

Social media and Performance of SMEs in North Central Nigeria

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Abstract

This study examined how social media usage impacts the performance of Small and Medium Enterprises (SMEs) in North Central Nigeria. It specifically explores how different platforms affect various aspects of business performance. As SMEs increasingly turn to social media for marketing, engaging with customers, and improving operational efficiency, there's still a lack of solid evidence regarding their effectiveness in North Central Nigeria. This research tackles the unclear and inconsistent effects that individual social media platforms have on key performance indicators for SMEs in the area. To fill this gap, the study employs a descriptive survey research design. Researchers gathered data from 360 SMEs throughout the North Central geopolitical zone of Nigeria using structured questionnaires. The data was analysed using linear regression techniques to assess the individual and combined impacts of Twitter and Snapchat on metrics like profitability and customer patronage. The findings indicate that Twitter usage notably boosts profitability and that Snapchat had a positive, though less pronounced, effect on customer patronage. Based on these findings, the study suggests that SMEs in North Central Nigeria should strategically align their social media activities with specific business goals. It also recommends that SMEs in North Central Nigeria have a fantastic opportunity to enhance their performance by making the most of various social media platforms such as Twitter and Snapchat, SMEs can increase their profitability by actively interacting with customer, answering questions, sharing promotions, and tapping into trending hashtags.

Keywords: Social media, SMEs & Performance

1.1. Background to the study

Social media has significantly transformed how businesses interact with customers, influencing both internal and external company operations. Aral, Dellarocas, and Godes (2013) highlight it as one of the most transformative developments in business information technology. It has enabled advanced customer behaviour analysis, personalized marketing, and accurate demand forecasting.

Beyond marketing, social media has reshaped employer-employee relations, enabling remote work, crowdsourcing, and micro-outsourcing. Platforms like Twitter, Facebook, LinkedIn, YouTube, and Snapchat serve various functions, including networking, media sharing, and content creation. They are widely accessible, often free, and more efficient than traditional media (Kaplan & Haenlein, 2010).

Studies suggest that social media boosts customer engagement and service efficiency (Ainin et al., 2015), although it also presents challenges that require strategic content planning. Marketing performance is multidimensional, involving metrics like customer satisfaction, brand loyalty, market share, and sales. According to Homburg et al. (2017), businesses must balance effectiveness and efficiency in their marketing strategies.

Research has consistently found a positive relationship between social media use and business performance, including improved sales, customer relationships, and brand loyalty (e.g., Kwok & Yu, 2013; Erdogmus & Cicek, 2012). For SMEs, in particular, social media enhances competitiveness, innovation, and sustainability. In Nigeria, SMEs are crucial to employment and economic development, employing over 84% of the labour force (NBS, 2021).

Overall, social media is now a strategic business tool that supports economic, social, and cultural growth. It allows companies, especially SMEs, to improve communication, refine operations, and remain competitive in a global, digital economy.

1.2 Statement of the Problem

Small and Medium-sized Enterprises (SMEs) have increasingly adopted the internet, particularly social media, as an integral tool for their business operations. Social media provides a powerful platform for marketing, customer service, and relationship management. It enables SMEs to access essential information that enhances performance, fosters innovation, streamlines resource management, and facilitates communication with customers, suppliers, and business partners. Additionally, social media is crucial in the development of Customer Relationship Management (CRM) systems, helping businesses improve customer-firm relationships and better meet consumer expectations (Trainor et al., 2014).

Despite the growing recognition of social media as a tool for increasing brand awareness, engaging target audiences, and promoting business growth, SMEs in Nigeria, particularly in the North Central region, face significant challenges in utilizing these platforms effectively for product distribution and customer outreach. Many SMEs struggle to integrate social media into their marketing and operational strategies, thus limiting their ability to meet consumer demands and expand their market reach.

While numerous studies have analysed the impact of social media on the performance of large businesses in developed economies, there remains a critical gap in understanding how SMEs in emerging markets, particularly in North Central Nigeria, can optimize social media for growth. The unique challenges and opportunities faced by these SMEs, in leveraging social media to enhance performance, remain underexplored. This gap in knowledge leaves SMEs in the region without a clear understanding of how to harness the full potential of digital platforms for their business success.

