



Quantitative Research Review: Awareness and Adoption of Digital Marketing Strategies amongst Small and Medium Enterprise in Lagos State, Nigeria

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Abstract: *This study was conducted by Nduneche Ezurike in the Department of Marketing, LIGS University, Honolulu, Hawaii, United States of America. It was a double-blind, peer-reviewed study, published in the Innovative Journal of Research in Marketing and Customer Success. The study sought to investigate the awareness and adoption of digital marketing strategies among Small and Medium Enterprises (SMEs) in Lagos State, Nigeria. This paper meets the eligibility criteria for a quantitative research critique due to its research design. The study evaluated in three (3) sections to provide a comprehensive assessment of the research. Merrigan and Huston (2014), as well as Cresswell and Cresswell (2018), are the underpinning books used for this review. Both are widely cited in the social sciences and education. They provide extensive foundations on quantitative research designs and methodological justifications. Peer-reviewed journals in the social sciences that carried out similar studies in Nigeria on SMEs' digital marketing strategies were also used to assess the paper's quality, relevance, and originality against established benchmarks.*

Keywords: *Quantitative, Research, Awareness, Adoption, and Digital Marketing*

I. Introduction

1.1 Identification of the Study's Variables

This is a communication research paper situated within the social sciences, as it aimed to investigate the behavioural awareness and adoption of digital marketing strategies by small and medium enterprises (SMEs) in Lagos State, Nigeria. It employed the quantitative research method, based on empiricism, a common approach in social science research, which will be further analysed in Section 2. It was blind peer-reviewed, meaning its quality, validity, and significance to the contribution of knowledge have been scrutinised by experts in the field before publication; nevertheless, it will be further analysed for this term paper. From the title, the independent variable is awareness of digital marketing strategies, such as content marketing, email marketing, social media campaigns, and search engine optimisation (SEO).

The study measures the extent of awareness and knowledge of these digital marketing strategies among SMEs, which will influence the dependent variable, which is the adoption level or behaviour in applying these strategies. The level of adoption, whether low, moderate, or high, determines the extent to which these digital marketing tools are applied. As Leatham (2012) explains, the independent variable is controlled and changed, influencing the dependent variable, which is measured. Understanding these variables is crucial to evaluating the study's logic and argument structure, which is grounded in supporting evidence and justified through sound reasoning. This aligns closely with how arguments in research are built and evaluated.

The acquisition of knowledge is a purposeful and critical process that advances society, informing decisions and enabling meaningful interpretations of everyday life. On this premise, scholars have outlined the various methods of knowing (Merrigan & Huston, 2014; Welsh, Mainwaring, & Ambegaonkar, 2023). Everyday method of knowing includes tenacity

(based on long-held beliefs), authority (reliance on expert opinion), a priori grounds (beliefs based on intuition), and the scientific method, which relies on systematic observation, empirical testing, and generalisation. Considering the journal's focus, the scientific method will be the primary point of analysis. To frame this analysis, the Toulmin Model of Argumentation is adopted, as it distinguishes research-based reasoning from everyday ways of knowing. It views research as a form of argument built on three core elements: claims, data, and warrants (Toulmin, 1972; Toulmin, Rieke, & Janik, 1984; Merrigan & Huston, 2014). The claim, data and warrant model provide a structure of arguments for research. The claim is the researcher's stance, the data serves as supporting evidence, while the warrant is a logical bridge between the two.

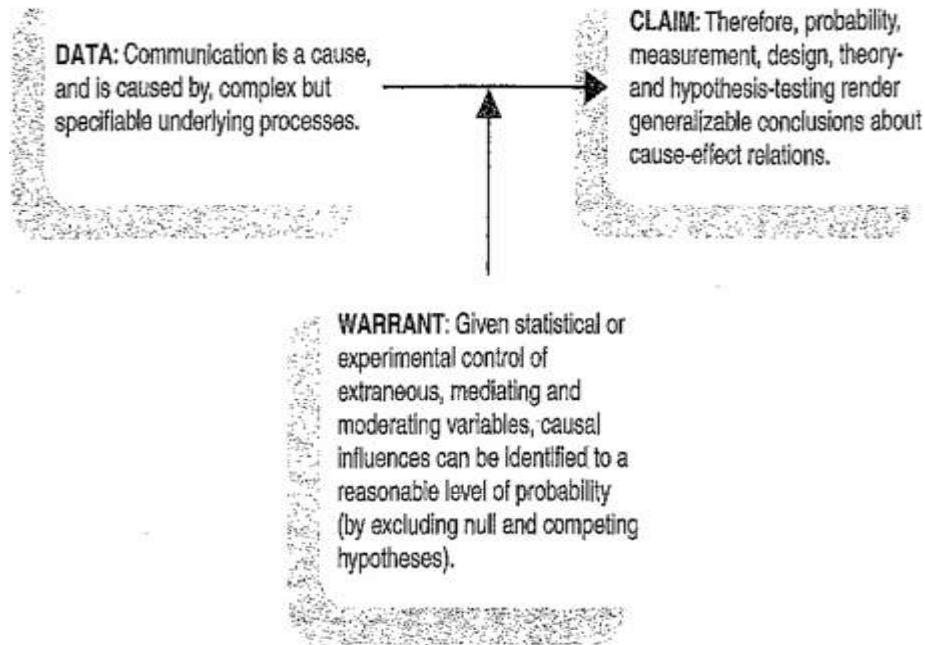


Figure 2: Diagramming the underlying argument for the discovery paradigm.

