

DOI: 10.5281/zenodo.20746773

THE INFLUENCE OF DIGITAL MARKETING ADOPTION ON MARKET DEVELOPMENT: MEDIATION OF CUSTOMER ENGAGEMENT AND SALES GROWTH AMONG SMES IN SOUTH AFRICA

Bonisa Sotondoshe^{1*}, Miston Mapuranga² and Mzwandile Mbenenge³

¹Department of Business Management & Economics, Faculty of Economics & Financial Science, Walter Sisulu University, Eastern Cape, South Africa, Email: bonisasoto@gmail.com

^{2,3}Department of Business Management & Economics, Faculty of Economics & Financial Science, Walter Sisulu University, Eastern Cape, South Africa

Received: 06/04/2026

Accepted: 29/04/2026

Corresponding Author: Bonisa Sotondoshe
(bonisasoto@gmail.com)

ABSTRACT

Small and Medium Enterprises (SMEs) are crucial to economic development, yet many, particularly in underdeveloped regions such as South Africa's Eastern Cape, face significant growth challenges. The adoption of digital marketing presents a viable pathway for these businesses to enhance their competitiveness and market reach. However, the specific mechanisms through which digital marketing adoption translates into tangible market development remain underexplored, especially in resource-constrained contexts. This study examines how the adoption of digital marketing contributes to market development among SMEs, focusing on the mediating roles of customer engagement and sales growth. A quantitative, cross-sectional research design was employed, with a structured questionnaire administered to a stratified random sample of 322 SMEs in the Eastern Cape. The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) to test the hypothesised relationships within the conceptual model. The findings reveal that digital marketing adoption significantly enhances both customer engagement ($\beta = 0.754$) and sales growth ($\beta = 0.333$). Customer engagement, in turn, has a strong positive effect on sales growth ($\beta = 0.533$). Furthermore, the results confirm that customer engagement and sales growth are significant mediators in the relationship between digital marketing adoption and market development ($\beta = 0.327$ and $\beta = 0.582$, respectively). The study identifies a strong sequential pathway where digital marketing adoption enhances customer engagement, which in turn drives sales growth, ultimately leading to improved market development. The model demonstrated substantial explanatory power, explaining 83.7% of the variance in market development. This research provides empirical evidence for a mediated model of digital marketing success in emerging markets. It offers practical insights for SME owners and managers, emphasising that digital marketing should be strategically leveraged not only for direct sales but also to build relational assets with customers, which are fundamental for long-term market expansion. The study also provides actionable recommendations for policymakers to support SMEs through enhanced digital infrastructure and targeted skills development. By validating the integrated roles of customer engagement and sales growth, this study contributes a nuanced understanding of how digital marketing adoption drives sustainable business growth for SMEs.

KEYWORDS: Digital Marketing Adoption, Customer Engagement, Sales Growth, Market Development, Small and Medium Enterprises (SMEs), Eastern Cape, PLS-SEM.

1. INTRODUCTION

The Eastern Cape is one of South Africa's most socio-economically marginalised provinces, characterised by high unemployment, rural dispersion, and limited digital infrastructure. Within this environment, Small and Medium-sized Enterprises (SMEs) play a crucial role in supporting economic development and job creation, yet their growth is hindered by insufficient financial resources, limited digital skills, and infrastructural constraints. As global business activity becomes increasingly digitised, digital marketing has emerged as a vital tool for enhancing SME competitiveness, enabling firms to reach wider audiences, target specific market segments, and monitor performance in real time through techniques such as social media marketing, search engine optimisation (SEO), email campaigns, and online advertising (Mou, Hossain, & Siddiqui, 2024). When effectively adopted, these tools can strengthen customer engagement, stimulate sales growth, and contribute to market development through expanded customer bases, improved visibility, and increased revenue. However, adoption gaps remain evident in underdeveloped regions like the Eastern Cape, creating an urgent need to understand how SMEs can leverage digital technologies to overcome contextual barriers.

Although international research increasingly recognises the strategic value of digital marketing, empirical evidence from developing contexts remains limited, fragmented, or industry specific. Studies show that Nigerian SMEs utilise digital tools such as SEO and online advertising to enhance sales performance, while rural South African SMEs continue to experience ICT access challenges that impede digital marketing adoption. Urban and Maphathe (2021) found that social media platforms particularly Facebook, Instagram, and Twitter play a critical role in improving customer engagement among South African SMEs, yet the mechanisms through which digital marketing drives broader market development remain insufficiently explored. In particular, little is known about how digital marketing adoption translates into meaningful business outcomes through customer engagement and sales growth, especially within resource-constrained environments like the Eastern Cape. This gap is further emphasised by recent work on the Technology–Organisation–Environment (TOE) framework, which highlights how technological readiness, organisational capabilities, and environmental pressures shape innovation adoption among SMEs (Alajlouni *et al.*, 2025). Such theoretical insights underscore the importance of examining not

only adoption decisions but also the resulting strategic performance outcomes.

This study addresses these gaps by investigating how the adoption of digital marketing influences market development among SMEs in the Eastern Cape, with a specific focus on the mediating roles of customer engagement and sales growth. Customer engagement is conceptualised as the nature and quality of interactions between SMEs and their customers across digital platforms, including social media participation, content interaction, and feedback exchange. Sales growth refers to increased revenue arising from improved market visibility and strengthened customer relationships.

2. LITERATURE REVIEW

This section synthesises empirical findings related to the study's core constructs Digital Marketing Adoption (DMA), Customer Engagement (CE), Sales Growth (SG), and Market Development (MD) within the context of SMEs, particularly in emerging economies. This synthesis clarifies the established relationships and identifies the specific research gap this study aims to address.

2.1. Digital Marketing Adoption (DMA) In Smes

Empirical research confirms that DMA is a critical driver for SME competitiveness, especially in reaching broader markets at a lower cost (Tiago & Veríssimo, 2014). However, adoption patterns and outcomes vary significantly by context. In emerging economies, studies reveal a paradox: while digital tools offer great potential, their implementation is often superficial. For example, research on Nigerian SMEs shows effective use of SEO and online advertising for direct sales (Adeola *et al.*, 2020), whereas studies in rural South Africa highlight that ICT access challenges and skill shortages severely limit meaningful adoption, reducing it to basic communication rather than strategic marketing (Mago & Chitokwindo, 2021). This suggests that mere adoption is insufficient; its depth and strategic integration determine subsequent performance outcomes.