Previous research on social media's influence on business performance has focused predominantly on large corporations in developed economies. The lack of empirical evidence regarding SMEs in developing economies, especially in North Central Nigeria, highlights a crucial area for investigation. Notably, the challenges faced by SMEs in integrating social media into their

operations have yet to be adequately explored. The limited research on this topic in Nigeria, particularly within the context of North Central Nigeria, calls for a dedicated study to bridge this knowledge gap. By examining the relationship between social media usage and market performance, this study aims to provide insights into the effective use of digital platforms for SMEs. The results will offer actionable strategies for improving digital engagement, optimizing social media marketing efforts, and promoting sustainable growth for SMEs in the region.

1.3 Objectives of the Study

The primary objective of this study is to examine the effect of social media on the performance of SMEs in North Central Nigeria. The specific objectives are:

- i) ascertain the effect of Twitter on profitability of SMEs in North Central Nigeria.
- ii) determine the effect of Snapchat on customers' patronage of SMEs in North Central Nigeria.

2.1 Conceptual Review

2.1.1 Social Media

Social media functions as a dynamic, digital network that connects people, information, and services globally, enabling rapid interaction and knowledge exchange (Eze et al., 2021; Baines, 2013). It has transformed how businesses communicate, collaborate, and engage with both local and global markets (Musa, 2021; Isiaka et al., 2022).

For small and medium enterprises (SMEs), social media has significantly enhanced business performance and growth by improving marketing, customer outreach, and brand visibility (Syaifullah et al., 2021; Effendi et al., 2020). Platforms like Facebook, Instagram, and Twitter help SMEs promote their products, engage directly with customers, and build competitive advantages (Ahmad et al., 2018; Qalati et al., 2021). Effective use of social media leads to higher brand awareness and increased sales compared to traditional marketing methods.

Beyond marketing, social media has positively impacted internal business operations, such as employee productivity, remote collaboration, and innovation through knowledge sharing and talent acquisition (Redjeki & Affandi, 2021). Defined as user-driven platforms built on Web 2.0 technologies, social media supports content creation and sharing (Kaplan & Haenlein, 2010; Vogus, 2011). While often used interchangeably with "social networking," social media more broadly enables the formation of user communities and relationships.

Importantly, social media has changed consumer behavior by promoting active participation, transparency, and interaction. Unlike traditional media, it empowers consumers to engage with content, share feedback, and influence others' purchasing decisions (Hollensen & Raman, 2014; Dewing, 2010).

2.1.2. Twitter (X)

Twitter is undeniably one of the most well-known platforms in the social media landscape. Yet, many companies remain reluctant to use it for marketing, often due to a lack of understanding of its benefits or past limitations like the former 140-character cap. However, with supporting data highlighting Twitter's potential for business and the increased character limit to 280, the platform is gaining ground as a valuable marketing tool. Investing in Twitter can be beneficial for your business—on average, each Twitter user holds a value of \$110, and each visit from Twitter to your website is worth around \$0.62. Furthermore, 52% of users report purchasing a product they first discovered on Twitter, and 81% believe Twitter has a greater influence on their buying decisions than television.

2.1.3 Snapchat

Snap Inc., previously known as Snapchat, has carved out a niche for itself as a distinctive social media platform with a strong appeal. Since its launch in 2011, it has retained a consistent user base for over ten years. By October 2022, the platform boasted 576 million users, with 347 million engaging daily (Statista, 2021). Snapchat continues to serve as an effective channel for reaching target audiences.

One of Snapchat's key advantages lies in its popularity among younger users, its creative use of augmented reality (AR) features like filters and lenses, and its storytelling capabilities through Snaps and Stories. However, the platform also presents certain drawbacks, such as short video lengths, the temporary nature of content, and limited access to in-depth analytics.

For small and medium-sized enterprises, Snapchat can be a valuable marketing tool when used strategically. Businesses can benefit by producing brief, attention-grabbing videos, utilizing AR features to showcase creativity, and maintaining an active presence through regular posts on their Snapchat Story to boost customer engagement and loyalty.

2.1.4 Small and Medium Enterprises

Small and medium-sized enterprises (SMEs) play a crucial role in national economic growth by fostering industrialization, improving living standards, reducing unemployment, and driving modernization. Globally, micro, small, and medium enterprises (MSMEs) contribute significantly to job creation, often surpassing larger corporations.

