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TELLER CUSTOMER RATIO MARKETING STRATEGY AND CUSTOMER SATISFACTION IN SELECTED BANKS IN LAGOS STATE

[1]Chigbu, Ishmael Okey & [2]Dr. Kabuoh, Margret Nma
[1&2]*Department of Business Administration and Marketing*
Babcock University, Ilishan, Ogun State Nigeria

Abstract
Long queues in the banks have over the years discouraged customers from bank transactions. In a service industry like banks, services and products sometimes fall short of clients' expectations despite the strategies adopted, and this may lead to dissatisfaction. Consequently this study examined the relationship between Teller-Customer Ratio (TCR) marketing strategies and customer satisfaction. Descriptive survey design was adopted. Research population consisted of headquarters of four banks (Union Bank, First Bank, Diamond Bank and Eco Bank) having customer population of 106,405 of which 2,000 customers were sampled and 1949 returned successfully using proportionate stratified random sampling technique.1949completed and returned. Structured questionnaire with a six- (6) point Likert-scale was administered with 97.5 percent response rate. The impact of the variable in this study on customer satisfaction revealed that there is a strong positive relationship in the following proportions: where relationship between TCR and CS is (R = 0.811; F = 3830.583; P = 0.000); significant relationship between TCR marketing strategies and customer satisfaction. In conclusion, the study states that TCR marketing strategy has effects on customer satisfaction. Therefore, it is recommended that banks should improve their services in the area of study through the adoption of better strategies that would serve the interest of all customers.

Keywords: *Customer Satisfaction, Teller-Customer Ratio, Marketing Strategy, Bank services, Competition.*

Background to the Study

In contemporary time organizations have discovered that they depend on customers for survival and growth. Hence customer satisfaction is now regarded as one of the most important factors that shape organizations' future. The teller-customer ratio in the banking sector has become a challenge that encourages outsourcing. Outsourcing is the business practice whereby companies contract out selected operations to other companies that specialize in those operations for cost efficiency and enhanced performance. It is part of strategic planning which organizations use to achieve set goals (Kabuoh, Chigbu & Abasilim, 2014). Due to globalization, companies understand that they have to change the way they run their businesses in order to survive. The effect of globalization is heightened competition, crowded markets with little or no product differentiation, which means that

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companies would have to take proactive measures to gain that competitive advantage over others. Moreover, customers aim to get maximum satisfaction from the products or services that they buy (Agbor, 2011). Management of organizations are, therefore, more interested in customer satisfaction than ever before and organizations are more customer-focused. In customer-driven economy firms are engaged in a stiff rat race to attract customers. Satisfied customers mean a long-term profitable business since they stay loyal to the firm (Gumesson, 2002).

In recent years, the development in the banking industry has made competition in the banking industry more critical. In order to maintain their customer base and strengthen a long-term customer relationship, the bank managements develop various strategies that focus more on the level of service and competence of service provision. Therefore, in a hyper-competitive market, banks are confronted with the challenge of retaining existing customers and attracting new ones. The maintenance of existing customers is seen as more important than the ability to pull new clients and this is premised on the fact that the cost of attracting new customers is much higher than the cost of retaining existing customers; thus customer satisfaction is essential to the success of banks. To survive in a competitive environment, banks strive to offer their customers something new in terms of services, products or incentives, because the competitive power of a bank is largely defined by the degree of its conformity to the needs of customers (Gerrard and Cunningham, 2001; Bowen and Chen, 2001). "Organizations require new capabilities for competitive success, such as customer relationships, product innovation, incentives and bonuses, customized products, employee skills, motivations, the firm's reputation and image, etc. Thus banks employ several marketing strategies solely to increase their deposit base. According to Rogers (2002) as cited by Aworemi, Odeyemi and Oyedokun (2012) marketing strategies are techniques employed by management to identify, anticipate and satisfy customers' requirements profitably.

Statement of the Problem

According to Bowen and Chen (2001) marketing strategies are prerequisite for customer satisfaction and retention. However, services and products sometimes fall short of clients' expectations and this may lead to dissatisfaction. Furthermore, despite the effects of globalization and technology all firms do not offer the same quality of service and products; there are differences (even though very slight), in products and service delivery. Such slim differences, quite often, constitute the factor which gives a bank a competitive advantage over others and the very factors that make a difference between one bank and the other. Everything considered, irrespective of the strategies adopted by banks, it is the customer who knows and can testify whether he / she is satisfied with a service / product or not.

