Service Quality Perceptions, Price Fairness, Brand Image and Consumers' Repurchase Intention of Telecom Service in Akwa Ibom State, Nigeria

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Abstract

This study examines the effects of consumers perceived service quality, price fairness and brand image on brand re-use intention of the four telecom companies in Akwa Ibom State, Nigeria. The state was segmented into three zones based on senatorial districts and data was collected from 208 active voice telecom subscribers using a structured questionnaire. Data was descriptively analysed using mean and standard deviation, and inferentially using simple and multiple regressions. The results indicate that consumers' perception of service quality was low and perceptions of both price fairness and brand image were high. In terms of service quality, the study revealed an inverse relationship between perceived service quality and market share of the telecom service providers in the active voice subscription market. Results also indicate that perceived service quality, perceived price fairness and perceived brand image had positive and significant effects on repurchase intention of telecom service, with brand image having the most positive and significant effect. The study further indicates that consumers' demographics in terms of gender, age, education level, and occupation moderated the effects of consumers' perceptions on patronage. This study moved a step ahead of previous study by examining consumers' perceptions of telecom services both on an industry basis and on the basis of each service provider,

Keywords: *Telecom Companies, Service Quality, Price Fairness, Brand Image, Repurchase Intention*

1. Introduction

The liberalization of the telecommunication industry in Nigeria in 2001, saw the entry of some privately-owned telecom companies into an industry formerly controlled by government-owned Nigerian Telecommunication Limited (NITEL). Government's decision to open up the telecom sector was informed not only by the poor performance (in terms of service delivery, customers' subscriptions, and profitability) of the state-owned monopoly, NITEL, but also by the necessity to develop a sector which in many economies of the world is a significant contributor to Gross Domestic Product (International Trade Association [ITA], 2023; National Bureau of Statistics [NBS], 2014; Olatokun & Nwonne, 2012). It was becoming increasingly difficult for companies in Nigeria to remain profitable in the competitive global economy while still operating in an environment of analog, ineffective and dysfunctional communication system (Micah & Okafor, 2017; Tella, 2007). As a consequence, in 2001, the telecommunication industry was deregulated and licenses granted to three telecom companies: ECONET (now Airtel Nigeria Limited), MTN Nigeria Communication Limited, and Mobile Telecommunication Limited (MTEL, an offshoot of NITEL (Adegoke & Babalola, 2011; Ajala, 2005; Nigerian Communication Commission [NCC], 2018; Opele et al., 2020). In 2002 and 2005, licenses were also issued to Globacom Limited, and Emerging Market Telecommunication Service Limited (EMTS) with the brand name, Etisaliat (now rebranded as 9Mobile), respectively (NBS, 2018).

There has been a boom in the telecommunication industry in Nigeria since the introduction of the GSM services (ITA, 2023). The total number of active voice subscription for all GSM network in the country, for example, grew from 192,413,613 at the end of the first quarter of 2021 to 221,769,883 as at end of the third quarter of 2023 (NBS, 2021; 2024) representing an annual growth rate of about 4.51%. In Akwa Ibom State - in the same accounting period - the total number of active voice subscription for the four GSM networks grew from 3,565,282 to 3,724,826 (NBS, 2021; 2023). In terms of market share of the telecom brands in the active voice subscription market as at the end of the third quarter of 2023, MTN, with 1,537,397 active voice subscribers, had the highest share, followed by Airtel (1,300,518), GLO (629,716, and 9Mobile (257,195), respectively (NBS, 2024).

To survive and remain profitable in this competitive industry, telecom GSM providers place premium on customers repurchasing its services as it is more profitable serving existing customers than attracting new ones (Kotler & Keller, 2009).. Customers' repurchase intention hinges heavily on their perceptions of service quality, price fairness, and brand image of the telecommunication service providers (Adebiyi et al., 2016; Adeleke & Aminu, 2012; Hanif et al., 2010; Mojekeh, 2008).

The GSM service has become increasingly popular in terms of the numbers of subscribers and applications in the everyday life of individuals and organizations This popularity has attracted the interests of researchers. In terms of consumers' perceptions, many works have investigated the effects of consumers perceived service attributes on consumers behavioural intentions toward telecom companies (brands) (Adebiyi et al., 2016; Khan, 2012). These studies examined customers' perceived service quality (and the other constructs) of the sampled telecom brands as a whole whereas an examination of each of the service dimensions on the basis of each firm would

have provided a deeper and comprehensive understanding of the differential effects of these variables. Also, a scooping review of the literature revealed scanty work of this nature in Akwa Ibom State. Beside the fact that this research carried out in Akwa Ibom State suffered from the same limitation identified in the other studies, the researchers restrict their works on a particular segment of the population such as tertiary institutions (Ibok, 2010) or churches (Mfon, 2021). This confinement of the study to a particular set of participants makes generalization of the findings inappropriate.