In Nigeria, particularly in North Central Nigeria, MSMEs are vital to the economy, accounting for 59.08% of GDP and employing 97.16% of the labor force, with most classified as micro businesses. Despite their importance, Nigerian MSMEs face growing challenges from technological advances and international trade agreements like AFTA and ACFTA, which intensify competition and demand greater adaptability.

To stay competitive, SMEs must develop sustainable strategies and unique advantages. Definitions of SMEs vary, often based on factors like workforce size, capital investment, annual turnover, and asset value. In Nigeria, classifications come from both the Central Bank and the National Policy on MSMEs.

Consumer preferences are shaped by socioeconomic and cultural backgrounds that drive business offerings and marketing strategies. Increasingly, consumers turn to the internet and social media to research, interact with businesses, and share insights. Social media's broad reach, speed, and low cost make it a valuable tool for SMEs to connect with customers and build loyalty.

Platforms such as Facebook, Twitter, and YouTube are widely used by Nigerian SMEs for marketing and customer engagement. This study focuses on how Nigerian consumers interact with these platforms and how SMEs use them to enhance visibility, promote products, and meet customer needs.

2.1.5 Performance of SMEs

Organizational performance is a central concept in management, though its definition varies depending on the researcher and context. Generally, it reflects how well an organization regardless of size achieves its goals using available resources. It encompasses both the efficiency of internal operations and the effectiveness of meeting customer needs and market demands.

Performance cannot be captured by a single measure. It includes financial outcomes (e.g., profit, return on assets/equity, sales) and non-financial outcomes (e.g., customer satisfaction, employee development, market share). Achieving performance goals requires clear objectives and alignment between employee efforts and organizational aims.

Effective performance evaluation involves both objective metrics (revenue, market share) and subjective or perceptual tools (customer loyalty, service quality). For small and medium enterprises (SMEs), performance often focuses on employment generation, wealth creation, and long-term sustainability. Strategic direction, organizational capabilities, resource availability, and communication systems all impact performance levels.

Performance is commonly viewed through four lenses: financial, customer-related, internal processes, and employee development (Rosli & Sidek, 2019). High-performing businesses balance both financial indicators (e.g., economic value added, shareholder returns) and non-financial indicators (e.g., workforce satisfaction, operational efficiency).

Organizational performance is best understood as a comprehensive and multifaceted concept. It requires clear goal-setting, continuous measurement, and the integration of both tangible results and intangible outcomes, such as customer perceptions and employee contributions.

2.1.6. Profitability

The primary objective of any small business is to generate profit. However, many business owners may not be familiar with how to evaluate the financial health of their company. With numerous financial reports available, it can be overwhelming to determine which figures are most important to track. Understanding how to measure your business's profitability is essential for staying on the path to long-term success. It provides insight into your financial stability and helps you plan for the future. Before exploring methods to assess profitability, it's important to distinguish between *profit* and *profitability*, as these terms, though often used interchangeably, refer to different

concepts. **Profit** refers to the amount of money your business earns after all expenses are deducted. It's calculated by subtracting total costs from total revenue and is typically shown on the income statement. While **Profitability**: Unlike profit, which is an absolute figure, profitability is a relative measure. It evaluates how effectively a business is generating profit in relation to revenue or other financial metrics, often expressed as a percentage. This helps in forecasting and analyzing business performance. While profit focuses on concrete numbers, profitability gives a broader view of financial performance. The key is to assess whether your business is consistently earning more than it spends. With this understanding in place, the next step is to explore four practical ways to evaluate your small business's profitability.

Running your margin ratios is one of the best ways to determine if your business is profitable. But, to do that, you'll need to calculate three different things from your income statement:

- Net Sales – Cost of Goods Sold = Gross Profit
- Gross Profit – (Operating Costs, Including Selling and Administrative Expenses) = Operating Profit
- (Operating Profit + Any Other Income) – (Additional Expenses) – (Taxes) = Net Profit

These three figures will help you see what your profit is from a dollar perspective. We can analyze these numbers further by turning them into ratios. Ratios help you measure your business's efficiency much easier than looking at a dollar amount.

