

JOURNAL OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP

The Effectiveness Of Digital Marketing Strategies On SMEs In Kuantan, Pahang: Insights From Information, Trends And Word-Of-Mouth (WOM)

Nurul Najihah Md Amin^a, Hartini Azman^{a*}, Atirah Sufian^a

^a*Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia*

Abstract

This study examines the effectiveness of digital marketing strategies on small and medium enterprises (SMEs) in Kuantan, Pahang, with emphasis on three key dimensions consist of information, trends, and word-of-mouth (WOM). The research objectives are to identify the digital marketing platforms used by SMEs to influence consumers in Kuantan, Pahang; to examine the impact of digital marketing on SME performance; and to investigate which attributes (information, trends, or WOM) have the most significant effect. A total of 335 SMEs participated in the study through an online survey. The data were analyzed using the Statistical Package for the Social Sciences (SPSS), applying descriptive statistics, reliability tests, Pearson's correlation, and multiple regression analysis. The results reveal that all three attributes significantly influence the effectiveness of digital marketing strategies, with information and trends showing a stronger impact than WOM. The findings demonstrate that digital marketing empirically supports in enhancing SME visibility, customer engagement, and competitiveness, especially in the digital and post-pandemic economy. The study concludes that SMEs that adopt and optimize digital marketing strategies are better positioned to sustain growth, build stronger customer relationships, and adapt to technological change. These insights are valuable for SME owners, policymakers, and practitioners aiming to strengthen SME resilience and performance through digital transformation.

Keywords: Digital Marketing; SMEs, Kuantan, Pahang; Information; Trends, WOM

1. Introduction

Digital marketing has become an essential tool for business growth in today's technology-driven

* Corresponding author.

E-mail address: hartini@utem.edu.my

economy. For small and medium enterprises (SMEs), digital platforms such as social media, search engines, and e-commerce sites offer cost-effective ways to reach wider audiences, build customer engagement, and strengthen competitiveness (Noor, Hashim, & Wahab, 2024; Li & Suh, 2023). The COVID-19 pandemic accelerated this transformation, forcing many SMEs to adopt digital solutions to sustain operations amid disruptions (Rahman, Taghizadeh, & Ramayah, 2024).

Despite its advantages, SMEs continue to face challenges in fully utilizing digital marketing. Many lack the technical knowledge, resources, or strategic expertise to implement effective online campaigns, leaving them at a disadvantage compared to larger firms (Chung, 2021; Media Out Reach, 2021). In Malaysia, SMEs are the backbone of the economy, representing over 97% of business establishments, yet their ability to adapt to digitalization remains uneven (DOSM, 2023). This raises concerns about sustainability, growth, and competitiveness in the evolving digital economy.

This study focuses on SMEs in Kuantan, Pahang, and examines how digital marketing strategies affect their performance. Specifically, it explores three key factors which is information, trends, and WOM. The research objectives are to identify the digital marketing platforms most used by SMEs to influence consumers; to examine the overall impact of digital marketing on SMEs in Kuantan; and to determine which attributes (information, trends, or WOM) are most significant.

The paper is structured as follows. Following this introduction, a literature review outlines current perspectives on digital marketing and SMEs. The research methodology describes the survey design, sample, and data analysis techniques. Results are then presented and discussed, followed by the conclusion, which indicates theoretical and practical implications for SMEs and policymakers in strengthening digital adoption.