It was to fill these gaps that this study was undertaken. This study sought to examine how GSM subscribers in Akwa Ibom State, Nigeria, perceived telecom companies in terms of the aforementioned variables.

The objectives of this studies are to: 1) examine consumers' perceived service quality, price and brand image of telecom companies, 2) examine the relationship between perceived service quality, price, brand image on repurchase intention of telecom service and 3) examine consumers demographics as a moderator between perceived service quality, price, brand image, and brand re-use intention. The research questions that guided the achievement of the objectives are as follows:

1. What are consumers' perceptions of service quality, price fairness, and brand image of telecom companies?
2. What effects have consumers' perception of service quality on repurchase intention of telecom services?
3. What effects have consumers' perception of price fairness on repurchase intention of telecom services?
4. What effects have consumers' perception of brand image on repurchase intention of telecom services?
5. What are the moderating effects of consumers' demographics in the relationshipbetween perceived service quality, perceived price fairness, perceived brand image, and repurchase intention of telecom services?

2. Literature Review and Theoretical Foundation

2.1 Theoretical Foundation

This study adapted the Theory of R which was developed by Fishbein and Ajzen (1975). This theory has been widely applied to predict behavioural intentions in many industry such as fast food (Ibitomi, 2018) and telecommunication (Nwinkinaka & Poi, 2023). This theory is made of attitude towards the behaviour, subjective norms about the behaviour, and behavioural intention. Behaviour is due mainly to behavioural intention, and to a lesser extent, other intervening factors. Behavioural intention is determined by a combination of attitude towards the behaviour, and subjective norms about the behaviour. Subjective norms are social pressure from perceived important referent individuals think he/she should do, and the motivation to comply. The 'attitude towards others' component is determined by beliefs about the perceived consequences of performing the behaviour, and also by his or her evaluations of the consequence.

Behaviour (purchase of telecom service) is dependent on intention (to repurchase telecom service). Intention is determined by two variables: attitude and subjective norm. Attitude towards telecom service is influenced by consumer's beliefs about service attributes- service quality price fairness and brand image. Subjective norm is about the opinion of significant others, like family members and friends about the behaviour (purchase of telecom service) and the motivation to comply or not to comply with this social pressure. The opinion of the significant others, just as that of the consumer in question, is formed from their perceptions of telecom companies

RepurchaseIntention

Some customers buy the same brand again or buy a product or service from the same vendor or service provider after an initial purchase. Repurchase intention is the likelihood that a customer who had previously purchased a brand would likely buy the same brand again, or a customer who had previously purchased a product or service from a vendor or service provider would likely buy again from the same vendor or service provider (Rajput & Gahfoor, 2020; Selines, 1993). Prior experience with a product or service influences perception (Jones et al., 2000; Wang et al., 2012). Consumer perception of service attributes like service quality (Choi et al., 2006), price (Kollmann, 2000, Lambert, 1980) and brand image (Groholdt et al., 2000; Khan, 2012) affect repurchase intention

Service Quality

Service quality is typically defined from the perspective of consumers' evaluation, as the disparity between a company's service offering and the expectations of what should be offered by companies providing such services (Parasuraman et al., 1988). Customers evaluate service quality relative to what they want by comparing their perceptions of service experience with their expectations of what the service performance should be. SERVQUAL (Parasuraman et al.,) is a measurement model for service quality that has enjoyed the consensus of scholars in the field of service marketing. This scale measures service quality by subtracting the value of consumers' prior expectation from their perceptions of a firm's performance (Loke et al., 2011; Zeithaml et al., 2008).

The SERVQUAL scale is made up of five dimensions. These dimensions, according to Lovelock (1996) are as follows:

i. Tangibles, involves the appearance of physical facilities, including the equipment, personnel and communication materials;
ii. Reliability, involves the ability to perform the promised service dependably and accurately;
iii. Responsiveness, involves the willingness to help customers;
iv. Assurance, involves the knowledge and courtesy of employees and their ability to convey trust and confidence. This assurance includes competence, courtesy, credibility and security; and,
v. Empathy, involves the provision of caring, individualized attention to customers. This empathy includes access, communication, and understanding the customer (p. 36).

