

Determining the Equality of Customer Loyalty between Two Commercial Banks in Anambra State-Nigeria

Aronu CO*

Department of Statistics, Nnamdi Azikiwe University Awka, Nigeria

*Corresponding author: Aronu CO, Department of Statistics, Nnamdi Azikiwe University Awka, Nigeria, Tel: +2348064063711; E-mail: amaro4baya@yahoo.com

Received date: December 16, 2013 Accepted date: May 30, 2014 Publication date: June 08, 2014

Copyright: © 2014 Aronu CO. 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.

Abstract

This study examined the equality of customer loyalty between two Banks in Anambra State- Nigeria. The objective of this study is to determine if there exists significant difference between loyalty of customers in two commercial banks in Anambra State. The data used for this study is primary data collected through the aid of administered questionnaire. The statistical tool used in analyzing the data was the permutation method for Hotelling T-Squared. The result of the analysis showed that there is no significant difference between customer loyalty of the two commercial banks. This result could be attributed to the improved supervision of the apex bank in Nigeria (Central Bank of Nigeria) on the activities and operation of the banking sector. Since, customer loyalty can help firms develop strategies to grow the right customers and in turn customers can be viewed in terms of their lifetime value. We recommend studies on determining the retention and lifetime value of commercial banking customers in Nigeria as a fruitful area for future research, for it appears that the banking industry is one of the most profitable within the Nigerian economy, hence, higher performance could be attained in terms of customer retention and loyalty there by creating wealth to her shareholders and rendition of social obligations to the larger society. Also, managers in the banking industry should note that failure to recognize the power of customer satisfaction, especially customer emotions, could destroy the power of customer retention and loyalty

Keywords: Permutation; Economy; Lifetime; Profitable; Managers; Retention; Satisfaction

Introduction

There is only one valid definition of business purpose which is to create a customer [1]. Business managers should understand that in today's highly competitive and complex world, it is not just enough to create a customer but it is more important to increase his/her loyalty for a business to be profitable in the long run. Usually, a customer remains loyal if he/she is satisfied with the company's product quality, service quality and such other attributes. In addition, a loyal customer naturally acts as a reference to the company offerings. Precisely for this reason, proposed an index called Net Promoter Index (NPI) to measure the growth of the business based on the likelihood of recommendation [2]. Of course, NPI did invite lot of criticism for its inadequacy to capture the complexities of the business economics using just a single number. One major criticism of this and similar approaches to measure the customer loyalty which drives customer Life Time Value (LTV) is that these measures do not lead to any actionable decisions which help the management to improve the business operations and thereby the profit of the company. However, researchers have found that company's growth is accompanied by the number of satisfied customers, who act as references. However, the measure of customer satisfaction is only partly determined by subjective experience with product quality. A much stronger influence is exercised by the quality of product information and the efficiency of a company's after sales support once customers have purchased the product. In areas where there is strong competition between similar products (such as rental vehicles and computers), the quality of customer care is especially important in securing customer satisfaction.

Every company has a vested interest in presenting a product's value and innovation in a way that makes it understandable to outsiders and clearly differentiates it from competing products. To accomplish this, a company develops a personalized customer language concept specifically for its target group that consists of a clearly defined consistent language with unambiguous, established terminology, and that determines how a company's image and the effectiveness of its advertising is perceived at home and abroad. The entire business, from front line employees to senior managers, must be committed to understanding the results and working to improve the customer experience. In the past, efforts to gain customer satisfaction have attempted to influence the attitude of the customer. A loyal customer has specific bias about what to buy and from whom Loyalty connotes a condition of some duration and requires that the act of the purchase occur no less than twice. Two important conditions associated with loyalty are customer retention and total share of customer. A customer retention rate is the percentage of customers who have made a specified number of repurchases over a finite period of time. Many companies operate under the false impression that a "retained" customer is automatically a loyal customer. If customer retention and total share of customer are essential for loyalty, how are these buying behaviors achieved?

