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| Research Article

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The Impact of the Dimensions of Electronic Phone Service Quality on Enhancing Customer Loyalty through the Mediating Role of Positive Word-of-Mouth and Customer Satisfaction: An Analytical Study of the Opinions of a Sample of Customers of Asiacell Telecommunications Company Limited

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Abstract: This study is designed to explore how the dimensions of electronic phone service quality (reliability, coverage, assurance, accessibility, and tangibility) affect customer loyalty in the telecommunications service and what role customer satisfaction and positive word-of-mouth play in this process. The research method and technique used in this study was descriptive analytical. The study population was all customers at Asiacell Telecommunications Company Limited and a sample of 385 respondents were randomly selected. The data collection was done using verified and validated electronic questionnaire. Data were analysed statistically in the form of data analysis in (SPSS.26) and JASP (0.96.0.0). The data were analysed using several statistical techniques, such as One-Sample t-test to compare the gaps with the accepted benchmark, simple linear regression analysis, and multiple linear regression analysis, the latter of which was used to check the significance of the mediating paths – the Sobel Test. The study was able to draw several conclusions, one of the leading ones being that Asiacell Telecommunications Company Limited managed to exceed the accepted benchmark of the measurement instrument on all aspects related to electronic phone service quality. Tangibility was the strongest dimension in terms of awareness and perception of customers followed by the coverage dimension. Additionally, positive word of mouth was discovered to be an important and mediating role in enhancing the relationship between the dimensions of electronic phone service quality and customer loyalty. The study suggests that in the light of these findings, the company should focus on improving the quality of its digital services, which should be regarded as the underpinning of the improvement and maintenance of customer loyalty in the long term.

Keywords: Service Quality, Customer Satisfaction, Positive Word-of-Mouth, Customer Loyalty, Asiacell.

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INTRODUCTION

The telecommunications industry in recent years has grown to amazing proportions around the world, as the number of users continues to rise and the scope of services offered by mobile telecommunications companies has grown significantly. The services can no longer be restricted to voice communications, and the competition is heating up among companies vying for market share. This problem has been worsened by increased customer attrition and the fast speed at which customers switch from one service provider to another. Customer satisfaction and the waning loyalty of customers to mobile communication services are undoubtedly the main reasons behind this swift switching.

It is important to note that the competitive dynamics of global telecom companies is not significantly different from that of mobile telecommunications companies in Iraq. In Iraq, mobile service providers have to contend with three top service providers (Asiacell, Zain Iraq

and Korek) and this is a major challenge for them to retain their customers. Therefore, customer satisfaction has become a cornerstone of the market share in telecommunications service provider's agenda.

Furthermore, most research on customer satisfaction and customer loyalty have suggested that creating customer satisfaction and building company reputation through positive word-of-mouth is a result of service quality and high quality of services offered to customers. It is therefore imperative to note the link between customer satisfaction and the dimensions of the mobile phone service quality and the effect of mobile phone service quality on enhancing the company's reputation and image which consequently helps to attract new customers and at the same time retain old customers.

RESEARCH METHODOLOGY

Research Problem

Due to the growing competition in the telecommunications sector in Iraq, many mobile telecommunication companies are confronted with challenges to retain customers. Customers have more than one Subscriber Identity Module (SIM) cards – that's a testament to this. This is a fairly typical occurrence in the telecom industry, but it definitely shows poor customer satisfaction with the company's services. Thus, the main element of the research problem is the decrease of customer loyalty, mainly due to the low quality of electronic phone services (applications and digital platforms). These services are no longer an option but are now the key factor in customer satisfaction. Moreover, telecommunications customers are more aware, informed and knowledgeable about the quality of telecommunications service and the value provided by various telecommunications service providers. In a now mass market of widely accessible and similar services, service quality is the key trait that sets one service provider apart from another.

The dimensions of the problem become more evident through the existence of a gap in the quality of electronic services, which leads to lower customer satisfaction. This decline, in turn, discourages customers from engaging in positive verbal behavior and positive word-of-mouth regarding the company's name and reputation.

Accordingly, the research problem is formulated through the following main research question:

What is the impact of electronic phone service quality on enhancing customer loyalty through the mediating role of positive word-of-mouth and customer satisfaction at Asiacell Telecommunications Company?

The following sub-questions are derived from the main research question:

1. What is the level of the study sample's evaluation of the dimensions of electronic phone service quality?
2. What is the level of customer satisfaction with the services provided by Asiacell Telecommunications Company?
3. What is the level of the study sample's evaluation of the positive word-of-mouth dimension regarding the company's electronic services?
4. What is the level of the study sample's evaluation of customer loyalty toward Asiacell Telecommunications Company?
5. Is there a statistically significant effect of electronic phone service quality on the customer loyalty of Asiacell Telecommunications Company?
6. Is there a statistically significant effect of the dimensions of electronic phone service quality on customer satisfaction at Asiacell Telecommunications Company?
7. Is there a statistically significant effect of the dimensions of electronic phone service quality on positive word-of-mouth among Asiacell customers?
8. Is there a statistically significant effect of both customer satisfaction and positive word-of-mouth on customer loyalty at Asiacell Telecommunications Company?
9. Does customer satisfaction mediate the relationship between electronic phone service quality and customer loyalty at Asiacell Telecommunications Company?
10. Does positive word-of-mouth mediate the relationship between electronic phone service quality and customer loyalty at Asiacell Telecommunications Company?

