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Analysis of the Impact of Digital Marketing on Sales Growth of Lampung Tapis Handicraft MSMEs in the Digital Economy Era

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ABSTRAK

Tujuan penelitian ini adalah. Penelitian ini bertujuan untuk menganalisis dampak pemasaran digital terhadap pertumbuhan penjualan usaha mikro, kecil, dan menengah (UMKM) kerajinan Tapis Lampung di era ekonomi digital. Meskipun adopsi pemasaran digital oleh UMKM tradisional semakin meningkat, bukti empiris mengenai efektivitasnya dalam meningkatkan kinerja penjualan masih terbatas, terutama untuk produk-produk yang signifikan secara budaya seperti kerajinan Tapis. Bahan dan metode. Penelitian ini mengadopsi metodologi kuantitatif, mengandalkan data primer yang dikumpulkan melalui kuesioner terstruktur yang diberikan kepada 50 pemilik UMKM Tapis yang terlibat aktif dalam pemasaran digital. Data penjualan sekunder dari Dinas Koperasi dan UMKM Provinsi Lampung (2020–2023) semakin mendukung analisis ini. Metode statistik, termasuk regresi linier melalui SPSS, diterapkan untuk memeriksa hubungan antara strategi pemasaran digital. Hasil. Temuan menunjukkan korelasi positif yang signifikan antara adopsi pemasaran digital dan pertumbuhan penjualan, dengan peningkatan rata-rata 35% pasca-implementasi yang signifikan. Platform media sosial, khususnya Instagram dan Facebook, muncul sebagai pendorong paling berpengaruh, mengungguli strategi berbasis pasar. Faktor kunci keberhasilan meliputi kreativitas konten, keterlibatan pelanggan, dan frekuensi promosi yang konsisten. Kesimpulan. Studi ini berkontribusi pada literatur pemasaran digital dengan memvalidasi Model Penerimaan Teknologi (TAM) dalam konteks UMKM kerajinan tradisional, dengan menekankan peran persepsi kegunaan dan kemudahan penggunaan dalam adopsi teknologi. Keasliannya terletak pada fokus pada sektor yang unik secara budaya, yaitu Tapis Lampung, yang belum banyak dieksplorasi dalam studi sebelumnya. Implikasi praktis menunjukkan perlunya program pelatihan digital yang dipimpin pemerintah dan kolaborasi dengan influencer lokal untuk mengoptimalkan kehadiran digital UMKM.

Kata kunci: pemasaran digital, pertumbuhan penjualan, UMKM, tapis Lampung, ekonomi digital, media social

ABSTRACT

The study purpose was. This study aims to analyze the impact of digital marketing on the sales growth of Lampung Tapis handicraft micro, small, and medium enterprises (MSMEs) in the digital economy era. Despite the increasing adoption of digital marketing by traditional MSMEs, empirical evidence regarding its effectiveness in enhancing sales performance remains limited, particularly for culturally significant products such as Tapis handicrafts. Materials and methods. The study adopts a quantitative methodology, relying on primary data gathered via structured questionnaires administered to 50 Tapis MSME owners who are actively involved in digital marketing. Secondary sales data from the Cooperative and MSME Office of Lampung Province (2020–2023) further support the analysis. Statistical methods, including linear regression via SPSS, are applied to examine the relationship between digital marketing strategies. Results. The findings reveal a significant positive correlation between digital marketing adoption and sales growth, with a notable 35% average increase post implementation. Social media platforms, particularly Instagram and Facebook, emerge as the most influential drivers, outperforming marketplace based strategies. Key success factors include content creativity, customer engagement, and consistent promotional frequency. Conclusions. This study contributes to the digital marketing literature by validating the Technology Acceptance Model (TAM) in the context of traditional handicraft MSMEs, emphasizing the role of perceived usefulness and ease of use in technology adoption. Its originality lies in focusing on a culturally unique sector Lampung Tapis which has been underexplored in prior studies. Practical implications suggest the need for targeted government-led digital training programs and collaborations with local influencers to optimize MSMEs' digital presence.