2.1.7 Customer Patronage

Customer patronage refers to the ongoing support, loyalty, and purchasing behavior exhibited by customers toward a business, product, or service. It reflects the trust, satisfaction, and engagement customers feel toward a brand, motivating them to make repeat purchases or recommend the business to others. Factors Affecting Customer Patronage include:

- i) **Product Quality** – Delivering high-quality products helps attract and retain customers.
- ii) **Customer Service** – Providing exceptional service encourages customers to return.
- iii) **Pricing** – Fair and competitive pricing plays a crucial role in influencing buying choices.
- iv) **Brand Reputation** – A strong, positive brand image builds trust among customers.
- v) **Convenience** – Easy and accessible products or services boost customer loyalty.
- vi) **Marketing and Promotion** – Well-crafted advertising strategies drive brand awareness and attract potential buyers.
- vii) **Loyalty Programs** – Offering discounts, rewards, and incentives motivates customers to continue their support.

Snapchat can be an effective tool for boosting customer patronage among Small and Medium Enterprises (SMEs) by enhancing brand interaction, building a community around the brand, and increasing traffic and sales through creative and engaging content.

2.3.0 Theoretical Review

A variety of behavioural theories have been developed to explore the relationship between social media and the performance of small and medium-sized enterprises (SMEs). These theories serve as foundational tools for understanding how social media influences SME growth and development. This study will primarily be guided by social network theory, while also considering other relevant frameworks such as Media Richness Theory, Social Presence Theory, Social Comparison Theory, Diffusion of Innovation Theory, and Media Ecology Theory. Together, these theories offer different perspectives for analysing the complex role of social media from individual behaviours and societal dynamics to the technological factors that shape SMEs performance.

2.3.1 Social Network Theory by Jacob Moreno (1930)

Social Network Theory views social media as a web of individuals linked through various types of relationships. It emphasizes how the structure and nature of these connections affect communication patterns and social behaviour. Core elements include **nodes** (representing individuals or entities) and **ties** (the relationships between them), with particular focus on how information circulates within these networks.

The theory primarily investigates the interactions, connections, and behavioural patterns that emerge within social groups. It explores how group dynamics influence the way information is shared, shifts in behaviour and language within communities, and the breakdown of social ties over time.

Importantly, the theory does not focus on the specific content of the information being shared, but rather the method and pathway through which it is transmitted from person to person or from smaller groups to larger populations.

Social Network Theory also considers how social connections shape individuals' speech, actions, and beliefs. These interconnected individuals form what are known as social networks or speech communities, groups of people who interact regularly and influence each other's communication styles and behaviours.

2.3.2 Media Richness Theory by Richard L. Daft & Robert H. Lengel (1986)

Media Richness Theory (MRT), developed by Daft and Lengel in 1986, evaluates how effectively different communication media transmit information without distortion or misinterpretation. The theory ranks media based on their ability to convey complex and nuanced messages, with richer media—like video calls—offering visual and verbal cues, while leaner media—like text—convey less contextual information.

Originally designed to help organizations manage ambiguity and communication challenges, MRT suggests that richer media are better for complex, uncertain topics, while simpler media suffice for routine messages. Though initially focused on internal business communication, the theory has evolved to include modern digital platforms such as video conferencing, online learning, and web-based meetings. While MRT emphasizes media effectiveness, many studies have also explored how people, especially managers, select communication tools depending on the complexity of the message being shared.

2.4 Empirical review

This section highlights previous research examining the relationship between social media and business performance.

Mirza (2022) conducted a study examining how the use of social media marketing channels influences the performance of small and medium-sized enterprises (SMEs) in Pakistan. The research aimed to explore the connection between social media usage and business performance, considering cost reduction, innovation, and marketing capabilities as mediating factors. Using a quantitative approach with Partial Least Squares Structural Equation Modelling (PLS-SEM), the study analysed data from 322 respondents—SME owners or key decision-makers—selected through purposive sampling. The findings revealed that social media marketing channel usage has a significant positive impact on SME performance. Additionally, cost reduction and innovation were found to significantly mediate this relationship. The study also identified a moderating effect of age on the link between innovation and business performance. It was suggested that future research could examine cultural influences as a potential moderator in this relationship. While this research focused on Pakistani SMEs, it provides relevant insights for the present study, which seeks to explore the impact of social media on SME performance within the context of North Central Nigeria.