2.2. Customer Engagement (CE) As A Strategic Outcome Of DMA

The adoption of interactive digital platforms has made CE a measurable and valuable asset. Engagement encompassing actions like social media interaction, content sharing, and feedback builds relational capital. Urban and Maphathe (2021) demonstrated that South African SMEs using social media (Facebook, Instagram) significantly improve

customer interaction and loyalty. However, the literature often treats CE as an end goal. There is limited empirical investigation into its role as a mediating mechanism that translates technological adoption into tangible business growth, particularly in settings where trust-based relationships are paramount for business survival and expansion.

2.3. Sales Growth (SG) And Market Development (MD)

SG is the most immediate and commonly measured financial outcome of DMA. The direct correlation between digital marketing activities and revenue increases is well-documented (Chaffey & Smith, 2022). MD, however, represents a more strategic, long-term outcome involving market expansion, entry into new segments, and enhanced competitive positioning. While DMA is presumed to contribute to MD, the pathway is not fully understood. Prior research tends to conflate short-term sales boosts with sustainable market development or overlooks the intermediate steps that connect them. The question remains whether DMA leads to MD primarily through direct sales or via the cultivation of engaged customer relationships that enable sustainable expansion.

2.4. Empirical Synthesis and Research Gap Identification

While the theoretical frameworks (TOE, IDT, and RBV) explain the mechanisms of adoption, empirical studies in emerging economies reveal a more complex and often inconsistent relationship between digital marketing and firm success. In Sub-Saharan Africa, research has shown that digital marketing adoption does not always lead to immediate market expansion. For example, studies on Nigerian SMEs indicate that while tools like SEO and social media increase visibility, their impact on long-term market development is often neutralized by low customer trust and poor engagement strategies (Mou et al., 2024).

Similarly, in South Africa, Urban and Maphathe (2021) highlighted that while urban SMEs effectively use Instagram and Facebook to drive sales, SMEs in more marginalized provinces often utilize these platforms only for basic communication, missing the deeper "relational assets" required for sustainable growth. Recent evidence suggests that a "missing link" exists in the literature: many studies examine the direct path from digital marketing to sales growth, but few empirically test how customer engagement acts as a necessary precursor that "primes" the market for expansion (Alajlouni et al.,

2025). This study addresses this specific gap by moving beyond direct-effect models. By investigating the dual mediating roles of customer engagement and sales growth, this research provides a nuanced empirical map of how digital adoption translates into tangible market development within the unique, resource-constrained environment of the Eastern Cape.

3. THEORETICAL FRAMEWORK

This study employs three complementary theoretical lenses to form a robust foundation for analyzing the relationships between DMA, CE, SG, and MD. These theories move from explaining adoption to explaining competitive advantage.

3.1. Technology–Organisation–Environment (Toe) Framework

The Technology–Organisation–Environment (TOE) Framework, as defined by Tornatzky and Fleischer (1990), provides a comprehensive model for understanding how organisations adopt new technologies. The framework considers three interrelated contexts: technological, organisational, and environmental that collectively shape adoption decisions. It has been widely applied in research on digital transformation, digital marketing adoption, and SME competitiveness, offering a holistic perspective on both internal capabilities and external pressures (Sam & Mu'min, 2025).

In the context of this study, the TOE framework explains how SMEs' internal readiness, such as technological infrastructure and organisational capacity, along with external factors, including market competition and regulatory pressures, influence digital marketing adoption. When SMEs operate under favourable technological, organisational, and environmental conditions, they are more likely to adopt digital marketing strategies effectively, enhancing customer engagement, driving sales growth, and facilitating market development in resource-constrained regions like the Eastern Cape.

3.2. Innovation Diffusion Theory

The Innovation Diffusion Theory (IDT), proposed by Rogers (2003), explains how new ideas and technologies, such as digital marketing, are adopted and spread among individuals and organisations. The theory identifies five attributes that influence adoption: relative advantage, compatibility, complexity, trialability, and observability. For instance, an SME may adopt a Facebook page if it perceives clear advantages over traditional methods (relative advantage), finds it aligns with current

business practices (compatibility), is easy to implement (complexity), can test it on a small scale (trialability), and observes peers successfully using it (observability). IDT provides a valuable lens for understanding how SMEs in the Eastern Cape adopt digital marketing tools and the mechanisms through which these tools support customer engagement, sales growth, and overall market development, highlighting the practical and theoretical implications of technology diffusion in resource-constrained settings (Bailusy, Pollack, & Fahri, 2025; Wani & Ali, 2015).

3.3. The Resource-Based View

The Resource-Based View (RBV), introduced by Barney (1991), is a strategic management theory that explains how firms achieve sustainable competitive advantage through their unique internal resources and capabilities. Unlike models that emphasise external market forces, RBV focuses on resources that are valuable, rare, inimitable, and non-substitutable (VRIN), which enable firms to outperform competitors when effectively managed. For SMEs in the Eastern Cape, RBV provides a framework to understand how internal assets such as digital skills, technological infrastructure, and strong customer relationships can be strategically leveraged to succeed in the digital marketplace. Resources are considered valuable if they improve efficiency or effectiveness, rare if few competitors possess them,

inimitable if difficult to replicate, and non-substitutable if no alternative delivers the same benefits. For instance, a skilled digital marketing team or a loyal customer base cultivated through robust online engagement represents resources that are difficult for competitors to imitate. By linking internal capabilities to business outcomes, RBV explains how SMEs' adoption of digital marketing tools can enhance customer engagement, drive sales growth, and support market development, offering a strategic lens for understanding long-term advantages in resource-constrained environments (Lubis, 2022; Sam & Mu'min, 2025).

4. CONCEPTUAL MODEL AND HYPOTHESIS FORMULATION

A conceptual model provides a structured framework to explain the relationships among the study constructs and to communicate the underlying assumptions guiding the research. This study's conceptual model is illustrated in Figure 1 below, drawing on the theoretical and empirical literature reviewed in earlier sections. The model identifies Digital Marketing Adoption (DMA) as the predictor variable, Customer Engagement (CE) and Sales Growth (SG) as mediating variables, and Market Development (MD) as the outcome variable.