2. Literature Review

2.1. Introduction and Overview

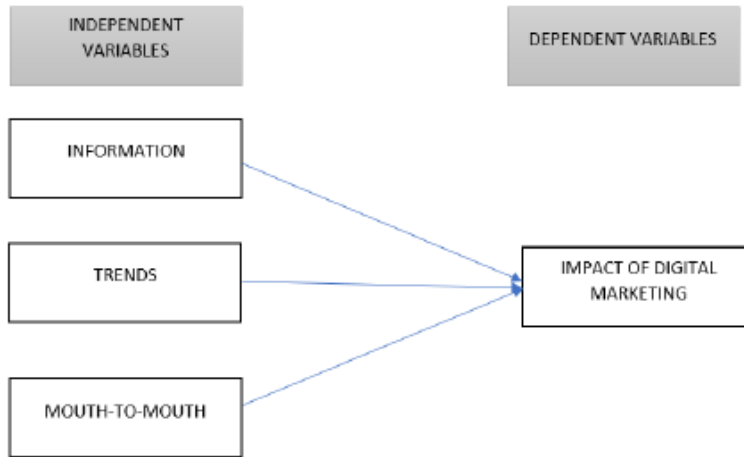
Digital marketing has become an essential strategy for small SMEs to remain competitive in today's economy. Platforms such as social media, search engines, and e-commerce allow SMEs to expand market reach, improve customer relationships, and reduce marketing costs (Noor et al., 2024; Li & Suh, 2023). The COVID-19 pandemic accelerated this shift, forcing SMEs to adopt digital platforms to survive (Rahman et al., 2024). However, many SMEs still face challenges such as limited resources and lack of expertise, making it difficult to maximize the potential of digital marketing (Chung, 2021). This study focuses on SMEs in Kuantan, Pahang, examining how information, trends, and WOM influence the effectiveness of digital marketing strategies.

2.2. Underpinning Theories

This study is guided by two theories. The Diffusion of Innovations (DOI) theory explains how innovations are adopted based on attributes such as relative advantage, compatibility, and observability (Rogers, 2019). In the SME context, DOI helps explain how digital marketing strategies spread and influence adoption decisions. The second is the Resource-Based View (RBV), which indicates the role of firm-specific resources and capabilities in creating competitive advantage. SMEs with stronger digital skills, marketing knowledge, and innovative capacity are more likely to achieve effective outcomes from digital marketing (Akpan, Soopramanien, & Kwak, 2022).

2.3. Research Framework

Figure 1: Research Framework



2.4. Independent Variables and Dependent Variable

2.4.1 Information

Information refers to the quality, accuracy, comprehensiveness, and timeliness of the content SMEs share on digital platforms. High-quality information reduces consumer uncertainty, builds credibility, and drives purchase decisions. For example, accurate product descriptions, transparent pricing, and consistent updates on social media or e-commerce platforms foster customer trust and loyalty.

Recent Malaysian studies confirm that SMEs that provide rich and reliable information online gain stronger customer engagement and sales growth. Zamri, Abdul Rahim, and Norizan (2024) found that SMEs adopting information-driven strategies improved their brand visibility and consumer trust, leading to higher competitiveness. Similarly, Bhat and Shah (2020) showed that information quality directly correlates with online purchase intention. These findings reinforce the argument that information quality is a critical element of digital marketing effectiveness.

Hypothesis 1 (H1): Information has a significant positive effect on the effectiveness of digital marketing strategies among SMEs in Kuantan, Pahang.

2.4.2 Trends

Trends capture how SMEs adapt their digital marketing to align with current consumer preferences, seasonal campaigns, and platform innovations. This includes practices such as using trending hashtags, engaging in real-time marketing during cultural events, or adopting popular formats like TikTok videos and Instagram reels. Staying aligned with trends not only increases brand visibility but also helps SMEs connect with younger, tech-savvy consumers.

Noviana, Sina, Damayanti, and Dirgantara (2024) indicated that SMEs actively following digital marketing trends achieved higher levels of consumer interaction and purchase conversion. Similarly, Madzharov, Block, and Morrin (2021) found that trend-driven environments enhanced brand perceptions and

purchase intention, especially when content was timely and culturally relevant. These results suggest that trend adaptation is a competitive advantage in dynamic markets.

Hypothesis 2 (H2): Trends have a significant positive effect on the effectiveness of digital marketing strategies among SMEs in Kuantan, Pahang.