Keywords: digital marketing, sales growth, msmes, lampung tapis, digital economy, social media

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INTRODUCTION

The Lampung Tapis handicraft industry plays a pivotal role in the regional economy, serving as both a cultural heritage and a significant source of livelihood for local micro, small, and medium enterprises (MSMEs) (Achmad Chaedar Yasin Bakhtiar et al., 2025) . These enterprises contribute to employment generation and economic diversification, particularly in rural areas where traditional crafts are a primary economic activity (Effendi et al., 2025). However, despite their cultural and economic importance, many Tapis MSMEs face challenges in scaling their businesses due to limited market access and reliance on conventional marketing methods (Salsabila et al., 2024). The advent of the digital economy has introduced transformative opportunities for these enterprises, enabling them to leverage digital marketing strategies to reach broader audiences, enhance brand visibility, and drive sales growth (Sodiq Odetunde Babatunde et al., 2022). Platforms such as social media and online marketplaces have emerged as powerful tools for MSMEs to connect with domestic and international customers, yet the empirical evidence on the effectiveness of these strategies, especially for culturally unique products like Tapis handicrafts, remains scarce (Murdiani, 2021).

A critical gap in the existing literature is the lack of comprehensive studies examining the impact of digital marketing on sales performance within the context of traditional handicraft MSMEs, particularly those producing Tapis (Sharabati et al., 2024), (Alanmi & Alharthi, 2023). While prior research has explored digital marketing's role in modern retail and manufacturing sectors, its application to culturally rooted industries like Tapis handicrafts has been underexplored (Wilson et al., 2024). This study addresses this gap by investigating the following research questions: (1) What digital marketing strategies are employed by Lampung Tapis MSMEs? (2) To what extent has sales growth improved before and after the implementation of digital marketing? (3) Which factors are most influential in determining the success of digital marketing campaigns for these enterprises?

The primary objective of this research is to quantitatively measure the impact of digital marketing on the sales growth of Lampung Tapis MSMEs, utilizing a combination of primary data from structured questionnaires and secondary sales data from the Cooperative and MSME Office of Lampung Province (2020–2023). By employing statistical methods such as linear regression, the study aims to identify correlations between digital marketing adoption and sales performance, with a focus on the role of social media platforms like Instagram and Facebook (Charlotte et al., 2025), (Purwanto & Muanas, 2025). Additionally, the research seeks to uncover key success factors, such as content creativity, customer engagement, and promotional consistency, that can inform strategic recommendations for MSME owners and policymakers.

This research advances academic discussion by empirically testing the Technology Acceptance Model (TAM) within traditional handicraft MSMEs, highlighting the critical roles of perceived usefulness and ease of use in adopting digital marketing strategies. Its novelty stems from its examination of the

Lampung Tapis industry, a culturally vital yet underexplored sector. From a practical standpoint, the results will deliver actionable recommendations for MSMEs to enhance their digital engagement, as well as guide policymakers in developing tailored training initiatives and partnerships with local influencers. By aligning theoretical models with practical implementation, this study seeks to foster sustainable development in the digital economy.

Digital Marketing Theory

Digital marketing theory encompasses a framework of strategies and models that explain how businesses leverage digital channels to enhance customer engagement, brand visibility, and sales performance (Saluja et al., 2018). At its core, the Technology Acceptance Model (TAM) provides a foundational lens, positing that perceived usefulness and ease of use drive the adoption of digital tools a principle highly relevant to MSMEs transitioning from traditional to digital marketing (Syafika & Antonio, 2024). For Lampung Tapis handicraft MSMEs, this model elucidates how artisans' willingness to adopt platforms like Instagram or Facebook hinges on their belief that these tools will simplify sales processes and expand market reach. Complementing TAM, the Diffusion of Innovations Theory further explains the gradual uptake of digital marketing among traditional MSMEs, where factors like relative advantage (e.g., higher sales) and compatibility (e.g., alignment with cultural product storytelling) determine adoption rates (Plekhanov et al., 2023; L. I. Wijaya et al., 2025). Empirical studies, such as those, validate that social media marketing significantly boosts SME revenue by enabling targeted outreach and cost-effective promotions, a finding echoed in the context of Indonesian batik MSMEs (Sharma et al., 2024). However, gaps persist in applying these theories to culturally rooted industries like Tapis handicrafts, where unique product narratives and customer trust dynamics may alter conventional digital marketing efficacy (Yanto & Sari, 2025b), (Koenaite et al., 2021; Sthapit et al., 2023).

