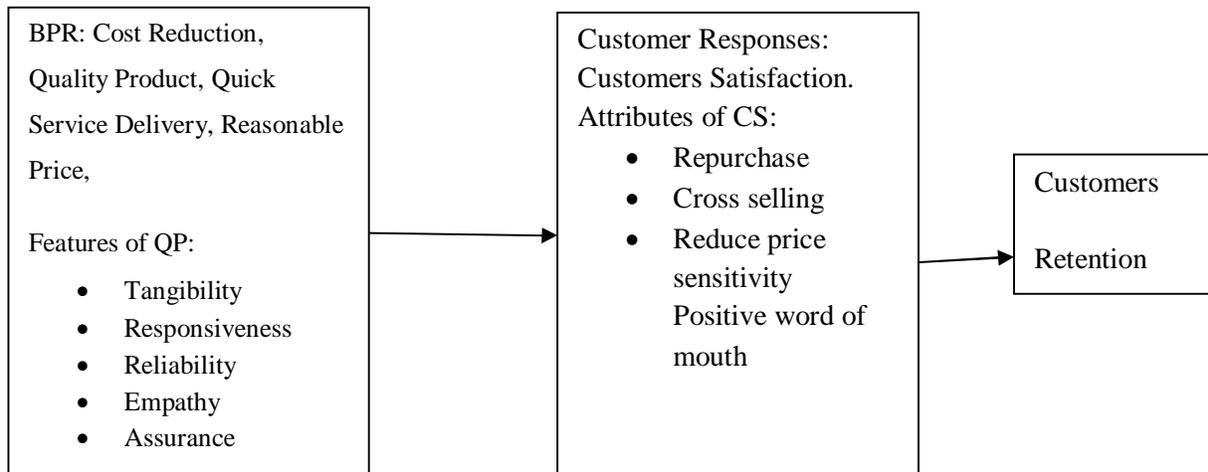
The concept of reengineering traces its root back to management theories developed as early as nineteenth (19th) century. The purpose of reengineering is to "make all your processes the best-in class". Fredrick Taylor suggested in the 1860's that managers could discover the best process of performing work and reengineering echoes the classical believe that there is one best to conduct tasks. In Taylor's time, technology did not allow large companies to design processes in a cross-functional or cross dimensional manner. Specialization was the stake-of- the- art method to improve efficiency given the technology situation at that time.

According to Hammer and Champy (1993) business process reengineering (BPR) is defined as the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service, and speed." Although Hammer and Champy (1993) declared that classical organizational theory is obsolete, classical ideas such as division of labour had an enduring power and applicability that reengineering has failed to demonstrate. Business process reengineering (BPR) does not appear to qualify as a scientific theory because among other things, it is not duplicable and it is limited in scope (Maureen et al, 2005). Today organizational development is a continuous process but the pace of change had increased in manifold. This means that in this competitive environment organizations will enhance its competitive advantage in its operation if it effectively design and implement Business Process Reengineering (BPR) selected processes. Davenport (1993) a famous BPR theorist emphasized the term process innovation, in his definition and he described it as "encompasses the envisioning of new work strategies, the actual process design activity, and the implementation of the change in all its complex technological, human, and organizational dimensions". The question now is what is Business Process

Reengineering? Business Process Reengineering (BPR)” is the analysis and design of workflows and processes within and between organizations (Davenport and Short, 1990).

At this juncture, it is relevant to emphasize the term “business process”. Davenport and Short (1990) defined business process as a set of logically related tasks performed to achieve defined business actions. A process is a structured measure set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organization, Davenport (1993). Examples of processes include developing a new product, ordering goods from a supplier, creating marketing plan, etc.

**Fig 1: Relationship between business process reengineering and customer responses**



*Source: Adapted from Matzler, K, et al (2005) The relationship between customer satisfaction and shareholder value, total quality management, vol.16, No. 5*

<b>Dimension</b>	<b>Description</b>
Tangible	Appearance of physical product
Reliability	Ability to perform the promised service dependably, accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence in the product
Empathy	Caring individualized attention to firm provides to its customers.
Cross selling	The total sales of the company grow and markets can be penetrated faster because customers who have become loyal are responding between firms marketing efforts.
Low price sensibility	Satisfied customers are less price sensitive. The lower price – sensibility increase the willingness of the customers to pay for the benefits they receive.
Word of mouth	Positive word- of – mouth can significantly enhance the effectiveness of marketing communication and therefore, lower acquisition costs for new customers, which increases a firms cash flow.
Repurchase	The continuous repurchase of a company’s product results in a

	stable relationship between customer and supplier which allow a firm to generate meaningfully knowledge about the customers.
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*Source: Source: Matzler, K, et al (2005) The relationship between customer satisfaction and shareholder value, total quality management, vol.16, No.5*

