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Digital Marketing Strategies and its Impact on Service Quality of Insurance Industries in Bokkos LGA of Plateau State

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Abstract: *Service quality through the evolution of digital marketing has significantly transformed how businesses interact with customers including those in the insurance sector. With the advent of technology, insurance industries now leverage various digital platforms to communicate, educate and engage with policyholders. One of the major challenges of Nigerian insurance industries is the transition from traditional marketing strategies to digital marketing strategies. Poor service quality of insurance sector still weaves around poor developed marketing channels as a result of poor implementation of digital marketing strategies which affect the growth of insurance industries in Bokkos Local Government Area, Plateau State. The motivation of this study is to evaluate the impact of digital marketing strategies on the service quality of insurance industries in Bokkos LGA, Plateau State and provide lasting solution to the digital efforts put in place by the Nigerian insurance industries in marketing insurance services. A descriptive survey design was employed, using both primary and secondary data sources. Data from 110 respondents were analysed using simple percentage as descriptive statistics while Chi-Square analysis was used as inferential statistics to test the hypotheses. Findings from the study revealed that digital marketing strategies significantly influence the service quality of insurance industries in Jos North Local Government Area of Plateau State. The study recommends that insurance firms in Plateau State should adopt regular training programmes and evaluation of the effectiveness of digital marketing strategies to help policyholders develop the necessary digital skills to access and utiilse online resources and benefits of insurance policies.*

Keywords: Digital marketing strategies, service quality, insurance service, insurance industry, Nigeria.

INTRODUCTION

The innovation of digital marketing has changed some company's specific operational model, marketing strategies, ethics and the environmental regulations of their innovative service deliveries to their customers and generation of more profit. The relevance of digital marketing in business practices has called for improved service quality, ethical standards and overall marketing approach to dealing with customers, employees and competitors in the insurance industry (Yum & Yoo, 2023). Despite the growing significance of digital marketing in the global insurance sector, its impact on service quality in Plateau State remains underexplored mostly in Bokkos LGA, Plateau State.

According to Eze and Obikeze (2020), most policyholders in the region are facing the challenge of adopting digital marketing which hinders them from enjoying the benefits of quality insurance services.Traditional marketing methods, while effective to some extent, have proven insufficient in addressing the unique needs of the modern consumer (Kotler, 2006). Globally, the constant poor service quality of insurance sector still weaves around poor marketing strategies as a result of brokers interference, policyholders perception, lack of premium payment as at when due, lack of policyholders retention and inability to adjust to new information and communication technology (Mehmeti-Bajrami, Qerimi, & Qerimi, 2022).

Policyholders' accessibility to good service quality is the best strategy for the insurance industry to maintain one of its primary objectives. Marketers analyzed that for businesses to satisfy their customers, the service quality of their company must improve (Wijaya, Marwan, & Rasdan, 2023). The reasons for poor service quality delivery are the inability of insurance industry to isolate those factors that relate to policyholders' dissatisfaction.

One of the major challenges of Nigerian insurance industry in Bokkos LGA, Plateau State is the limited technological infrastructure in the region, which hinders the effective implementation of digital marketing strategies. Additionally, when service quality is poor, it weakens the customer's relationship with the company, making them more likely to switch to competitors and also can lead to poor company image, as customers perceive the service as defective (Eze and Obikeze, 2020). For example, a lack of trust in digital payment platforms or limited digital literacy may discourage compliance with premium payments (Njegomir, Demko-Rihter & Bojanić, 2021).

Furthermore, there is need for insurance providers to improve their service quality by driving operational changes, fostering **transparency and trust**, and leveraging customer feedback to enhance the overall customer experience. Effective digital marketing campaigns often promote features like streamlined online applications, automated claims processing, and digital document delivery. To live up to these "fast and easy" selling points, insurance firms must invest in the underlying technology and process automation, leading to a more efficient and higher-quality service delivery tailored to the local context (Radchenko, Marenych, Marchenko, Kryvosheeva, Guzenko, & Shcheblykina, 2021). The use of a product or a service is traced to its benefits to the customers and its service quality offered by the company (Salah, & Alzghoul, 2024).

This study aims to address this gap by investigating the effectiveness of digital marketing strategies in enhancing service quality of insurance industries within the scope of this study and identifying barriers to its adoption. By doing so, the study will provide actionable

recommendations for insurance providers and policymakers. Understanding these dynamics will help insurance companies develop tailored strategies that align with the behavioral and technological trends of service quality of insurance industries in Bokkos LGA, Plateau State.

Effective digital marketing improves the functionality and engagement of an insurance company's policyholders (Das, Agarwal, Malhotra, & Varshneya, 2019). Ardisa, Sutanto and Sondak (2022) described service quality as a measure of how well a service's delivery meets or exceeds customer expectations. In the insurance industry, people view service quality as an indicator that significantly influences customer satisfaction and loyalty. High-service quality insurance industries contribute to improving policyholders' satisfaction. Based on analysis, there is a relationship between service quality and customers perceptions (Yum et. al, 2023).