Studies carried out with different samples and in different locations to examine the relationship between consumers' perception of service quality and repurchase intention and loyalty towards telecom service providers reported positive and significant relationship (Adebiyi et al., 2016; Ansah, 2021; Choi et al., 2006; Deng et al., 2009; Olatokun & Nwonne, 2012). Therefore, this study proposes the following hypothesis:

H1: Service quality has a positive effect on repurchase intention of telecom services

2.3 Price Fairness

Price is the cost of acquiring something or the amount of money exchanged to have a product or benefit of a service. Price plays a vital role in telecommunication market especially for the mobile telecommunication users (Kollmann, 2000). Here, price includes not only the buying price but also the call rate. Consumers' perceptions of price fairness are influenced by their assessment different factors such as competitor's price, previous price, and cost of goods during the period (Bolton & Alba, 2006). Studies have linked right price to consumers customer intention to repurchase telecom band and loyalty to GSM service providers (Adebiyi et al., 2016; Hanif et al., 2010; Olatokun & Nwonne, 2012). Therefore, this paper proposes the following hypothesis:

H2: Perceived price fairness has a positive effect on repurchase intention of telecom services

2.4 Brand Image

Brand image is a mental image picture that reflects the way a brand is perceived, including all the identifying elements, the products or company personality, and the emotions and association evoked in the consumer's mind (Kort, 2005). It is constituted by a series of pictures and ideas in people's minds that sum up their knowledge of a brand. Brand image is achieved through marketing communication and promotion (Ogwo & Igwe, 2012). The image consumers have of a brand influence their buying behaviour (Schiffman & Kanuk, 2010). Previous studies have reported positive relationship between brand image and consumers repurchase intention of telecom services (Khan, 2012; Muhammed et al., 2023). Therefore, this paper proposes the following hypothesis:

H3: Brand image has a positive effect on repurchase intention of telecom services

2.5 Consumers' Demographics as Moderator

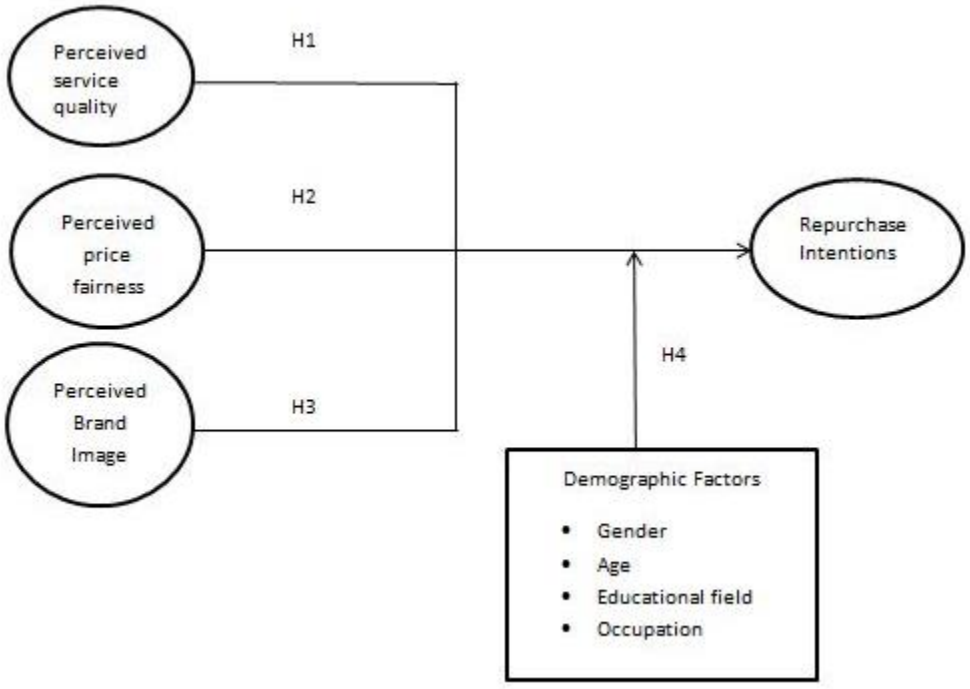
In a study on service quality and customer loyalty in private banks, gender of bank managers was used as the moderator (Iqbal et al., 2016). Gender was found to moderate the relationship between service quality and customer loyalty. The impact of male manager was higher than the impact of female manager in the relationship. Female manager had no significant impact in the relationship. In a study on service quality, brand image and trust on customer loyalty in telecommunication industry in Pakistan, price fairness was used as a moderator (Ashraf et al., 2018). Price fairness moderated in the relationships between service quality and customer loyalty, and service quality and customer loyalty. Therefore, this paper proposes the following hypothesis:

H4: Consumers' demographics moderate the relationship between service quality, brand image, price fairness and brand re-use intention of telecom companies.