Bank customers in Nigeria face the problem of inadequate number of tellers in a banking hall. The number of tellers in a bank as against the number of customers has implications for service quality and customer satisfaction. A situation where the ratio is lopsided against the customer would mean that customers would have to wait for a long time in the queues thereby increasing service times and resulting in an unnecessary loss of man-hour. The consequences or problems caused by long queues in Nigerian banks often lead to customer dissatisfaction with service; this may result in reneging as the customer waiting in a queue may decide to forego the service and may be the root cause of economic losses in business (Ogbo, 2009). Also Onyeizugbe (2011) asserted that consequences of long queues on the banks are increasing customer dissatisfaction, economic loss, chaos and confusion. Hence the need for this study.

Objective of the study

The objective of the study was to evaluate the effect of teller-customer ratio as a marketing strategy to satisfying customers in Nigerian banks.

Research Question

How does teller-customer ratio affect customer satisfaction?

Hypothesis
There is no significant relationship between teller-customer ratio and customer satisfaction.

Conceptual frame work on the study variable (Teller-Customer Ratio)
Several concepts are involved in the variable of teller-customer ratio. The number of tellers in a bank as against the number of customers has implications for bank strategies and customer satisfaction. A situation where the ratio is lopsided against the customer, dissatisfaction follows. The consequences of such an uneven ratio are that customers would have to wait for a long time in the queues thereby increasing service times. Two key concepts are involved: The queuing system and service time.

The Bank teller
The teller is the employee who deals face to face with the customer. The teller is the person most people associate with a bank. They constitute about 28 percent of bank employees (Raj, 2008) and conduct most of a bank's routine transactions and operations like cashing checks, handling deposits and withdrawals, loan payments. Other responsibilities include selling savings bonds, accepting payments for customers' utility bills, processing necessary paper work for certificates of deposits, selling travelers checks, handling foreign currencies and commercial/business accounts. The teller is one of the most important profiles in the banking institution with various duties and as a result a lot of multitasking is expected from him (Arjun, 2013).

The description above implies that a lot of transactions are vested on the shoulders of the teller. In other words, the teller is a very busy employee. Second to this is that each transaction (involving customer's economic interest) is a very sensitive one which demands care and attention to detail, otherwise the teller is bound to make mistakes which may directly or indirectly affect the customer, the teller and the bank. For example, prior to cashing a check ...a teller must verify the date, bank name, identification of the person to receive payment and legality of the document. They must also make sure that written and numerical amounts agree and that the account has sufficient funds to cover the check. The teller then must carefully count cash to avoid error... when accepting a deposit; tellers must check the accuracy of the deposit slip before processing the transaction.

The sensitive nature of this operation means that the teller has to take his/her time for every transaction to every customer. However, the cumulative effect of all this is that as the teller attends to one customer, other customers are waiting on the queue desiring to be served. This is to say that the ratio of teller to customer is heavily tilted against the customer. The picture of many customers standing in the line waiting for one waiter means that the queue is one of the outstanding features of the teller business.

Service Times
Cogdill and Monticino (2007:16) define service time as 'the elapsed time from when a teller initiates customer service through the teller transaction platform to when that customer engagement is ended on the platform'. Simply put service time is the amount of time it takes a teller to round off a transaction. Service time is generally restricted to the actual transaction portion of the customer-teller engagement and does not include non-transaction customer-teller interaction.

Service times are conditioned by branch, t he teller performing the transaction, the transaction and the operational instrument (Raj, 2008). The size of a branch has implications for service time; a big branch with a long teller line may have a reduced service time while a small branch with a short teller line may have a prolonged service time. The teller performing the transaction is instrumental to the length of service time. All tellers are not the same (although they do the same duty) in terms of speed and dispatch, which generally requires mental conditioning, environmental adaptation, mood balance and the

ability to deal with distractions, official or unofficial. As a result we can safely posit that all tellers do not have the same service capabilities.