In recent years, digital transformation has become a crucial driver of growth in many sectors, including the insurance industry. By adopting digital marketing strategies, insurance providers can target policyholders more effectively by providing them with personalised services such as prompt notification of policyholders' premium payments and swift disbursement of monies into the policyholders account after claims resolution to boost policyholders trust in insurance services. The innovative response of insurance industry through digital applications not only improve customer experience but also enhance the service quality of insurance companies in Nigeria(Ajemunigbohun & Aduloju, 2017).

On the other hand, service quality reduces future risks and improves policyholders' loyalty to sustain its credibility and reliability. Following Delgado-Ballester, Munuera-Aleman and Yague-Guillen, (2003), service quality has a huge impact on policyholders' behaviour, as well as subsequent purchase of insurance policies and payments of premium. Stanković, Stanković, and Tomić, (2022) carried-out a study that revealed the need to build trust among customers' and the insurance industry to improve customers perception. In the context of Bokkos LGA, Plateau State, digital marketing strategy is compounded by unique regional challenges such as ethno-religious conflicts, low industrialization.

Such vulnerabilities often lead to financial insecurity, reducing individuals' ability to invest in long-term protective measures like insurance (Amin, 2021). Furthermore, there is a widespread lack of understanding of insurance in Bokkos LGA, Plateau State, with many perceiving it as a luxury rather than a necessity. Awareness levels are low, and misconceptions about insurance persist. For instance, some individuals associate insurance with superstitious beliefs or view it as incompatible with religious values, which further discourages its adoption.

Despite the extensive research on digital marketing strategies, there is a notable gap in the current literature on the impact of digital marketing strategies on the service quality of insurance industries in Bokkos LGA, Plateau State where insurance industries are persistently faced with lack of service quality.

This negatively influences the insurance industries by damaging their reputation, leading to customer dissatisfaction and reduced loyalty, and ultimately impacting their financial performance and market share. This occurs because poor service quality, such as unfulfilled promises, slow response times, and inconsistent delivery, fails to meet customer expectations, creating a gap between perceived and actual service. Addressing this gap in the literature would contribute to a more comprehensive understanding of the impact of the relationship

between digital marketing strategies and service quality of insurance industries in Bokkos LGA, Plateau State.

Given these challenges, particularly in the context of Bokkos LGA, Plateau State, it becomes necessary to explore how digital marketing strategies influence service quality of insurance industries through the following research questions;

- To what extent has email marketing strategy influenced service quality of insurance industries in Bokkos LGA, Plateau state?
- To what extent has social media advertisement strategy influenced service quality of insurance industries in Bokkos LGA, Plateau State?
- To what extent has search engine optimisation strategy influenced service quality of insurance industries in Bokkos LGA, Plateau State?

In line with the research questions, the study has the following objectives;

- To examine the effects of email marketing strategy on service quality of insurance industries in Bokkos LGA, Plateau State.
- To assess the impact of social media advertisement strategy on service quality of insurance industries in Bokkos LGA, Plateau State.
- To evaluate the effect of search engine optimisation strategy on service quality of insurance industries in Bokkos LGA, Plateau State.

From the background and the domain of the constructs of this study, the conceptual model of this study was conceived and presented below as:

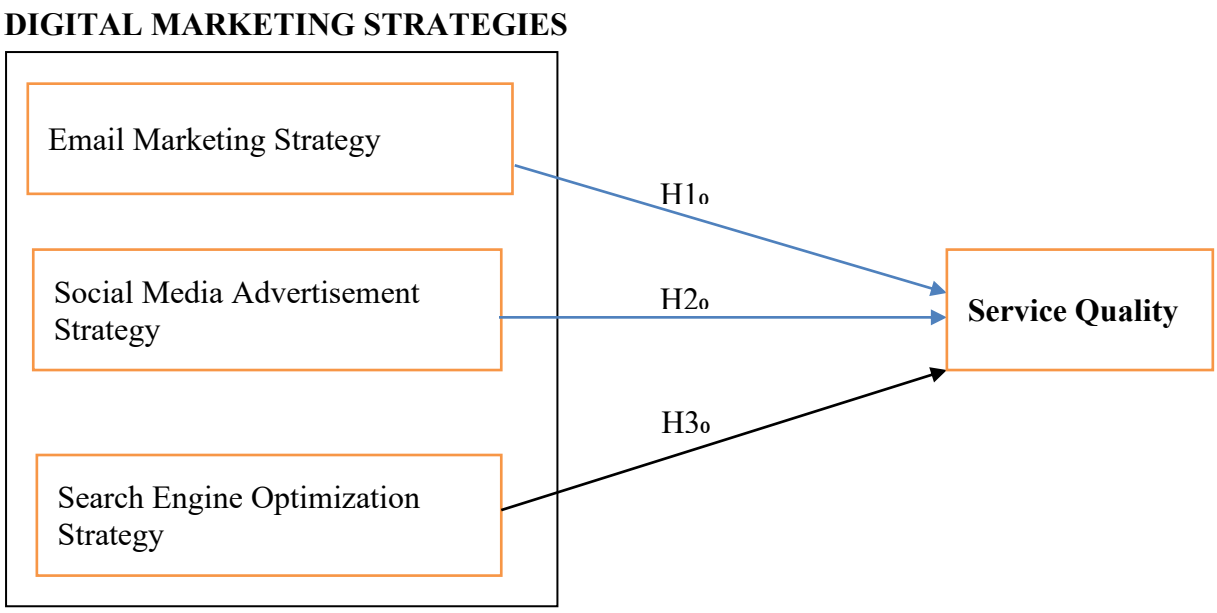

Figure 1: *Conceptual Framework/Model*

The conceptual framework/model for this study showed the hypothesised relationship between the variables designed to determine the influence of each of the constructs on service quality of insurance industries in Bokkos LGA, Plateau State.

LITERATURE REVIEW

There is a large body of literature on the relationship between digital marketing strategies and the service quality of insurance industries. Applied digital marketing strategy plays an important role in enhancing the service quality of companies, making it a crucial tool for new era marketing practices (Boer, 2018). The insurance market is consistently using digital marketing strategies to reach and engage those policyholders who prefer using the Internet in carrying-out business transactions (Njegomir et al., 2021).

Following the highly competitive nature and innovation of this current-day marketing, insurance industry must engage customers-oriented beneficial policies to retain its customer base (Kajwang, 2022). Service quality is a crucial tool in the insurance industry to sustain its reputation (Chen, 2016). The improvement in policyholder satisfaction is dependent on good service quality which creates long-term relationships with policyholders.

The practice of promoting brands through the internet and other digital communication channels such as email, social media, text and multimedia messages, and many more increase the investment returns of insurance industries (Slobodník, 2023). Digital marketing strategy, which uses wireless technologies, social media websites, and eWOM, has influenced the communication channels between the marketers and the customers on a global scale. Analyssing the impact of global competition on insurance industries through new technology, the field of marketing has improved different from the traditional marketing strategies (Brzaković, Brzaković, Karabašević, & Popović, 2021; Lee, 2023).

The importance of digital marketing has grown as insurance businesses increase their social media activity.

Belch and Belch, (2003); Johnson, (1998) and Chawla, and Singh, (2017) found that targeted email marketing increased premium payment compliance by 25% among policyholders in Nigeria. Chen and Wan (2014) and Kumar & Kumari **(**2020) highlighted that social media engagement significantly improved policy renewals and compliance rates.

Chawla and Singh (2019) discovered that mobile notifications and automated reminders reduced policy lapses by 30% in Kenyan insurance firms. Chaffey (2019) emphasised that digital content marketing enhanced customer trust, leading to higher adherence to premium payment schedules.

More importantly, the relationship between digital marketing strategies and the perception of the customers encourages consideration of the insurance businesses and fosters policyholders' loyalty (Ardisa et al, 2022).

THEORETICAL FOUNDATION

The theories that support the impact of the digital marketing strategies on service quality of insurance industries are discussed. Following the Technology Acceptance Model (TAM) propounded by Fred Davis in 1989, this research provides a framework used to explain and predict user acceptance of information systems and technologies. The primary objective of TAM was to shed light on the processes underpinning the acceptance of technology, in order to predict the behaviour of and provide a theoretical explanation for the successful implementation of technology. The practical objective of TAM was to inform practitioners about measures that they might take prior to the implementation of systems. This theory

suggests that users' acceptance of digital marketing strategies depends on perceived usefulness and ease of use. This theory emphasises the importance of an organization's technological ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments (Nnaji, & Odili, 2019). It suggests that firms with strong digital dynamic capabilities are better equipped to achieve sustained competitive advantage in measuring its service quality.

In accordance to E-Service Quality marketing theory developed by Parasuraman, Zeithaml, and Malhotra in 2000, this theory suggests that all marketing communications should be coordinated and consistent to deliver a unified message. Digital marketing strategies should be integrated with traditional marketing efforts to create a seamless customer experience and reinforce the brand's message. Digital marketing strategies influence attitudes, perceptions, and purchasing behaviour.

Al-Areefi, Hassali and Ibrahim (2013) stated that e-service quality marketing is the application of digital marketing strategies to the analysis, planning, execution, and evaluation of programmes designed to influence policyholders' patronage of insurance services to improve their personal welfare and that of society. E-service quality marketing theory posits that inadequate digital marketing strategies insurance industries can induce stress and anxiety among policyholders, influencing their level of satisfaction and perception of insurance services.