The following sections present the formulation of the study hypotheses based on the relationships depicted in the conceptual model.

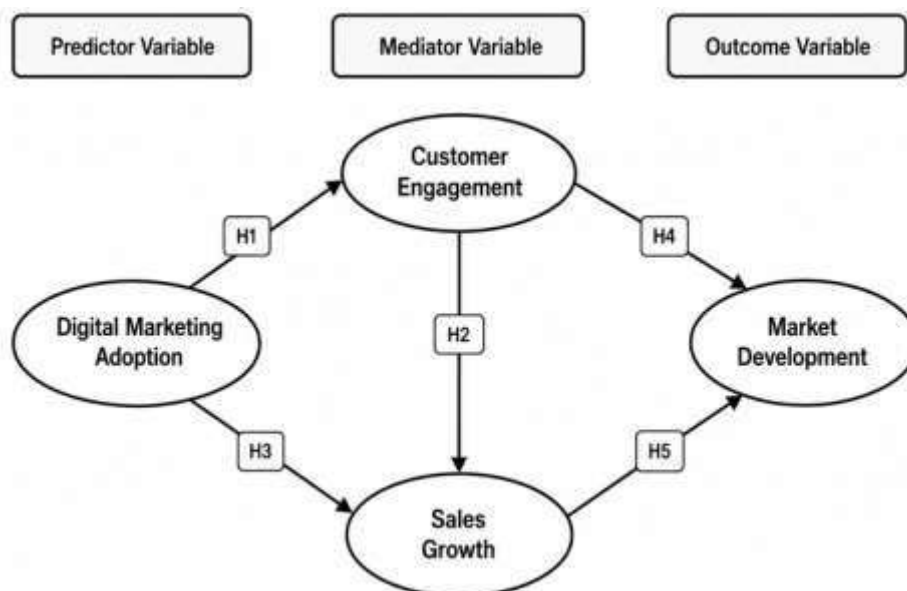


Figure1:Research Model.

4.1. Digital Marketing Adoption and Customer Engagement

Digital marketing adoption has emerged as a transformative strategy for small and medium-sized enterprises (SMEs), particularly in the digital era, where platforms such as Facebook, Instagram, Twitter, and Search Engine Optimisation (SEO) provide cost-effective tools for increasing brand visibility, facilitating customer interaction, and promoting market expansion. For SMEs operating in rural and semi-urban contexts, digital marketing serves as a practical alternative to traditional marketing approaches, which are often constrained by geographic isolation and limited infrastructure. In this study, customer engagement is conceptualised as a mediating construct, measured through online interaction metrics such as likes, shares, comments, and loyalty indicators including repeat purchase intentions (Lekhanya, 2015). Empirical evidence further supports this relationship. Kamyabi, Özgüt, and Ahmed (2025) demonstrate that digital marketing strategies enhance customer engagement and brand promotion in the hospitality sector, while Habib, Hamadneh, and Hassan (2022) show that customer engagement mediates the relationship between digital media marketing and purchase intentions in India's OTT industry. Collectively, these findings highlight the pivotal role of customer engagement as the mechanism through which digital marketing adoption drives outcomes such as sales growth and market development. Nonetheless, research examining this process remains limited in developing economies, particularly among rural and semi-urban SMEs in the Eastern Cape, providing the rationale for the present study.

H1: There is a positive and significant relationship between the adoption of digital marketing strategies and customer engagement among SMEs in the Eastern Cape.

4.2. Customer Engagement and Sales Growth

Customer engagement has been shown to play a critical role in enhancing sales growth, particularly as digital and data-driven marketing tools become central to SME competitiveness. Musa and Nasiru (2020) found that effective customer relationship management strengthens loyalty and contributes to market-related outcomes such as sales growth, underscoring the value of sustained customer interactions. In the South African SME context, Urban and Maphathe (2021) demonstrated that the use of social media platforms specifically Facebook, Instagram, and Twitter significantly increase customer engagement, which in turn supports improved marketing performance. Advancements in

digital analytics further extend these insights: Ojika et al. (2024) propose a machine-learning-based framework showing that predictive modelling, customer segmentation, and recommendation systems enhance engagement and conversion rates, ultimately driving sales growth. Similarly, Wan (2024) notes that personalised and interactive digital content strengthens engagement and encourages repeat purchases, resulting in higher sales. Despite these contributions, limited research examines the engagement-sales growth nexus in developing regions, particularly among rural and semi-urban SMEs in the Eastern Cape. This gap highlights the need for context-specific empirical evidence.

H2: There is a positive and significant relationship between customer engagement and sales growth among SMEs in the Eastern Cape.

4.3. Digital Marketing Adoption and Sales Growth

Digital marketing adoption has become a key determinant of SME competitiveness, sales performance, and long-term sustainability. Recent evidence shows that digital transformation when guided by the Technology-Organization-Environment (TOE) framework strengthens business growth by aligning technological readiness, organizational capabilities, and external market pressures (May et al., 2025). SMEs that adopt advanced digital tools such as automation and AI-driven analytics report significantly higher levels of customer engagement and revenue growth, with more than half generating between 2 and 4 million Naira annually after implementing AI-based digital marketing interventions (May et al., 2025). Similar trends are observed in the South African context, where SMEs that utilise social media marketing, digital promotions, and online selling platforms achieve stronger sales growth compared with firms relying on traditional marketing approaches (Jeza & Lekhanya, 2022). Furthermore, research from rural South Africa, such as Flagstaff, demonstrates that digital marketing enhances business sustainability by improving communication, reaching niche markets, and enabling firms to remain competitive despite infrastructure constraints (Noqazo & Madondo, 2024). However, challenges such as low consumer digital adoption, limited e-commerce usage, and poor digital literacy continue to restrict full benefits, particularly in rural and semi-urban settings. Despite growing evidence, empirical research focusing on SMEs in the Eastern Cape remains limited, highlighting the need for further

examination of how digital marketing adoption influences sales growth within this provincial context.

H3: There is a positive and significant relationship between digital marketing adoption and sales growth among SMEs in the Eastern Cape.