Significance of the Study

The significance of this study, both academically and practically, lies in its examination of contemporary concepts in the fields of quality management and marketing, namely service quality, customer satisfaction, positive word-of-mouth, and customer loyalty within the telecommunications sector. The present study also seeks to bridge the knowledge gap regarding the nature of the relationships among these variables and to extend previous research that has addressed them. Furthermore, it is expected to serve as an additional reference for researchers interested in conducting further studies on the variables investigated in this research.

From a practical perspective, the study aims to provide decision-makers in the investigated company with recommendations and proposals that contribute to improving the quality of electronic services, enhancing customer experience, increasing customer satisfaction, and sustaining long-term relationships between the company and its customers.

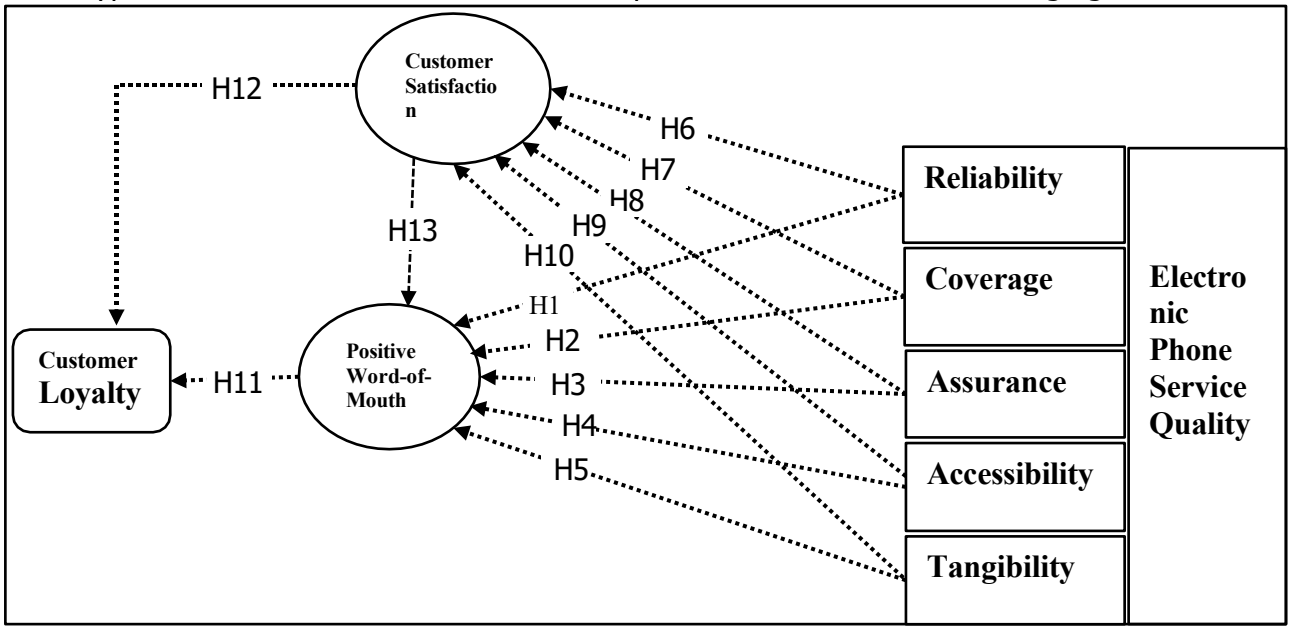
Objectives of the Study

This study aims to achieve the following interrelated research objectives:

1. To analyze the study sample's level of perception of the dimensions of electronic phone service quality.
2. To analyze the level of customer satisfaction with the electronic phone services provided by Asiacell Telecommunications Company.
3. To analyze the extent to which Asiacell customers engage in positive word-of-mouth regarding the company's electronic services.
4. To analyze the current level of customer loyalty toward Asiacell Telecommunications Company within the competitive telecommunications environment.
5. To analyze the effect of electronic phone service quality on customer loyalty at Asiacell Telecommunications Company.
6. To analyze the effect of the dimensions of electronic phone service quality on customer satisfaction at Asiacell Telecommunications Company.
7. To analyze the effect of the dimensions of electronic phone service quality on positive word-of-mouth among the company's customers.
8. To analyze the effect of customer satisfaction and positive word-of-mouth on customer loyalty at Asiacell Telecommunications Company.

The Hypothetical Research Model

Based on the research questions presented in the research problem and the hypothesized relationships among the study variables (independent, dependent, and mediating variables), the hypothetical research model can be developed as illustrated in the following figure:



Source: Prepared by the Researcher.

Figure 1. The Hypothetical Research Model

Research Hypotheses

Based on the hypothetical research model, the study hypotheses are formulated as follows:

H1: Reliability has a statistically significant effect on positive word-of-mouth in the investigated company.

H2: Coverage has a statistically significant effect on positive word-of-mouth in the investigated company.

H3: Assurance has a statistically significant effect on positive word-of-mouth in the investigated company.

H4: Accessibility has a statistically significant effect on positive word-of-mouth in the investigated company.

H5: Tangibility has a statistically significant effect on positive word-of-mouth in the investigated company.