From *Communication Research Methods* (4th ed., p. xxvi), by G. Merrigan & C. Huston, 2014, Oxford University Press. Copyright 2020 by Oxford University Press.

From the diagram, it can be inferred that the data (grounds) refers to specific underlying processes that serve as the factual basis or observation being made. This informs the claims, which are the assertions or conclusions that the researcher wants to be accepted.

Through the selection of an appropriate research design and testing, causal claims can be made. The warrants serve as the logical bridge that connects the data to the claims; they can take the form of rules, laws, principles, or formulas to guide reasoning. By controlling the extraneous variables in the study, the warrant is strengthened; therefore, causal inference can be made, providing a bridge for further arguments. The researcher's claim, according to the Toulmin model of argumentation, is usually derived from the research question, serving as the central assertion to be proved through data collected and justification through a warrant. The study's research questions are:

1. To what extent are SMEs operators in Lagos State, Nigeria aware of digital marketing strategies?
2. To what extent do SMEs in Lagos State adopt digital marketing strategies?
3. How do SMEs operators perceive the adoption of digital marketing strategies in aiding business growth?

1.2 The claims made by the researcher include:

1. SME operators in Lagos, Nigeria, are moderately aware of digital marketing strategies
- Note:** The marketing strategies highlighted in the study includes: content marketing, social media marketing, email marketing, SEO (Search Engine Optimization), etc.
2. Most SMEs in Lagos, Nigeria do not adopt digital marketing strategies.
3. Most SMEs in Lagos State do not adopt any digital marketing tools, but among those who do, social media marketing is the most commonly used.
4. Most SME operators in Lagos, Nigeria agree that digital marketing strategies aid business visibility and growth.
5. Digital marketing assists in customer acquisition and retention.

These claims will act as the foundation of this study's assessment. According to Merrigan and Huston (2014, p. xxii), there are four paradigms in the discipline of communication: discovery, strict empiricist analysis, interpretation, and critical approaches.

The strict empiricist method studies communication by directly observing and precisely analysing naturally occurring behaviours. The interpretive method, on the other hand, sees reality as socially constructed and shaped by individual perceptions and interactions. In contrast, the critical method examines how hidden systems of power and influence shape our reality, with the aim of promoting social change or improvement. Lastly, the discovery paradigm utilises experiments, controls, and measurements to understand reality.

As previously stated, the independent and dependent variables have been identified. It can therefore be gleaned from the variables to be measured that this study is grounded in the discovery research paradigm. Discovery research, as outlined in Merrigan & Huston (2014, pg 31), aims to describe, explain, and predict patterns of human communication using observable data. Its foundations lie in objectivity, systematic observations, testable empirical knowledge and rigorous methodological standards. This paradigm aligns with the postpositivist perspective, which acknowledges limitations of human perceptions and research methodologies, hence emphasising three ways for testing knowledge: (1) precision in the statement of research terms, processes and results; (2) systematic inquiry that follows a structured and organised process; (3) repetition for verification, meaning the research must be replicable.

1.3 Research Design

In discovery research, concepts are clearly defined for precise measurements. This is achieved through the quantification of data, which transforms abstract ideas into measurable variables. Concepts are abstract key ideas which are not directly measurable. In this study, the key concepts include: *digital marketing, awareness, adoption and small and medium enterprises (SMEs)*. These concepts are derived from the research topic; however, without precise numeric data, the research would lack accuracy, making it difficult to predict outcomes in social situations.

This is because quantitative data provides the empirical evidence to identify patterns and trends that can inform policy-making within SMEs in Lagos, Nigeria.

To achieve abstract ideas that are researchable, the concepts are transformed into constructs that operationalise the measurement process. The study's constructs are the level of awareness of digital marketing strategies (*Yes/No*), degree of adoption (*No extent, Moderate, Large, Very Large*), and types of digital tools used (*social media, SEO, email marketing*, etc). A diagram is used to illustrate the process of designing discovery research; this is an attempt to provide an analytic outline of the process, before the actual study was conducted.

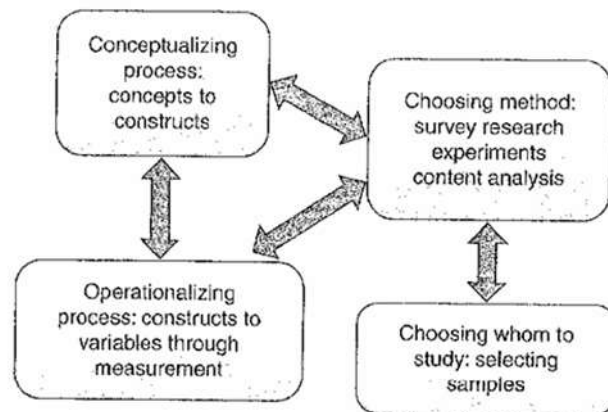


Figure 3. *Designing Discovery Research*

From *Communication Research Methods*, by G. Merrigan & C. Huston, 2014. pg 221, Oxford University Press. Copyright 2014 by Oxford University Press.