### **Concept of Business Process Reengineering**

The concept of reengineering has been widely adopted by industries such as food and beverages, financial services, retailing and manufacturing. Reengineering is the radical redesign of an organization's processes, especially its business processes. Rather than organizing a firm into functional specialties' like production, accounting, marketing e.t.c, and looking at the task that each function performs, we should according to the reengineering theory, be looking at complete process from materials acquisitions, to production, to marketing and distribution. The firm should be reengineered into a series of processes.

*The reengineering concepts involve four dimensions that are stated below:*

- i. **Innovative Rethinking:** This is a process that it is itself utterly dependent on creativity, inspiration and old fashion luck. Drucker (1993) argues that this paradox is apparent only not real most of what happens in successful innovations is not the happy occurrences of a blinding flash of insight but rather, the careful implementation of spectacular but systematic management discipline.
- ii. **Process Function:** Taking a systematic perspective, Hammer and Champy (1993) describes process functions as a collection of activities that take one or more kinds of input and creates an output that is of value to the customer. Typical process of this includes ordering of organizational structure, manufacturing, production, development, delivery and invoicing.
- iii. **Radical Change:** In radical change, a key business process is the transformation of organizational element; it is essential to an organization survival. Change leads to new ideas, technology, innovation and improvement. Therefore, it is important that organizations recognize the need for change and learns to manage the process effectively (Pamela et al, 1995).
- iv. **Organizational Development and Performance:** It takes a look at the firm's level of efficiency and way to improve its current activity in order to meet up to standards and survive the competitive pressure. One way to judge the performance of an organization is to compare it with other unit within the company. Comparisons with outsiders however can highlight the best industrial practices and promote their adoption. This technique is commonly term "bench making" (Roberts, 2007).

### **Relationship between Business Process Reengineering and Information Technology**

Hammer (1990) considers information technology (IT) as the key factor in the BPR for organization that wants to witness a "radical change" in its operation. He prescribes the use of IT to challenge the assumption inherent in the work processes that have existed since long before the advent of modern computer and communication technology. He argues that at the heart of

reengineering is the notion of discontinuous thinking or recognizing and breaking away from the outdated rules and fundamental assumptions about technology, people and organizational goals that no longer hold. Aremu and Saka (2006) argued that information technology (IT) is a strategic resources that facilitates major changes in competitive behavior, marketing and customer service. In essence, IT enables a firm to achieve competitive advantages.

Davenport and Short (1990) further posted that business process reengineering requires taking a broader view of both information technology (IT) and business activity and of the relationships between them. IT should be viewed as more than an automating or mechanizing force to fundamentally reshape the way business is done.

Information technology and business process reengineering have recursive relationship. IT capabilities should support business process and business should be in terms of the capabilities IT can provide. Davenport and Short (1990) refer to this broadened, recursive view of IT and BPR as the new industrial engineering business process represents a new approach to coordination across the firm, IT promises and its ultimate impact is to be the most powerful tool for reducing cost of coordination.

### **Elements of Re-engineering in an Organization**

According to Ezigbo (2003), the essential elements or principles of reengineering include the following:

- Rethinking the theory of the business.
- Challenging old assumptions and discharging old rules that are no longer applicable.
- Breaking away from the conventional wisdom and the constraints of organizational boundaries.
- Using information technology not to automatic outdated process but to redesign new ones
- Externally focus on customers and the generation of greater value for customers.
- Internal focus on harnessing more of the potential of people and applying to those activities that identify and deliver values to customers.
- Encourages training and development by building creative work environment.
- Think and execute as much activity as possible horizontally, concentrating on flows and processes through the organization.