Transaction types are numerous including deposits, withdrawals, purchasing money orders, cashing checks, buying savings bonds, credit card payments etc. These transactions are not the same and so require different times to begin and complete. For example, deposits tend to be more varied and complicated transaction than cashing checks (Beasley 2013) and so requiring longer time to complete than cashing checks. Additionally, network challenges may tend to frustrate operations thereby prolonging the time of beginning and ending a particular transaction.

The Queuing Theory

The queuing theory deals with the analysis of queues (or waiting lines) where customers wait to receive a service; it deals with actual waiting time (Sundara 2009). Perrors (2012) explains that a queue is formed when customers arrive faster than they can get served. For example, if the service time for a particular transaction (say cashing a check) takes 10 minutes and customers arrive every 15 minutes, no queue will be formed. On the other hand, if the service time required to complete the same transaction is 15 minutes, and customers arrive every 10 minutes, a queue will grow forever.

Basic Components of Queues

The Queuing theory has several components. Raj (2008) outlines 5 basic components of queues. These components deal with the fundamental dynamics of the queuing system. They are the following: The arrival process, the service time distribution, the number of services, waiting positions and service discipline.

The arrival process is concerned with how customers arrive at the service centre. Customers may arrive in singles or groups. Whether they arrive singly or in groups has significant impact on the length of the queue and service time. The arrival process also deals with the possibility of having a finite (manageable) population of customers or an infinite (manageable) proportion of customers (Beasley, 2013).

The service time distribution states how long the service will take, and a description of the resources needed for service to begin. The number of servers is an important component of the theory because it is the tellers who serve the customers in the queue. Waiting position refers to the characteristics of the queues, that is, the arrangement of the customers in relation to the tellers. Queue discipline relates to how the customers in the queue are chosen to be served; in other words it describes the manner in which customers are served after a queue has formed. The common methods are: (i) First come first served (FCFS) where the customers areserved one at a time in a rule where the longest waiting customer, assumed to have come before others is served first; (ii) Last come first served (LCFS) where the customers are served one at a time, however, the customer with the shortest waiting time is considered above others. Another method used in choosing customers in the queue is the priority principle, which requires that the customers with high priorities are served first (Asmussen and Boxma,2009).

Types of Queue Systems

Generally, there are two broad categories of queues. The single queuing system and the multiple queuing system (Raj, 2008). However, Perros (2012) identified four different types, all of which are subsumed under the two broad categories. The single queue with a single server, the single queue with multiple servers, the multiple queues with a single server, and the multiple queues with multiple servers. The single queue actually denotes queues where the customers are organized in a single line and served by either a single teller or multiple tellers. On the other hand, the multiple-queue system denotes the process where the customers are arranged in multiple lines (three or four, as the case may be) and they are served by a single teller or multiple tellers.

The queuing theory, being the mathematics of waiting lines is extremely useful in predicting and evaluating system performance. It is also useful in accounting for the feeling of customers before, during and after a service, which all have implications for customer satisfaction.

The Pareto Principle

The Pareto Principle is a prediction that 80% of effects come from 20% of causes (Aleku, 2010) hence it is also referred to as the 80/20 principle. The principle was propounded by Italian economist Vilfredo Pareto in 1906, after he noted that 80% of Italy's land was owned by 20% of the people. He later became obsessed with this ratio and saw it in almost everything. For example, he observed that 80% of the peas in his garden came from 20% of the pea plants.

Aleku (2010) states that the principle which was anchored on Pareto's search for equilibrium could be applied in almost every discipline or context. However, Anna (2013) explained that the exact value of 20 and 80 are not significant; they could actually be 10 per cent and 60 per cent. What is important is that there is a considerable disproportion. This principle is concerned with the factors of concentration, irregularity or inverse proportion in the society.

Anna (2013) reasoned that the Pareto principle is still relevant in contemporary times and can be applied in management, technology, sales and marketing, etc. She suggests the following scenario:

Projects:
- 80% of value is achieved with the first 20% of effort
- 80% of project politics come from 20% of your stakeholders
- 80% of problems originate with 20% of projects
- 80% of work is completed by 20% of your team
- 80% of soft ware problems are caused by 20% of bugs
- 80% of customers only use 20% of software features
- 80% of sales come from 20% of your clients
- 80% of sales come from 20% of your products
- 80% of sales come from 20% of your sales people
- 80% of complaints come from 20% of customers
- 80% of wealth is owned by 20% of the people

The Pareto Principle can be applied to the subject of teller-customer ratio. In this instance, it could be said that 80% of customers are served by 20% of tellers. The inverse proportion suggests a default in the service given to customers. If most of the customers are served by few staff, it means that the servers (tellers) are not sufficient; that there are delays in service delivery and that the customers are far from satisfied.