Customer Care

Customer care consists of numerous processes that accompany the customer before and after the purchasing decision. It is especially prevalent when promotional offers are used intentionally to create customer relationships that not only retain the loyalty of regular customers, but also win the satisfaction of new customers. For this, the product/service characteristics (features, quality, price, time), image and reputation (brand), customer service (response and delivery

times) and social responsibility aspects of a company are taken into account. These four aspects are given different priority depending on the business area and market segmentation. Communication processes are easier when the parties can refer to clearly defined concepts and terms. That is the task of terminology work, which is done before the actual exchange of services. Terminology work defines the framework for all activities in a company and has proven to be particularly cost-effective in strategically important and complex communication processes. Furthermore, terminology is able to minimize the potential losses and behavioral uncertainty of the parties involved. In addition to the beneficial aspect, terminology work presents an important cultural and social dimension for every business: values, attitudes and behavior are formulated for internal employees as well as for external reference groups so that the company can compete successfully.

Business managers should note that customers and companies must speak “the same language” if significant excellence is expected. Communication processes are easier when the parties can refer to clearly defined concepts and terms. Furthermore, social and cultural aspects such as values, attitudes and behavior should be formulated for the company as well as for customers. This must be done before the actual exchange of services so that the framework is established for all subsequent transactions. Defining concepts and communicating knowledge, taking social and cultural aspects into consideration, is the task of terminology work. Through global co-operation, the relocation of production and direct investments abroad, companies are being directly confronted with new and different things (language, communication, values). Technical language and terminology are widely used in the activities and processes involved in the planning, implementation and usage phases of a product. The communication processes within a company, as well as between the company and customers at home and abroad, initiate, manage and direct activities on many levels that play a deciding role in how customers perceive quality. Companies that focus their attention on communication and address their customers intelligibly can secure new market shares and expand. A company that forgoes developing a language policy that consistently and clearly uses its technical terminology will be at a considerable disadvantage next to its competitors. For international business, the target clientele must be analyzed for every country. Local conditions (traditions, level of language) must be considered when creating the language for the customer – for every language and every country (such as English, Igbo, Hausa and Yoruba for Nigeria). Applying an internal corporate language policy greatly reduces this burden for international companies.

Loyalty and purchase cycle

Each time a customer buys, he progresses through a buying cycle. A first time buyer goes through five steps:

1. becomes aware of the product
2. Makes an initial investment
3. Post purchase evaluation
4. Decision to repurchase
5. Repurchase

Growing a customer

A customer is a person or firm who becomes accustomed to buying from a particular company. Without a strong track record of contact

and repeat purchase, this person or firm is NOT a customer; rather a buyer. Because a true customer is grown overtime, hence;

A loyal customer is one who:

Makes regular purchases

Purchases across product and service lines

Refers others

Demonstrates immunity to the pull of the competition. (Harley owners refuse to admit that another bike even exists)

People become loyal through stages such as;

Stage One: A suspect is anyone who might possibly buy your product or service. We call them suspects because we believe or suspect that they might buy from us – we don’t know for sure.

Stage Two: A prospect is someone who has a need for your product or service and is able to buy. Although a prospect has not yet purchased from you, he may have heard about you, read about you, or had someone recommend you to him.

Stage Three: Disqualified Prospect. These are those who don’t need, or do not have the ability to buy your products.

Stage Four: First time customer is one who has purchased from you one time, this person can be a customer of yours and a customer of your competitor as well.

Stage Five: Repeat customers are people who have purchased from you two or more times.

Stage Six: A client buys everything you have to sell that he can possibly use. This person purchases regularly. You have a strong, ongoing relationship that makes him immune to the pull of the competition.

Stage Seven: Like a client, an Advocate encourages others to buy from you. He talks about you and does marketing for you.

However, Al-Rousan et al. [3] in their study advised that failure of companies to recognize the power of customer satisfaction, especially their emotions, could destroy the power of customer retention and loyalty. Junxiang [4] noted that increasingly, companies are viewing customers in terms of their lifetime value; the net present value of customers calculated profit over a certain number of months. He noted that for, existing customers, customer loyalty can help companies estimate their customer lifetime value and treatment strategies to maximize customer value. For newly acquired customers, customer loyalty can help companies develop strategies to grow the right customers. Bolajoko et al. [5] stressed that indigenous company, may need to focus on better communication with their customer to enable them provide excellent services to their customers. In addition, Butscher [6] in his study concluded that the lack of differentiation among benefits has therefore made loyalty programs within an industry interchangeable and consequently the loyalty programs are losing their competitive edge. Since it is known that the purpose of every business venture is to create a customer and the commercial banking sector in Nigeria is not an exception. Hence, examining customer Loyalty between two commercial banks in Nigeria using Anambra State as case is not to be overemphasized. The objective of this study is to determine if there exists significant difference between loyalty of customers in two commercial banks in Anambra State.