4.4. Customer Engagement and Marketing Development

Customer engagement has increasingly been recognised as a critical driver of marketing development, particularly within digitally enabled SMEs. Digital platforms allow businesses to build continuous and interactive relationships with customers, even in resource-constrained environments, thereby strengthening loyalty and market presence (Lekhanya, 2015). Social media marketing similarly enhances brand visibility and engagement, supporting market development and strategic growth in emerging economies (Urban & Maphathe, 2021). Recent evidence further shows that digital content strategies such as ephemeral and interactive formats significantly enhance authenticity, participation, and perceived relevance, ultimately improving brand loyalty and advocacy (Nguyen et al., 2025). Complementing this view, studies demonstrate that customer engagement remains central to developing strong relational ties and brand loyalty, both of which are essential for sustained market expansion (Zaware & Deokate, 2025; Cevher, 2024). Collectively, the literature suggests that customer engagement, when strengthened through digital marketing practices, substantially contributes to marketing development by fostering loyalty, word-of-mouth, and long-term customer relationships.

H4: There is a positive and significant relationship between customer engagement and market development among SMEs in the Eastern Cape.

4.5. Sales Growth and Marketing Development

Sales growth is more than an indicator of increased revenue; it represents a strategic driver that supports a firm's ability to pursue long-term marketing initiatives and broader market expansion. Research in Sub-Saharan Africa shows that growth-related resource flows when reinforced by technological adoption and organisational adaptation play a critical role in enabling firms to achieve wider developmental outcomes (Horvey & Odei-Mensah, 2024). In a similar vein, Ogundare and Van der Merwe (2024) argue that SMEs that enhance

their performance through competitive strategies are better positioned to engage in market development activities, underscoring the interconnected relationship between sales performance, firm competitiveness, and market expansion. Overall, the literature suggests that sales growth acts as an important mediating mechanism, translating strategic decisions into measurable market development outcomes. Through improved sales performance, SMEs are better equipped to penetrate new markets, strengthen their competitive position, and achieve sustainable business growth.

H5: There is a positive and significant relationship between sales growth and market development among SMEs in the Eastern Cape.

5. METHODOLOGY ASPECTS

5.1. Sample And Data Collection

This study involved owners and managers of Small and Medium Enterprises (SMEs) in the Eastern Cape Province of South Africa. A total of 1,961 SMEs were listed in the Rentech Digital SME Database, which provides a complete record of registered SMEs in the region. To be included in the study, businesses had to already be using digital marketing tools in their operations.

To make sure the sample represented the diversity of SMEs in the region, a stratified random sampling method was used. The sample was divided into groups based on:

- Sectors: Manufacturing (13.0%), Food (12.1%), Services (15.5%), Clothing (14.0%), Construction (19.3%), Agriculture (12.1%), and Other (14.0%).
- Business Sizes: Micro, small, and medium enterprises.

This method ensured that each SME in the population had an equal chance of being selected, making the sample more representative (Berndt, 2020).

The questionnaires included statements assuring respondents that their identities would be kept confidential and that the study was only for academic purposes. The sample size was calculated using the Raosoft sample size calculator (Raosoft Incorporated, 2004), considering the total population of 1,961 SMEs, a 5% margin of error, a 95% confidence level, and a 50% response distribution. This gave a minimum sample size of 322 SMEs.

The questionnaires were sent out electronically via Google Forms. Participation was voluntary, and informed consent was obtained before respondents completed the survey. All 322 questionnaires were

returned and included in the analysis, providing a reliable dataset to study how adopting digital marketing affects market development among SMEs.

5.2. Respondents Profile

Table 1 presents the demographic characteristics of the 322 respondents who completed the questionnaire. The study included owners, directors, and managers of SMEs operating across various sectors in the Eastern Cape Province.

Table 1: Demographic Characteristics of Sample (N=322).

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	166	51.6
Female	156	48.4
Total	322	100.0
Age (years)		
18-29	55	17.1
30-39	79	24.5
40-49	112	34.8
50 & above	76	23.6
Total	322	100.0
Qualification		
Matric	56	17.4
Diploma	80	24.8
Degree	110	34.2
Postgraduate	76	23.6
Total	322	100.0
Occupation		
Business Owner	122	37.9
Director	75	23.3
Marketing Manager	80	24.8
Sales Manager	45	14.0
Total	322	100.0
Business Sector		
Manufacturing	42	13.0
Food	39	12.1
Services	50	15.5
Clothing	45	14.0
Construction	62	19.3
Agriculture	39	12.1
Other	45	14.0
Total	322	100.0
Business Turnover ®		
<100,000	77	23.9
100,001-500,000	61	18.9
500,001-1,000,000	78	24.2
>1,000,000	106	32.9
Total	322	100.0

The gender distribution was relatively balanced, with 51.6% male and 48.4% female respondents, indicating that perspectives from both genders were well represented in the study.

Regarding age, the majority of respondents (34.8%) were aged between 40–49 years, followed by 30–39 years (24.5%), 50 years and above (23.6%), and 18–29 years (17.1%). This shows a wide range of experience levels among participants.

In terms of educational qualifications, most respondents held a degree (34.2%), followed by a diploma (24.8%), postgraduate qualifications (23.6%), and matric (17.4%). This suggests that the participants were well-educated, which is critical for

understanding and implementing digital marketing strategies in SMEs.

Occupationally, the sample was composed mainly of business owners (37.9%), marketing managers (24.8%), directors (23.3%), and sales managers (14.0%). Respondents represented a variety of business sectors, including construction (19.3%), services (15.5%), clothing (14.0%), manufacturing (13.0%), agriculture (12.1%), food (12.1%), and other sectors (14.0%), reflecting the diversity of SMEs in the Eastern Cape.

Business turnover data indicated that 32.9% of businesses generated over R1,000,000 annually, 24.2% earned between R500,001 and R1,000,000,

23.9% earned below R100,000, and 18.9% were between R100,001 and R500,000. This demonstrates that the study captured SMEs of varying sizes and financial capacities.

Overall, the demographic profile illustrates a representative and diverse sample in terms of gender, age, education, occupation, sector, and business turnover. This diversity ensures that the findings reflect the varied experiences of SMEs in the Eastern Cape regarding digital marketing adoption, customer engagement, sales growth, and market development.