In agreement to the social marketing theory introduced by Kotler and Zaltman in 1971, social marketing is the design, implementation and control of programmes calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution and marketing research. Despite the relevance of the social marketing theory as a driving digital marketing strategy, researchers have discovered that many social marketers do not explicitly use the theory as the basis for implementing social marketing activities (Mehmeti-Bajrami, et. al. 2022). During these periods, policyholders may become more risk-averse, leading to increased demand for insurance products as a means of showing their dissatisfaction which affect the service quality of insurance industries.

By applying these theories, insurance industries can develop more effective digital marketing strategies that enhance service quality perceptions, build stronger policyholders relationships, and ultimately drive insurance business success in Bokkos LGA, Plateau State.

HYPOTHESES DEVELOPMENT

Considering the difficulties policymakers of insurance industry go through in rendering quality services to their policyholders in this new era of digital transformation, it is important to understand the innovative implication. Globally, insurance landscape faces a substantial challenge in the form of impact of digital marketing strategies on its service quality.

Despite the critical role of insurance industry in providing risks coverage, its service quality in the region faces a multifaceted problem. These challenges, if left unaddressed, have the potential to erode the service quality of insurance industries in Bokkos LGA, Plateau State. Existing studies have proved the need and importance to use digital marketing strategies and devices to improve the service delivery of companies for customer satisfaction (Chandra & Nadjib, 2023).

Furthermore, Dewi (2022) illustrates that service quality is an effective moderator, enabling technology-based marketing strategies to enhance policyholders' satisfaction through adopting appropriate digital marketing strategies. It can be deduced from reviewed literature that most of the existing studies focus on broader national or international perspectives, overlooking regional differences in economic conditions, cultural perceptions of insurance, and local market dynamics.

Additionally, while prior research has explored financial constraints and insurance adoption, limited attention has been given to how digital marketing strategies influence the service quality of insurance industry in Bokkos LGA, Plateau State. This study seeks to bridge this gap by providing innovative marketing insights into the service quality of insurance industries within the region of this study.

Hence, we hypothesise:

$H1_o$: Email marketing strategy does not have significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

$H2_o$: There is no significant relationship between social media advertisement strategy and the service quality of insurance industries in Bokkos LGA, Plateau State.

$H3_o$: Search engine optimisation strategy does not have significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

By doing so, the aim is to provide targeted interventions and policy measures that can improve service quality of insurance industries in Bokkos LGA, Plateau State through digital marketing strategies.

METHODOLOGY

The study made use of a descriptive survey design. According to NAICOM and PLASCHEMA 2024 Annual Reports, there are a total of seven (7) insurance industries' branches in operation in Bokkos LGA, Plateau State. The population of this study involves the staff of Insurance industries in Bokkos LGA, Plateau State. In consideration to the religious killings, herdsmen attack and other forms of insecurity happening in the region of this study which have led to shut down of some of the branches of insurance industries and other major businesses, the staff of five (5) insurance industries were randomly selected out of the available seven (7) insurance industries operating in Bokkos LGA, Plateau State to serve as the population of this study.

Table 1: Population Distribution of the Study

S/N	Insurance Industry	Population of Staff
1	Leadway Insurance	50
2	AIICO Insurance	35
3	Industrial and General Insurance	25
4	Royal Exchange Assurance Plc	30
5	Cornerstone Insurance Plc	28
	Total	**168**

***Source**: NAICOM 2024 Annual Report*

To determine the sample size, Taro Yamane formula was employed,

The Yamane (1967) formula is given as:

$$n = \frac{N}{1+N(e)^2}$$

Where:
n = sample size
N = total population (168)
e = margin of error (0.05)

$$n = \frac{168}{1+168(0.05)^2} = \frac{168}{1+168(0.0025)} = \frac{168}{1.42} = 118$$

According to the Taro Yamane formula, the sample size of the study is 118.

To avoid bias, the study adopted a stratified sampling technique. Stratified sampling technique was primarily used to ensure that different groups of the population are adequately represented in the sample so as to increase the population's level of accuracy when estimating the parameters. The strata are made up of five (5) insurance industries. The strata consist of the staff of these insurance industries that shared similar attributes or characteristics.

The proportion of a sample from each stratum is evaluated; its size is compared to the population. The subgroups of the strata are then taken to form the sample. The above analysis satisfied one of necessary conditions for the use of stratified sampling for this study.