### **Steps Involved in Business Process Reengineering**

Davenport and Short (1990) prescribe a five step approach to business process reengineering. These are:

- i. **Develop the business vision and process objectives:** Business process reengineering is driven by a business vision which implies specific business objectives such as cost reduction, time reduction, output quality improvement, quality of work life.
- ii. **Identify the processes to be redesigned:** Most firms use high impact approach which focuses on most important processes or those that conflict most with the business vision. Few numbers of firms use the exhaustive approach that attempts to identify all the processes within an organization and they prioritize them in order to redesign urgency.
- iii. **Understand and measure the existing process:** For avoiding the repeating of old mistake and for providing a baseline for future improvements.
- iv. **Identify information technology (IT) levels:** Awareness of IT capabilities can and should influence process. This is because IT is a sine qua non to the business process reengineering.

- v. **Design and build a prototype of new processes:** The actual design should not be viewed as the end of the BPR process rather, it should be viewed as a prototype, aligns the BPR approach with quick delivery of results and the involvement and satisfaction of customers.

### **Benefits of Business Process Re-engineering**

The hard task of re-examining mission and how it is being delivered on a day to day basis will have fundamental impacts on an organization, especially in terms of responsiveness and accountability to customers and stakeholders.

Reengineering as a must tool to improve efficiency, productivity and quality of product or service and the motivation for reengineering usually the realization that there is a need to speed up the process, reduce needed resources, improve the productivity, efficiency and improve competitiveness. Also the rewards of reengineering are many including empowering employees, eliminate waste, unnecessary management overhead and obsolete or inefficient processes, producing often significant reductions in cost and cycle times, enabling revolutionary improvements in many business processes as measured by quality and customer service, helping top organizations stay on top and low achievers to become effective competitors.

Besides, process reengineering radically changes the work environments. Individual processes are combined to gain efficiencies and productivity. Workers are allowed to make decisions on the spot to eliminate process roadblocks and increase speed to market. Not only is this beneficial for overall business performance, it can also increase employee satisfaction and loyalty. Employees can expand their skill and knowledge into other areas and have the ability to make decisions that affect their individual performance (Hammer 1996).

Hammer and Champy (1993) have identified five major functions of Business Process Re-engineering and they are; business growth, increased effectiveness, improved effectiveness, reduced cost, and meaningful job for employees.

Although BPR is very effective in controlling cost and improving efficiency, its implementation is a hard nut to crack. Employees are very resistant to this kind of change thus, it is important to have extensive support from the top management. Furthermore, there are several impacts of reengineering on customer and company itself.

#### **Customer**

- BPR increases the customer satisfaction about the services that are provided such service become more efficient and systematic.
- BPR motivate the customer loyalty because the company product is of high quality at affordable prices.
- Customers valued speed, efficiency and easy access to information about the company products.

#### **Company**

- Improve the value of the company because the BPR increase the efficiencies and effectiveness in the service and also their productivity.
- Systematic and efficient procedure in the organization structure.
- The strengths and weakness of an organization service can be evaluated in terms of the relative importance of the services attributes to the customer.
- Encourage organization to strive toward short term financial results while utilizing methods that damage long term employee morale and customer service.

- BPR can give the dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed in the business.

### **Problems of Business Process Re-engineering Project in company**

Despite the sound theoretical background and striking results, business process reengineering has not always led to stellar performance. In fact, Bashein et al (1994) showed that only 30% of BPR projects achieved performance breakthrough. Reasons for large failure include:

- a) Lack of sustained management commitment and leadership
- b) Unrealistic scope and expectation
- c) Resistance to change
- d) Non encouragement to conceptualization of business process
- e) Non- detailing of rewards and recognition with new business process.

### **Methods and Materials**

In order to examine the relationships that exists between BPR and customer responses in selected food and beverages companies in Lagos State. The study was conducted in Lagos State, the most densely populated city in Nigeria and the commercial capital of the country. It therefore implies that Lagos could serve as a good representative of industrial characteristics of Nigeria. A cross-sectional survey design was used by collecting data from a defined population. The use of survey research method was justified because it follow a correlational research strategy and helps in predicting behaviour (Borden and Abbott, 2002) It also helps to ascertain whether or not a relationship exists between the variables of study (Kerlinger, 1973). Responses were sought from both employees and those that consumed food and beverages products in Lagos State. The target population consisted of those that consumed food and beverages products. A simple random Sampling technique was used in selecting respondents. A sample size of 2150 from the general customers was used for the study. Simple random sampling method was adopted in selecting respondents from the population of study and this helped to ensure that each customer has an equal chance of being selected.