For analysis, conceptualising the process will serve as the starting point. The concepts in this study allowed the researcher to identify what was to be investigated. Whereas, the constructs translated the abstract concepts into measurable variables. The variables have attributes that indicate the measurement responses that were captured.

1.4 Conceptualising the process:

1. Concept: Digital marketing strategies

Concept transformed into construct:

- a. Types of digital marketing tools used (the variable being measured is the digital tools, while the attributes include: social media platforms, SEO, email marketing and others)
- b. Frequency of use of these tools (the variable is the frequency of use while the attributes include: no extent, moderate extent, large extent and very large extent)
- c. Purpose of digital marketing (The attributes include: brand visibility and customer retention)

2. Concept: Awareness

Concept transformed into construct:

- a) Level of awareness of digital marketing strategies (The variable was adoption level, while the attributes include- no extent, moderate extent, large extent, very large extent)

3. Concept: Adoption

Concept transformed into construct:

- a. Degree of adoption (the attributes are -no extent, moderate extent, large extent, very large extent)
- b. Perceived effectiveness of adopted digital strategies

This is a breakdown of the concepts and constructs in the study, although the study failed to specify the type of SMEs examined.

1.5 Theoretical Framework of the Study

Technology Acceptance Model (TAM)

The study was grounded in the Technology Acceptance Model (TAM), developed by Fred Davis in 1989. The study rightly justifies the adoption of TAM to explain the perceived usefulness and perceived ease of use as determinants for technological adoption. Within this

study its relevance is reflected in the items on the questionnaire seeking to determine the extent of awareness and adoption and the perceived performance of digital marketing tools in business growth and retention in SMEs. SME operators' decisions to adopt digital marketing tools will likely depend on how useful they perceive these tools to be in achieving business goals (Perceived Usefulness), as well as how easy they believe the tools are to learn and integrate into their existing operations (Perceived Ease of Use). The model justifies the investigation into why a large percentage of SMEs have not adopted these strategies, despite the potential benefits, by highlighting the role of perceptions in shaping adoption behaviour. The use of TAM in the study provides a theoretical analysis to interpret the behavioural patterns of use among SMEs

1.6 Summary of Section 1

This section addresses the research design, constructs, claims, and the theoretical framework of the study. It justifies the foundation of the study from a quantitative research approach, given the need to obtain empirical data.

SECTION TWO

1.7 Systematic Review and Analysis of Methodology

The first section of this critique addressed the papers, concepts, constructs, variables, and the attributes to be measured, including the importance to trends and policies. It equally addressed the claims of the study; in this section, a panoramic analysis of the methodology will be provided. Each table will be dissected to reflect deviation or conformity with the principles of the discovery paradigm as illustrated in Merrigan and Huston's (2012) Figure 11.1 (p. 220). This will guide section two of the analysis.

II. Research Method

“This study adopted the survey research design. According to Ogunsanya et. al (2019) “survey is the study of a specific group or population to find out opinion, describe behaviour, predict behaviour and explain behaviour”. The survey research method is most suitable to this study as it helps to generate relevant data and helps in choosing a sample which is representative of the entire population of study. The instrument of data collection for this study was a questionnaire. The study population for this study comprised of SMEs operators and in Lagos State. The population was chosen because according to a survey carried out by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in Collaboration with the National Bureau of Statistics in 2021, Lagos state accounts for the highest number of SMEs in the country, with a total of 91,097 SMEs in the state. The Taro Yamane formula for sample size determination was used to arrive at a sample size of three hundred and ninety-eight (398). The researcher administered 352 (88.4%) questionnaires interpersonally while 46 (11.6%) questionnaires were successfully administered online. The purposive sampling technique was adopted in selecting the SMEs which were sampled for this study. Data Presentation and Analysis Out of the 398 copies of the questionnaire that were distributed to SMEs owners in Lagos State, a total of 376 copies (94.5%) were properly filled, retrieved and analysed in this study”.

2.1 Analysis of the research design

A research design outlines the logical process that links the claim with the data and warrants (Merrigan & Huston, 2014). The study adopted the survey research design, which has its roots in the discovery paradigm associated with positivist or post-positivist research.

This is commonly used in the social sciences from which this journal originates, to uncover observable patterns, test hypotheses, and make generalisations about human behaviour. Its foundation lies in empirical investigations, emphasising numerical measurements, objectivity, and statistical analysis, which align closely with the tenets of quantitative research. The study employs a survey research design effectively to collect data from a large population, uncover patterns and trends, test the relationship between constructs, and describe variables as outlined in Section 1. Unlike other paradigms, it fulfils the tenets of discovery research by seeking to objectively measure the awareness and adoption of digital marketing strategies among SMEs in Lagos State. Other paradigms, such as interpretivist or critical theory, would explore subjective experiences, failing to provide the measurable insights for policy and strategic planning that this study offers.

Based on Figure 11.1 from Merrigan and Huston (2014), the survey method is the most suitable for this study because it enables the collection of data on awareness and adoption through the use of questionnaires. In contrast, content analysis analyses meanings and patterns within texts or media content, while experiments test hypotheses in controlled conditions. They would not have been able to achieve the result of capturing the self-reported behaviours of the respondents to address the claims of the study.

