

IMPACT OF DIGITAL MARKETING OF AGRICULTURAL PRODUCTS BY SMALL AND MEDIUM ENTERPRISES IN GOMBE STATE

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Abstract

The study investigated impact of digital marketing of agricultural products by small and medium enterprises in Gombe State. Two specific research objectives, two research questions with corresponding two hypotheses guided the study. The study adopted descriptive survey research design. The instrument consisted 4 sections; section A-C solicited information about gender, age and experience of the respondents while section D of the instrument solicited information on the impact of e-commerce and social media of agricultural products by small and medium enterprises in Gombe state. Total population for the study was 102 registered SMEs that are in marketing of agricultural products in Gombe State. There was no sampling as the whole population was studied. Cronbach alpha was used to test the reliability of the instrument which yielded 0.79. Pearson Correlation Coefficient was used to test the hypotheses at 0.01 level of significance. The adoption of social digital marketing, especially through social media, and E-commerce, was found to enhance the business performance of agricultural SMEs in Gombe State. This study concluded that adopting digital media marketing as a strategy for business helps in improving the efficiency of agricultural SMEs and must be invigorated by policymakers to guarantee extreme efficiency.

Keywords: Digital Marketing, Agricultural Products, Small and Medium Scale Enterprises

Introduction

Agricultural sector has been transformed by digital marketing through; promoting products, streamlining supply chains, and connecting producers with consumers. Digital marketing strategically promotes products and services through digital channels and technologies to engage and interact with consumers. According to Gamba (2025) digital marketing encompasses a wide range of strategies such as search engine optimization (SEO), pay-per-click (PPC) advertising, social media marketing, email marketing, E-commerce and content marketing. It has significantly transformed the agricultural sector, enhancing farmers' and agribusinesses' engagement with the market (Gadanakis, 2024). Numerous online channels, technologies, and data-driven strategies are utilized to promote agricultural products,

modernize supply chains, and connect producers with consumers. Digital platforms include websites, e-commerce platforms, social media, mobile apps, and email marketing. Digital marketing contributes to community building by fostering online communities around agricultural interests (Masarrat, 2025). Digital marketing is also changing the way that agri-based businesses target the customers, set product prices and synchronize supply chains. Agricultural markets, which at one time were predominantly dominated by face-to-face trade and long intermediary chains, are undergoing a revolution on the internet, through social media, mobile services and e-commerce marketplaces, which can increase access to markets and offer lower costs related to transaction. These devices will have not only a wider geographical area but also better price discovery, better direct buyer feedback, and a chance at differentiating the products in question to the small and medium agri-firms and groups of farmers. Equally, the uptake of mobile-based agricultural extension and advisory services was found to enhance knowledge and responsiveness of the farmer, which is strongly related to perceived economic gains, technological familiarity and local context (Amrit, 2023). The implication of these results is that the impact of digital marketing on sales performance is not direct but rather mediated by firm resources and capabilities, platform design, and institutional and infrastructural-wide requirements. E-commerce platforms, specifically, seem to affect firm behavior and market performance in the following ways: through reducing search and matching costs, the ability to sell directly to urban or niche consumers, the provision of visible pricing signals, and (when accompanied by the ability to facilitate the tracking of products) may result in premium positioning based on quality or even green features. This era which has been characterized by firm competition globally, advanced technologies and innovation, and a knowledge-based economy; digital marketing strategies might be valuable tools that can play major roles in giving competitive advantages to improve marketing of agricultural products which in turn enhance the performance of Small and Medium Enterprises that are involved in supply chain of agricultural products particularly, in Gombe State.