Theories for this Study

There are so many theories associated with this study but we are adopting three for proper match, space and judgement. They are Expectancy-disconfirmation Theory, Negativity Theory and the Under-manning Theory. The reason for these choices is that the three theories are customer satisfaction theories and are useful to analyses the variable of the study.

a). Expectancy-Disconfirmation Theory

Expectancy-disconfirmation is a theory widely used in customer satisfaction and loyalty studies (Lin, Tsai, & Chiu , 2009). Expectancy-disconfirmation theory alone can be applied in order to predict customer loyalty through the direct influence of satisfaction. The theory suggests that the degree of customers' satisfaction is determined by customers' initial expectations and disagreement between performance and customers' initial expectations (Vogel, Eranschitcky & Ramasechan, 2006). Expectations indicate the level of customers' prediction and belief. In other words, what will happen and what should happen. Anic & Radas,

(2006) see customer satisfaction as post consumption experience outcome, in terms of rewards and costs, which indicates the degree to which a service meets or exceeds customer expectations.

b). Negativity Theory

The theory propounded by Carlsmith and Aronson (1963, cited in Ekinci & Sirakaya, 2004) suggests that any discrepancy of performance from expectation will disrupt the individual, producing a negative effect, (Ekinci & Sirakaya, 2004). The theory states that when expectations are strongly held, customers will respond negatively to any disconfirmation. This is to say that dissatisfaction will occur if perceived performance is less than expectation or if perceived performance is more than expectation.

c). Under Manning Theory

Under manning theory propounded by Barker posits that there is a continuum of manning or staffing that any behavior setting can have from undermanned to overmanned (Baker 1964, cited in Tan, 2003). The level of participation of the occupants of the setting is related to the level of manning of the setting. If the setting is overmanned, occupants will engage in fewer programme actions and it will be difficult for them to engage meaningfully in the direction of setting activities. As a result, penetration into the inner circle of decision making will be difficult. On the other hand, if the setting is undermanned, penetration into the inner management level will not only be easier, but will also be more demanded by the need to have an adequate population to carry out the setting programme.

Empirical Study

Fouzia (2011) evaluates the different dimensions of customer satisfaction in the Pakistani Islamic banking and based on the SERVQUAL model, a positive relationship between service quality, and customer satisfaction. However unlike Osman, Ali, Zainuddin, Rashid and Jusoff (2009), he found that the overall reputation of the sector hinged on its interest free practices which are promoted in Islam and there was awareness about Islamic products. Muhammed's (2012) measurement of the degree of customer satisfaction of Pakistani Islamic banks' customers corroborated Fouzia (2011) in terms of the religious reputation and image of the bank. Unlike the two previous studies, Muhammed found that other service quality dimensions like confidentiality and location of bank were additional promoters of customer satisfaction in Pakistani Islamic banks. Irwan, Surachman & Hadiwidjojo, (2013) who assessed the influence of service quality of Islamic banks on customer satisfaction and trust, in Indonesia, found a result different from Osman et al (2009) in terms of strongest attribute. Whereas Ismah et al (2009) found that reliability was perceived as the strongest attribute influencing customer satisfactions Irwan et al (2013) found that responsiveness was the strongest attraction. However, both studies revealed that compliance with Islamic principles was the weakest attributes but overall result singled out compliance as the most important factor for selecting Islamic banks which offered Islamic products and services to the market.