Although not stated, it is assumed that the study employed a cross-sectional research design, which involves collecting data from the sample population at a single point in time to draw conclusions related to the research questions.

2.2 Population and Scope

It was succinctly stated that the study's scope was limited to Lagos State in Nigeria, as it has the highest number of SMEs in the country, with a total of 91,097, according to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in Collaboration with the National Bureau of Statistics in 2021. This explicit statement of the population clearly defines the sample population, ensuring validity and allowing for generalisations about whom the research findings apply. This avoids bias by precisely outlining the characteristics of the population, which includes all SMEs situated within Lagos state. It is impractical to collect data from such a large population, due to cost and time wastage, prompting the necessity of sampling the population.

2.3 Sample size

Hence, the study employs the Taro Yamane formula to determine the sample size, ensuring the validity and accuracy of the results as a representative of the population.

The formula states: $n = N / (1 + Ne^2)$

Where:

- n = sample size
- N = population size
- e = margin of error (e.g., 0.05 for 5%)

The formula is relevant because it provides a statistical sample size from the total population of SMEs in Lagos State, allowing the research findings on adoption levels to be generalised to the larger population. Though the study did not outline the formula or the calculations, the sample size was stated as three hundred and ninety-eight (398). Using the purposive sampling technique, the researcher administered 352 in-person and 46 online questionnaires to SME owners in Lagos State. This information is essential to ensure transparency, reliability and replication of the research (Bennett et al., 2011).

2.4 Data collection and sampling technique

Creswell and Creswell (2018) outline various data collection methods, including surveys (such as questionnaires and interviews), observations (both participant and non-participant), experiments, content analysis of documents or media, and the use of existing records or secondary data. Each method varies in approach and is dependent on the study objectives, variables and research design. The study's research design aligns with the use of a questionnaire to gather respondents' levels of adoption and awareness from a large population. Other survey methods, such as in-depth interviews or focus groups, would have been less suitable, especially for a large population, due to the difficulty in producing quantifiable data and time constraints. Similarly, observations, experiments, and content analysis would not effectively capture the quantifiable data needed to address all the claims and research questions of the study. Therefore, the survey method is the most appropriate. The data is self-reported because the key respondents are interviewed individually to reveal their behaviours, beliefs, or characteristics.

The use of the purposive sampling technique, as opposed to others such as simple random, stratified, and systematic techniques, reflects the intentional selection of SMEs, indicating that non-participants who did not fall under the purview of the research questions and claims were excluded from the study. This resulted in a lapse in the generalization of the study's findings (see Section 3 for a detailed clarification). The study defines its scope as SMEs within Lagos State.

“Out of the 398 copies of the questionnaire that were distributed to SMEs owners in Lagos State, a total of 376 copies (94.5%) were properly filled, retrieved and analysed in this study”.

A questionnaire is a data collection instrument that contains a series of questions posed to the study's respondents. It can be structured, with closed-ended questions that provide fixed response options; unstructured, which contains open-ended questions that allow respondents to answer freely; and lastly, semi-structured, which combines both formats. It can be self-administered (either in paper-based or online format) or interviewer-administered (either face-to-face or by telephone). Irrespective of type or administration, a rationale must be provided to give sound arguments.

By indicating the distribution, return, and analysis, the study not only demonstrates transparency but also builds strong evidence for the claims and warrants of the study. The statement assures the reader that the study's methodology is valid and that its findings are accurate. The high response rate of 94.5% indicates strong participation among respondents, thereby ensuring the adequate generalizability of the findings. This implies that the data is not biased or insufficient to make a meaningful analysis. Furthermore, the study's distinction between the types of administration of the questionnaire —face-to-face, which allows for a higher response rate but is time-consuming, and the online method, which is cost-effective but excludes the digitally illiterate —shows the study's consideration of reach and a need to be inclusive. However, the study failed to mention how the data were collected online, as well as the purpose of administering the questionnaire both online and face-to-face.

2.5 Validity and reliability

The study does not explicitly mention validation and reliability measures to assess the internal consistency of the administered questionnaire. Validity refers to whether the instrument selected accurately measures the variables, while reliability refers to the consistency of the instrument, which can be replicated. A Statistical tool, such as Cronbach's alpha, can achieve this objective (Merrigan & Huston, 2014). Cronbach's α value of 0.7 or higher could have been used to verify if the measurement of the items on the questionnaire is consistent. Additionally, no pilot test appears to have been conducted, nor is there any mention of the statistical tools used for analysis. The ethical considerations are also not present.

These omissions undermine the strength of the methodology, limiting its replicability, accuracy of findings and its scientific rigour. Perhaps due to the journal's length constraints, but this should be explicitly stated so there is no question about its methodological accuracy. Moreover, similar studies in the field of social sciences explicitly state this in their study (Adeniyi et al., 2024; Khairuddin, 2020; Olasanmi et al., 2023; Olowosuyi, 2020; Ujah-Ogbuagu, 2019). A more detailed analysis is provided in Section 3.

2.6 Statistical Analysis of the Data/Evidence Presented

Each table in the paper will be analysed to provide a comprehensive overview of the levels of measurement, claims, and evidence presented.