H6: Reliability has a statistically significant effect on customer satisfaction in the investigated company.

H7: Coverage has a statistically significant effect on customer satisfaction in the investigated company.

H8: Assurance has a statistically significant effect on customer satisfaction in the investigated company.

H9: Accessibility has a statistically significant effect on customer satisfaction in the investigated company.

H10: Tangibility has a statistically significant effect on customer satisfaction in the investigated company.

H11: Positive word-of-mouth has a statistically significant effect on customer loyalty in the investigated company.

H12: Customer satisfaction has a statistically significant effect on customer loyalty in the investigated company.

H13: Customer satisfaction has a statistically significant effect on positive word-of-mouth in the investigated company.

H14: Customer satisfaction mediates the relationship between service quality and customer loyalty in the investigated company.

H15: Positive word-of-mouth mediates the relationship between service quality and customer loyalty in the investigated company.

H16: Customer satisfaction mediates the relationship between service quality and positive word-of-mouth in the investigated company.

H17: Positive word-of-mouth mediates the relationship between customer satisfaction and customer loyalty in the investigated company.

Data Collection Instrument and Measurement of Variables

To achieve the objectives of the study, an electronic questionnaire was developed as the primary instrument for data collection. All study variables were measured using a five-point Likert scale, with the corresponding weights presented in the following table (Saunders,2023:456).

Table 1. Five-Point Likert Scale Weights

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The study adopted well-established international measurement scales that were adapted to suit the Iraqi context, as follows:

1. **Electronic Service Quality:** Measured as the independent variable through the following dimensions: reliability, coverage, assurance, accessibility, and tangibility, based on the **CCAAT** scale developed by Karunaratna (2022) (Karunaratna,.2022:72).
2. **Customer Loyalty:** Measured based on the scale developed by (Jo & Park, 2024:7).

3. **Positive Word-of-Mouth:** Measured based on the scale proposed by (Rachbini and Harimurti,2021:50**)**
4. **Customer Satisfaction:** Measured based on the scale developed by (Ancu and Ungureanu, 2024:71).

Research Methodology

The study adopted the descriptive-analytical approach due to its suitability for the nature of the research. The descriptive aspect was employed to identify and assess customers' perceptions of the study variables and the dimensions of electronic service quality, whereas the analytical aspect was used to test the research hypotheses, examine the causal relationships among the variables, and investigate the mediating roles of customer satisfaction and positive word-of-mouth in enhancing customer loyalty.

Population and Sample of the Study

The study population consisted of customers of Asiacell Telecommunications Company Limited. Due to the difficulty of accurately determining the size of the study population, the sample size was determined using **Cochran's Formula**, resulting in a sample of **(385) respondents**, which constituted the study sample (Cochran., 1977:72).

Statistical Analysis Methods

Analysis of the collected data was done using Statistical Package for the Social Sciences (SPSS.26) for descriptive analysis apart from JASP (Version 0.96.0.0). The methods of data analysis used were designed to extract the results of the study from the data. These comprised One-Sample t-test, simple and multiple linear regression analyses, and (Sobel Test) for statistical significance of the mediating effects.

THEORETICAL FRAMEWORK OF THE STUDY

Electronic Phone Service Quality

The concept of service quality has attracted considerable attention and generated extensive debate in the academic literature due to the difficulties associated with both its definition and measurement, with no comprehensive consensus having been reached on either aspect. Consequently, numerous definitions of service quality have been proposed, each varying according to the type of service provided. For example, the concept of phone service quality differs from that of healthcare or banking service quality. In general, service quality is defined as the degree of discrepancy between customers' expectations of a service and their perceptions of its actual performance (Makanyeza, 2016:4).

Accordingly, electronic phone service quality refers to the extent to which customers perceive that telecommunications services meet their expectations through digital platforms or the Internet (Triatmojo and Sefnedi, 2025:17). Furthermore, electronic phone service quality refers to customers' evaluation of the quality of services provided by the telecommunications company, whether delivered directly or through electronic platforms (Rahmadika, and Rahmatika, 2025:2).

Therefore, electronic phone service quality is considered a measure of the quality of electronic services delivered by the company through digital platforms, such as websites, mobile applications, and other electronic communication systems (Lorenza.,2025:4). Accordingly, electronic phone service quality reflects an organization's ability to meet or exceed customer expectations. Moreover, (Almarri et al, 2025:171) emphasized that service quality is a fundamental determinant of customer satisfaction and customer loyalty, particularly in service-intensive industries such as telecommunications. As customer expectations continue to evolve in the digital era, ensuring high service quality has become essential for telecommunications companies seeking to retain customers and sustain their competitive advantage.

Dimensions of Electronic Phone Service Quality

To measure the dimensions of electronic phone service quality, this study adopted the model developed by Karunaratna (2022), which comprises the following dimensions (Karunaratna,2022:72).