2.6 Conceptual model

Based on the reviewed literature, this present study proposed a conceptual model depicted in Figure 1. The model has four constructs (perceived service quality, perceived price fairness, perceived brand image, and repurchase intention). The model has four paths. The first three paths (H1, H2, and H3) measure the regression coefficient between each of the three independent variables (perceived service quality, perceived price fairness, and perceived brand image) and the dependent variable, repurchase intention. The fourth path (H4) test the moderating effects of consumers' demographics on the relationships between the combined effect of the three perceived variables (service quality, price fairness, and brand image) on repurchase intention

Figure 1: Conceptual model



3 Methodology

This study adopted a cross sectional survey design. The population of this study was all subscribers of the major GSM networks - MTN, Globacom, Airtel, and 9Mobile – operating in Akwa Ibom State, Nigeria. Though some telecom customers subscribed to more than one GSM networks, a GSM consumer (subscriber) was defined and identified by GSM network he or she makes and receives calls more/most with. To ensure representativeness, Akwa Ibom State was stratified into three zones based on senatorial district. Convenience sampling method was used to

select 20 subscribers of each network from the headquarter of each senatorial district (Uyo, Eket, and Ikot Ekpene) making it 80 subscribers from each zone or 240 subscribers from the three senatorial districts.

A structured self-completed questionnaire was used in collecting data from participants. The questionnaire consisted of five sections: A, B, C, D, and E. Section A, consisted of 15 questions and measured consumers' "Perceived Service Quality of TSPs on SERVQUAL scale. The statements on this section were adapted from original SERQUAL model by Parasuraman, et al. (1988). However, instead of the five statements on each of the dimensions, the author extracted only three statements each from the five dimensions. The need was to make the questionnaire less burdensome to complete by participants. Section B, consisted of five questions and measured consumers' "Perceived Price fairness of GSM service providers". The questions were adapted from the study by Rahman et al., (2010). Section C, consisted of five questions and measured consumers' "Perceived Brand image GSM service providers." The questions were adopted from Kort (2005). Section D, consisted of five questions and measured consumers "Repurchase intention." Section E, measured respondents' socio-demographic characteristics. Sections A to D, were based on a 5-point Likert scale which ranged from "Strongly Disagree (scaled as 1 point) to "Strongly Agree (scaled as 5-points). The Statistical Package for Social Sciences (SPSS) version 20 was used in analyzing data.

4 Result and Discussion

Two hundred and forty questionnaires were distributed and 219 were returned. Eleven of the returned questionnaires were wrongly completed and therefore discarded. The 208 correctly completed and usable questionnaire represented a response rate of 86.7 per cent.

Reliability

The Alpha Cronbach coefficient (α) was used to test the internal consistency of the items. A reliability of 0.70 was set as the criterion of acceptability for this study. As shown in Table 1, the least Cronbach coefficient of the variables was 0.887 for patronage and the highest 0.895 for price. The instrument was considered reliable as the Cronbach coefficient for each variable was above the minimum criterion for acceptability (Nunnally, 1978).

Table 1: Reliability coefficients of variables measures

S/n	Dimensions	no of items	no of cases	Cronbach's Alpha
1.	Perceived tangibility	3	208	.889
2.	Perceived reliability	3	208	.888
3.	Perceived responsiveness	3	208	.889
4.	Perceived assurance	3	208	.889
5.	Perceived empathy	3	208	.890
6.	Perceived price	5	208	.895
7.	Perceived brand image	5	208	.888
8.	Patronage	5	208	.889

The distribution of respondents' demographic and social characteristics are presented in Table 2. The table shows that most of the respondents were subscribers of Airtel, 56 (26. 9%) followed by MTN subscribers 51 (24.5 %), while 9mobile had the least number of subscribers of participants representing 49 (23.0%). There was no significant difference between the numbers of male participants 109 (52, 4 %) and the female participants 99 (47.6 %). Most of the participants were of the '21-30' age bracket while the age bracket "below the age of 21", were the least participants, 20 (9.6 %). On the educational levels of the survey participants, holders of B.Sc./equivalent, were 81 (38.9 %), while Ph.D. holders were only 7 (3.4 per cent). Most of those who took part in the survey were civil servant 59 (28.4 %). This was closely followed by students 54 (26.0%). In terms of locations of the study's participants, the table shows that most of them, 77 (37.0%), live in Uyo, while fewest of the participants, 63 (30.3%), reside in Ikot Ekpene.