The instrument used for collecting data in the study was a questionnaire and was mainly designed to elicit information from customers. The questionnaire was made up of 20 items grouped into four main parts. Part 1 collected data on customer satisfaction and was made up of five items, part 2 collected data on quality product and also contained five items, part 3 collected data on product price and has five items, part 4 collected data on customer retention and was made up of five items. The dependent variables examined in this study are customer satisfactions and customer retention that result from the application of independent variables; quality products and reasonable price by food and beverages industry. The questions were tailored along a five point likert scale. The responses were coded and mapped in to numeric values such as Strongly Agree=5points, Agree=4points, Undecided=3points, Disagree=2points, Strongly Disagree=1point.

According to Saunders, Lewis and Thonhill, (2003), sampling is a part of the entire population carefully selected to represent that population. The justification for using random sampling technique is that it eliminates the possibility that the sample is biased by the preference of the individual selecting the sample (Bordens and Abbott, 2002). Another justification is that it is particularly necessary when one wants to apply research findings directly to a population (Mook, 1983).

The inferential study design was also employed because it consists of correlation, regression and anova which help in ascertaining relationship and strength of relationship between variables.

Normality tests were conducted on all variables so as to ensure that the data was normally distributed and thus applicable for further statistical analysis. Validity and reliability tests were conducted to verify the quality and integrity of the constructs used in this research. In emerging markets, a Cronbach Alpha of above 0.6 represents a reliable set of measures of the underlying construct (Burgess & Steenkamp, 2006). The analysis showed that all constructs were reliable and the questions forming these constructs were internally consistent.

The questionnaire formed the main source of primary data whilst related published literature particularly from the internet, journals, textbooks and reports provided secondary data for the study. Correlation analysis, Anova and simple regression analysis were performed to test the strength of relationships between variables. 250 out of 2150 responses received were rejected due to non-responding and incompleteness. Therefore, 1900 questionnaire representing 79% were completely filled and returned for the study.

**Correlations**

		Customer satisfaction	Quality product	Product price	Customer retention
Customer satisfaction	Pearson Correlation				.
	Sig. (2-tailed)				
	N	1900			
Quality product	Pearson Correlation	.589**			.
	Sig. (2-tailed)	.000			
	N	1900	1900		
Product price	Pearson Correlation	-.126**	-.143**		
	Sig. (2-tailed)	.000	.000		
	N	1900	1900	1900	
Customer retention	Pearson Correlation	.145**	-.011	.677**	
	Sig. (2-tailed)	.000	.646	.000	
	N	1900	1900	1900	1900

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The table shows the correlation coefficients between each pair of variables listed, the significance level and the number of cases.

Form the table, it could be established that there is a positive correlation between customer satisfaction and quality product given the pearson correlation coefficient (0.589). The more the quality of products of an organization, the higher the level of customer satisfaction that would be attained. The strength of their relationship can also be determined based on the suggestion of Borden and Abbott, (2002). It can be seen that  $r=.589$ , this means that there is a high correlation between the two variables suggesting quite a strong relationship between customer satisfaction and quality of product. We can also say that the high value can be attributed to characteristics of quality product such as tangibility, reliability, responsiveness, assurance and empathy (Agbor, 2011).

Secondly, it could be established that there is also a positive correlation between product price and customer retention given the pearson correlation coefficient (0.677). The lower the price or a moderate price, the higher customer retention advantage available to the organization.

The strength of their relationship can also be determined based on the suggestion of Borden and Abbott, (2002). It can be seen that  $r=.677$ , this means that there is also a medium correlation between the two variables suggesting quite a weak relationship between price and customer retention. Confidence was established in the results as the respective levels of statistical significances have their value less than 0.05 level (Sig. = 0.000).

**Hypothesis One:** There is no significant relationship between customer satisfaction and quality product.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 <sup>a</sup>	.347	.135	.46991

a. Predictors: (Constant), Quality product

The R square is given as 0.347. This means that the model (quality product) was able to explain 34.7% (expressed as a percentage, multiply by 100, by shifting the decimal point two places to the right) variation in the dependent variable (customer satisfaction). R square value in the sample tends to be a rather optimistic overestimation of the true value in the population as the Adjusted R square depicted a small value. It helps to correct the R square to provide a better estimate of the true population value.