Table 2. Dimensions of Electronic Phone Service Quality

Dimension	Concept	Source
Reliability	**Reliability:** Refers to the service provider's ability to deliver the promised electronic service accurately, consistently, and dependably. Customers primarily expect the company to provide its electronic services as promised, without errors or inconsistencies.	(Imam and Khan, 2025:189) (Saleem et al .,2024:45)
Network Coverage	**Coverage:** The coverage dimension refers to the availability of a wide network supported by a range of services, including attractive service packages, updated technology, and value-added services provided by the service operator.	(Polak et al., 2024:3) (Mahadevan, and Joshi, 2022:23)
Assurance	**Assurance:** This dimension refers to the employees who provide electronic services, their competence, courtesy, and ability to inspire customers' trust, confidence, and sense of security. It is concerned with making customers feel safe and confident in their transactions and interactions with the service provider.	(Imam and Khan, 2025:189) (Saleem et al .,2024:45)
Accessibility	**Accessibility:** This dimension refers to the availability of branches and customer service centers, meaning that the company has a sufficient number of branches to provide services, that these branches are conveniently located close to customers, and that customers have easy access to the automated customer support system.	(Karunaratna,2022:72)
Tangibility	**Tangibility:** This dimension encompasses the physical aspects of the service, including the appearance of physical facilities, the attractiveness of the company's website, the condition of its equipment, the professional appearance of service personnel, the cleanliness and organization of branches, the pleasant atmosphere of service locations, and the appearance of employees.	(Imam and Khan, 2025:189) (Saleem et al .,2024:45)

Source: Prepared by the Researcher.

Positive Word-of-Mouth

Electronic word-of-mouth (eWOM) through the Internet and social media platforms is considered an informal and interactive form of communication transmitted by current, former, and prospective customers to reflect their actual experiences with the quality of companies' electronic phone services. It involves the exchange of messages, comments, and personal perceptions independent of organizations' official marketing sources, thereby giving it greater credibility than traditional advertising (Rachbini and Harimurti.,2021:33). Positive word-of-

mouth is also defined as customers' dissemination of product-related information through Internet channels and social media platforms (Chow., 2025:95). Word-of-mouth communication generally refers to the exchange of messages, perceptions, responses, and ideas among consumers, whereby customers choose to discuss products, services, and brands with others (Purnamabroto et al.,2022:92).

Such communication is greatly affected by the nature of the customer's digital experiences. Negative word-of-mouth is generated from complaints because of poor experiences and technical problems that users encounter with the e-app/services, while positive word-of-mouth is a powerful marketing instrument which helps to minimise uncertainty and alleviate subscribers' concerns before adopting or using e-applications and services (Saeed et al .,2026:5).

Importantly, positive word of mouth is a form of social proof, which can help to mitigate customers' uncertainty about product quality. The impact of its influence, however, is only felt in shaping perceptions or beliefs, and not directly increasing purchasing behavior (Utami et al.,2026:233). In addition, positive word-of-mouth has a multiplying effect that increases customers' belief in the quality of services offered by telecommunications companies, and boosts customer satisfaction and customer loyalty to the company's brand (Hu et al., 2026:1215).

Customer Satisfaction

Customer satisfaction is one of the most extensively studied concepts in evaluating the quality of companies' services and is widely regarded as a global benchmark for assessing organizational performance and commitment to fulfilling customer needs and expectations. In general, customer satisfaction refers to an individual's feeling of pleasure or disappointment resulting from comparing the actual performance of a service with prior expectations. Accordingly, customers become dissatisfied when performance falls below expectations and satisfied when performance meets expectations (Masoud.,2020:78). However, when customers perceive that a product or service performs at or above their expectations, they experience satisfaction; conversely, dissatisfaction occurs when performance falls below expectations (Mahadevan and Joshi, 2022:23).

Customer satisfaction represents either a positive or negative evaluation of service performance resulting from comparisons between expected and actual performance. It reflects an overall judgment of service performance based on a series of actual experiences accumulated over time (Kasapi, 2024:2). Customer satisfaction with electronic phone services does not differ conceptually from satisfaction with traditional services, as customers are satisfied when telecommunications companies effectively meet or exceed their needs and expectations (Rahmadika, and Rahmatika, 2025:3).

From another perspective, customer satisfaction reflects the manner in which a company delivers its services and indicates its success in attracting and retaining customers. Satisfied customers are willing to continue investing their time and money in the company when the services they receive exceed their expectations (Shokrollahi, 2025:3).

It must be noted that customer satisfaction is not an immediate result but it is largely developed based on a chain of positive previous experiences and frequent purchases on the company's platforms (Melinda and Aditya ,.2023:82). Thus, customer satisfaction evaluation of the company's services is one of the most crucial strategies that can be adopted, namely, by examining the customer's online interactions with the company and observing behavioral signs such as purchasing the same products from the company repeatedly, paying for its products electronically, and continuing to seek the company's services online (Sajjad, and Shafiq.,2025:382). Besides, an increase in customers' satisfaction will result in the retention and continued use of the products, as well as recommendations to other customers, which will lead to the increase of customers' numbers, customers' shares, and profitability of the company (Luthfitawati and Sutejo, 2026:181).

Customer Loyalty

Customer Loyalty is more than just repurchase or repeated use behavior. It is a type of repeat buying that signifies an awareness of the need to keep buying the same brand even if it takes very little effort and time to look for another brand. This attitude should be positive and accompanied by a high commitment to the brand (OJOK.,2017:11). It aligns with (Abd-

Elrahmanet al., 2019:45) who described customer loyalty as a continuous and long-term commitment of customers to repurchase/reuse products and/or services from the company in the future.