Methodology

The sample size for this study was derived using Cochran's (1963:75) sample size formula for known and unknown population, given as:

$$n = \frac{Z^2 p(1-p)}{E^2}$$

Where, n = sample size (for: Infinite Population)
Z = alpha value at 95% level of confidence (1.96)
p = degree of variability (50%)
e = margin of error or level of precision (2.5%)

Applying the above we have that:

$$n = \frac{Z^2 p(1-p)}{e2}$$

$$n = \frac{1.96^2 * 0.5 * (1 - 0.5)}{0.025^2}$$

n = 1537

Since our evaluation of customer satisfaction is focused on 106,405 customers, the sample size that will now be necessary for the purpose of this study is illustrated below using Cochran's finite population correction for proportion formula, thus:

$$n_0 = \frac{n}{1 + \frac{(n\ 1)}{N}}$$

Where: n = sample size (for: infinite Population)
$n_{0=}$ sample size (for: finite Population)
N= finite population size (Total number of customers from the office Headquarters of the 4 bank)

$$n_{0=} \frac{1537}{1+(1537-1} = 1515$$
106,405

Our above sample size figure of 1,515 tallies with that obtainable from The Research Advisors (2006) published sample size table for known and unknown (large) population as shown below. Please see the arrow indicating the place of our above figure on the table below:

Population Size	Confidence = 95% Margin of Error				Confidence = 99% Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	48	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
5OO	217	306	377	475	285	365	421	485
600	234	340	432	*565*	315	416	490	579
700	2 8	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9103	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

Application of Sample Size to the Population

The four banks that were sampled in this study are Union Bank, First bank, Eco Bank and Diamond Bank, all in Lagos. Given the disparity in the number of customers among these four banks, it became needful to undertake a proportional allocation in order to obtain a representative sample that is proportionate to the population of each of the banks. To

achieve this, we adopted a sampling fraction of n_0 /N. The application of the n_0 /N sampling fraction yields the following:

F = n_0 /N

Where:
F = sampling fraction
n_0 = sample size (for: finite Population) = 2000
N = finite population size (Total number of customers from the office headquarters of the 4 bank) = 106,405

Therefore, F = 2,000 / 106,405

In order to derive a proportionate number of respondents for each office headquarter of the four banks, we adopted the following formula:

$$\frac{Y \times n_0}{N}$$

Where n_0 = sample size of finite population
N = finite population size
Y = the number of customers at each office headquarter of the four banks

Therefore:
Union Bank = $\frac{37045 \times 2000}{106405} = 696$
First bank = $\frac{42310 \times 2000}{106405} = 795$
Eco bank = $\frac{10400 \times 2000}{106405} = 196$
Diamond bank = $\frac{16650 \times 2000}{106405} = 313$

The figures above show that from the sample size of 2,000 respondents, each office headquarter of the four banks would provide different number of respondents for interview; 696 respondents from Union bank; 795 respondents from First bank; 196 respondents from Eco bank and 313 respondents from Diamond Bank. This result is shown in the table below;

Bank HQ	No. of customers	Proportionate sample size
Union Bank	37,045	696
First bank	42,310	795
Eco Bank	10,400	196
Diamond Bank	16,650	313
Total	106,405	2,000

Figure

Method of Data Collection
Due to the nature of information required in this study, the method of data collection included both primary and secondary sources of data. The primary data source was through questionnaires. Structured questionnaires were used to collect data from respondents, while the secondary data included Annual Audited Accounts, published journals, etc. Four research attendants each to each bank assisted in the questionnaire administration due to the large number and time constraint.

Six (6) Point Likert-scales was used to elicit response for every question, and this would cover two extremes of 'strongly agree' and 'strongly disagree'. Out of the 2000 questionnaire distributed, 1949 were successfully completed and returned.

i. Demographics Features presented (age, sex, occupation, education, experience) have influences on customer satisfaction experience, despite the quality of service.

ii. Teller-customer ratio The structured statements are focused on the number of tellers and queue management