Excerpt from the paper: Demographic Presentation

Table 1. Presentation of demographic data

Variables	Characteristics	Frequency	Percentage
Gender	Male	192	51%
	Female	184	49%
	Total	376	100%
Age	18-25	29	7.7%
	26-35	61	16.2%
	36-45	173	46.0%
	46-55	72	19.1%
	56 above	41	11.0%
	Total	376	100.0
Educational Qualification	FSLC	28	7.4%
	SSCE	44	11.7%
	NCE	39	10.4%
	OND	53	14.1%
	B.Sc./HND	167	44.4%
	M.Sc.	34	9.0%
	Ph.D.	11	3.0%
	Total	376	100.0
Marital Status	Single	104	25.2%
	Married	239	66.7%
	Divorced	22	3.5%
	Widowed	12	4.6%
	Total	376	100.0

The quantitative data presented indicate that the variables are self-report data collected through the administration of a questionnaire, showcasing the characteristics of the sample population in terms of gender, age, educational qualification, and marital status. Though the table shows representation, it does not establish the validity and reliability of the study, which was omitted. This is a descriptive statistical table, as it summarises and describes the sample population in terms of frequency and percentage. The variables in the study utilised Univariate analysis because it examined one variable at a time. The other types include Bivariate analysis (examining two variables to discover associations or relationships) and Multivariate analysis, which examines three or more variables simultaneously. Considering no relationships were explored but presented in frequency and percentages, the study employed univariate analysis.

a. Level of measurement

Although there are four levels of measurements, which are: ordinal, nominal, interval and ratio (Merrigan & Huston, 2014). This table's level of measurement is nominal and

ordinal. Nominal measurement refers to the classification of data into categories without any order (the demographic variables are the gender and marital status of respondents). In contrast, ordinal measurement involves arranging data in order or rank, although the intervals between these categories may not be equal (age groups and educational qualifications of respondents). The collection of marital data was unnecessary, as it does not reflect a direct or indirect relationship between the adoption levels of digital tools among SMEs. However, it could be cross-tabulated with the marital status of the sample population and their adoption levels, which could uncover a pattern that would allow for inferences to be made. The constructs are unidimensional because each one captures a single, independent characteristic of a respondent.

From the frequency and percentage data, it is easy to determine the numerical distribution of the variables. For example, the variable gender has two categories, which are male and female. The data show that males have a greater representation in the sample (192) compared to females (184), which implies that the study objectively presents facts and numerical data on its sample population characteristics. There was no indication to suggest the central tendencies -mean, median and mode were applied. This limits the ability to present a clear summary of respondents' patterns.

Table 2. Extent of Awareness of Digital Marketing Strategies Excerpt from the journal

Items	Characteristics	Frequency	Percentage (%)
Are you aware of digital marketing strategies?	Yes	282	75%
	No	94	25%
	Total	376	100%
To what extent are you aware of digital marketing strategies?	No Extent	94	25%
	Moderate Extent	143	38%
	Large Extent	97	25.9%
	Very Large Extent	42	11.2%
	Total	376	100%
Which digital marketing tool are you mostly aware of?	Content Marketing	41	10.9%
	Social Media		
	Marketing	123	32.7%
	Email Marketing	79	21.0%
	SEO	23	6.1%
	Others	16	4.3%
	None	94	25.0%
	Total	376	100%

b. Claims and Evidence

In Table 2, the three questions from the questionnaire are presented using simple descriptive statistics, demonstrating moderate awareness among SME respondents, which provides evidence for Claim One. It is used to measure the extent of awareness of digital marketing strategies among SME operators, directly addressing Research Question One, which has been outlined for clarity and precise measurement. It also justifies the first claim of the study, as outlined in the specific marketing strategies presented in the table. This implies that the questionnaire items are directly linked to the constructs of awareness outlined in section 1. From the data, it can be gleaned that the awareness level is moderate, with limited diversification from the tools stated in the table. It also reflects the limitations of applying the benefits of these tools to operations in SMEs in Lagos, Nigeria.

b. Reiteration of research question (1):

1. To what extent are SMEs operators in Lagos State, Nigeria aware of digital marketing strategies?

c. Restatements of Claim 1:

1. SME operators in Lagos, Nigeria, are moderately aware of digital marketing strategies

Note: The marketing strategies highlighted in the study include content marketing, social media marketing, email marketing, and SEO (Search Engine Optimisation), among others.

d. Level of measurement and Questionnaire format

From the table, it can be surmised that the questionnaire has a structured format with closed-ended questions and fixed response options. This enhances the quantitative data collection of the study, ensuring that all responses are uniform, reducing researcher bias and ambiguity in how respondents interpreted the questions.

The first question, "Are you aware of digital marketing strategies?", is measured at the nominal level as a dichotomous variable, because the response options are limited to "Yes" or "No".

The second question, "To what extent are you aware of digital marketing strategies?" is measured at the ordinal level (No extent, Moderate, Large, Very Large), as this is a rank order, but the interval between ranks is not equal.

The third question, "Which digital marketing tool are you mostly aware of?" is also measured at the nominal level because of the distinct categories mentioned, such as content marketing, social media marketing, email marketing, seo, and others. However, unlike the first question, it contains a researcher-constructed variable designed to capture respondents' awareness of specific digital marketing tools related to the study.

The nominal and ordinal scales used are appropriate based on the descriptive nature of the study, as they can categorise and summarise the data without numerical inputs. In contrast, interval and ratio both involve numerical values with equal intervals between them.