Therefore, customer loyalty is a mix of attitudes and behaviors that are helpful to the business to ensure that the customers are likely to renew their service purchases in the future, thereby helping in the growth of the organizational profit (Karunaratna and Kumara, 2021:35). In other words, customer loyalty is the phenomenon in which customers continually buy products or consume services of a company, visit the company frequently and are loyal to its products and services over time (Sajjad and Shafiq,.2025:383).

In addition, (Aqabneh, 2025:584) proposed that customer loyalty should not only be in terms of repeat purchases or usage but also in terms of customers' resistance to competitors' offers. Similarly, (Kasapi, 2024:3) noted that customer loyalty also involves a customer's allegiance to the brand, willingness to buy the same product/service despite the availability of similar offers from other brands, willingness to promote the company's products/services.

It is worth noting that customer loyalty in the context of electronic services is conceptually similar to loyalty toward traditional services, as customer loyalty in electronic transactions is regarded as a critical factor contributing to sustainable business success and profitability. In the context of electronic phone services, customer loyalty refers to the behavioral pattern of users of online electronic phone services, whereby customers remain committed to the service provider and continue using its platform (Lorenza .,2025:31).

Customer loyalty toward electronic phone services provides several advantages to the company. It ensures a continuous stream of revenue, reduces marketing and operating costs, and increases customers' resistance to competitors' promotional activities. Moreover, the costs associated with acquiring new customers are considerably higher than those required to retain existing customers. Therefore, the value of customer loyalty cannot be overlooked in a competitive business environment (Aqabneh,.2025:586). Loyal customers are less susceptible to negative information about the brand and are more willing to defend it, even in highly competitive markets. Consequently, they represent the first line of defense for the brand, remaining willing to purchase and continue using its services despite the availability of numerous alternatives (Luthfitawati and Sutejo, 2026:182).

EMPIRICAL FRAMEWORK OF THE STUDY

Description and Profile of the Demographic Characteristics of the Study Sample

Due to the large size of the study population, a simple random sample consisting of (**385) respondents** was selected based on **Cochran's Formula**, representing the study sample (Cochran,. 1977:72). The demographic characteristics of the respondents are presented in the following table.

Table 3. Demographic Characteristics of the Study Sample

Variable	Category	Frequency	Percentage
Gender	**Males**	253	**65.7**
	Females	132	**34.3**
Age	**Less than 20 years**	66	**17.1**
	21-30	215	**55.8**
	31-40	72	**18.7**
	41-50	25	**6.5**
	More than 51 years	7	**1.8**
Educational Level	**Postgraduate Degree**	47	**12.2**
	Bachelor's Degree	212	**55.1**
	Diploma	49	**12.7**
	Secondary School	35	**9.1**
	Below Secondary School	42	**10.9**

Source: Prepared by the Researcher based on the outputs of the (SPSS.26) program.

The statistical analysis results of the demographic characteristics of the study sample, consisting of (385) respondents, indicate that the majority of respondents were males, representing (**65.**7%), This result is considered expected, particularly within the Iraqi context, which is characterized by a predominantly male population. Regarding age, the majority of respondents were young individuals within the age group (21–30 years), representing (55.8%), as young people in Iraq constitute the largest group using mobile phone services. Concerning educational level, the majority of the study sample were bachelor's degree holders, representing (55.1%), which indicates the awareness and understanding of the study sample and its suitability for the research.

Description and Diagnosis of the Study Variables

This section includes an analysis of the response trends of the sample members and their levels of perception regarding the study variables through the description and diagnosis of these variables. The results are presented in the following table.

Table 4. Description and Diagnosis of the Study Variables

Variable	Dimension	Mean	Standard Deviation
Electronic Phone Service Quality	**Reliability**	3.690	0.7990
	Coverage	3.861	0.7451
	Assurance	3.538	0.8025
	Accessibility	3.715	0.8213
	Tangibility	3.863	0.6864
Customer Satisfaction		3.334	1.0742
Positive Word-of-Mouth		3.388	0.7156
Customer Loyalty		3.367	1.0410

Source: Prepared by the Researcher based on the outputs of the (SPSS.26) program.

The results of the descriptive statistical analysis of the study variables and dimensions indicate that all dimensions of electronic phone service quality achieved high evaluation levels. The **Tangibility** dimension ranked first with the highest mean value of (3.863), followed by the **Coverage** dimension with a mean value of (3.861), whereas the **Assurance** dimension ranked last with a mean value of (3.538). The standard deviation values (less than 1.00) demonstrate a clear consistency in respondents' answers and a low level of dispersion. These results also reflect the study sample's perceptions of the study dimensions and variables.

In contrast, the results for **customer satisfaction, positive word-of-mouth, and customer loyalty** showed moderate and relatively close evaluation levels, with their mean values ranging between (3.33) and (3.38). This variation between the sample members' evaluations of electronic phone service quality dimensions and customer satisfaction and loyalty provides an important analytical opportunity to examine the relationships and effects among the study variables.