Odoom, Dorson, and Acheampong (2016) conducted a study titled *Antecedents of Social Media Usage and Performance Benefits in Small- and Medium-Sized Enterprises (SMEs)*, highlighting that although social media marketing is rapidly expanding, its application and implications within SMEs remain relatively underexplored in academic literature. The study aimed to deepen understanding of the factors that motivate SMEs to adopt social media and the resulting performance benefits, using empirical data from an emerging economy. Drawing from existing literature, the researchers proposed that interactivity, compatibility, and cost-effectiveness are key motivators for SMEs to use social media, which in turn drive performance improvements. The study analyzed data from 210 SMEs with Facebook and/or Twitter accounts using structural equation modeling, including subgroup comparisons. Findings revealed that while social media usage positively impacts performance, the outcomes vary between product- and service-based SMEs. Product-oriented SMEs tend to be motivated by cost-effectiveness, whereas service-based SMEs prioritize interactivity. The study also found that Facebook delivered greater performance benefits than Twitter for SMEs in the sample. The research contributes valuable insights for both scholars and practitioners, particularly in emerging markets where SMEs are increasingly leveraging social media to enhance their marketing efforts despite some challenges. While this study aligns closely with the present research, it primarily focuses on the specific performance benefits of social media usage, whereas the current study examines the overall performance of SMEs in North Central Nigeria.

3.0 METHODOLOGY

3.1 Area of the Study

The study was conducted in Nigeria's North-Central region, which comprises six states—Benue, Nasarawa, Plateau, Kogi, Niger, and Kwara as well as the Federal Capital Territory (FCT), Abuja.

3.2 Population of the Study

The target population for this study consists of 13,378 small and medium enterprise (SME) owners located in Nigeria's North-Central geopolitical zone (SMEDAN, 2024; Federal Ministry of Industry, 2022; Trading View, 2022). The table below presents the distribution of SME owners included in the study.

Table 3.1: Population Distribution Table

S/N	Name of States	Population of SMEs owners
1	Benue	1,811
2	FCT, Abuja	2,825
3	Kogi	1,027
4	Kwara	1,416
5	Plateau	1,574
6	Nasarawa	2,604
7	Niger	2,121
Total		13,378

Source: SMEDAN website 2025

3.3 Sample Size Determination

Given the finite size of the population, the researcher employed the Taro Yamane formula to determine the appropriate sample size. According to Taro Yamane (1964), the sample size for a known population can be calculated using the following formula:

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

Where:

n	=	Sample size of the study
I	=	Mathematical constant
N	=	Population of the study
e	=	Error limit

In the study, the population of the study (N) = 13378. The error limit (e) = 0.05 (5 percent). Substituting in the above formula, we have

$$\begin{aligned}
 n &= \frac{13378}{1+13378(0.05)^2} \\
 &= \frac{13378}{1+13378 \times 0.0025} \\
 &= \frac{13378}{1+33.445}
 \end{aligned}$$

$$= 388.3873$$

$$= 388 \text{ approximately}$$

3.3.1 Determination of Individual States Sample Size

The Bowley (1964) formula, as cited in Onwubiko, Ehikwe, & Onwuka (2013), was applied to allocate the sample proportionally across the seven states within Nigeria's North-Central geopolitical zone, as illustrated below:

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

where:

n = Sample size of the entire population.

nh = The states size of the respondents required

Nh = Total number of SME owners in each State

N = Total population size.

Table 3.2: Sample Size Distribution of Individual SMEs in each State

S/N	State	Registered SMEs in each State	Sample Distribution
1	Benue	$\frac{388 \times 1,811}{13,378}$	53
2	Nasarawa	$\frac{388 \times 2,825}{13,378}$	82
3	Plateau	$\frac{388 \times 1,027}{13,378}$	30
4	Niger	$\frac{388 \times 1,416}{13,378}$	40
5	Kogi	$\frac{388 \times 1,574}{13,378}$	46
6	Kwara	$\frac{388 \times 2,604}{13,378}$	76
7	Federal Capital Territory	$\frac{388 \times 2,121}{13,378}$	61
Total			388

Source: Researcher's Computation, 2025.