Proportional distribution method was applied to each stratum to ensure even-spread allocation as captured in Table 2. The proportionate formula used is given as:

$$nh = \frac{nNh}{N}$$

Where;
nh= number distributed to each class strata
n = Total sample
Nh = Total population of each strata
N = Total population

Table 2: Selected Sample

S/N	Insurance Industry	Population of Staff	Sample
1	Leadway Insurance	50	118x50/168 = 35
2	AIICO Insurance	35	118x35/168 = 24
3	Industrial and General Insurance	25	118x25/168 = 18
4	Royal Exchange Assurance Plc	30	118x30/168 = 21
5	Cornerstone Insurance Plc	28	118x11/168 = 20
	Total	**168**	**118**

***Source**: Field Survey, 2025.*

The data sought is primary and secondary in nature. To ensure that the research instrument (questionnaire) effectively measures the constructs of this study it intended to assess, content validity was employed.

The questionnaire items were adapted based on a comprehensive review of relevant literatures that aligned with the research objectives. 118 copies of the questionnaire on a 5-point likert scale to measure the feedback for the constructs of this study were administered to the respondents. To validate the content, the draft instrument was reviewed by two experts in the department of insurance and one expert in research methodology in the University of Jos. Their suggestions were incorporated to improve clarity, relevance,and item appropriateness. This form of expert review establishes face and content validity of the instrument.

To test the reliability of the instruments of the constructs of this study, a pilot study was conducted at the Plateau State University, Bokkos, Plateau State, to test the internal consistency of the questionnaire. A sample of 40 staff members under insurance coverage was randomly selected and administered the questionnaire. The responses were analysed using Cronbach's Alpha via SPSS version 25.

The analysis yielded a Cronbach's Alpha coefficient of 0.76, 0.79 and 0.74 indicating a high level of internal consistency among the items. A Cronbach's Alpha value above 0.70 is generally considered acceptable, as it shows that the instrument is reliable for data collection purposes.

Method of Data Analysis

Descriptive and inferential statistics were used for the analysis of the data. The descriptive statistics (tables, frequencies and simple percentages) were employed to summarise items on the questionnaire. The inferential statistics such as Chi-Square Analysis was utilised to empirically examine the impact of digital marketing strategies on the service quality of insurance industries in Bokkos LGA, Plateau State.

Model Specification

The model specifications for this study are formulated as Chi-Square Analysis to tests the three hypotheses and they are as follows:

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$$X^2 = \frac{\sum(F_o - F_e)^2}{F_e}$$

X^2 = Chi-square
$\sum$ = Summation
F_o = Observed Frequency
Fe = Expected Frequency.
at 5% level of significance.

RESULTS AND DISCUSSION OF FINDINGS

Questionnaire Return Rate

Questionnaire return rate is the proportion of the questionnaire returned to the researcher after administration to the respondents who are the staff of the selected five (5) insurance industries in Bokkos LGA, Plateau State for this study.

Out of the 118 questionnaires administered to the respondents, 110 of them were returned. The questionnaire return rate were therefore 100% and hence acceptable for data analysis.

Table 3: Allocation and Return of Questionnaires

S/N	Respondent	No. of Distributed Questionnaire	No. of Returned Questionnaire	No. of Questionnaire Not Returned
1	Leadway Insurance	35	34	1
2	AIICO Insurance	24	23	1
3	Industrial and General Insurance	18	16	2
4	Royal Exchange Assurance Plc	21	19	2
5	Cornerstone Insurance Plc	20	18	2
	Total	**118**	**110**	**8**

Source *Research Survey, 2025*

Descriptive Statistics of Validly Returned Questionnaires

GENDER			AGE			EDUCATIONAL LEVEL		
Response	NO. RESPON-DENT	PERCEN-TAGE (%)	Response	NO. RESPON-DENT	PERCEN-TAGE (%)	Response	NO. RESPON-DENT	PERCEN-TAGE (%)
Male	58	52.73%	0-20	17	15.46%	SSCE	16	14.55%
Female	52	47.27%	21-30	38	34.55%	HND	20	18.18%
			31-40	32	29.09%	B.Sc.	34	30.91%
			Above 40 years	23	20.90%	M.Sc.	15	13.63%
						Others	25	22.73%
Total	110	100%	TOTAL	110	100%	Total	110	100%

Source*: Field research, 2025*

TEST OF HYPOTHESES

Test of Hypothesis One

The Hypothesis One in null form is restated as follows:

H_0: Email marketing strategy does not have significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

Table 4: Contingency table showing the relationship between Email marketing strategy and service quality of insurance industries in Bokkos LGA, Plateau State

Response	Leadway Insurance	AIICO Insurance	Industrial and General Insurance	Royal Exchange Assurance Plc	Cornerstone Insurance Plc	Total
Agreed	20	12	16	18	8	74
Undecided	4	3	2	8	3	20
Disagree	3	3	3	3	4	16
Total	**27**	**18**	**21**	**29**	**15**	**110**

***Source**: Field study 2025*

From the functional relationship of Chi-Square Analysis Method, let

$$(Fe)ij = \frac{\Sigma(ROW_1)(COLUMN_1)}{GRAND\ TOTAL}$$

Where:

(fe)ij = expected frequencies for i^{th} row and j^{th}column.