Literature Review

Reinartz and Kumar [7] examined the relationship between customer longevity and companies profit. They explained that they expected to find a positive correlation, so their real question was how strong it would be. A perfect correlation (that is 1) would mean that marketers could confidently predict exactly how much money there was to be made from retaining customers. The weaker the correlation (the closer it was to zero), the looser the association between profits and customer tenure. The result was hardly a ringing endorsement of the loyalty mantra. The association was weak to moderate in all four companies they studied, with correlation coefficient of 0.45 for the grocery retailer, 0.30 for the corporate service provider, 0.29 for the direct brokerage firm and just 0.2 for the mail – Order Company”. In addition, Duffy [8] said that customer loyalty is seen as one of the major facilitators of service quality that emerged from the literature. Customer loyalty happens when there is repeated purchasing by the same customers and their willingness to recommend the product to other customers without any outright benefits, and eventually the repeated usages would generate positive and quantifiable financial results. Stone et al. [9] posits that customer loyalty is also dependent on a number of customer related factors, that is, how customers perceive the business rather than what the business really does. Given all these benefits, it's only natural that businesses should turn to a diverse range of tools to develop customer loyalty. And every company seems to have a different formula for making that loyalty happen. Such initiatives include creation of valuable customer experiences, creation of resonant brand, proactive marketing initiatives, quality control processes, and customer relationship management. Coyles and Gokey [10] found from their research that satisfaction alone does not make a customer loyal and that merely measuring satisfaction does not tell a company how susceptible its' customers are to changing their spending patterns or jump ship to competitors with a better offering. They identify three basic customer attitudes, emotive, inertia and deliberative that underlies loyalty profiles. They have found that the emotive customers are the most loyal. Thus, it would seem that while satisfaction is an important component of loyalty the loyalty definition needs to incorporate more attitudinal and emotive components. According to Ozuru and Kalu [11] customer loyalty refers to the level of faithfulness shown by a customer in continuing to purchase a particular product or service. Also customer loyalty is an indicator of the degree of satisfaction the customer has with the product. They added that customer loyalty could also be defined as the feeling of attachment or affection for a company's product or service that will directly influence customer's behavior, with the aim of keeping and satisfying them and making them buy more of the firm's products. Sun [12] studied the relationships among E-service quality, system quality, information quality and customer loyalty, her findings revealed a positive relationship among the variables of e-service quality, system quality, information quality and customer loyalty. But there is no available research on E-service quality experience and customer loyalty in the Nigeria airline sector. Srinivasan et al. [13] reported that these are two main categories of loyal customers. The first category is of loyal customers. Within the loyal category there are satisfied and unsatisfied customers. The satisfaction is not an essential requirement for loyalty, so satisfied customers do not have to be loyal but there is a correlation between the satisfied customers and loyal customers. Sometimes unsatisfied customers are also loyal due to attachment and commitment with the supplier. And satisfied customers, if lack the trust commitment and attachment with the suppliers products and services will always deflect once they find a competitor with better