However, while an interval has no true zero point, a ratio does. Hence, the latter measurements would not be suitable because the study's responses were based on categories rather than continuous numerical values.

Table 3. Extent of Adoption of Digital Marketing Strategies Excerpt from Journal
Table 3: To what extent do SMEs in Lagos State adopt digital marketing strategies?

Items	Characteristics	Frequency	Percentage (%)
Does your company adopt digital marketing strategies?	Yes	167	44.4%
	No	209	55.6%
	Total	376	100%
To What extent does Your organization adopt digital marketing strategy?	No Extent	209	55.6%
	Moderate Extent	83	22.1%
	Large Extent	59	15.7%
	Very Large Extent	25	6.6%
	Total	376	100%
What is the most prominent digital marketing tool adopted in your organization?	Content Marketing	17	4.5%
	Social Media		
	Marketing	93	24.7%
	Email Marketing	41	10.9%
	SEO	12	3.2%
	Others	4	1.1%
	None	209	55.6%
	Total	376	100%

It can be gleaned from Table 3 that it directly addresses research question 2, which sought to investigate the extent of SME adoption of digital marketing tools in Lagos State. The findings support claims 2 and 3.

d. Reiteration of Research Question 2

2. To what extent do SMEs in Lagos State adopt digital marketing strategies?

Reiteration of Claims 2 and 3

2. Most SMEs in Lagos, Nigeria do not adopt digital marketing strategies.
1. Most SMEs in Lagos State do not adopt any digital marketing tools, but among those who do, social media marketing is the most commonly used.

Data/ Evidence provided

The table shows that a majority of SMEs (55.6%) do not adopt digital marketing strategies at all, while only a small percentage (6.6%) do adopt it to a very large extent. This supports Claim 2, indicating a low level of integration of digital marketing tools within SME operations. Furthermore, though 55.6% do not adopt any prominent digital marketing tool, Social media marketing (24.7%) is the most commonly used digital tool among the SMEs that do. While this corroborates claim 3, it reveals minimal adoption levels, which are currently limited to social media platforms, likely due to the ease of use, low cost, and broad reach.

e. 11 Level of Measurement

The level of measurement used for the variables in the table is both nominal and ordinal. The nominal measurement measured as a dichotomous variable applies to the first question "*Does your company adopt digital marketing strategies?*" with response options "Yes" or "No. Likewise the question "*what is the most prominent tool adopted in your organisation?*". It is measured at the nominal level with researcher-constructed responses, chosen based on their relevance to the digital marketing tools in the study.

Conversely, the ordinal level of measurement applies to the question "*To what extent does your organisation adopt digital marketing strategy?*" because the responses indicate varying degrees of adoption. Both levels of measurement are appropriate, serving the purpose of ranking and classifying SMEs' adoption levels in Lagos State. The table presents univariate data, as each variable is analysed separately in terms of frequency and percentages, without comparing or exploring the relationships between the variables.

Table 4. Perception of Adoption of Digital Marketing Strategies Excerpt from the Journal:

Items	Characteristics	Frequency	Percentage (%)
Digital marketing strategies are veritable tools to increase visibility and profits for businesses?	Agree	349	92.8%
	Disagree	11	2.9%
	Indifferent	16	4.3%
	Total	376	100%
Digital marketing strategies can play pivotal roles in customer acquisition and retention?	Strongly Disagree	3	0.8%
	Disagree	8	2.1%
	Strongly Agree	199	53%
	Agree	166	44.1%
Total		376	100.0%

Table 4 directly addresses Research Question 3 with Claims 4 and 5. The table presents data on respondents' perceptions of digital marketing strategies.

Restatement of Research Question 3

3. How do SMEs operators perceive the adoption of digital marketing strategies in aiding business growth?

Restatement of Claims 4 and 5

1. Most SME operators in Lagos, Nigeria agree that digital marketing strategies aid visibility and business growth.
2. Digital marketing assists in customer acquisition and retention.

Data/Evidence

Most SMEs (92.8%) agree that digital marketing increases visibility and drives business growth, while 53% believe its strategies also help with customer acquisition and retention. The data directly addresses Research Question 3, which explores how SME operators perceive the role of digital marketing in supporting business growth. The findings strongly support Claims 4 and 5. This implies the recognition of digital marketing in aiding business growth, even if its adoption level is low. It could be inferred that knowing the benefits of a strategy does not readily translate to the proliferation of use.

Level of Measurement

The table has two questions with closed-ended options (e.g Agree, Disagree and Indifferent). The level of measurement for both is ordinal because the options are in an order, but the intervals between them are not equal. It employed univariate analysis.

2.7 Operationalising the Process: Constructs to Variables through Measurement

Operationalising the process, as outlined by Merrigan and Huston (2014), involves translating the study's constructs into measurable variables. For instance, the construct *awareness of digital strategies* was operationalised by asking respondents questions (Yes/No questions) and ranking the extent of awareness through multiple options like (No Extent, Moderate, Large, Very Large), which were measured using nominal and ordinal scales, respectively. All the constructs of the study were addressed as outlined in the tables. The structured, closed-ended items in the questionnaire enabled quantitative analysis of the constructs. The variables in the study guided the data collection method of the survey, which informed the sample selection. Though the purposive sampling technique can be used for a quantitative study, other non-probability sampling methods would have been more suitable. Notwithstanding, the data collection approach aligns with the study's objectives, meaning it fulfilled the tenets of discovery research.