Calculation of expected frequencies (EF_1)

Formula = $\frac{(\text{Column Total})\ (\text{Row Total})}{\text{Grand Total}}$

$Cell_1EF_1 = \frac{27\ x\ 74}{110} = 18.16$

$Cell_2EF_2 = \frac{18\ x\ 74}{110} = 12.1$

$Cell_3EF_3 = \frac{21\ x\ 74}{110} = 14.1$

$Cell_4EF_4 = \frac{29\ x\ 74}{110} = 19.5$

$Cell_5EF_5 = \frac{15\ x\ 74}{110} = 10.1$

$Cell_6EF_6 = \frac{27\ x\ 20}{110} = 4.9$

$Cell_7EF_7 = \frac{18\ x\ 20}{110} = 3.3$

$Cell_8EF_8 = \frac{21\ x\ 20}{110} = 3.8$

$Cell_9EF_9 = \frac{29\ x\ 20}{110} = 3.8$

$Cell_{10}EF_{10} = \frac{15\ x\ 20}{110} = 2.7$

$Cell_{11}EF_{11} = \frac{27\ x\ 16}{110} = 3.9$

$Cell_{12}EF_{12} = \frac{18\ x\ 16}{110} = 2.6$

$Cell_{13}EF_{13} = \frac{21\ x\ 16}{110} = 3.1$

$Cell_{14}EF_{14} = \frac{29\ x\ 16}{110} = 4.2$

$Cell_{15}EF_{15} = \frac{15\ x\ 16}{110} = 2.2$

Table 5: Calculation of X^2

Cell	OF	EF	OF-EF	$(OF-EF)^2$	$\frac{(OF-EF)^2}{EF}$
1	20	18,16	1.84	3.39	0.19
2	12	12.1	-0.1	0.01	0.00
3	16	14.1	1.9	3.61	0.26
4	18	19.5	-1.5	2.25	0.12
5	8	10.1	-2.1	4.41	0.44
6	4	4.9	-0.9	0.81	0.17
7	3	3.3	-0.3	0.09	0.03
8	2	3.8	-1.8	3.24	0.85
9	8	5.3	2.7	7.29	1.38
10	3	2.7	0.3	0.09	0.03
11	3	3.9	-0.9	0.81	0.21
12	3	2.6	0.4	0.16	0.06
13	3	3.1	-0.1	0.01	0.00
14	3	4.2	-1.2	1.44	0.34
15	4	2.2	1.8	3.24	1.47
Total	**110**				**5.54**

***Source**: Field work 2025.*

Chi-square $(X^2) = \frac{\Sigma\ (OF-EF)^2}{EF} = 5.54$

The Critical Value

Degree of freedom (df) in contingency table = (R-1) (C-1)
Where R Rows and C-Columns = (3-1) (5-1)
= (2) (4)
= 6

Assume 5% level of significance at 6 degree of freedom

Chi-square (X^2) result from the table is 12.59

Decision

Since the calculated X (chi-square) value is less than the table value, the research rejects the null hypothesis and accepts the alternative hypothesis,

Conclusion

Based on the above decision, the research concludes that email marketing strategy has significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

Test of Hypothesis Two

The Hypothesis two is restated as follows:

H_1: There is no significant relationship between social media advertisement strategy and the service quality of insurance industries in Bokkos LGA, Plateau State.

Table 6: Contingency Table Showing the Relationship between social media advertisement strategy and service quality of insurance industries in Bokkos LGA, Plateau State

Response	Leadway Insurance	AIICO Insurance	Industrial and General Insurance	Royal Exchange Assurance Plc	Cornerstone Insurance Plc	Total
Agreed	20	16	13	14	11	74
Undecided	3	8	3	2	4	20
Disagree	4	2	2	3	5	16
Total	**27**	**26**	**18**	**19**	**20**	**110**

***Source**: Fieldwork 2025*

Calculation of expected frequencies (EF_1)