quality of products and services. This type of loyalty is sometimes called False Loyalty in which unsatisfied customers remain loyal to their suppliers. The reason for this false loyalty is the factors due to which the customer feels hurdles and obstacles in his/her way, which stops him/her from switching or choosing another supplier. These hurdles are called switching costs. Peppers and Rogers [14] differentiated between two types of customer loyalty concepts, namely behavioristic and neo-behavioristic. The behavioristic approach to customer loyalty implies viewing and analyzing evident consumer behavior and purchase intentions, whereas the neo-behavioristic approach implied greater focus on loyalty causes and customer attitudes to the provided goods and services. According to Cahill [15] the concept of customer loyalty was given much attention at the beginning of the 1990s when the topic was especially popular with business and marketing researchers. That period was marked by a growing degree of rivalry in the global market when companies attempted to develop efficient methods and techniques aimed at customer retention. Kracklauer et al. [16] were convinced that customer loyalty should be viewed as a combination of customer satisfaction and customer trust. Furthermore, they developed a model of persistent and long-term customer loyalty, which is determined by such factors as short-term loyalty and commitment. Reinartz and Kumar [7] added that customer-driven loyalty strategies should take into consideration that the majority of customers tend to buy more than one brand in a product or service category. In this sense, the key aim of every customer loyalty strategy or programme is to achieve single-brand orientation. It is argued that the transition from multi-brand loyalty to single-brand loyalty is a complex process, which takes much time and efforts. Companies can implement such strategies and programmes such as special discount cards, regular client cards and personal relationships with customers. Timm [17] suggested series of efficient customer loyalty strategies that can be practiced in companies. First, he emphasized the importance of high-quality corporate websites, which contribute to communication with customers and their loyalty. Second, all official statements and public speeches made by the management should start from customer evaluations, opinions and reviews. Third, customer profiles and target groups must be clearly recognized by companies. The fourth strategy, which can increase consumer loyalty, is sophisticated and makes use of social media such as Facebook, Twitter, LinkedIn and YouTube. Finally, innovative and creative marketing campaigns are increasingly important for the growth of customer loyalty. In their contribution Bowen and Chen [18] explained that it is commonly known that there is a positive relationship between customer loyalty and profitability. Today, marketers are seeking information on how to build customer loyalty. The increased profit comes from reduced marketing costs, increased sales and reduced operational costs. Finally, loyal customers cost less to serve, in part because they know the product and require less information. They even serve as part-time employees. Therefore loyal customers not only require less information themselves, they also serve as an information source for other customers. Chao [19] conceptualized customer loyalty as including both psychological and behavioral dimensions. Basically, customer loyalty refers to the tendency of customers to select one company or product over another so as to satisfy a particular need. It also describes the behavior of repeat customers hence loyalty is observed through the actions of the customers. Oyeniyi and Abiodun [20] in their study observed that the major contribution is that switching barriers affect significantly the level of customer retention, and also affect the relationship between customer satisfaction and customer retention. It does seem that switching costs could be used to predict consumers' behavior in the

mobile telecommunication sector. Customer satisfaction has positive effects on the customer retention. Thus, manager may need to emphasize total satisfaction programme in an attempt to retain customers in the competitive telecommunication market. However, the moderating role of switching barriers in the relationship between customer satisfaction and retention is indicative that for low involvement services as telecommunication services switching barriers may play a big role in customers retention programme. Managers therefore, must significantly consider switching barriers and dimensions of customer satisfaction when making plans or focusing efforts in customer retention. Mu'azu Saidu Badara et al. [21] examined customer's perception and the direct effect of service quality dimensions on customer satisfaction and customer loyalty in Nigerian Islamic Bank. They used primary source of data which measured service quality consisting of six dimensions: tangibility, reliability, responsiveness, assurance, empathy and compliance; customer satisfaction and customer loyalty from Nigerian students studying at Universiti Utara Malaysia. They analyzed the obtained data using Structural Equation Modeling (SEM) using Amos 16 and performed Convergent validation using Confirmatory Factor Analysis (CFA) and composite reliability. The result of their finding revealed that responsiveness is a significant predictor of customer satisfaction and assurance is significant predictor of customer loyalty. This implies that customers will be satisfied when the bank staff are responsive and provide fast banking service. They added that to maintain loyal customers Islamic banks should give assurance in terms of Islamic banking compliance. Rahim et al. [22] explained that customer loyalty can seem elusive and magical to those trying to obtain it. However, there are a lot of good reasons for businesses to pursue customer loyalty as a strategic objective. Customers are expensive to acquire; keeping them loyal allows you to amortize acquisition costs. Loyal customers are often willing to pay premium prices. For example, some of the important attitudes and behaviors expected of a loyal customer include: Likelihood to recommend company products and services to others; likelihood to continue purchasing the company products and services, at minimum, at the same level; likelihood of purchasing other products and services the company offer; believing company products and services are superior to competitors; not actively seeking alternative service providers and providing the company with opportunities to correct problems and not using these as a basis for compromising the relationship. They added that the power of customer loyalty is clear and compelling; this is because it leads to more profitable growth. Loyal customers stay longer with companies that treat them well. They buy more of their products, and they cost less to serve. They recommend the companies to their friends and colleagues, becoming, in effect, a highly credible volunteer sales force. Investing in loyalty can generate more attractive returns than rolling out an ambitious new marketing plan or expanding line of company's business. Loyalty can be of substantial value to both customers and the firm. Customers are willing to invest their loyalty in business that can deliver superior value relative to competitors.