DATA PRESENTATION, ANALYSES AND DISCUSSION OF FINDINGS

This research work assesses the effect of social media on the performance of SMEs in North central Nigeria. Data collection was primarily relied on a questionnaire designed on a 5-point Likert scale and addressed structured questions aligned with the study objectives. In administering the questionnaire, the researchers employed a quota sampling technique to obtain data across the selected SMEs for this study. The presentation is based on fully filled and returned questionnaires, out of 388 distributed questionnaires, only 360 were fully filled and returned.

1. Table 4.1 Objective one: to ascertain the effect of Twitter on profitability of SMEs in North Central Nigeria.

Effect of Twitter (X)		Profitability ratings					
		SA	A	U	D	SD	Total
1	Consistent use of twitter by SMEs in North Central contribute significantly SMEs profitability	125	145	10	48	32	360
2	Use of twitter creates awareness for new products of SMEs in North Central Nigeria	150	120	4	56	30	360

3	A wide reach through twitter positively influences the quality of services SMEs provide	132	126	12	40	50	360
4	Consistent use of twitter by SMEs contribute significantly to SMEs profitability	143	146	0	31	40	360
5	Use of twitter enables SMEs to build communities around their brand, fostering loyalty and repeat sales	154	146	18	24	18	360
6	A wide reach through twitter positively influences brand visibility of products thereby increasing profitability	125	150	5	45	35	360
Average total		138.16	138.83	8.16	40.66	34.16	360

Source: Fieldwork 2025

The result suggest that more respondents strongly agreed and agreed that twitter impact SMEs profitability in North Central Nigeria. The table shows that the cluster of mean of items for twitter is 3.91 above the cut point of 3.0 ($5+4+3+2+1 = 15/5 = 3$ for a five- point summation Likert scale). Based on the objective, respondents agreed and strongly agreed that use of twitter affect SMEs profitability in North Central Nigeria. This implies that use of twitter affects Profitability of SMEs in North Central Nigeria.

Table 4.2 Objective two: to determine the effect of Snapchat on customers' patronage of SMEs in North Central Nigeria

Effect of Snapchat		Customers' patronage ratings					
		SA	A	U	D	SD	Total
1	Snapchat significantly aid customers patronage by enabling brand engagement	118	138	26	23	55	360
2	Use of Snapchat helps build an emotional connection with the customers	168	152	0	17	23	360
3	Snapchat enables our SMEs to interact directly with customers through hats and quick responses, making communication faster and more personal	142	140	6	44	28	360
4	Snapchat significantly aid customer patronage by enhancing brand engagement	118	138	26	23	55	360
5	Use of Snapchat helps build emotional connection with customer thereby increasing patronage	144	140	26	29	21	360
6	Snapchat enables SMEs to interact directly with customers' requirements faster	155	145	10	30	20	360
Average total		140.83	142.16	15.66	27.66	33.66	320

Source: Fieldwork 2024

The above suggest that more respondents agreed and strongly agreed that affect customers patronage of SMEs in North Central Nigeria. The table shows that the cluster of mean of items for Snapchat is 3.96 above the cut point of 3.0 ($5+4+3+2+1 = 15/5 = 3$ for a five- point summation Likert scale). Based on the objective, respondents strongly agreed that Snapchat affect customers patronage of SMEs in North Central Nigeria. This implied that Use of Snapchat has positive impact on SMEs customers patronage in North Central Nigeria.

4.3 Hypotheses testing

Hypothesis one

H₀: Twitter(X) has no significant positive effect on profitability of SMEs in North Central Nigeria.

H_a: Twitter(X) has significant positive effect on profitability of SMEs in North Central Nigeria.

Table 4.3.1^a Descriptive Statistics

	Mean	Std. Deviation	N
Consistent use of twitter by SMES contributes significantly to customers patronage	3.91	1.116	360
Use of twitter by SMEs influences brand visibility of SMEs products vis a vis profitability	4.00	1.120	360

Source: SPSS version 27.0

Table 4.3.1^a shows the descriptive statistics of the relationship between consistent use of twitter by SMEs contributes significantly to customers patronage with a mean of 3.91 and a standard deviation of 1.116, on the other hand creation of products awareness and brand visibility has a mean score of 4.00 with a standard deviation of 1.120. The cluster of mean of items for twitter and profitability is 3.91 and 4.00 above the cut point of 3.0 ($5+4+3+2+1 = 15/5 = 3.0$ for a five-point summation Likert scale). An observation of the standard deviation values reveals that there is almost the same variation of data points amongst the dependent and independent variables. This implied that Twitter (X) constitutes about the same percentage of variables that significantly affect profitability of SMEs in North Central Nigeria.