5.3. Measurement Instrument and Questionnaire Design

The study's variables were based on prior research but adapted for SMEs in the Eastern Cape. Referencing the original authors ensured theoretical grounding and validity. The questionnaire was structured to capture information on digital marketing adoption, customer engagement, sales growth, and market development. Each item used a five-point Likert scale, where 1 means "strongly disagree" and 5 means "strongly agree."

- Digital Marketing Adoption (DMA): Based on the Technology–Organisation–Environment (TOE) framework (Tornatzky & Fleischer, 1990) and Innovation Diffusion Theory (IDT) (Rogers, 2003). Four items assessed respondents' understanding of digital marketing, the presence of a strategy, budget allocation, and team skills for effective implementation.
- Customer Engagement (CE): Adapted from Lekhanya (2015) and Urban & Maphathe (2021). Four items captured the level of customer interaction, frequency of feedback through digital channels, social media effectiveness, and responsiveness to online communications.
- Sales Growth (SG): Drawn from the Resource-Based View (RBV) (Barney, 1991) and strategic marketing literature (Chaffey & Smith, 2022). Four items measured perceived contributions of digital marketing to sales growth, alignment between marketing and sales teams, and tracking of performance metrics.
- Market Development (MD): Also based on the Resource-Based View (RBV) (Barney, 1991) and strategic marketing literature. Four items assessed how digital marketing helped reach new customer segments, expand brand visibility, test new markets, and collect online market data to support expansion decisions.

6. STATISTICAL ANALYSIS PROCEDURE

The statistical analysis procedure in this study was designed to systematically examine the relationships between Digital Marketing Adoption (DMA), Customer Engagement (CE), Sales Growth (SG), and Market Development (MD) among SMEs in the Eastern Cape. The analysis combined descriptive and inferential statistics with advanced multivariate modelling using Partial Least Squares Structural Equation Modelling (PLS-SEM). Data preparation involved screening and cleaning the dataset, addressing missing values through listwise deletion, and identifying outliers using standardised z-scores. Normality was evaluated via skewness and kurtosis, although PLS-SEM does not require strict multivariate normality, making it suitable for small to moderate sample sizes (Hair et al., 2022).

Descriptive statistics were calculated to summarise respondent demographics and measurement item responses, including means, standard deviations, frequencies, and percentages. The measurement model was then assessed to ensure construct reliability and validity. Internal consistency was confirmed using Cronbach's Alpha and Composite Reliability, while convergent validity was verified through Average Variance Extracted and outer loadings (Fornell & Larcker, 1981). Discriminant validity was tested using the Heterotrait-Monotrait ratio and cross-loadings (Oluwadamilare & Ayanwale, 2021).

The structural model was evaluated using path analysis, with R^2 values indicating explanatory power and bootstrapping (5,000 resamples) used to determine the significance of path coefficients and mediating effects. Effect sizes (f^2) and predictive relevance (Q^2) were also examined (Cohen, 1988; Hair et al., 2022). Overall model fit was assessed using SRMR, NFI, and Chi-square statistics, ensuring that the model was a valid and reliable representation of the proposed theoretical framework.

6.1. Procedures Used for Testing the Mediation Relationship in the Model

To examine the mediating role of Customer Engagement (CE) and Sales Growth (SG) in the relationship between Digital Marketing Adoption (DMA) and Market Development (MD), the study employed a structured mediation testing procedure within the PLS-SEM framework. Mediation analysis allows researchers to determine whether the effect of an independent variable on a dependent variable occurs directly or indirectly through a mediator (Hair et al., 2022).

The procedure began by estimating the direct effect of DMA on MD, followed by the indirect effects through CE and SG. Bootstrapping with 5,000 resamples was employed to test the statistical significance of these indirect paths, as this non-parametric approach does not assume normality of the sampling distribution and is widely recommended for mediation testing (Preacher & Hayes, 2008). Path coefficients, t-statistics, and p-values were examined to evaluate the strength and significance of both direct and indirect effects.

To further quantify the extent of mediation, the Variance Accounted For (VAF) was calculated. A VAF value of 20–80% indicates partial mediation, while a value above 80% suggests full mediation (Hair et al., 2022). This method ensured that both complementary and full mediation effects could be identified and interpreted appropriately within the context of SMEs in the Eastern Cape.

By systematically applying these procedures, the study rigorously assessed how CE and SG function as intervening variables, providing a deeper understanding of the mechanisms through which digital marketing adoption influences market development outcomes.

7. MEASUREMENT MODEL VALIDATION

Before testing the structural relationships in the model, the measurement model was rigorously assessed to ensure reliability and validity of all reflective constructs, as recommended by Hair, Hult, Ringle and Sarstedt (2021). This assessment confirms whether the indicators consistently and accurately measure their respective latent variables.

7.1. Reliability And Convergent Validity

The reliability of the constructs was first evaluated using Cronbach's Alpha (α) and Composite Reliability (ρ_c). All constructs demonstrated strong internal consistency, with Cronbach's Alpha values ranging from 0.783 for Customer Engagement (CE) to 0.829 for Market Development (MD). Similarly, Composite Reliability values ranged between 0.860 (CE) and 0.887 (MD). Since all values exceed the recommended minimum threshold of 0.70, the results confirm that the measurement items were reliable and consistently represented their respective constructs.

Convergent validity was assessed using the Average Variance Extracted (AVE). All constructs achieved acceptable AVE levels, with CE at 0.606, DMA at 0.621, MD at 0.662, and SG at 0.661. These values are above the recommended minimum of 0.50, confirming that each construct explains more than

half of the variance in its indicators, thus demonstrating good convergent validity (Fornell & Larcker, 1981).

7.2. Discriminant Validity

Discriminant validity was evaluated through two methods: the Fornell-Larcker Criterion and the Heterotrait-Monotrait (HTMT) ratio.

The Fornell-Larcker Criterion requires the square root of each construct's AVE to be greater than its correlations with other constructs. As shown in Table 3, Digital Marketing Adoption (DMA) met this requirement. However, discriminant validity was not fully achieved for the outcome constructs (CE, MD, SG). The correlation between CE and MD (0.784) slightly exceeded the square root of CE's AVE (0.779), and the correlation between MD and SG (0.839) exceeded the square roots of both MD's (0.814) and SG's (0.813) AVE.