Gap Analysis Test

The following table presents the **One-Sample T-Test** to determine the level of gaps or significant differences between the actual evaluations of the sample members regarding the study variables' dimensions and the accepted benchmark in the measurement instrument. The results are presented in the following table:

Table 5. One-Sample t-test

Variables / Dimensions	T-value	Significance Level (Sig.)	Average Variance
Reliability	16.941	.000	.6899
Coverage	22.668	.000	.8608
Assurance	13.159	.000	.5382
Accessibility	17.089	.000	.7153
Tangibility	24.666	.000	.8629
Customer Satisfaction	6.101	.000	.3340
Positive Word-of-Mouth	10.625	.000	.3875
Customer Loyalty	6.913	.000	.3668

Source: Prepared by the Researcher based on the outputs of the (SPSS.26) program.

The statistical interpretation of the above table indicates that all calculated **(T)** test values for the study variables and their dimensions achieved full statistical significance at the significance level of ($p < 0.001$). Since all **(T)** values had positive signs, this confirms the existence of statistically significant differences in favor of the actual evaluations of the sample members. This indicates the company's success in exceeding the accepted benchmark or the assumed adequacy threshold in the measurement instrument across all indicators.

When examining the level of positive gaps among the technical dimensions of service quality, it is observed that the **Tangibility** dimension achieved the widest positive gap in its favor, with a value of (**t = 24.666**) and a mean value of (**0.8629**), followed directly by the **Coverage** dimension with a value of (**t = 22.668**) and a mean value of (**0.8608**). This difference reflects the customers' evaluation of the company's infrastructure, network coverage, and digital applications, which enabled the actual customer evaluations to exceed the accepted benchmark by substantial margins. In contrast, the **Assurance** dimension recorded the narrowest positive gap compared with the benchmark, with a level of (**t = 13.159**) and a mean value of (**0.5382**). This indicates that although it exceeded the accepted benchmark, it remains the dimension closest to the adequacy threshold, highlighting customers' need for further enhancement of trust and security aspects.

Regarding the behavioral and emotional outcomes, the gap analysis revealed an analytical contrast. Although the variables of **Customer Satisfaction** (**t = 6.101**), **Customer Loyalty** (**t = 6.913**), and **Positive Word-of-Mouth** (**t = 10.625**) significantly exceeded the accepted benchmark, their positive gaps and corresponding **(T)** values were relatively lower and considerably smaller compared with the technical and technological dimensions of quality.

Construct Validity of the Study Instrument

To obtain the construct and convergent validity of the study instrument, confirmatory factor analysis was conducted. Table (6) presents the outputs of the measurement model evaluation for the eight dimensions constituting the study.

Table 6. Confirmatory Factor Analysis

Dimension	Item	Factor Loading	Standard Error
	X1	1.000	0.000
	X2	0.984	0.048
Reliability	X3	1.073	0.039
	X4	1.010	0.043
	X5	0.887	0.052
	X6	1.000	0.000
	X7	1.091	0.051
Coverage	X8	1.014	0.052
	X9	0.934	0.048
	X10	1.030	0.054
	X11	1.000	0.000
	X12	0.659	0.046
Assurance	X13	0.869	0.034
	X14	0.864	0.034
	X15	0.757	0.044
	X16	1.000	0.000
	X17	1.014	0.048
Accessibility	X18	0.923	0.045
	X19	0.958	0.045
	X20	1.030	0.047
	X21	1.000	0.000
	X22	1.061	0.056
Tangibility	X23	0.886	0.054
	X24	1.031	0.065
	X25	1.022	0.067
	X26	1.000	0.000
	X27	1.141	0.042
Customer Satisfaction	X28	1.079	0.041
	X29	1.075	0.039
	X30	1.041	0.039
	X31	1.000	0.000
Positive Word-of-Mouth	X32	1.058	0.077
	X33	1.100	0.077
	X34	1.066	0.077
	X35	0.935	0.075
	X36	1.000	0.000
Customer Loyalty	X37	1.303	0.055
	X38	1.275	0.048
	X39	1.217	0.046
	X40	1.297	0.049

Source: Prepared by the Researcher based on the outputs of the (JASP.0.69.0.0) program.

The statistical results presented in Table (6) indicate that all items of the study instrument (X1–X40) achieved high, strong, and statistically significant factor loadings at the significance level of ($p < 0.001$). All estimated loading values clearly exceeded the statistical threshold of (0.50) (Hair and Ringle.,2019:5).

It is worth noting that the factor loading values ranged between the minimum value of (0.659) for item (X12), which represents the **Assurance** dimension, and the maximum value of (1.303) for item (X37), which represents the **Customer Loyalty** variable. Based on these high indicators, the achievement of convergent validity for all questionnaire items and the structural validity of the instrument is confirmed, providing the measurement tool with sufficient statistical validity to proceed to the hypothesis testing stage and relationship

analysis.

Hypothesis Testing

1- Testing Direct Effect Hypotheses

The following table presents the results of analyzing the direct effect relationships among the dimensions of the study variables, and the results were as follows:

Table 7. Results of Direct Path Analysis

Symbol	Path	Unstandardized Effect Coefficient (B)	Standard Error	Standardized Path Coefficient (Beta)	Standardized Path Coefficient (Beta)	Significance Level (Sig.)	Coefficient of Determination (R^2)	F-value	Hypothesis Result
H1	Reliability → Positive Word-of-Mouth	-.115	.073	-.129	-1.591	0.113			Rejected (Not Significant)
H2	Coverage → Positive Word-of-Mouth	.078	.074	.081	1.060	0.290			Rejected (Not Significant)
H3	Assurance → Positive Word-of-Mouth	.107	.066	.120	1.617	0.107	.089	7.404	Rejected (Not Significant)
H4	Accessibility → Positive Word-of-Mouth	-.050	.058	-.057	-.860	0.390			Rejected (Not Significant)
H5	Tangibility → Positive Word-of-Mouth	.287	.064	.275	4.478	0.000			Accepted (Statistically Significant)
H6	Reliability → Customer Satisfaction	.344	.085	.256	4.039	0.000			Accepted (Statistically Significant)
H7	Coverage → Customer Satisfaction	-.041	.086	-.028	-.470	0.639			Rejected (Not Significant)
H8	Assurance → Customer Satisfaction	.215	.078	.161	2.770	0.006	.443	60.217	Accepted (Statistically Significant)
H9	Accessibility → Customer Satisfaction	-.256	.068	-.196	-3.761	0.000			Accepted (Statistically Significant with an Inverse Effect)
H10	Tangibility → Customer Satisfaction	.758	.075	.484	10.085	0.000			Accepted (Statistically Significant)
H11	Positive Word-of-Mouth → Customer Loyalty	.491	.025	.714	19.963	0.000	.510	398.508	Accepted (Statistically Significant)
H12	Customer Satisfaction → Customer Loyalty	3.304	.053	.009	.171	0.864	.000	.029	Rejected (Not Significant)
H13	Customer Satisfaction →	.313	.075	.209	4.176	0.000	.044	17.440	Accepted (Statistically

Positive Word-of-Mouth	**Significant)**

Source: Prepared by the Researcher based on the outputs of the (SPSS.26) program.

Based on the path analysis results, it can be concluded that the dimensions of service quality significantly and directly affected the positive word of mouth, customer satisfaction and customer loyalty, but the results also showed that the dimensions of service quality, namely the dimensions of service, service reliability, service responsiveness, service assurance and customer empathy had their own different strengths and directions. As far as positive word-of-mouth, the dimensions of Reliability, Coverage, Assurance and Accessibility did not show statistically significant effects, while Tangibility showed a positive effect and was highly significant. This means that tangible and service-related dimensions are the key factors in creating positive impressions which can be communicated by customers, relative to other dimensions which may not be more visible or more perceived by customers. In addition, the low value of (R^2 =0.089) suggests that this variation could not be fully captured by these dimensions alone, which might indicate that other dimensions are not considered in this model and may affect the explained variation of positive word of mouth.

In terms of customer satisfaction, the findings indicated that Reliability, Assurance and Tangibility have positive and statistically significant relationship, in which Tangibility was the most important factor in determining customer satisfaction. Coverage did not show a significant effect whereas Accessibility had a negative and significant effect; this could be due to organizational, service or operational problems that affect the customer experience despite the fact that service is available. The coefficient of determination (R^2 = 0.443) is a good measure of the explanatory power of the model in explaining a significant amount of the variance in customer satisfaction.

As related to customer loyalty, it was found that Positive Word-of-Mouth is the most explanatory factor, supporting the centrality of recommendations and shared perceptions in strengthening customer loyalty. Although many theoretical models have assumed that customer satisfaction will directly affect loyalty, the results revealed a direct and significant influence of customer satisfaction with loyalty through the mediator of positive word-of-mouth. This is also backed by the positive and significant relationship between customer satisfaction and positive word of mouth. This discovery suggests that to turn customer satisfaction into actual loyalty, it is necessary that the customer satisfaction translates into positive communicative behavior. Also, the R^2 (coefficient of determination) value is good at (0.510), which indicates the good explanatory power of the model for customer loyalty.

2- Testing Indirect Effect Hypotheses

This table examines the indirect effect relationships among the study variables, and the results are presented in the following table:

Table 8. Results of Indirect Relationship Testing

Symbol	Full Mediation Path	Indirect Effect Value	Sobel Test Value (Z-value)	Significance Level (p-value)	Type of Mediation	Mediating Hypothesis Result
H14	Service Quality → Customer Satisfaction → Customer Loyalty	0.0084	0.170	0.865	No Mediation	Rejected
H15	Service Quality → Positive Word-of-Mouth → Customer Loyalty	0.1228	4.137	0.000	Full Mediation	Accepted (Significant)
H16	Service Quality → Customer Satisfaction → Positive Word-of-Mouth	0.2920	3.946	0.000	Partial Mediation	Accepted (Significant)
H17	Customer Satisfaction → Positive Word-of-Mouth → Customer Loyalty	0.1537	4.082	0.000	Full Mediation	Accepted (Significant)

Source: Prepared by the Researcher based on the outputs of the (SPSS.26) program.

The mediation test results revealed that **Positive Word-of-Mouth** represents the most influential mediating variable in the model. A statistically significant mediation effect was found in the paths related to service quality and customer loyalty, as well as between customer satisfaction and customer loyalty. The indirect effect in the path (**Service Quality → Positive Word-of-Mouth → Customer Loyalty**) reached (0.1228), with a Sobel value of (4.137) and a significance level of (0.000), indicating the presence of statistically significant full mediation. Similarly, the path (**Customer Satisfaction → Positive Word-of-Mouth → Customer Loyalty**) recorded an indirect effect of (0.1537), a Sobel value of (4.082), and a significance level of (0.000), which also confirms the existence of full mediation in this path.