Formula $= \frac{\text{(Column Total) (Row Total)}}{\text{Grand Total}}$

$Cell_1EF_1 = \frac{27 \times 74}{110} = 18.16$

$Cell_2EF_2 = \frac{26 \times 74}{110} = 17.5$

$Cell_3EF_3 = \frac{18 \times 74}{110} = 12.1$

$Cell_4EF_4 = \frac{19 \times 74}{110} = 12.8$

$Cell_5EF_5 = \frac{20 \times 74}{110} = 13.5$

$Cell_6EF_6 = \frac{27 \times 20}{110} = 4.9$

$Cell_7EF_7 = \frac{26 \times 20}{110} = 4.7$

$Cell_8EF_8 = \frac{18 \times 20}{110} = 3.3$

$Cell_9EF_9 = \frac{19 \times 20}{110} = 3.5$

$Cell_{10}EF_{10} = \frac{20 \times 20}{110} = 3.6$

$Cell_{11}EF_{11}$ = $\frac{27\ x\ 16}{110}$ = 3.9

$Cell_{12}EF_{12}$ = $\frac{26\ x\ 16}{110}$ = 3.8

$Cell_{13}EF_{13}$ = $\frac{18\ x\ 16}{110}$ = 2.6

$Cell_{14}EF_{14}$ = $\frac{19\ x\ 16}{110}$ = 2.8

$Cell_{15}EF_{15}$ = $\frac{20\ x\ 16}{110}$ = 2.9

Table 7: Calculation of X^2

Cell	OF	EF	OF-EF	$(OF-EF)^2$	$\frac{(OF-EF)}{EF}$
1	20	18,16	1.84	3.3856	0.18643172
2	16	17.5	-1.5	2.25	0.12857143
3	13	12.1	0.9	0.81	0.06694215
4	14	12.8	1.2	1.44	0.1125
5	11	13.5	-2.5	6.25	0.46296296
6	3	4.9	-1.9	3.61	0.73673469
7	8	4.7	3.3	10.89	2.31702128
8	3	3.3	-0.3	0.09	0.02727273
9	2	3.5	-1.5	2.25	0.64285714
10	4	3.6	0.4	0.16	0.04444444
11	4	3.9	0.1	0.01	0.0025641
12	2	3.8	-1.8	3.24	0.85263158
13	2	2.6	-0.6	0.36	0.13846154
14	3	2.8	0.2	0.04	0.01428571
15	5	2.9	2.1	4.41	1.52068966
Total	**No**				**7.25437113**

***Source**: Field work 2025.*

Chi-square (X^2) = $\frac{\Sigma\ (OF-EF)^2}{EF}$

= 7.25437113

The Critical Value

Degree of freedom (df) in contingency table = (R-1) (C-1)
Where R Rows and C-Columns = (3-1) (5-1)
= (2) (4)
= 6

Assume 5% level of significance at 6 degree of freedom

Chi-square (X^2) result from the table is 12.59

Decision

Since the calculated X^2 (chi-square) value is less than the table value, the research rejects the null hypothesis and accepts the alternative hypothesis.

Conclusion

Based on the above decision, the research concludes that there is a significant relationship between social media advertisement strategy and the service quality of insurance industries in Bokkos LGA, Plateau State.

Test of Hypothesis Three

H_2: Search engine optimisation strategy does not have significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

Table 8: Contingency table showing the relationship between Search engine optimisation strategy and service quality of insurance industries in Bokkos LGA, Plateau State

Response	Leadway Insurance	AIICO Insurance	Industrial and General Insurance	Royal Exchange Assurance Plc	Cornerstone Insurance Plc	Total
Agreed	20	10	16	18	10	74
Undecided	4	2	2	8	4	20
Disagree	3	2	3	3	5	16
Total	**27**	**14**	**21**	**29**	**19**	**110**

***Source**: Fieldwork 2025*

From the functional relationship of Chi-Square Analysis Method,

Calculation of expected frequencies (EF_1)

$$\text{Formula} = \frac{(\text{Column Total})\ (\text{Row Total})}{\text{Grand Total}}$$