Given the known limitations of the Fornell-Larcker criterion, the more robust HTMT ratio was employed (Henseler et al., 2015). The results, presented in Table 4, indicate a more pronounced discriminant validity challenge. While the HTMT value for DMA and MD (0.831) was below the conservative threshold of 0.85, the values for CE and MD (0.972), CE and SG (0.972), and critically, MD and SG (1.011) significantly exceeded this threshold.

7.3. Discussion Of Measurement Model Results and Implications

The measurement model demonstrates strong reliability and convergent validity. However, both discriminant validity tests, particularly the HTMT ratio, indicate a lack of clear empirical distinction between the constructs of Customer Engagement (CE), Market Development (MD), and Sales Growth (SG) within this sample. The HTMT ratios for these constructs exceeded the strict 0.85 threshold, suggesting a high correlation between them.

This finding provides a crucial contextual insight. In the context of SMEs in the Eastern Cape where owners and managers often have a holistic, integrated view of business success the theoretical distinctions between building customer relationships (CE), achieving revenue increases (SG), and expanding market presence (MD) may not be sharply differentiated in practice. Respondents may perceive strong sales growth as synonymous with market development or view high customer engagement as a direct contributor to both outcomes, leading to the observed high correlations. This overlap reflects a holistic business approach, where engagement, sales, and expansion are experienced as interconnected

dimensions of business growth.

While this overlap limits the strict statistical separation of constructs, it does not invalidate the structural model. Instead, it highlights that, for the SMEs in this study, these success metrics operate as an integrated process. The model achieved an R^2 of 83.7% for Market Development, indicating exceptional predictive validity. The high HTMT

values suggest that the proposed mediation pathway (DMA → CE → SG → MD) represents a highly integrated process rather than entirely independent stages. This will be considered when interpreting the structural results and is acknowledged as a key limitation of the study, reflecting the reality of how business growth is perceived in this specific environment.

Table 2: Cronbach Alpha And Composite Reliability 1.

Construct	Cronbach's alpha	Composite reliability (rho_c)
CE	0,783	0,860
DMA	0,795	0,867
MD	0,829	0,887
SG	0,828	0,886

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

Table 3: Fornell Lacker Criteria.

Construct	CE	DMA	MD	SG
CE	0,779			
DMA	0,754	0,788		
MD	0,784	0,678	0,814	
SG	0,784	0,735	0,839	0,813

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

Table 4: Heterotrait-Monotrait (Htmt) Ratio.

Construct	CE	DMA	MD	SG
CE				
DMA	0,955			
MD	0,972	0,831		
SG	0,972	0,902	1,011	

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

7.4. Structural Model Assessment (Path Analysis)

After confirming the reliability and validity of the measurement model, the structural model was examined to test the hypothesised relationships between constructs. The structural model shows how independent variables, mediators, and dependent variables relate to each other, allowing an evaluation of the strength and significance of these paths (Hair et al., 2022). This analysis ensures that observed relationships reflect true effects rather than measurement errors.

In this study, the structural model focused on the effects of Digital Marketing Adoption (DMA) on Market Development (MD) and Sales Growth (SG), with Customer Engagement (CE) as a mediator. Path coefficients were estimated to determine direct, indirect, and total effects. The results provide insights into how DMA drives market growth and sales through increased customer engagement, supporting the theoretical framework. Model fit indices were also examined to confirm the explanatory and predictive power of the model, demonstrating that the hypothesised relationships

are meaningful and statistically supported.

7.5. The Standardized Root Mean Square Residual

The model fit was further evaluated using the Standardized Root Mean Square Residual (SRMR), which measures the average difference between the observed and predicted correlations in the model. A smaller SRMR value indicates a better fit, with values below 0.08 generally considered acceptable (Pavlov, Maydeu-Olivares, & Shi, 2021). In the present study, both the saturated and estimated models returned an SRMR of 0.066, indicating a good model fit. Additional fit indices, including Chi-square (500.788 for the saturated model and 500.664 for the estimated model) and Normed Fit Index (NFI = 0.829), supported the adequacy of the structural model. These results suggest that the proposed model accurately reproduces the observed data, providing confidence in the reliability of the path coefficients and hypothesis testing. Overall, the SRMR and complementary fit measures confirm that the structural model is a suitable representation of the relationships between Digital Marketing Adoption, Customer Engagement, Market Development, and

Sales Growth.

7.6. Coefficient Of Determination (R^2)

The Coefficient of Determination (R^2) was used to assess the explanatory power of the structural model by determining how much variance in each dependent variable is explained by its predictors (Hair, Hult, Ringle & Sarstedt, 2022). The results show that Customer Engagement (CE) has an R^2 value of 0.569, indicating moderate explanatory power. This means that 56.9% of the variation in CE is explained by Digital Marketing Adoption (DMA), confirming that SMEs' adoption of digital marketing plays an important role in enhancing customer interaction and participation. Sales Growth (SG) achieved a substantial R^2 value of 0.785, demonstrating that DMA and CE together explain 78.5% of the variation in sales performance. Market Development (MD) recorded the highest R^2 value at 0.837, indicating substantial explanatory power and showing that DMA, CE, and SG collectively explain 83.7% of the variance in MD. These findings confirm that CE and SG serve as important mediators in the relationship between DMA and MD and highlight the strong explanatory capability of the model in predicting SME performance outcomes in the Eastern Cape.

7.7. Predictive Relevance (Q^2)

Predictive relevance (Q^2) was assessed using the blindfolding procedure in SmartPLS to determine the model's ability to predict data points that were not used in the estimation process. According to Hair et al. (2022), Q^2 values greater than zero provide evidence of predictive relevance, meaning the model has the ability to accurately predict future observations. In this study, all endogenous constructs Customer Engagement (CE), Sales Growth (SG), and Market Development (MD) produced Q^2 values above zero, confirming that the model

possesses strong predictive accuracy. This implies that Digital Marketing Adoption (DMA), Customer Engagement (CE), and Sales Growth (SG) are not only statistically significant constructs but also meaningful predictors capable of forecasting key business outcomes for SMEs. The positive Q^2 values further support the reliability of the structural model and indicate that the relationships identified in the analysis are practically relevant. Overall, these results demonstrate that the model provides strong predictive power, confirming its usefulness when applied to SMEs operating within the digital marketing landscape of the Eastern Cape.