Table 2: Distribution of respondents' characteristics (N=208)

Characteristics	Categories	Frequency	Percentage
Networks	MTN	51	24.5
	Airtel	56	26.9
	Globacom	52	25.0
	9Mobile	49	23.0
Gender	Male	109	52.4
	Female	99	47.6
Age (years)	Below 21	20	9.6
	21-30	76	36.5
	31-40	60	28.8
	41-50	31	14.9
	51+	21	10.1
Education	SSCE/NECO	57	27.4
	OND/NCE/Equivalent	48	23.1
	B.Sc./Equivalent	81	38.9
	M.Sc./M.A/MBA	15	7.2
	PhD	7	3.4
Occupation	Civil servant	59	28.4
	Professional	40	19.2
	Technician/Artisan	31	14.9
	Student	54	26.0
	Unemployed/Retiree	24	11.5
Location	Uyo	77	37.0
	Eket	68	32.7

Ikot Ekpene	63	30.3

Customers Perceived Service Quality of Telecom Companies

The SERVQUAL model was used to calculate the gap score which is the difference between customers' perceived service quality and customers' expectation of service quality (Zeithaml et al., 2008). The responses of participants to statements in Section A of the questionnaire were analyzed and the results presented in Table 3 and Table 4. Table 3 summarized the perceived service quality for the four telecom companies, while Table 4 presented a breakdown of perceived service quality on the basis of four GSM networks

Table 3. The perceived service quality of telecom companies on the 5 SERVQUAL dimensions

Dimension	Statement	Perception score (P)	Expectation score (E)	Gap score (P-E)
Tangibility, Tan.1	Physical facilities of telecom company are appealing	3.456	3.555	-0.088
Tan.2	Customer service staff are well behaved	3.658	3.702	-0.044
Tan.3	The voice quality is clear	3.790	3.818	-0.028
	Mean score			-0.057
Reliability, Rel.1	Telecom service providers are reliable	3.221	3.287	-0.066
Rel.2	Calls usually go through when dialled the first time	3.075	3.548	-0.473
Rel.3	There are no voice distortions during calls	3.285	3.893	-0.608
	Mean score			-0.382
Responsiveness, Res.1	Telecom company usually inform customers when services will be provided	3.256	3.518	-0.262
Res.2	Always willing to help customers	3.635	3.387	0.248
Res.3	Readily responds to customers' requests	3.536	3.439	0.097
	Mean score			0.219
Assurance, Ass.1	Customer service staff can be trusted	3.361	3.487	-0.126
Ass.2	Customer service staff are polite	3.654	3.185	0.469
Ass.3	Customers feel secured with dealings	3.501	3.912	-0.411

	Mean score			-0.227
Empathy, Emp.1	Telecom service personnel show care and concern when interacting with me	3.921	3.635	0.286
Emp.2	Complain avenue and process is convenient to me	3.363	3.174	0.189
Emp.3	I get immediate solutions to my complains	3.244	3.288	-0.044
	Mean score			0.144
Overall mean gap score				-0.099

Gap scores of 0.000 and above, indicate "High Service Quality," while Gap score below 0.000 (having negative values) indicate "Low Service Quality" (Parasuraman et al., 1988). As shown in Table 3, the perceived service quality of telecom companies is low as indicated by the low mean score of all the four dimensions of SERVQUAL; reliability (-0.057), responsiveness (-0.382), assurance (-0.227), and empathy (0.144).

Table 4: Distribution of customers' perceived service quality on the basis of telecom companies

Dimension / Statement	MTN			Airtel			Glo			9Mobile		
	Perception	Expectation	Gap score	Perception	Expectation	Gap score	Perception	Expectation	Gap Score	Perception	Expectation	Gap Score
Tangibility												
Tan.1	3.490	3.764	-0.274	3.589	4.143	-0.554	3.481	3.865	-0.384	3.265	2.449	0.816
Tan.2	3.412	3.902	-0.490	3.821	3.946	-0.125	3.827	3.981	-0.154	3.571	2.980	0.591
Tan.3	3.765	4.000	-0.235	3.893	4.000	-0.107	3.808	3.808	0.000	3.694	3.462	0.232
Mean gap			-0.333			-0.262			0.179			0.546
Reliability												
Rel.1	3.039	3.765	-0.726	3.143	2.625	0.518	3.307	3.654	-0.347	3.041	3.102	-0.061