Table 4.3.1^b: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.182 ^a	.033	.031	5.207	.225

a. Predictors: (Constant), Twitter

b. Dependent Variable: profitability

The R² of the simple linear regression in table 4.3.1^b predicts that 3.3% of the variation in use of twitter among SMEs in North Central Nigeria is explained by the variation of predictor (twitter), While 96.7% of the variations in the profitability of SMEs in North Central Nigeria is explained by the model, which is an indication that twitter significantly boost profitability of SMES.

Table 4.3.1^c: Twitter on profitability of SMEs in North Central, Nigeria

$r = 0.023$ $R^2 = 0.001$								
Model		Unstandardized Coefficient		Standardized Coefficient	T	P-value	95.0% confidence interval for B	
		B	Std Error	Beta			Lower Bound	Upper Bound
1	(constant)	18.243	1.921		9.494	.000	14.462	22.023
	Usage of twitter	.482	.097	-.023	.415	.001	-.232	.151
a. Dependent variable: profitability								

Result Summary Beta = 0.482, $|t| = 0.415$, $p - \text{value} = 0.001$, $r = 0.023$, $R^2 = 0.001$

Interpretation of the Result

Table 4.3.1^c showed the effect of twitter on profitability among SMEs in North Central, Nigeria. Information in the table showed that a unit decrease in twitter usage will result to significant decrease in profitability of SMEs ($p < 0.05$). Also, 0.1% variations in profitability was determined by twitter usage and there is strong association between twitter usage and profitability among SMEs in North Central, Nigeria ($r = 0.023$).

Decision: P-value less than 0.05, the null hypothesis was rejected. It is then concluded that twitter usage significantly increases profitability of SMEs in North Central, Nigeria.

Hypothesis two

H₀: Snapchat has no significant positive effect on customer patronage of SMEs in North Central Nigeria.

H_a: Snapchat has significant positive effect on customer patronage of SMEs in North Central Nigeria.

Table 4.3.2^a Descriptive Statistics

	Mean	Std. Deviation	N
Snapchat significantly aid customers patronage by enhancing brand engagement	3.92	1.016	360
Use of use of snapchat by SMEs Snapchat significantly aid customers patronage	4.02	1.010	360

Source: SPSS version 20.0

Table 4.3.2^a shows the descriptive statistics of the relationship between snapchat and customers patronage has a mean 3.92 with a standard deviation of 1.016, on the other hand snapchat and customers patronage has a mean score of 4.02 with a standard deviation of 1.010. The cluster of mean of items for snapchat and customers patronage is 3.92 and 4.02 above the cut point of 3.0 ($5+4+3+2+1 = 15/5 = 3.0$ for a five-point summation Likert scale). An observation of the standard deviation values reveals that there is almost the same variation of data points amongst the dependent and independent variables. This implied that snapchat constitutes about the same percentage of variables that significantly affect customers patronage of SMEs in North Central Nigeria.

Table 4.3.2^b: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.274 ^a	.075	.073	2.333	1.623

a. Predictors: (Constant), Snapchat

b. Dependent Variable: customers patronage

The R^2 of the simple linear regression in table above predicts that 3.3% of the variation in use of twitter among SMEs in North Central Nigeria is explained by the variation of predictor (snapchat), While 96.7% of the variations in customers patronage of SMEs in North Central Nigeria is explained by the model, which is an indication that snapchat significantly boost customers patronage of SMES in North Central.