Materials and Methodology

Data collection

The source of data used for this study is primary data collected through the aid of a questionnaire filled by customers who visited the two banks in Akwa and Onisha between the months of June 2013 to September 2013. The respondents were randomly selected customers that visited the 5 branches of Bank A and 3 branches of Bank B in

Awka and 8 branches of Bank A and 2 branches of Bank B at Onitsha. The choice of the two cities (Awka and Onitsha) of Anambra State is that they constitute the major business and commercial towns in Anambra State. A sample of 370 and 351 customers were administered the questionnaire from a customer base of 10,000 and 4000 for the two observed respectively using the Cochran's sample size calculation procedure at 95% confidence level [23].

Permutation method for hotelling T^2

The permutation test is a conditional test since it generates the permutation distribution conditional on the observed values of the random variables (unlike the randomization model where the observed values were not random except their treatment assignments). The test is also conditionally distribution-free, since, conditional on the observed data, the permutation distribution of the test statistic does not depend on the population distributions [24-31]. Also, the permutation test is conditionally exact for the same reasons that the randomization test is exact, but it is also unconditionally exact since the probability of a Type I error is controlled for all possible samples [18]. The permutation method for Hotelling T^2 measures whether the mean vectors of the two groups differ significantly. One measure of the difference in mean vector is the two-sample Hotelling T^2 statistic which is given as

$$T^2 = \frac{n_1 n_2}{n_1 + n_2} (\bar{X} - \bar{Y}) S^{-1} (\bar{X} - \bar{Y}) \quad (1)$$

The pooled estimate of the variance-covariance matrix S is given as

$$S = \frac{A+B}{n_1+n_2-2} \quad (2)$$

Where, X and Y are the mean vector of the two samples, A and B are the covariance matrix of the two samples.

The testing procedure of the permutation method for hotelling T^2

Consider two independent random samples $\{X_i, i=1,2,\dots,n_1\}$ and $\{Y_i, i=1,2,\dots,n_2\}$. To test the hypothesis that both samples came from the same distribution we shall obtain the mean vector of the two samples \bar{X} and \bar{Y} . We obtain the reference value of the test statistic, T^2 using Equation (1) and Equation (2)

Permute at random the rows and corresponding columns of the covariance matrix of one of the samples; A .

Compute the test statistic T_i^{2*} , obtaining a value T^{2*} of the test statistic under permutation.

Repeat steps 2 and 3 a large number of times to obtain the distribution of T^{2*} under permutation; add the reference value T^2 to the distribution.

For a one-tailed test involving the upper tail, calculating the probability (p value) as the proportion of values T^{2*} greater than or equal to T^2 . Conversely, for a test in the lower tail, the probability is the proportion of values T^{2*} less than or equal to T^2 .

Data presentation

The distribution of responses on Customer Loyalty for Bank A and Bank B are shown in Tables 1 and 2.

S/N	QUESTIONS	SA	A	SD	D	Total
1	You have been loyal to Bank A and you are not considering changing to another Bank	300	56	10	4	370
2	You can tolerate minor mistakes from staff of Bank A and their actions do not affect your loyalty negatively	100	76	94	100	370
3	Bank A always satisfy your needs fully even in the other services such as ATM and Transfers	81	275	6	8	370
4	Your loyalty to Bank A has been constantly increasing over time	267	87	2	14	370
5	You are loyal to Bank A and consider it the best	98	240	22	10	370
6	You will recommend Bank A to friends and relatives.	200	94	8	68	370
7	The price you pay for products and services with Bank A is commensurate with the quality of service you receive	305	46	14	5	370
8	Members of staff of Bank A are courteous and friendly in handling your grievances and complaints.	209	144	7	10	370

Table 1: Distribution of Responses on Customer Loyalty for Bank. A
Source: Field Survey 2013.

S/N	QUESTIONS	SA	A	SD	D	Total
1	You have been loyal to Bank B and you are not considering changing to another Bank	281	44	21	5	351
2	You can tolerate minor mistakes from staff of Bank B and their actions do not affect your loyalty negatively	60	116	70	105	351
3	Bank B always satisfy your needs fully even in the other services such as ATM and Transfers	234	100	7	10	351
4	Your loyalty to Bank B has been constantly increasing over time	120	99	60	72	351
5	You are loyal to Bank Band consider it the best	281	44	21	5	351
6	You will recommend Bank B to friends and relatives.	60	116	70	105	351
7	The price you pay for products and services with Bank B is commensurate with the quality of service you receive	129	90	62	70	351
8	Members of staff of Bank B are courteous and friendly in handling your grievances and complaints.	66	120	64	101	351

Table 2: Distribution of Responses on Customer Loyalty for Bank B.
Source: Field Survey 2013. Key: SA= Strongly Agree; A= Agree; SD= Strongly Disagree; D= Disagree.