In contrast, the results did not show a mediation effect of customer satisfaction in the relationship between service quality and customer loyalty. The indirect effect in the path (**Service Quality → Customer Satisfaction → Customer Loyalty**) was only (0.0084), with a Sobel value of (0.170) and a significance level of (0.865), indicating that this effect is not statistically significant and that the corresponding mediation hypothesis can be rejected. Regarding the path (**Service Quality → Customer Satisfaction → Positive Word-of-Mouth**), the indirect effect reached (0.2920), with a Sobel value of (3.946) and a significance level of (0.000), reflecting the existence of statistically significant partial mediation. This means that customer satisfaction explains part of the relationship between service quality and positive word-of-mouth without fully accounting for the entire effect.

According to this research, it can be seen that Positive Word-of-Mouth is at the centre of the service quality and customer satisfaction to customer loyalty process. However, customer satisfaction does not directly lead to loyalty but more so when it is expressed in positive thinking and recommendations from customers. The results suggest that establishing loyalty in the studied environment is mainly dependent on improving positive word-of-mouth as one of the key explanatory modes by which the behavioral effects are transmitted.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. The study results indicated that the level of perceptions of the study dimensions and variables of the study sample has surpassed the statistically accepted dimension for studying the Asiacell. The results showed very high levels, well above the statistical threshold, which reflect the operational efficiency and stable infrastructure.
2. In the segment "Influence and Customer Awareness", the Tangibility dimension was the No. 1 most influential dimension followed directly by the Coverage dimension. This only reinforces a first line of defense for telecommunications companies – the visible elements and network stability.
3. The results indicated that there is a gap because technical dimensions and operational quality were found to have significant digital strength and momentum, yet not proportional in terms of emotional satisfaction and actual loyalty levels for the customers.
4. The findings showed that while customers' satisfaction is a precondition, it was not sufficient to build sustainable loyalty or guard against customer defection to competitors.
5. The findings revealed that Positive Word-of-Mouth is not just a by-product of satisfaction; it is the basic conversion mechanism and the actual driver that leads to behavioral and attitudinal loyalty.
6. The results showed that positive word-of-mouth is the critical factor between customer satisfaction and customer loyalty. This means that first the customer has to translate their satisfaction to an explicit recommendation, and then to loyalty.
7. As expected, the results showed that the relationship between the dimensions of service quality and the positive word of mouth was in part mediated by customer satisfaction, suggesting that the relationship between the dimensions of service quality and positive word of mouth may sometimes be mediated directly.
8. Multiple regression analysis showed that the impact of the service quality dimensions on loyalty is complex, with direct and indirect links between these, and that the absence of any dimension (especially responsiveness and security) reduces the entire value chain.

9. The results showed that although Coverage and Tangibility are superior dimensions, other dimensions like accessibility, ease of communication, assurance, security and trust are critical. If any of these areas are weak, then the satisfaction pathway may be disrupted, and satisfaction can result in immediate dissatisfaction.
10. The study found that the real competitive power of telecommunications firms doesn't just come from fulfilling customer's basic needs that lead to satisfaction, but goes far beyond to delight them and drive them to the point of being brand advocates.

Recommendations

1. As both Coverage and Tangibility dimensions were identified as having the highest impact upon customers' awareness and perceptions, the study recommends ongoing enhancement and modernisation of the telecommunications network infrastructure to maintain stability of the Coverage dimension and the incorporation of an enhanced visual identity throughout the branches and smart applications to support the Tangibility dimension.
2. The critical points identified in the dimension of Support and Assistance are recommended to be addressed by developing Artificial Intelligence systems and providing instant digital assistants for Accessibility efficiency and avoiding waiting times as well as by introducing proactive and immediate compensation policies for Assurance and security.
3. The study suggests that there is a need to shift from the static satisfaction measurement to dynamic and real-time satisfaction measurement after every transaction or satisfaction measurement experience. It also suggests giving employees on the front line the flexibility to make prompt improvements and incentives to customers who are having trouble, which will maintain the sustainable levels of customer satisfaction.
4. The study suggests that developing flexible and completely customizable packages of services in relation to the real consumption patterns of customers. That would bring a feeling of individual gratification to consumers, surpass their fundamental requirements, and help enhance the emotional fulfillment markers—not just operational fulfillment.
5. Invest in Positive Word-of-Mouth as a marketing channel by introducing incentive programs that reward existing customers for effectively recruiting new customers to buy, with the assumption that they'll now actively promote the product.
6. The study also calls for the development of more sophisticated digital listening platforms to help businesses keep an eye out for and respond to negative word-of-mouth before it can go further, continuing to spread, and to recognise and reward positive word of mouth to keep customers coming back.
7. Finally, the study suggests the company invest more in infrastructure to provide widespread coverage and maintain signal strength, especially in buildings and in locations away from the urban core.
8. Improving the capability of electronic technical support to handle customer problems from the initial interaction and shortening of waiting times in call centers and live chat services.
9. Recommendation to carry on (5G) technologies deployment to maintain the quality of services delivered to the customers, customer expectations and to enhance customer satisfaction with the services rendered by the company.

The study suggests that it is important to incentivise customers to share positive reviews on social media platforms, given that recommendations were found to be the most effective motivator for gaining new subscribers and deter customers from switching to their competitors, as the study showed.

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