Rel.2	2.882	3.412	-0.530	3.054	3.875	-0.821	3.058	3.558	-0.500	3.306	3.347	-0.041
Rel.3	3.294	3.882	-0.588	3.143	3.893	-0.750	3.212	3.788	-0.576	3.490	4.020	-0.530
Mean gap			-0.615			-0.351			-0.474			-0.211
Responsive												
Res.1	3.137	3.255	-0.118	3.250	3.286	-0.036	3.288	3.692	-0.404	3.347	3.837	-0.490
Res.2	3.412	3.431	-0.019	3.696	3.429	0.267	3.769	3.115	0.654	3.653	3.571	0.082
Res3.	3.510	3.588	-0.078	3.625	3.946	-0.321	3.558	3.038	0.520	3.449	3.184	0.265
Mean gap			-0.072			-0.030			0.256			-0.048
Assurance												
Ass.1	3.275	3.765	-0.490	3.393	3.446	-0.053	3.368	3.000	0.368	3.408	3.735	-0.327
Ass.2	3.647	3.706	-0.059	3.625	3.464	0.161	3.692	3.019	0.673	3.653	2.551	1.102
Ass.3	3.471	4.275	-0.804	3.286	3.554	-0.268	3.615	3.942	-0.327	3.633	3.878	-0.245
Mean gap			-0.451			-0.053			0.238			0.177
Empathy												
Emp.1	4.020	3.824	0.196	3.875	3.286	0.589	4.077	3.923	0.154	3.714	3.510	0.204
Emp.2	3.353	3.137	0.216	3.161	3.500	-0.339	3.673	3.403	0.270	3.265	2.654	0.611

Emp.3	3.235	3.255	-0.020	3.196	3.768	-0.572	3.288	3.231	0.057	3.256	2.898	0.358
Mean gap			0.131			-0.107			0.160			0.391
Grand mean gap			-0.268			-0.161			0.072			0.171
Consumers' perceptions of service quality	Low service quality			Low service quality			High service quality			High service quality		

Table 4 shows that the perceived service quality of MTN (-0.268) and Airtel (-0.161) are low, while those of GLO (0.072) and 9Mobile (0.171) are high.

Research question 2**:** What is the relationship between customers' perceptions of price and brand re-use intention? The data provided to Section B of the questionnaire were descriptively analyzed and the result presented in Table 5.

Table 5. Mean and standard deviation scores of respondents on the perceived price fairness

S/n	Statement	Mean score for each network				Group mean	Std. dev.
		MTN	Airtel	Glo	9Mobile		
1	The call rate the main factor I considered in choosing this network	2.90	3.23	2.92	2.90	2.99	0.113
2	The charges (call rate) for this network is moderate	3.14	3.14	3.04	3.41	3.18	0.435
3	I am satisfied with the billing system for this network	2.75	2.75	3.02	3.08	2.90	0.152
4	Bonus credit is something I always look forward to	3.02	3.57	3.33	3.27	3.10	0.278
5	Call rate is more important than quality of service	3.00	2.89	2.92	2.96	2.94	0.041
	Cluster	2.96	3.12	3.05	3.12	3.06	

Table 5, shows the mean perceived prices fairness of MTN (2.96), Airtel (3.12), GLO (3.05), and 9Mobile (3.12). Since these scores are above the 2.50 cut-off point (Hair et al., 2006), it suggests that consumers' perceptions of the price fairness of telecom companies are high.

Table 6: Mean and standard deviation scores of respondents on the perceived brand image

S/n	Statement	Mean score for each network				Group mean	Std. dev.
		MTN	Airtel	GLO	9Mobile		
1	I am satisfied with my present network	3.55	3.57	3.60	3.16	3.47	0.018
2	I recommend this network to friends	3.41	3.61	3.40	3.47	3.47	0.084
3	I am considering switching to another network	3.29	3.43	3.27	3.12	3.28	0.124
4	I will continue to subscribe to this network	3.69	3.45	3.56	3.71	3.60	0.105
5	I want to continue to make this my major network	3.63	3.70	3.54	3.69	3.64	0.064
	Cluster	3.51	3.55	3.47	3.43	3.49	

Table 6, shows the mean perceived brand image of MTN (3.51), Airtel (3.55), GLO (3.47), and 9Mobile (3.43). Since these scores are above the 2.50 benchmark, it suggests that consumers perceptions of the brand image of telecom companies are high.