Small and Medium Scale Enterprises (SMEs) are known worldwide as viable tools for the creation of wealth, generation of employment, and sustainability. The SME sector according to Jagun (2022), showed that these businesses contribute about 50% of the world's GDP and about 80% of employment opportunities. Bello et al., (2018) reported that small and medium scale enterprises in Nigeria contributed about 48% to Nigeria's GDP in the past five years, and about 50% of employment opportunities were created, with about 90% coming from the manufacturing industry. Clarke (2018) however, reports that from the 1960s and 1970s, agricultural SMEs have been the major avenues for job creation, boasting about 70% of

employment opportunities. By adopting the social media marketing strategy, SMEs can be creative, flexible and entrepreneurial than other bigger organizations through the efficient responsiveness to the needs of their customers by leveraging the opportunity to get close to them and obtain feed-back. However, despite the aforementioned advantages offered by digital marketing in transforming Small and Medium Enterprises in marketing of agricultural products and job creation, studies showed that, only about 35% of SMEs survive, due to various challenges faced, ranging from finance, marketing, technological innovations, competition, tax rates, and even the death of the owner. Most of these SMEs are challenged with having to reach a larger audience, with the traditional methods being expensive.

Most of these SMEs, specifically, those associated with agriculture, do not realize the value that digital marketing brings to them, particularly concerning profitability, brand visibility, customer interaction, and influencing customer interaction and retention. Marketing is considered an expensive practice for SMEs as they are typically reliant on their trifling income margins for competitive advantage (Maziriri, 2018). Various digital marketing platforms like social media Instagram, e-commerce, mobile based marketing and online marketing help SMEs achieve their goals (Nazgu et al., 2025).

Objectives of the study:

The main objective of this study is to assess the impact of digital marketing of agricultural product by small and medium scale enterprises in Gombe State. Specifically, the study seeks to determine relationship between:

1. social media marketing and the performance of SMEs in Gombe State
2. E-commerce and the performance of SMEs

Research Questions

The following research questions were created in order to meet the study's objectives:

1. What is the relationship between social media marketing and the performance of SMEs
1. in Gombe State?
2. What is the relationship between E-commerce and the performance of SMEs?

Research Hypotheses

H₀₁: There is no significant relationship between social media marketing and the performance of SMEs

H₀₂: There is no significant relationship between E-commerce and the performance of SMEs

Research Methodology

Research Design

The study adopted descriptive survey research design. Descriptive survey according to Rahi (2017), is a type of design which aims at collecting data on, and describing in a systematic manner the characteristics, feature or facts about a given population. It is a research method that describe a characteristic of the population or phenomenon under study. The methodology focuses on what, when, where and how. Descriptive survey is the most appropriate design for this research since the study will be based on the opinions and views of the respondents on impact of digital marketing of agricultural product by small and medium scale enterprises in Gombe State.

Population of the Study

The population of study is the entire registered small and medium scale enterprises in Gombe State that are marketing agricultural products which is one hundred and two (102).

Sample and Sampling Technique

There is no sampling as the entire population is manageable.

Method of Data Collection

Primary data are gathered with a structured questionnaire that is carried out on the owners, managers, or the marketing executives of SMEs. The questionnaire has two parts, (a) firm demographic questions, and (b) the measurement questions that determine digital marketing practices, digital capability, and sales performance. The answers will be registered with the help of the five-point Likert scale, where 1 (strongly disagree) is offered to 5 (strongly agree). The method is very common in digital marketing, as well as SME performance.

Data Analysis

Techniques Facilitated data obtained are processed through the application of statistical software. Descriptive statistics present characteristics of samples. Validity tests and reliability analysis (Cronbach) used to measure the consistency on measurements which yielded 0,79. Hypotheses kH1-H2 are tested by multiple regression analysis, whereby the moderation analysis is used to test the influence of digital capability on the performance of digital marketing-sales relation.

Results

Section A: Demography details of the respondents

Table 1: Gender

		Frequency	Percentage	Cumulative Percent
Valid	Male	90	88.2	88.2
	Female	12	11.8	11.8
	Total	102	100.0	100.0

In Table 1, the data presents the gender distribution of the respondents in the sample. Out of the total 102 participants, 90 (88.2%) identified as male, while 12 (11.8%) identified as female. The cumulative percent shows that 88.2% of the respondents are male, and the remaining 11.8% are female. The data highlights a slightly higher representation of males in the sample compared to females. This information provides insights into the gender composition of the participants and can be relevant for understanding potential gender-related patterns or trends in the study.