7.8. Effect Size (f^2)

Effect size (f^2) was examined to determine the practical significance of each predictor by assessing the change in R^2 when an exogenous variable is included or excluded from the structural model (Cohen, 1988; Hair et al., 2022). The results show that Digital Marketing Adoption (DMA) has a very large effect on Customer Engagement (CE) ($f^2 = 1.321$), demonstrating that digital marketing plays a critical role in strengthening customer interaction and participation. CE has a large effect on Sales Growth (SG) ($f^2 = 0.364$), confirming that improved engagement significantly enhances sales performance. SG shows a large effect on Market Development (MD) ($f^2 = 0.512$), indicating that increased sales directly support market expansion among SMEs. CE also displays a medium effect on MD ($f^2 = 0.161$), suggesting that customer interaction contributes to market growth but is more impactful when paired with increased sales. DMA has a small direct effect on SG ($f^2 = 0.142$), indicating that its influence on sales occurs largely through CE. These findings confirm that CE and SG act as key mediators, strengthening the impact of DMA on overall SME development.

Table 5: Model Fit Assessment 1.

Indices	Saturated model	Estimated model
SRMR	0,066	0,066
NFI	0,829	0,829

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

Table 6: R-Squared.

Construct	R-square	Interpretation
Customer Engagement (CE)	0.569	Moderate
Sales Growth (SG)	0.785	Substantial

Market Development (MD)	0.837	Substantial
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CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

Table 7: Effect Size (F2).

Construct	f-square
CE -> MD	0,161
CE -> SG	0,364
DMA -> CE	1,321
DMA -> SG	0,142
SG -> MD	0,512

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

7.9. Path Model

The path analysis was conducted to evaluate the hypothesised causal relationships among the study constructs, building on the validated measurement model to ensure that the observed effects reflect true structural relationships (Hair et al., 2022). The results show that Digital Marketing Adoption (DMA) has a strong and significant effect on Customer Engagement (CE) ($\beta = 0.754$, $t = 24.455$, $p < 0.001$), supporting H1. CE also significantly enhances Sales

Growth (SG) ($\beta = 0.533$, $t = 9.744$, $p < 0.001$), confirming H2. DMA demonstrates a positive direct effect on SG ($\beta = 0.333$, $t = 6.154$, $p < 0.001$), supporting H3. Additionally, CE positively influences Market Development (MD) ($\beta = 0.327$, $t = 6.428$, $p < 0.001$), confirming H4. Lastly, SG strongly predicts MD ($\beta = 0.582$, $t = 11.292$, $p < 0.001$), supporting H5. These results confirm the theoretical model and highlight the mediating role of CE and SG in strengthening SME market expansion.

Table 8: Path Coefficient Model 1.

Hypothesized Relationship	Hypotheses	Path coefficient	T-Statistics	P-value	Decision Outcome
DMA -> CE	H1	0,754	24,455	0,000	Positive and statistically significant, fully supported
CE -> SG	H2	0,533	9,744	0,000	Positive and statistically significant, fully supported
DMA -> SG	H3	0,333	6,154	0,000	Positive and statistically significant, fully supported
CE -> MD	H4	0,327	6,428	0,000	Positive and statistically significant, fully supported
SG -> MD	H5	0,582	11,292	0,000	Positive and statistically significant, fully supported

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth

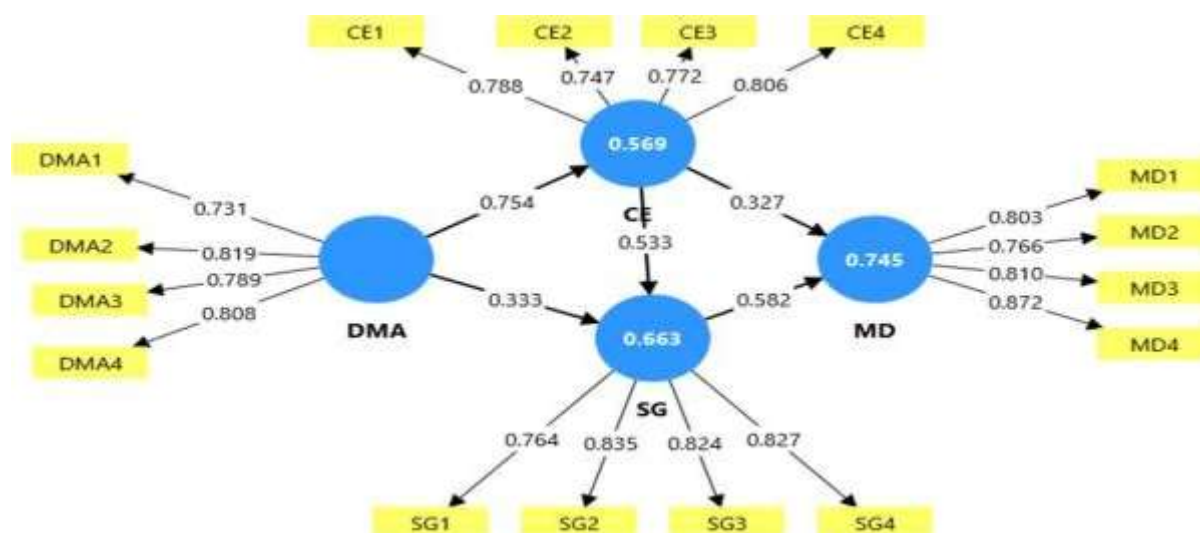


Figure 2: Final SEM Model.

CE = Customer Engagement; DMA = Digital Marketing Adoption; MD = Market Development; SG = Sales Growth.

8. DISCUSSION AND CONCLUSION

This study investigated the influence of Digital Marketing Adoption (DMA) on Market Development (MD) among SMEs in the Eastern Cape, considering Customer Engagement (CE) and Sales Growth (SG) as mediating variables. All five hypothesised relationships were supported, demonstrating the interconnected roles of digital marketing, customer engagement, and sales performance in facilitating market expansion.

8.1. Discussion Of Findings

The results confirm and extend existing literature while providing novel insights into the mechanisms of growth in resource-constrained settings. The strongest relationship in the model was between Sales Growth and Market Development ($\beta = 0.582$; $t = 11.292$; $p = 0.000$). This finding underscores a fundamental tenet of business growth: increased revenue provides the essential financial resources and confidence for SMEs to invest in market expansion activities, such as product diversification or geographic reach, as suggested by strategic management literature (Barney, 1991).