2.8 Operationalising

This section thoroughly addresses the methodology and data presentation of the study. It justified the claims made by the researcher through the provision of evidence. The study sought to establish the awareness and adoption of digital marketing strategies among SMEs in Lagos. Using a survey research design and a questionnaire to collect data, the study provided quantitative evidence to support the claims. The purposive sampling technique was employed to select SMEs in Lagos, and the Taro Yamane formula was used to determine a sample size of 398 SMEs. Furthermore, the researcher provided numerical data in a tabular format to address each claim. Although, as earlier stated, the sampling technique provided certain limitations for the study (see section 3 for a more detailed clarification)

SECTION THREE:

This review integrates peer-reviewed journal articles and regionally published studies that focused solely on the literature on digital adoption among SMEs in Nigeria. This provides a comprehensive perspective to determine if the elements in this journal not only align with

Merrigan and Huston (2014) and Creswell and Creswell (2018), but also with similar works in the field of social sciences. Here, the study is reviewed based on its originality, methodological rigour, warrants and relevance of the findings to the field.

III. Research Method

3.1 Warrants

A summary of the warrants will be stated to avoid repetition, considering that throughout the body of this review, it has been addressed. Sections 1 to 3 contain several arguments to justify the warrants in this study. Its adherence to the 3Ps of discovery research was addressed, the methodology (see section 2) was dissected, highlighting if the choice of method was reasonable, the theoretical framework logically connected the variables in the study (see section 1), and the discussion of the findings explains “why” the study’s result makes sense and adds to the body of knowledge

3.2 Analysis of the Discussion of Findings

The study’s findings are in congruence with the claims of the study and extensively outline how it tallied with the three research objectives. To avoid redundancy, the detailed alignment with the three objectives can be referenced in Sections 1 and 2 of this review. The evidence provided succinctly addressed each research question, and there was no compelling narrative to challenge the claims presented. Furthermore, the study related its findings to past literature, both in its empirical review and in the discussion of findings. For example, based on research question one, most SMEs in Lagos State are aware of digital marketing strategies, which conforms with the findings of Abraham (2018). Okundaye (2019), as cited in Eze et al. (2020), similarly confirms the findings addressing research question two, which highlight the low adoption of these digital tools in developing countries due to a lack of skills, limited resources, and inadequate government support. The supporting studies of Kanan and Li (2017), as cited in Arobo (2022), also corroborate the research question's three findings that, though there is low adoption, digital marketing strategies are perceived to be an effective tool for business growth, increasing visibility, profitability, customer acquisition, and retention.

Unfortunately, the study failed to provide contrasting literature, which demonstrates a degree of critical engagement. Moreover, although the study filled the knowledge gap, it did not discuss the theoretical or practical implications of the problems identified. It merely stated the data without extrapolating the need for urgency in addressing the identified issues.

“Furthermore, this study has filled the knowledge gap by revealing that although SMEs operators in Lagos State are aware of digital marketing strategies, a lot of SMEs in Lagos State have not adopted digital marketing strategies in their marketing efforts”

This could be achieved by linking the theoretical framework to the study’s findings, highlighting both the implications for understanding SME digital adoption and the practical impact it has on policy, strategic business growth, and resource allocation within SMEs. The study excluded the statement of limitations, which is essential for transparency and interpretation of the findings in research. This omission is particularly noticeable, considering that similar studies in the field have identified their limitations (Adeniyi et al., 2024; Khairuddin, 2020; Olasanmi et al., 2023; Olowosuyi, 2020; Ujah-Ogbuagu, 2019).

3.3 Appraisal of Methodological Rigour and Research Design

Merrigan & Huston (2014) posit that methodological rigour refers to the systematic processes followed in a study to ensure the reliability and validity of its findings. On this basis, the study will be evaluated using Figure 11.1, which outlines the design of discovery research. The study explicitly states that it adopted a survey research design because it was appropriate

for collecting awareness and adoption levels from a large population; however, it does not state that it was a cross-sectional study. It justified its scope by using Lagos State, which has a high concentration of SMEs. It cited relevant sources, SMEDAN/NBS (2021), from which the population of 91,097 SMEs in the state were culled. It used the Taro Yamane formula to narrow down the population to an appropriate sample size of three hundred and ninety-eight (398). It stated its data collection method as the questionnaire tallying with its quantitative research design. It employed both online and self-administration of the questionnaire (see section 2 for a more detailed discussion), but did not justify the reason. Neither was there any reliability or validity of the questionnaire.

Cronbach's alpha would have been appropriate to test the internal reliability of the questionnaire (Cresswell & Creswell, 2018). There was no pilot study or any documentation to indicate that the questionnaire's items had been validated. However, the questionnaire items addressed each research question and variable succinctly, with a total return rate of 376 (94.5%), which was analysed. The data was presented in a descriptive statistical format in the form of frequencies and tables. Other studies like Adeniyi et al., 2024; Khairuddin, 2020; Olasanmi et al., 2023; Olowosuyi, 2020; Ujah-Ogbuagu, 2019 went further to include measures of central tendency (mean, median and mode) to summarise data by identifying the average, midpoint, and most frequent value, respectively, in a dataset. Olasanmi et al. (2023) used ANOVA to measure the relationships between variables, whereas Adeniyi et al. (2024) utilised SPSS. These studies stated the statistical tools they employed, which are omitted in this study. The application of more advanced statistical tools, as opposed to just presenting percentages and frequencies, could add more depth and analytical value to the findings. After each data presentation, inferences were made to interpret the data. There was no statement of informed consent to show ethical credibility.