2.4.3 Word-of-Mouth (WOM)

Electronic word-of-mouth (eWOM) includes online reviews, customer referrals, influencer endorsements, and social sharing. It is particularly powerful because consumers often perceive peer opinions as more credible than company advertising. Positive eWOM not only enhances trust and brand reputation but also expands SMEs' organic reach at minimal cost.

Seputro and Putri (2023) found that eWOM significantly improved SME visibility and consumer trust during the COVID-19 pandemic, when traditional marketing channels were limited. In a broader context, Agustian, Hidayat, Pramono and Fitria (2023) revealed that eWOM strengthens brand awareness and purchase intention, though its direct financial impact depends on factors such as review credibility and platform trustworthiness. These studies suggest that while eWOM consistently improves intangible outcomes like trust and awareness, its effect on tangible performance indicators such as revenue may vary.

Hypothesis 3 (H3): WOM has a significant positive effect on the effectiveness of digital marketing strategies among SMEs in Kuantan, Pahang.

2.4.4 Effectiveness of Digital Marketing Strategies

The dependent variable refers to SMEs' performance outcomes attributable to digital marketing efforts, including customer engagement, brand visibility, sales growth, and competitiveness. In practice, this means measuring how well SMEs convert digital activities into real business benefits.

In Malaysia, Zamri et al. (2024) demonstrated that SMEs leveraging digital strategies experienced measurable improvements in visibility and customer acquisition. Similarly, Surahman, Fikri and Anisa (2023) concluded that SMEs engaging in digital transformation including digital marketing recorded significant increases in customer satisfaction and sales performance. These findings align with global evidence that digital marketing effectiveness translates into stronger SME competitiveness, sustainability, and resilience in the digital economy.

3. Method

This study employed a quantitative research design to examine the effectiveness of digital marketing strategies on SMEs in Kuantan, Pahang. Data were collected through an online questionnaire survey distributed to SME owners and managers, yielding 335 valid responses across different sectors. The instrument consisted of structured, closed-ended questions measured on a five-point Likert scale. A pilot test with 30 SME respondents was conducted to ensure clarity, reliability, and validity of the questionnaire, with results confirming satisfactory internal consistency. Convenience sampling was applied as it provided access to a diverse group of respondents within the research timeframe. The data were analyzed using the Statistical Package for the Social Sciences (SPSS), applying descriptive statistics, reliability tests, Pearson's correlation, and multiple regression analysis to test the hypotheses and examine the strength of relationships among variables. To reduce bias, anonymity was assured, the questionnaire was pre-tested, and only complete responses were included. This methodological approach enabled systematic testing of hypotheses and

generated practical insights into how information, trends, and WOM influence SME digital marketing effectiveness.

4. Results and Discussion

4.1. Descriptive Analysis

The study surveyed 335 SMEs in Kuantan, Pahang. Respondents were fairly balanced by gender (54.9% female, 45.1% male) and largely young to middle-aged, with 41.8% aged 21–30 years. Most had strong educational backgrounds, with 46.3% holding a Bachelor's degree and 34% a diploma. A large majority (88.7%) reported prior work experience, and nearly half (50.4%) stated it was relevant to their current business. In terms of business type, sole proprietorships dominated (77%), followed by partnerships (14.3%) and companies (8.7%). For digital marketing platforms, social media (46.9%) was the most used, followed by online advertising (39.4%). Most SMEs were micro-enterprises, with 71% employing fewer than five workers, and had been in operation mainly 3–5 years (59.1%). Overall, SMEs in Kuantan are characterized by young, educated entrepreneurs, operating small-scale sole proprietorships with strong reliance on social media marketing.

4.2. Correlation Analysis

Information, trends, or WOM were examined as independent variables, and their relationships with the dependent variable, digital marketing effectiveness on SMEs, were analyzed using the Pearson Correlation test. The outcome of the correlations is summarised in Table 1.