$$\text{Cell}_1EF_1 = \frac{27\ x\ 74}{110} = 18.2$$

$$\text{Cell}_2EF_2 = \frac{14\ x\ 74}{110} = 9.4$$

$$\text{Cell}_3EF_3 = \frac{21\ x\ 74}{110} = 14.1$$

$$\text{Cell}_4EF_4 = \frac{29\ x\ 74}{110} = 19.5$$

$$\text{Cell}_5EF_5 = \frac{19\ x\ 74}{110} = 12.8$$

$$\text{Cell}_6EF_6 = \frac{27\ x\ 20}{110} = 4.9$$

$$\text{Cell}_7EF_7 = \frac{14\ x\ 20}{110} = 2.5$$

$$\text{Cell}_8EF_8 = \frac{21\ x\ 20}{110} = 3.8$$

$$\text{Cell}_9EF_9 = \frac{29\ x\ 20}{110} = 3.8$$

$Cell_{10}EF_{10} = \frac{19\ x\ 20}{110} = 3.5$

$Cell_{11}EF_{11} = \frac{27\ x\ 16}{110} = 3.9$

$Cell_{12}EF_{12} = \frac{14\ x\ 16}{110} = 2.0$

$Cell_{13}EF_{13} = \frac{21\ x\ 16}{110} = 3.1$

$Cell_{14}EF_{14} = \frac{29\ x\ 16}{110} = 4.2$

$Cell_{15}EF_{15} = \frac{19\ x\ 16}{110} = 3.2$

Table 9: Calculation of X^2

Cell	OF	EF	OF-EF	$(OF-EF)^2$	$\frac{(OF-EF)^2}{EF}$
1	20	18.2	1.8	3.24	0.1780
2	10	9.4	0.6	0.36	0.0383
3	16	14.1	1.9	3.61	0.2560
4	18	19.5	-1.5	2.25	0.1154
5	10	12.8	-2.8	7.84	0.6125
6	4	4.9	-0.9	0.81	0.1653
7	2	2.5	-0.5	0.25	0.1
8	2	3.8	-1.8	3.24	0.8526
9	8	5.3	2.7	7.29	1.3755
10	4	3.5	0.5	0.25	0.0714
11	3	3.9	-0.9	0.81	0.2077
12	2	2.0	0	0	0
13	3	3.1	-0.1	0.01	0.0032
14	3	4.2	-1.2	1.44	0.3429
15	5	2.8	2.2	4.84	1.7286
Total	**110**				**6.0474**

***Source**: Field work 2025.*

Chi-square $(X^2) = \frac{\Sigma\,(OF-EF)^2}{EF} = 6.0474$

The Critical Value

Degree of freedom (df) in contingency table = (R-1) (C-1)
Where R Rows and C-Columns = (3-1) (5-1)
= (2) (4)
= 6

Assume 5% level of significance at 6 degree of freedom

Chi-square (X^2) result from the table is 12.59

Decision

Since the calculated X (chi-square) value is less than the table value, the research rejects the null hypothesis and accepts the alternative hypothesis.

Conclusion

Based on the above decision, the research concludes that search engine optimisation strategy has significant relationship with the service quality of insurance industries in Bokkos LGA, Plateau State.

DISCUSSION OF FINDINGS

Findings from the study after the analysis reveal that email marketing strategy as digital marketing strategies significantly influences the service quality of insurance industries in Bokkos LGA, Plateau State. This is further reinforced by correlation analysis result which showed a strong and statistically significant relationship between email marketing and service quality of insurance industries. This finding is in agreement with the work of Chawla, and Singh (2017) who found that targeted email marketing increased premium payment compliance by 25% among policyholders in Nigeria.

Correlation analysis result further confirmed a strong, statistically significant relationship between social media advertisement strategy and the service quality of insurance industries in Bokkos LGA, Plateau State. This supports the findings of Chen et. al. (2014) who highlighted that social media engagement significantly improved policy renewals and compliance rates.

The study findjngs through the result of the chi-square analysis confirmed that search engine optimisation strategy significantly influences the service quality of insurance industries in Bokkos LGA, Plateau State. This supports the findings of Johnson (1998) whose study revealed that manufacturers are presently the focus of technological implementations and objectives of Internet optimisation. Digital marketing strategies enable insurance industries to tailor their communication and services to policyholders' needs and preferences, leading to a more personalised and satisfying experience mostly in Bokkos LGA, Plateau State. Effective implementation of insurance digital marketing strategies is a pivotal factor for service quality of insurance industries which allow insurance industries to reach a wider audience in Bokkos LGA, including those who may not have access to traditional marketing channels. Understanding digital marketing strategies in the marketing of insurance policies or services allow for the provision of clear and detailed information about insurance products and services, fostering trust and enabling informed decision-making by the policymakers.

CONCLUSION AND RECOMMENDATIONS

In conclusion, this study highlights the necessary dimensional factors of digital marketing strategies that affect service quality of insurance industries in Bokkos Local Government Area of Plateau State. Digital marketing strategies provide opportunities for insurance industries to get feedback, which can be used to identify areas for improvement in service quality and customer experience.

Ensuring user-friendly digital marketing strategies that provide easy access to information, policy management, policyholders support, sending targeted emails with relevant information, policy updates, and promotional offers can lead to maximum service quality of insurance industries in Bokkos Local Government Area of Plateau State in attracting new policyholders and encouraging existing ones to renew their policies. To achieve these results, the following recommendations were made:

1. Insurance industries in Bokkos Local Government Area, Plateau State should invest in the necessary digital infrastructure to support its digital marketing strategic efforts.

2. Insurance industries within the scope of this study should regularly monitor and evaluate the effectiveness of digital marketing strategies to identify areas for improvement.
3. Insurance industries in Bokkos LGA, Plateau State should collaborate with community leaders and organisations to ensure that digital marketing messages reach all segments of the population by offering regular training programmes to help policyholders develop the necessary digital skills to access and utilise online resources.

AUTHORS' CONTRIBUTIONS

Chibuisi Chigozie and Oche Charles Ako drafted the introduction, reviewed literature, analysed data and drafted the manuscript. Chibuisi Chigozie and Olufunmilayo Anita Coker conceptualised the study, handled issues of design and methodology and proof-read the manuscript. Hajia Asabe Binta Abdulsalam and Daniel Manga Ojah handled the field work and part of literature review. All the authors read and approved the manuscript.

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