Table 4.3.2^c: Snapchat on customer patronage of SMEs in North Central, Nigeria

r = 0.023 R ² = 0.001						
Model	Unstandardized Coefficient		Standardized Coefficient	t	P-value	95.0% confidence interval for B
	B	Std Error	Beta			Lower Bound Upper Bound

1	(constant)	18.243	1.921		9.494	.000	14.462	22.023
	Use of snapchat	.440	.097	-.023	-.415	.001	-.232	.151
a. Dependent variable: customer patronage								

Result Summary Beta = 0.440, $|t| = 0.415$, $p - \text{value} = 0.001$ $r = 0.023$, $R^2 = 0.001$

Interpretation of the Result

Table above showed the effect of Snapchat on customers patronage of SMEs in North Central, Nigeria. Information in the table showed that a unit increase in Snapchat Usage will result to a significant increase in customers of the SMEs ($p < 0.05$). Also, 0.1% variations in customers patronage was determined use of Snapchat and there is strong association between Snapchat and customer patronage among SMEs in North Central, Nigeria ($r = 0.023$).

Decision: P-value is greater than 0.05, the null hypothesis was accepted. It is then concluded that Snapchat has significant effect on customer patronage of SMEs in North Central, Nigeria.

4.4 Discussion of findings

In this section we discuss the research results based on the data analyzed and hypotheses tested. The findings of this study are discussed under the various objectives of this study as presented in chapter one

4.4.1 Objective one: to investigate the effect of Twitter on profitability of SMEs in North Central Nigeria

In order to determine whether the use of Twitter affect profitability of SMEs in North Central Nigeria, respondents' views were inquired and it was found out that, consistent use of Twitter by SMEs in North Central Nigeria contribute significantly to customers patronage, creation of awareness for SMEs new products and positively influences the quality of services provided by the SMEs, build communities around their brand, fostering loyalty and repeat sales. This is in line with Ting, (2023) who noted that customers supplier relationship and quality control activities significantly affect firm's investment decisions that impact directly on their return on investment. Olasegun, et al (2020) noted that online marketing affects the performance of SMEs positively as they help in creating customers awareness, encourages more sales which enable SMEs to boost their profitability. Ha, et al, (2016) noted that social media has become a major channel for firms' marketing communication which determine the volume of sales vis a vis profitability. Okongo & Ntongai, (2022) noted that firms should adopt and integrate digital marketing practices such as twitter to enhance patronage thereby boosting their profitability.

4.4.2: Objective two: to determine the effect of Snapchat on customers patronage of SMEs in North Central Nigeria

In order to determine whether the use of Snapchat affect customers patronage of SMEs products, respondents' views were inquired and it was found out that Snapchat enables SMEs to interact directly with customers through chats and quick responses, making communication faster and more personal, and helps build emotional connection with the SMEs customers. It aids customer patronage by enhancing brand engagement. This agrees with Sumona et al, (2019) noted that there is a dire need to focus on relationship marketing strategy and social media for SMEs to boost performance and sustainability. Ha et al, (2016) opines that social media has become a major channel for firms' marketing communication. Kumar & Ayedee, (2018). The adoption of social media enables small and medium scale enterprises to market their goods through the internet and gives accessibility to a larger audience. Ahmad et al., (2018). It also allows smooth interaction between marketers and potential customers or clients and provides benefits like improving customers satisfaction and providing an edge among competitors. Doshmanli et al. (2018), organizations or small and medium scale enterprises with a viable and functional social media system easily create awareness of their products and services to potential clients and improve sales better than what the conventional marketing can handle.

5.0. Conclusion: The study adopted the survey design to examine the effect of social media on performance of SMEs in North Central Nigeria. The result showed that social media (Twitter, and Snapchat) had positive and significant effect on performance (profitability, and customers patronage) this indicate that social media adoption are pivotal factors that contribute to the overall performance and the success of SMEs. Therefore, the importance of social media practices encompassing Twitter and Snapchat on performance of SMEs not be over emphasized. Thus, social media is a fundamental driver of SMEs performance and sustainability in North Central Nigeria. That is by actively adopting and implementing various social media practices SMEs can achieve growth and sustainability.

5.1: Recommendations

Based on the findings of this study the following recommendations were made:

- i. Considering the positive impact of twitter on profitability, Small and medium-sized enterprises (SMEs) in North Central Nigeria should get involved with their customers on Twitter. This means answering questions, sharing promotions, and using popular hashtags to boost their visibility and increase profits.
- ii. SMEs in North Central Nigeria should use Snapchat's interactive features like AR filters, behind-the-scenes content, and limited-time offers to create a unique and engaging customer experience, thereby boosting patronage.

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