Table 2: Table of Age of Respondents

		Frequency	Percent	Cumulative percent
Valid	Below 34 years	8	7.8	7.8
	34 – 39	12	11.8	19.6
	40 – 49	37	36.3	55.9
	From 50 and above	45	44.1	100
	Total	102	100	100

The data shows the respondents' distribution by age group in Table 2. The age distribution of the 102 participants is as follows: 8 (7.8%) are under 34, 12 (11.8%) are between 34 and 39, 37 (36.3%) are between 40 and 49, and 45 (44.1%) are 50 years of age or older. 7.8% of respondents are under 34, 11.8% are between 34 and 39, 36.3% are between 40 and 49, and the 44.1% are 50 years of age or above, according to the cumulative percentage. The information offers insightful information on the participants' age distribution, which may be useful for examining any possible age-related trends or preferences in the research.

Table 3: Level of Experience

		Frequency	Percent	Cumulative Percent
Valid	Below 5 years	21	20.6	20.6
	Above 5 years	81	79.4	79.4
	Total	102	100	100

The data shows the respondents' distribution according to experience level in Table3. Of the 102 participants, 21 (20.6%) have below 5 years of experience, while 81 (79.4%) have above 5 years. The cumulative percent shows that 20.6% of the respondents had below 5 years of experience, while the remaining 79.4% have above 5 years of experience. Understanding the experience diversity within the study sample or analyzing possible variances in answers based on experience can both benefit from the data's insightful information about participants' experience levels.

Test of Hypotheses

The Pearson Correlation Coefficient was employed in this study for testing hypotheses 1 and 2. Hypothesis 1 H0: There is no significant relationship social media marketing and the performance of SMEs 2 H0: There is no significant relationship between e-commerce marketing and the performance of SMEs.

Correlation Analysis

Table 4 presents the correlation analysis between Social Media Marketing, E-commerce Marketing, and the Performance of SMEs based on the Pearson correlation coefficient. The table shows the correlation coefficients and their corresponding p-values (Sig. - 2-tailed) for each pair of variables. The correlation between Social Media Marketing and E-commerce Marketing is 0.770, signifying a strong positive correlation between these two marketing strategies. The p-value (0.000) is less than the significance level of 0.01, signifying that this correlation is statistically significant. Equally, the correlation between Social Media Marketing and Performance of SMEs is 0.615, which also indicates a strong positive correlation. The p-value (0.000) is less than 0.01, confirming that this correlation is statistically significant. Furthermore, the correlation between E-commerce Marketing and the Performance of SMES is 0.813, showing a very strong positive correlation. The p-value (0.000) is less than 0.01, signifying that this correlation is statistically significant as well. Generally, the correlation analysis suggests that both Social Media Marketing and E-commerce Marketing are strongly

and positively correlated with each other and with the Performance of SMEs. These findings indicate that higher engagement in social media and E-commerce marketing is associated with better SME performance.

Table 4: Correlation matrix

		Social Media	E-Commerce	Performance of SMEs
Social Media	Pearson Correlation	1	0.770*	0.615*
	Sig. (2-tailed)		0.000	0.000
	Number	102	102	102
	Pearson Correlation	0.770	1	0.813
E-Commerce	Sig. (2-tailed)	0.000		0.000
	Number	102	102	102
	Pearson Correlation	0.615	0.813	1
Performance of SMEs	Sig. (2-tailed)	0.000	0.000	
	Number	102	102	102

*Correlation is significant at the 0.01 level (2-tailed).