Table 1: Teller Customer Ratio Questions

Item	Characteristics	Freq.	%	Mean	SD	CV	Remark	Total
1. The number of tellers in my bank is sufficient	Strongly disagreed	24	1.2					
	Disagreed	21	1.1					
	Fairly disagreed	105	5.4					
	Fairly agreed	500	25.6					
	Agreed	666	34.2					
	Strongly agreed	633	32.5	4.88	1.038	0.21	Agreed	1949
2. The tellers in my bank are efficient	Strongly disagreed	10	0.5					
	Disagreed	30	1.5					
	Fairly disagreed	93	4.8					
	Fairly agreed	520	26.7					
	Agreed	778	39.9					
	Strongly agreed	518	26.6	4.84	0.958	0.20	Agreed	1949
3. In my bank, customers wait in the queue for just a little time	Strongly disagreed	34	1.8					
	Disagreed	78	4.0					
	Fairly disagreed	153	7.8					
	Fairly agreed	512	26.3					
	Agreed	693	35.5					
	Strongly agreed	479	24.6	4.64	1.153	0.25	Agreed	1949
4. In my bank the queue is well organized	Strongly disagreed	19	1.0					
	Disagreed	21	1.1					
	Fairly disagreed	146	7.5					
	Fairly agreed	459	23.5					
	Agreed	773	39.7					
	Strongly agreed	531	27.2	4.82	1.013	0.21	Agreed	1949
5. In my bank, customers are served strictly on a first-come-first served basis	Strongly disagreed	26	1.3					
	Disagreed	36	1.8					
	Fairly disagreed	126	6.5					
	Fairly agreed	523	26.8					
	Agreed	683	35.1					
	Strongly agreed	555	28.5	4.78	1.069	0.22	Agreed	1949

Item 1 reports findings in connection with the number of bank customers as against the number of tellers. There is obviously a discrepancy between respondents who reported that the tellers in their banks were insufficient and those who reported that the tellers were sufficient. An insignificant minority strongly disagreed (1.2%) disagreed (1.1%) and fairly disagreed (5.4%). On the other hand, a significant majority fairly agreed (25.5%) agreed (34.2%) and strongly agreed (32.5%). This result with a mean score of 4.88 indicates a near total consensus on agreement.

Item 2 reports findings in relation to the efficiency of tellers in the four banks. There is obviously a discrepancy between respondents who attested that the tellers in their banks were inefficient and those who positively attested to the efficacy of tellers across the four banks. Whereas an insignificant minority strongly disagreed (0.5%) disagreed (1.5%) and fair disagreed (4.8%) a significant majority fairly agreed (26.7%), agreed (39.9%) and strongly agreed (26.6%). The mean score of 4.84 is suggestive of an overall endorsement of teller efficiency across the four banks.

Item 3 reports' findings about the time customers wait in the queue to receive service. There is a discrepancy between respondents who disagreed that they waited in the queue for a little time and those who agreed that they waited in the queue for a little time. However, compared with the first two items, there is a slightly observable increase in the number of those who disagreed: 1.7% strongly disagreed, 4.0% disagreed and 7.9% fairly disagreed. This is against the majority who fairly agreed (26.3%), agreed (35.6%) and strongly agreed (24.6%). The mean score of 4.64 represents agreement.

Item 4 is the response of respondents concerning the organization of queues across the four banks. Again it is noticeable that there is a discrepancy between respondents who disagreed that queues in their banks were well organized and those who agreed. A minority strongly disagreed (1.0%), disagreed (1.1%) and fairly disagreed (7.5%) while a majority fairly agreed (23.6%), agreed (39.7%) and strongly agreed (27.2%). The mean score of 4.82 is suggestive of agreement.

Item 5 report's findings in connection with how customers in the queue are selected for service. Whereas a minority disagreed that they are served on a first-come-first-served basis, a majority agreed. The result shows that 1.3% strongly disagreed, 1.8% disagreed, 6.5% fairly disagreed. This number is contrary to the majority who fairly agreed (26.8%), agreed (35.0%) and strongly agreed (28.5%). The mean score of 4.78 is indicative of agreement

Table 2: Descriptive Statistics and Pearson Correlation Analysis

Variable	Mean	Std. Deviation	N	Pearson Correlation (R)	Sig.
Customer satisfaction	4.74	0.719	1949	0.811*	0.000
Teller customer ratio	4.80	0.822	1949		

*.Correlation is significant at the 0.05 level. $R^2 = 0.658$ (65.8%)

Source: Researchers' Field Survey, 2015

Table 2 above explains the extent to which teller-customer ratio affect customer satisfaction.

The descriptive statistics indicates that the mean response of 1949 respondents on Customer satisfaction and Teller customer ratio is obtained as 4.74 and 4.80 respectively. The mean response score results implied that a significant majority of the respondents agreed on customer satisfaction and teller-customer-ratio across the four banks with

respect to the questions asked. The Pearson correlation result suggests that there is a strong positive relationship between Teller customer ratio and Customer satisfaction at R = 0.811, since P-value = 0.000< 0.05 significant level. This result implied that increase in Teller customer ratio will increase Customer satisfaction. The variation accounted for in the model is given as R^2 = 0.657 (65.7%), which is the amount of information explanatory variable (Teller Customer Ratio) has about the dependent variable (Customer Satisfaction). The adequacy of variation in the model is ascertained in the ANOVA table.