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.587	1	15.587	70.588	.000 <sup>a</sup>
	Residual	419.106	1898	.221		
	Total	434.692	1899			

a. Predictors: (Constant), Quality product

b. Dependent Variable: Customer satisfaction

This table helps to assess the statistical significance of the result. It helps to test the null hypothesis and given a statistical significance (Sig. = .000; this really means  $p<0.05$ ), we say that there is a relationship between quality product and customer satisfaction.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.547	.075		47.084	.000
	Quality product	.156	.019	.589	8.402	.000

a. Dependent Variable: Customer satisfaction

Quality product price has a beta value of 0.589 with Sig. of 0.000, the value is less than .05. This variable is making a significant unique contribution to the prediction of the dependent variable (customer satisfaction).

**Hypothesis Two:** Price has no significant impact on customer retention.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677 <sup>a</sup>	.458	.327	.34881

a. Predictors: (Constant), Product price

The R square is given as 0.458. This means that the model (product price) was able to explain 45.8% (expressed as a percentage, multiply by 100, by shifting the decimal point two places to the right) variation in the dependent variable (customer retention). R square value in the sample tends to be a rather optimistic overestimation of the true value in the population as the Adjusted R square depicted a small value. It helps to correct the R square to provide a better estimate of the true population value.

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.123	1	68.123	559.909	.000 <sup>a</sup>
	Residual	230.926	1898	.122		
	Total	299.050	1899			

a. Predictors: (Constant), Product price

b. Dependent Variable: Customer retention

This table helps to assess the statistical significance of the result. It helps to test the null hypothesis and given a statistical significance (Sig. = .000; this really means  $p < 0.05$ ), we say that there is a relationship between product price and customer retention

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.904	.048		61.079	.000
	Product price	.270	.011	.677	23.662	.000

a. Dependent Variable: Customer retention

Product price has a beta value of 0.677 with Sig. of 0.000, the value is less than .05. The variable is making a significant unique contribution to the prediction of the dependent variable (customer retention)

**Discussion**

The quality of a product determines the level of customer satisfactions. Customers are always sensitive to the quality of different types of product and determine their preference based on the level of the quality (Agbor, 2011). Product of high quality possessed the following attributes: tangibility, reliability, responsiveness, assurance and empathy (Agbor, 2011). It is also revealed that product of poor quality are always neglected by customers. Organization that produced quality goods enjoyed high level of patronage and hence improved the profitability. Food and beverages customers in Lagos are sensitive to the production quality of different companies in the industry. Companies that are noted for producing high quality product are known to have

competent managers and employees that put quality and customers satisfaction as priorities (Matzler, Hinterhuber, Daxer & Huber, 2005; Wang, et al, 2006). Therefore, quality product is a catalyst to customer satisfaction, in returns customer satisfaction benefits the company in the following way: repurchase, cross selling, reduced price sensitivity and positive word of mouth (Matzler, et al, 2011). It is also found out that price is a major determinant of customer retention. Organisation that would like to be competitive in the dynamic business environment should place reasonable prices that are affordable to the customers in order to retain them (Akhtar, et al 2011).

In Lagos State where large numbers of people fall within the middle and lower class, customer responses to differences in the price of the same product is highly expected. These categories of consumers will prefer lower priced goods. This agree with the law of demand which states that the lower the price the higher the quantity demanded and the higher the price the lower the quantity demanded (Dwivedi, 2002). This explained the reason why large number of customers in Lagos State consumed Coca-Cola and Peps as a result of their low prices, and why they have over the years have the largest number of customers (Martisiute, Vilutyte, Grundey, 2012).

### **Limitations**

Despite customer responses, it was also realized from the study that customers are not responsive to the lower prices of some products in the food and beverages industries in Lagos State. The middle class and the upper class are not influenced about price difference of products. They sometimes attributes price increase to quality product and hence their preference for higher priced products. This is in line with differentiation business strategy that increase in price is attributed to quality product differentiation (Oyedijo, 2004 and David, 2009). Therefore, lower prices may not necessarily be the sole determinant of customer retention.

### **Recommendations**

The study recommends that company in the food and beverages industry should ensure that quality products are provided in order to satisfy their customers. It also recommends that food and beverages companies should make the prices of their product to be competitive enough as to retain customers. Company should not overprice their products so that they will maintain and retained their customers in order to be competitive, productive and profitable.

### **Summary and Conclusion**

The study revealed that only company that produced quality product and charged competitive and reasonable prices for their product could survive in the turbulent and dynamic Nigeria food and beverages industry.

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