3.4 Critical Analysis of the Sampling technique

Quantitative research relies on probability sampling to ensure an equal chance of selection and generalisation of findings to the representative population. For this study, the use of the purposive sampling technique fell short of representativeness, making it challenging to generalise the findings to the entire SME population in Lagos. Similar studies by Adeniyi et al. (2024) and Khairuddin (2020) used the simple random technique, which is more accurate as it minimises bias and supports representation. A more appropriate sampling technique could have been used, such as the simple random sampling, so all SMEs have an equal chance of selection or the stratified random sampling technique where the SMEs can be grouped into strata—such as micro, small, and medium enterprises or by sector, depending on the discretion of the researcher that all categories are proportionately represented. Lastly, systematic sampling could also be appropriate for selecting a fixed number of units from the comprehensive list of SMEs in Lagos State. These techniques align with the principles of quantitative research, enhancing the reliability of findings and reducing bias. In contrast, the purposive sampling technique is deficient in achieving this, although it can be applied to quantitative studies; it is a non-probability sampling method, making it challenging to extrapolate its findings to the entire SME population in Lagos.

3.5 Analysis Based on the 3Ps- Power, Parsimony and Precision

Merrigan and Huston (2014) assert that the framework of a discovery paradigm is precision, parsimony, and power. Precision (objective and exact presentation of numerical data) was partially achieved through the survey design and sample size; however, failure to use Cronbach's alpha and the use of a purposive sampling technique reduced the measurement accuracy. Parsimony involves providing a detailed, simple explanation of a behaviour which is evident in the study's explanation of the data presented, indicating high awareness but low

adoption of digital marketing strategies. However, it failed to link the findings to the theoretical underpinning of the study-Technology Acceptance Model (TAM). For power, which refers to the use of a representative sample to generalise findings to a broader population, the use of purposive sampling limits the ability to generalise the findings to all 91,097 SMEs in Lagos State, despite having an adequate sample size. All this suggests that, although the study provides valuable insights, its sampling technique limits the power and precision of the findings.

3.6 Evaluation of the Study's Conclusion and Recommendations

The conclusion provides a summary of the findings, and its recommendations are similar to existing research. The first emphasis on public-private partnerships to train SMEs in digital marketing aligns with the study by Adeniyi et al. (2024), the scholars highlight the need for targeted training to enhance SEO and digital skills. Similarly, Olasanmi et al. (2023) note that a lack of digital knowledge influences the adoption of such digital tools and recommend structured programs. This indicates the study's conformity to the selected similar studies in the social sciences. Furthermore, the study prioritises social media tools for customer acquisition, retention, and loyalty, reflecting the findings of the research evidence presented.

Beyond these similarities, a unique recommendation to attract and incentivise Gen Z employees was stated, involving routine web analytics adoption to strengthen data-driven decision-making for policy-making.

IV. Conclusions

Final Assessment and Conclusion

This critical review comprises three sections, each systematically examining the study's processes. The study provides valuable insights into SME awareness and the adoption of digital marketing strategies in Lagos State, Nigeria, aligning with several similar works in the social sciences. It succinctly addressed each claim, providing evidence and justification for its warrants, which were analysed using Toulmin's model of argumentation. The research questions were all addressed with data supporting the conclusion that there is moderate awareness of digital marketing strategies, but adoption is low, despite perceived benefits. Its levels of measurement were limited to nominal and ordinal categories, which were sufficient to address its research questions and objectives. It followed the tenets of discovery research; however, certain methodological limitations weaken its findings. These include the use of the purposive sampling technique, as opposed to the simple random sampling technique adopted by other studies in the same field and scope. Furthermore, its lack of measures of central tendency and advanced statistical tools limits the study's ability to provide deeper insights and identify potential patterns or relationships between the variables. Using cross tabulations and other advanced analytical tools would have provided a more nuanced understanding of the data. It omitted specific key reports on the reliability and validity of its data collection instrument, which other reviewed studies addressed. Additionally, the study lacked ethical consent and did not address its limitations. In its discussion of the findings, there were no counterarguments or contrasting literature that could have strengthened its arguments or reasserted the claims, thereby providing a critical evaluation of the study.

Nonetheless, the study contributes to the body of knowledge, providing relevant data and offering a unique recommendation to utilise Generation Z (1997- 2012) due to their tech-savvy nature. A recommendation not found in the similar studies reviewed. In terms of the 3Ps framework of discovery research, it meets the criteria, particularly parsimony, as it offered a straightforward explanation of the study's findings. However, it falls short in precision and power because it failed to provide an accurate report on its methodological processes, and its

use of the selected sampling technique limits its generalisability and analytical depth of its findings.

It has a solid theoretical foundation, and its literature review addresses all the variables measured in the study, supported by timely and relevant citations, which enhances its credibility.

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