Table 1: Correlations

		Information	Trends	WOM	The Effectiveness of Digital Marketing on SMEs
Information	Pearson Correlation	1	.670**	.367**	.523**
	Sig. (2-tailed)		.000	.000	.000
Trends	Pearson Correlation	.670**	1	.325**	.567**
	Sig. (2-tailed)	.000		.000	.000
WOM	Pearson Correlation	.367**	.325**	1	.366**
	Sig. (2-tailed)	.000	.000		.000
The Effectiveness of Digital Marketing on SMEs	Pearson Correlation	-.236**	.367**	.545**	1
	Sig. (2-tailed)	.000	.000	.000	

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

Table 1 presents the correlation results between the independent variables (information, trends, and

WOM) and the dependent variable, digital marketing effectiveness among SMEs in Kuantan, Pahang. The findings indicate that both information ($r = .523$, $p < 0.01$) and trends ($r = .567$, $p < 0.01$) demonstrate strong positive correlations with digital marketing effectiveness. In contrast, WOM ($r = .366$, $p < 0.01$) shows a moderate positive correlation. These results suggest that while all three factors significantly contribute to the effectiveness of digital marketing strategies, information and trends exert a stronger influence compared to WOM in shaping SME digital marketing outcomes.

4.3. Multiple Regression Analysis

This study employs multiple regression analysis to evaluate the impact of the independent variables (information, trends, and WOM) on the dependent variable (digital marketing effectiveness among SMEs in Kuantan, Pahang).

Table 2: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.619 ^a	.383	.377	.43889

Table 2 presents the results of the multiple regression analysis on digital marketing effectiveness among SMEs in Kuantan, Pahang. The correlation coefficient was $R = .619$, indicating a strong overall relationship between the variables. The coefficient of determination ($R^2 = .383$) shows that 38.3% of the variance in digital marketing effectiveness can be explained by the three predictors, while the remaining 61.7% is influenced by other factors not included in this study.

4.4. Empirical Results

Table 3: Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.464	.222		6.603	.000
	Information	.200	.056	.214	3.603	.000
	Trends	.346	.055	.369	6.301	.000
	WOM	.147	.041	.167	3.577	.000

Table 3 shows the regression coefficients for the independent variables. All predictors were statistically significant at $p < 0.01$. Among them, trends ($\beta = .369$, $t = 6.301$, $p = .000$) had the strongest positive effect on digital marketing effectiveness, followed by information ($\beta = .214$, $t = 3.603$, $p = .000$) and WOM ($\beta = .167$, $t = 3.577$, $p = .000$). The results indicate that trends have the strongest influence on digital marketing effectiveness, as evidenced by the highest standardized regression coefficient ($\beta = 0.369$, $p < 0.05$).

5. Conclusion

This study investigated the impact of information, trends, and WOM on the effectiveness of digital marketing strategies among SMEs in Kuantan, Pahang. The results indicate that all three factors significantly influence digital marketing effectiveness, with trends emerging as the strongest predictor, followed by information and WOM. These findings suggest that SMEs achieve competitive advantage by systematically aligning digital marketing strategies with current platform dynamics. The strong influence of trends indicates that SMEs' ability to strategically adapt to evolving digital marketing tools significantly enhances marketing effectiveness (Noviana et al., 2024). Similarly, the significant role of information reinforces the view that credible and comprehensive content enhances customer trust and purchase decisions (Zamri et al., 2024). Although WOM showed a weaker effect, it remains an essential mechanism for building reputation and consumer confidence, consistent with the findings of Seputro and Putri (2023).