A pivotal finding is the powerful influence of Digital Marketing Adoption on Customer Engagement ($\beta = 0.754$; $t = 24.455$; $p = 0.000$). This strongly supports the work of Urban and Maphathe (2021), who identified social media as a critical tool for customer interaction among South African SMEs. Our study extends this by empirically quantifying this relationship and positioning CE not as an end goal, but as a critical mediator. Furthermore, the significant path from Customer Engagement to Sales Growth ($\beta = 0.533$; $t = 9.744$; $p = 0.000$) validates the relational marketing perspective that engaged

customers are valuable assets, directly contributing to revenue through repeat purchases and advocacy (Brodie et al., 2013).

The most revealing insight lies in the examination of the direct and indirect pathways. The direct effect of DMA on SG, while significant, was moderate ($\beta = 0.333$). The corresponding effect size ($f^2 = 0.142$) further indicates a small-to-moderate practical impact. This nuance is critical. It suggests that the primary commercial value of digital marketing for SMEs in this context is not necessarily immediate, direct sales, but rather the cultivation of customer relationships. This finding contrasts with studies that emphasize direct ROI from digital advertising (e.g., in more developed e-commerce contexts) but aligns with research highlighting the importance of trust and relationships in emerging markets (Lekhanya, 2015). The substantial indirect effect via CE underscores that DMA's greatest contribution to sales is relational, not just transactional.

Consequently, the study reveals a sequential growth engine: DMA builds CE, which in turn drives SG, ultimately fueling MD. This integrated model, where CE also has a direct effect on MD ($\beta = 0.327$), provides empirical evidence for a dual-capital pathway: digital marketing helps SMEs build both financial capital (SG) and relational capital (CE), which are jointly leveraged for sustainable market development.

8.2. Theoretical And Practical Implications

Theoretical Implications: The results provide robust empirical support for the integration of the TOE framework, IDT, and RBV. The model demonstrates that DMA, influenced by technological, organisational, and environmental

factors (TOE/IDT), functions as a strategic capability (RBV) that generates valuable and hard-to-imitate resources namely, an engaged customer base and improved sales performance. These resources become the foundation for sustainable competitive advantage in the form of market development.

Practical Implications: For SME owners and managers in regions like the Eastern Cape, the findings advocate for a strategic shift in perspective:

Move beyond direct sales focus: Digital marketing efforts should be evaluated not just on short-term sales metrics but on their success in building online communities, interaction, and customer loyalty.

Invest in engagement: Content and campaigns should be designed to foster two-way communication and value exchange, as this engagement is the key catalyst for sustained sales growth.

For policymakers and support agencies: Initiatives should go beyond providing digital access. Training must emphasize strategic digital marketing skills focused on engagement and relationship-building, alongside foundational technical skills.

8.3. Limitations And Future Research

This study has limitations that offer directions for future research. The cross-sectional design prevents definitive causal conclusions. The discriminant validity challenges between CE, SG, and MD, as indicated by high HTMT ratios, suggest this success constructs are perceived as highly integrated by SME respondents; future qualitative work could explore this perceptual fusion. The focus on one province limits generalizability; future studies could test this model across different regional contexts in South Africa and other emerging economies. Longitudinal research would be valuable to trace the evolution of the DMA → CE → SG → MD pathway over time.

8.4. Conclusion

In conclusion, this study provides a validated, mediated model explaining how digital marketing adoption drives market development for SMEs in an underdeveloped region. It establishes that the path to growth is not direct but is powerfully mediated by the strategic cultivation of customer engagement and the subsequent achievement of sales growth. By affirming the integrated roles of relational and financial capital, this research offers a nuanced and actionable framework for SMEs seeking to harness digital tools for sustainable expansion in challenging

environments.

8.5. Implications Of the Study

The findings have both theoretical and practical implications. Theoretically, this study integrates TOE, IDT, and RBV to provide a multi-layered understanding of digital marketing adoption and its impact on SMEs' performance and market growth. It confirms that digital marketing serves as a strategic resource that builds both relational and financial capital, which is essential for competitive advantage (Barney, 1991; Chaffey and Ellis-Chadwick, 2019).

Practically, SME managers should prioritise digital marketing as a strategic investment rather than a routine operational activity. Building customer engagement through interactive campaigns, personalised communication, and consistent online presence is crucial for fostering loyalty and driving sales. Furthermore, the positive link between Sales Growth and Market Development indicates the importance of reinvesting profits to explore new customer segments and geographic areas. Policymakers can support these initiatives by expanding digital infrastructure, providing training on advanced digital marketing applications, and offering incentives such as grants or tax relief to promote digital adoption (Hair et al., 2021; Tiago and Veríssimo, 2014).

8.6 Limitations and Directions for Future Research

This study has limitations that must be acknowledged. First, data were collected using a cross-sectional design, capturing relationships at a single point in time, limiting the ability to establish causality. Second, self-reported measures from SME owners and managers may be subject to bias. Third, focusing exclusively on SMEs in the Eastern Cape limits the generalisability of findings to other provinces or larger firms.

Future research could employ longitudinal designs to assess the stability and causality of the DMA → CE → MD and DMA → SG → MD pathways. Qualitative approaches such as interviews or case studies could uncover how specific digital marketing tactics influence customer engagement and sales. Comparative studies across different provinces or developing countries could reveal how infrastructural and policy contexts moderate the effectiveness of digital marketing strategies on market development (Chaffey and Ellis-Chadwick, 2019; Hair et al., 2021).

9. CONCLUSION

Overall, this study confirms that Digital Marketing Adoption significantly enhances Customer Engagement and Sales Growth, which in turn drive Market Development among SMEs in the Eastern Cape. The empirical evidence validates a sequential model where digital marketing functions both as a technological tool and a strategic resource,

enabling SMEs to build relational and financial assets for sustainable market growth. By establishing the dual mediation pathways, this study provides a clear roadmap for SMEs to strategically leverage digital marketing for long-term competitiveness in a resource-constrained context.

Funding: This research received no external funding. All activities, including data collection, analysis, and reporting, were self-funded by the researcher.

Data Availability Statement: The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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