Analysis and Result

Research Hypothesis is stated as

H_{01} : Customers loyalty for both Banks is not significant

H_{11} : Customers loyalty for both Banks is significant

Inputting the data in Table 1 and Table 2 into R 2.13.0 command window and calling the hotelling test function [30].

R>Bank A=matrix(c(30, 56, 10, 4, 100, 76, 94, 100, 81, 275, 6, 8, 267, 87, 2, 14, 98, 240, 22, 10, 200, 94, 8, 68, 305, 46, 14, 5, 209, 144, 7, 10), n row= 8, by row=TRUE)

R>Bank B=matrix(c(281, 44, 21, 5, 60, 116, 70, 105, 234, 100, 7, 10, 120, 99, 60, 72, 281, 44, 21, 5, 60, 116, 70, 105, 129, 90, 62, 70, 66, 120, 64, 101),n row= 8, by row=TRUE)

R>Test=hotelling.test(Bank A, Bank B, shrinkage=FALSE, perm=TRUE, B= 10000)

Test stat:1.0285

Numerator df: 4

Denominator df: 11

Permuation P-value: 0.426

Number of permutations: 10000

Discussion

The result obtained from the analysis showed that there is no presence of significant differences between customer loyalty of Bank A and Bank B since the test statistic value of 1.03 was obtained and a corresponding p-value of 0.43 for 10, 000 permutations as presented by the result of the hotelling.test function. This result indicates that the obtained significant value of 0.43 fall on the acceptance region of the hypothesis assuming a significance level of 5% ($\alpha=0.05$) and implies that customer loyalty of the two Banks is statistically the same. Hence, the null hypothesis was accepted since p-value=0.43 is greater than $\alpha=0.05$ assuming a 95% confidence interval level.

Conclusions

This study examined the equality of customer loyalty between two Banks in Anambra State- Nigeria. The result of the permutation method for Hottelling T-Squared showed that there is no significant difference between customer loyalty of the two commercial banks. This result could be attributed to the improved supervision of the apex bank in Nigeria (Central Bank of Nigeria) on the activities and operation of the banking sector. Since, customer loyalty can help firms develop strategies to grow the right customers and in turn customers viewed in terms of their lifetime value. We recommend studies on determining the retention and lifetime value of commercial banking customers in Nigeria as a fruitful area for future research, for it appears that the banking industry is one of the most profitable within the Nigerian economy, hence, higher performance could be attained in terms of customer retention and loyalty there by creating wealth to her shareholders and rendition of social obligations to the larger society. Also, managers in the banking industry should note that failure to recognize the power of customer satisfaction, especially customer emotions, could destroy the power of customer retention and loyalty [3].