These results carry important implications. Given that trends emerged as the strongest predictor of digital marketing effectiveness ($\beta = .369$), SME owners should prioritize trend-driven marketing practices, such as leveraging short-form video content and platform-specific features, to enhance customer engagement and competitiveness. SMEs in Kuantan should also focus on enhancing their digital presence through social media campaigns and short-form content, while leveraging WOM to build customer loyalty. Given the significant influence of information and trends on digital marketing effectiveness, policymakers should design digital literacy programs that emphasize content quality and trend responsiveness, rather than focusing solely on platform adoption. Collectively, these measures can strengthen SME competitiveness, improve market reach, and support sustainable growth in the digital economy.

From both methodological and contextual perspectives, this study is limited by its cross-sectional design and focus on SMEs in Kuantan, Pahang, which restricts causal inference and broader generalizability, while the model's explanatory power (38.3%) indicates that other relevant factors such as financial literacy and government support were not examined, suggesting that future research should expand the geographical scope, incorporate additional variables, and adopt longitudinal approaches.

Despite these limitations, this study extends digital marketing and SME literature by empirically validating the relevance of Diffusion of Innovations (DOI) and Resource-Based View (RBV) theories in explaining digital marketing effectiveness. The findings demonstrate that trend responsiveness and information quality function as strategic capabilities that enhance SMEs' competitive advantage in a developing economy context.

Acknowledgement

The study is funded by the Ministry of Higher Education (MOHE) of Malaysia through the publication incentive and the Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia. The authors also would like thanks to Centre of Technopreneurship Development (C-TeD) for the support.

References

- Agustian, R., Hidayat, R., Pramono, A., & Fitria, N. (2023). Electronic word-of-mouth and its impact on brand awareness and purchase intention. *Journal of Business and Retail Management Research*, 17(3), 45–58.

- Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2022). Cutting-edge technologies for small business and innovation in the era of COVID-19 global health pandemic. *Journal of Small Business & Entrepreneurship*, 34(2), 123–140.
- Bhat, S. A., & Shah, A. (2020). Impact of information quality on consumers' purchase intention in e-commerce. *International Journal of E-Business Research*, 16(3), 24–38.
- Chung, K. H. (2021). Digital marketing adoption challenges for SMEs: A resource-based view. *Journal of Asian Business and Economic Studies*, 28(4), 267–281.*
- Department of Statistics Malaysia. (2023). *SME performance 2023*. Putrajaya: Department of Statistics Malaysia.
- Li, J., & Suh, A. (2023). Facial recognition payment systems and consumer trust in smart environments. *Computers in Human Behavior*, 145, 107720.
- Madzharov, A. V., Block, L. G., & Morrin, M. (2021). The cool effect: How trend-driven environments influence consumer behavior. *Journal of Consumer Research*, 48(1), 56–75.
- Media OutReach. (2021). Digital marketing challenges faced by SMEs in Asia. Retrieved from <https://www.media-outreach.com>
- Noor, N. M., Hashim, R., & Wahab, S. A. (2024). Digital platforms and SME competitiveness in Malaysia. *Journal of Asian Finance, Economics and Business*, 11(2), 45–56.
- Noviana, D., Sina, S., Damayanti, A., & Dirgantara, R. (2024). Digital marketing trends and their impact on SMEs: Evidence from Indonesia. *International Journal of Entrepreneurship and Small Business*, 52(1), 89–105.
- Rahman, M. S., Taghizadeh, S. K., & Ramayah, T. (2024). The role of digitalization in sustaining SMEs during COVID-19. *Journal of Small Business Management*, 62(1), 112–129.
- Rogers, E. M. (2019). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Seputro, A., & Putri, M. (2023). Electronic word-of-mouth and SME survival during COVID-19. *Journal of Business Strategy and Development*, 14(2), 77–91.
- Surahman, D., Fikri, R., & Anisa, N. (2023). Digital transformation and SME performance: Evidence from Southeast Asia. *Small Business International Review*, 7(1), e527.
- Zamri, M. F., Abdul Rahim, R., & Norizan, N. (2024). Information quality and SME digital marketing performance in Malaysia. *Asian Journal of Business Research*, 14(2), 23–40.