Test of Hypothesis

Table 3: Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	679.158	1	679.158	3830.583	0.000
Residual	354.243	1947	0.177		
Total	1033.401	1948			

a. Dependent Variable: Customer satisfaction. b. Predictor: (Constant), Teller customer ratio

Source: Researcher's Field Survey, 2014

The ANOVA table deals with $H_0 1$ and also shows that the variation in the dependent variable accounted for by the explanatory variable is adequate at F = 3830.583, P-value = 0.000< 0.05 significant level. Hence the model is acceptable for result utilization and further analysis. The effect of the explanatory variable on the dependent variable is examined in the regression analysis.

The ANOVA table also shows that F-value (3830.583) with a corresponding P-value (0.000) < 0.05 level of significance revealed that there is a significant relationship between teller-customer ratio and customer satisfaction, thereby rejecting the acceptance of the null hypothesis,$H_0 1$

Discussion

The result of the hypothesis confirms that the number of tellers in a bank as against the number of customers has implications for marketing strategy and customer satisfaction. The result also shows that there is a strong positive relationship between teller customer ratio and customer satisfaction. The above assertion conforms with Ogbo (2009) and Onyeizugbe (2011). They concluded in their findings that consequences or problems caused by long queues in Nigerian banks often lead to customer dissatisfaction with service; this may result in reneging as the customer waiting in a queue may decide to forego the service and may be the root cause of economic losses in business. Consequently, long queues in the banks increase customer dissatisfaction; lead to chaos and confusion and ultimately lead to economic loss. Findings will help management of banks to re-examine their teller customer ratio and effect amendments which would contribute to increased customer satisfaction.

Linear Regression Model

Table 4: Regression Analysis Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.335	0.056		23.953	0.000
Teller customer ratio	0.709	0.011	0.811	61.892	0.000

Dependent Variable: Customer satisfaction

Source: Researchers' Field Survey, 2015

Simple regression analysis was used to determine the effect of Teller customer ratio on Customer satisfaction. Customer satisfaction represents the dependent variable, while Teller customer ratio represents the independent variable. The result of the analysis reveals that Teller customer ratio is significant at t = 61.892, P-value = 0.000< 0.05 significant level. Hence, Teller customer ratio has significant direct effect on Customer model is given as:
Customer satisfaction = 1.335 + 0.709 Teller customer ratio. The model implies that, based on the data collected, a unit increase in Teller customer ratio will increase Customer satisfaction by 0.709 (70.9%).

Conclusion

The hypothesis is, the teller-customer ratio has no significant effect on customer satisfaction. The result negates the hypothesis in that teller-customer ratio is found to have a positive significant effect on customer satisfaction. The implication of this result is that the banks had sufficient tellers to attend to customers, the tellers were efficient in their service delivery, the queues were well organized and customers were served on a first-come-first-served basis. As a result customers received prompt service and so did not spend too much time in the queues for services. The consequence of all these is that customers were satisfied with the services rendered by tellers and the operation and organization of queues in their various banks. Therefore, it could be submitted that the ratio of teller to customers is a strong factor in terms of customer satisfaction. Where there are sufficient tellers, who are efficient, and the queue is well organized, customers will be satisfied and they can do a word-of-mouth advertisement for the bank. But where the tellers are not sufficient or they are not efficient or that the queues are not well organized, customers may not be satisfied.

Recommendations

The following recommendations are:

1. Banks should invest more on the training of tellers because they are the staff that deals with the customer on a one-on-one basis.
2. The banks should ensure that the tellers are sufficient and efficient.
3. Where the tellers are insufficient the customers are promptly serviced.
4. The internet systems should be up-dated in order to avoid delays in service time.
5. The bank should also invest more in training the tellers towards achieving excellent communication skills.
6. A good inter-personal rapport between a service provider (like the teller) and the customer is an effective means of boosting understanding and camaraderie between the two groups.

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