Four hypotheses were formulated for this study. Hypotheses one and four were tested using multiple regression analysis, while hypotheses two and three were tested using simple regression analysis. The test of H1 was based on responses to the second research question. The result of the test of this hypothesis is presented in Table 7.

Table 7: The multiple regression analysis of relationship between consumers' perceived service quality and repurchase intention (N208)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	F	Adjusted R Square
		B	Std. Error	Beta				
1	(Constant)	8.081	1.183		8.833	.000	16.291	.270
	Tangibility	.003	.090	.002	.034	.973		
	Reliability	.317	.076	.275	4.154	.000		
	Responsiveness	.397	.080	.333	4.963	.000		
	Assurance	.119	.098	.085	1.208	.229		
	Empathy	.032	.085	.026	.383	.706		

a. Dependent Variable: Patronage of TSPs; Sig. at .05 level

Table 7 shows that the analysis of the relationship between consumers' perceptions of service quality and brand re-use intention of telecom companies yielded an adjusted R-square multiple regression coefficient of 0.270. The result also shows that Analysis of Variance for the multiple regression data produced an F-ratio of 16.291 which is greater than the critical F-value of 2.45 and was significant at 0.05 level, [F-statistic (4, 204) = 16.291 compared to

F0 0.05 (4, 204) = 2.45]. Therefore, H1, which stated that service quality has a positive effect on repurchase intention of telecom services was accepted.

The test of H2 was based on responses to the third research question. The result of the test of this hypothesis is presented in Table 8

Table 8: The simple regression on perceived price fairness and repurchase intention (N=208)

Variable	Adjusted R square	Beta	F	Sig.
(Constant)	.048		11.449	.000
Price fairness		.229		.001

a. Dependent Variable: Patronage; Sig. at .05 level

Table 9 shows that the analysis of the relationship between consumers' perceptions of price fairness and brand re-use intentionof telecom companies, yielded an adjusted R-square simple regression coefficient of 0.048. The result also shows that Analysis of Variance data produced an F-ratio of 11.449 which is greater than the critical F-value of 3.92 and was significant at 0.05 level, [F-statistic (1, 207) = 11.449 compared to F0 0.05 (1, 207) = 3.92. By this result, H2 which stated that perceived price has a positive effect on repurchase intention of telecom services was accepted

The test of H3 was based on responses to the fourth research question. The result of the test of this hypothesis is presented in Table 9.

Table 9: The simple regression on perceived brand image and repurchase intention (N=208)

Variable	Adjusted R square	Beta	F	Sig.
(Constant)	.310		93.963	.000
Brand image		.229		.000

a. Dependent Variable: Patronage; Sig. at .05 level

Table 9 shows that the analysis of the relationship between consumers' perceptions of brand image and brand re-use intention of telecom companies yielded an adjusted R-square simple regression coefficient of 0.310. The result also shows that Analysis of Variance data produced an

F-ratio of 93.693 which is greater than the critical F-value of 3.92 and was significant at 0.05 level, [F-statistic (1, 207) = 11.449 compared to F0 0.05 (1, 207) = 3.92. Therefore, H3 which stated that brand image has a positive effect on repurchase intention of telecom services was accepted

The test of H4 was based on responses to the fifth research question. The result of the test of this hypothesis is presented in Table 10.

Table 10: The multiple regression analysis of the effect of consumers' demographic on the relationship between perceived service quality, price fairness and brand image on repurchase intention (N=208)

Model		Unstandardized Coefficients		Standardized Coefficients				
		B	Std. Error	Beta	T	Sig.	F	Adjusted R Square
1	(Constant)	3.863	1.621		2.383	.018	12.218	.431
	Tangibility	- .224	.086	-.166	-.2.619	.010		
	Reliability	.184	.073	.160	2.530	.012		
	Responsiveness	.411	.073	.345	5.619	.000		
	Assurance	-.035	.090	-.025	-.387	.699		
	Empathy	.088	.078	.071	1.124	.263		
	Price fairness	-.004	.048	-.055	-.078	.938		
	Brand image	.445	.060	.497	7.453	.000		
	Gender	.376	.316	.065	1.189	.236		
	Age	.290	.175	.133	1.656	.099		
	Education level	-.177	.200	-.065	-.882	.379		
	Occupation	-.099	.124	-.048	-.801	.424		

a. Dependent Variable: Patronage; Sig. at .05 level

The table shows that the analysis of consumers' perceptions (in terms of service quality, price, and brand image) and socio-demographic variables (in terms of gender, age, educational level, and occupation) on patronage of telecom companies, yielded an adjusted R-square multiple regression coefficient of 16.431. The Analysis of Variance for the multiple data produced an F-ration0f 12.218, which is greater than the critical F-value 0f 1.75, and was significant at 0.05 level. [F-statistic (14, 194 = 12.218 compared to F0 0.05 (14, 194) = 1.75. Therefore, H4 which stated that consumers' demographics moderate the relationship between perceptions service quality, price and brand image, and repurchase intention of telecom companies was accepted. The Beta weights of four variables, tangibility (-.166), reliability (.160), responsiveness (.345), and brand image (.497) were significant at 0.05 level while the other seven variables were not significant. Brand image made the highest positive contribution to the prediction of brand re-use intention of the 11 variables studied.