References

1. Drucker P. (1957) *Landmarks of Tomorrow*. Harper & Row; New York.
2. Reichheld FF (2004) *The One Number You Need to Grow*. Harvard Business Review, Harvard Business School Publication Corp. 82:133-133.
3. Al Rousan R, Badaruddin M (2010) Customer Loyalty and the Impacts of service Quality. *Int J Hum social s* 5: 13- 23.
4. Junxiang L (2003) Modelling Customer Lifetime value using Survival Analysis – An Application in the Telecommunication Industry. *Data mining Technique, SUGI Conference*: 120 – 128.
5. Dixon-ogbechi B, Haran E, Aiyeku J. (2009) Customer's Perception of Relationship Marketing As a Strategic Tool in the Nigerian Food and Beverages Industry. *proceeding of the 10th Annual conference IAABD*. 11:124-132.
6. Butscher AS (1998) Using Pricing to Increase Customer loyalty; *J professional Pricing*, 29- 32.
7. Reinartz W, Kumar V (2002) The mismanagement of customer loyalty. *Harvard Business Review*, No. July, 86-94.
8. Duffy DL (2003) Internal and External Factors which Affect Customer Loyalty. *J Cons Mark*, 20:480-485.
9. Stone M, Woodcock N, Machtynger L (2000) *Customer Relationship Marketing: Get to know your customers and win their loyalty* (2nd eds.). Kogan Page Ltd.
10. Coyles S, Gokey T (2002) Customer Retention Is Not Enough, *The McKinsey Quarterly* 2, 18 Sept. 2002.
11. Ozuru HN, Kalu SE (2009) *Marketing Dictionary: A click and Mortar Approach*. Cutting Edge Publishers, Port Harcourt.
12. Sun Q (2010) "The Relationships among E-Service Quality, System Quality, Information Quality and Customer Loyalty: An Empirical study of internet Banking in China. *J Manage Bus Res* 10: 27-34.
13. Srinivasan SS, Anderson R, Ponnayolu K (2007) Customer loyalty in e-commerce: an exploration of its antecedents and consequences". *J. Retailing*, 78: 41-50.
14. Peppers D, Rogers M (2004). *Managing customer relationships: a strategic framework*, John Wiley and Sons New York,.
15. Cahill D (2007) *Customer loyalty in third party logistics relationships: findings from studies in Germany and the USA*. Springer, New York.
16. Kracklauer A., Mills D, Seifert D (2004) *Collaborative customer relationship management: taking CRM to the next level*, Springer, New York.
17. Timm P (2007) *Customer Service: Career Success Through Customer Loyalty*, 4th ed., Prentice Hall, New York.
18. Bowen JT, Chen SL (2001) The Relationship Between |Customer Loyalty and Customer satisfaction. *Int J ContempHosp Manage* 13: 213-217.
19. Chao P (2008) Exploring the Nature of the Relationships between Service Quality and Customer Loyalty: An Attribute-Level Analysis. *The Serv Industries J* 28: 95–116.
20. Oyeniyi JO, Abiodun JA (2009) Switching Cost and Customers Loyalty in the Mobile Phone Market, the Nigerian Experience. *Bus intell J* 3: 111-121.
21. SaiduBadara M, NikKamariahNik M, MuhdMujtaba A, AbdallaNayef A, Musa Badara A et.al. (2013) Direct Effect of Service Quality Dimensions on Customer Satisfaction and Customer Loyalty in Nigerian Islamic Bank. *Management*, 3 (1): 6-11.
22. Rahim Ajao Ganiyu, RA, Ikechukwu Uche I, Elizabeth. AO (2012) Is Customer Satisfaction an Indicator of Customer Loyalty? *Aust J Bus Manage Res* 2:14-20
23. Higgins CC, Kotrlik JW, Bartlett JE (2001) Organizational Research: Determining Appropriate Sample Size in Survey Research. *Inftechnol learn Performance J* 19: 43-50.
24. Mantel N, Valand RS (1970) A Technique of Nonparametric Multivariate Analysis. *Biometrics*, 26(3): 547 – 558.
25. Ernst MD (2000) Permutation methods: A Basis for Exact inference. *Stat Science* 19: 676-685.
26. Aronu CO, Ebuh GU (2013) Application of Mantel's Permutation Technique on Asphalt Production in Nigeria. *International J Stat Applications* 3: 81–85.
27. Aronu CO, Ebuh GU, Ogbogbo GO, Bilesanmi AO (2013) Partial Mantel Analysis on Estimating the Resemblance of Students Performance. *Int J SciEng Res* 4 2269-2273.
28. Aronu CO, Ogbogbo GO, Bilesanmi AO (2013) Measuring the Resemblance in Weight of two Group of Broiler Birds using the Mantel Test Analysis. *Int J AgriFor* 3:145-151.
29. Ijeoma N, Bilesanmi AO, Aronu CO (2013) Determining The Contribution Of Human Resource Accounting (HRA) On Financial Statement Of Nigerian Banks Using The Mantel Test Analysis. *Int J SciTechnol Res* 2: 51-55.
30. Aronu CO, Bilesanmi AO (2013) Assessing the Knowledge, Attitude and Factors Affecting Team Building Amongst Health Workers in Nigeria Using the Permutation Method for Hotelling T-squared Analysis. *Am J Theo Appl Stat* 2: 184-190.
31. Aronu CO, Bilesanmi AO, Aronu FI (2013) Measuring The Resemblance On Knowledge And Attitude Of Team Building Activities Among Health Workers In Nigeria. *Int J SciTechnol Res* 2: 242-248