Discussion of Findings

The results of the correlation analysis reveal a statistically significant positive relationship between social media marketing, E-commerce marketing, and SME performance. The strong correlation coefficients (social media marketing: $r = 0.615$, $p < 0.01$; email marketing: $r = 0.813$, $p < 0.01$) point out that both digital marketing strategies contribute meaningfully to SME success. These findings support and highlight the conclusions of several empirical studies conducted across different areas and backgrounds. Social media marketing's positive impact on SME performance ($r = 0.615$) agreed with recent research. Musa (2025), found a strong predictive relationship ($R^2 = 0.666$) between social media adoption and business performance in Kwara State, Nigeria, particularly in enhancing brand visibility and customer acquisition. Similarly, Anusi (2025) established that strategic social media use significantly improved SME performance metrics in Anambra State through targeted advertising and customer engagement. The present study's results further aligned with these findings, suggesting that SMEs in Gombe State similarly benefit from social media's reach and interactivity. The slightly lower correlation coefficient compared to E-commerce marketing may reveal unpredictable levels of social media utilization among the surveyed SMEs, indicating room for improved strategic implementation. The even stronger correlation between E-commerce marketing and SME performance ($r = 0.813$) highlights its efficiency as a digital marketing tool. This finding echoes Ononiwu et al., (2025) found out email marketing emerged as a preferred low-cost strategy with measurable performance impacts. Nura et al. (2024) also

identified email marketing as the only digital strategy with a consistently positive effect on small business performance in Birnin Kebbi, attributing its success to personalised communication and direct customer relationships.

The high correlation in the present study suggests that Gombe State-based SMES may be leveraging E-commerce marketing's strengths in separation and measurability more effectively than social media, perhaps due to its lesser reliance on system changes or platform competition. The significant intercorrelation between social media and E-commerce marketing ($r = 0.770$) suggests that SMEs employing both strategies synergistically attain better performance outcomes. This aligns with Kingsnorth (2025) recommendation for integrated digital marketing approaches, where combined strategies create complementary effects. The recent findings suggest that while each strategy individually improves performance, their harmonized use, such as social media driving E-commerce list growth, or E-commerce campaigns increasing social content, may yield multiplicative benefits. This integration addresses possible restrictions of single-channel methods, such as social media's system reliance or E-commerce's reach limitations. These results together highlight digital marketing's transformative role in SME effectiveness, mostly in urban commercial centers like Gombe. The strength of the relationships supports extant literature positioning digital adoption as critical for market expansion, customer retention, and operational efficiency in SME sectors (Dimoso, & Utonga 2024). However, the variation in correlation strengths between strategies suggests that SMEs may need personalized tactics based on their resources, target markets, and digital literacy levels. Future research could explore optimal strategy combinations and implementation frameworks for different SME segments.

To sum up, the differences in literature findings are addressed in this paper through accentuating contextual and implementation variation between SMEs. Although previous research has indicated that social media marketing has a mixed impact on SME performance, we find that social media and email marketing are significant in promoting the performance of the SMEs in Gombe, with email marketing having a more positive association. The nature of the research context can explain this more powerful effect: SMEs in Gombe are functioning in a highly competitive and urban environment, where E-commerce marketing provides an opportunity to communicate with the existing customers in a more targeted, customized, and measurable way. In comparison with social media, where algorithms and changes in the quality of engagement are subject to change, and content saturation is evident, E-commerce marketing offers more direct access to customers, superior segmentation, and clearer performance monitoring, thus offering more consistent performance results in such an environment.

Conclusion

This study examined how digital marketing influences the performance of SMEs in Gombe State. Using quota sampling, 102 questionnaires were distributed, and all were retrieved successfully, after which the responses were analyzed with SPSS. The findings revealed that both E-commerce marketing and social media marketing have a strong positive effect on SME performance.

Recommendations

Based on these results, the following recommendations are made for SMEs aiming to improve their performance through digital marketing:

1. The role of digital marketing in agricultural SMEs implies that policymakers in governments can hold digital in their business plans for sales revenue, campaign, brand visibility as well their interaction with their clients.
2. A strong gross domestic product is strongly associated with the growth recorded in the agricultural sector. Therefore, based on the research problems and findings, it is recommended that policymakers should pay attention on improving agricultural production and the marketing strategies of these products.

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