Discussion

The study first sought to assess customers' perceptions of service quality, price, and brand image of the four major telecom companies operating in Akwa Ibom State, Nigeria. The results of data analysis revealed an aggregate low perceived service quality for the four telecom companies. MTN, the industry leader in terms of market share (NBS, 2024) had the lowest perceived service

quality. This was followed by Airtel, the GSM brand with the next highest market share (NBS). These findings collaborate the work of Ibok (2010) which reported low customers' perceived service quality of MTN and Airtel service providers in Akwa Ibom State, Nigeria. The perceived service quality of the relatively low market share brands, GLO and 9Mobile, were both high. This finding suggests an inverse relationship between relative market share and perceived service quality high perceived. The results of data analysis show that perceived price fairness and perceived brand image of the four telecom brands were high.

The study also investigated the effect of customers' perceived service quality on repurchase intention of telecom service. The result of the hypothesis testing was positive and significant. Past studies with different samples and in different locations reported similar findings (Adebiyi et al., 2016; Ansah, 2021; Choi et al., 2006; Deng et al., 2009; Olatokun & Nwonne, 2012). On the effects of perceived price fairness on repurchase intention of telecom brand, the result of the analysis was positive and significant. This result is in tandem with those of similar studies carried out in the past (Adebiyi et al., 2016; Hanif et al., 2010; Kollmann, 2000; Olatokun & Nwonne, 2012). Another objective of the study was to test the effect of customers' perceived brand image on repurchase intention of telecom service. A positive and significant effect was revealed. Studies by Khan (2012) and Muhammed et al., (2023) reported that brand image had positive and significant effect on consumers brand repurchase intention in the telecommunication industry. When consumers' demographics were introduced into the model as moderators, the effect was significant suggesting that age, gender, education level and occupation have interacting effects on the study's parameters.

5 Conclusions and Recommendations

The study examined the effects of consumers' perceived service quality, price fairness and brand image on intention to re-use brand of telecom services in Akwa Ibom State, Nigeria. The results of the study show that the aggregate perceived service quality of the four telecom service providers was low. MTN, which has the highest market of the GSM market had the lowest perceived service quality, followed by Airtel the next highest share company. The perceived service quality of the relatively low market share brands, GLO and 9Mobile were both high. This finding shows an inverse relationship between relative market share and perceived service quality suggesting complacency among GSM operators in the state. Consumers' perceptions of service quality, price fairness and brand image have positive and significant effects on repurchase intention of telecom brands. Of the three variables of consumers' perceptions used in this study, perceived brand image has the most significant effect on repurchase intention of telecom services..

Premised on the findings of the present study, two major recommendations were made:

1. Telecom service providers should increase their service quality so as to have more share of the market. Increase in market share should be matched by corresponding increase in service quality.
2. In view of the strongest effect perceived brand image has on brand re-use intention, telecom companies should invest in the promotion of their brands so as to have not just a strong brand image but a stronger brand equity.

6 Limitations and Suggestions for Future Studies

This study has several limitations and its findings should be used with caution in making generalizations. First, the study limited its measures of consumers' perceptions to only service quality, price fairness and brand image whereas there are many other measures. Future studies should have models which incorporate more comprehensive measures of consumers' perceptions.

Second, data for this study were collected from only one state of the 36 states and the Federal Capital Territory that make up the Nigerian Federation. This study is limited in the representativeness of consumers of GSM services. In future studies, survey should be expanded to the other states, and possibly to other countries where a cross-country comparison can be made. The latter would allow for a more valid generalization.

Third, the hypotheses were tested with simple and multiple regression analyses, both of which cannot estimate errors in measurement. Structural equation modeling (SEM) is a robust statistical procedure with the ability to estimate measurement error. Future studies should apply SEM so as to give results that would be more valid. The application of SEM is germane given the need to incorporate more variants of consumers' perceptions as suggested in the first paragraph.

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