The rise of the digital economy has also popularized the 4C Framework (Consumer, Content, Context, Community), which shifts focus from transactional exchanges to relationship-building (Rauschnabel et al., 2024). For Tapis MSMEs, this translates to crafting culturally resonant content (e.g., behind the scenes weaving videos) and fostering community engagement through interactive posts strategies empirically linked to higher conversion rates (Shahbaznezhad et al., 2021). Yet, challenges such as digital literacy gaps and algorithm dependency (Stankovska et al., 2016) underscore the need for tailored government interventions, as seen in Malaysia's SME digital upskilling programs (Hussin et al., 2018). Crucially, while meta-analyses (e.g., (Pascucci et al., 2018) confirm digital marketing's positive correlation with SME growth, sector-specific studies remain scarce, particularly for handicrafts reliant on artisanal authenticity (R. E. Putra et al., 2023). This study addresses this gap by contextualizing established theories within Lampung Tapis MSMEs, offering novel insights into how cultural SMEs can optimize digital tools without diluting their heritage value.

MSMEs and Challenges in the Digital Age

Micro, Small, and Medium Enterprises (MSMEs) serve as a vital driver of global economic progress, making substantial contributions to job creation, technological advancement, and the reduction of poverty, especially in emerging economies such as Indonesia. However, the rapid digitalization of markets presents both opportunities and formidable challenges for these enterprises, especially traditional handicraft sectors such as Lampung Tapis. While digital platforms offer unprecedented access to broader markets, many MSMEs struggle with technological adoption due to limited digital literacy, inadequate infrastructure, and financial constraints. For instance, a study by (Tambunan et al., 2019), on Indonesian MSMEs revealed that only 30% of traditional craft businesses actively utilize digital tools, primarily due to a lack of technical skills and fears of high operational costs. This digital divide is exacerbated in rural areas, where internet connectivity remains unreliable, hindering consistent online engagement. Additionally, the competitive nature of digital marketplaces demands proficiency in search engine optimization (SEO), social media algorithms, and e-commerce logistics skills often absent among artisan-based MSMEs (Lei & Slocum, 2020).

Cultural and operational uniqueness further complicates digital transitions for handicraft MSMEs (Aashish et al., 2025). Unlike standardized products, Tapis handicrafts require storytelling and authenticity to appeal to niche markets, necessitating tailored digital strategies that balance commercialization with cultural preservation. Research by (Muzdalya et al., 2022) on Javanese batik MSMEs highlights that while digital marketing increases visibility, over-commercialization risks diluting artisanal value, alienating traditional buyers. Moreover, the absence of localized support systems, such as government-led training or subsidies for digital tools, leaves many MSMEs reliant on trial-and-error approaches, reducing efficiency (Razak et al., 2022). Paradoxically, even when MSMEs adopt digital platforms, algorithmic biases on social media and marketplaces often favor established sellers, marginalizing smaller players (Petropoulos et al., 2022). Despite these hurdles, successful cases such as Thai silk MSMEs leveraging Instagram's visual centric platform to boost exports (Kumar et al., 2020) demonstrate the transformative potential of context-specific digital strategies. This underscores the urgent need for policies addressing infrastructural gaps, skill development, and culturally sensitive digital frameworks to empower MSMEs like Lampung Tapis in navigating the digital economy's complexities while preserving their heritage.

Lampung Tapis Craft as Cultural Heritage

The Lampung Tapis textile represents an invaluable cultural heritage of Indonesia, embodying centuries old traditions, spiritual symbolism, and the artistic identity of the Lampung people. Recognized as one of the nation's most intricate traditional textiles, Tapis weaving incorporates gold-thread embroidery (suji) and complex geometric motifs that convey social status, tribal affiliations, and philosophical values (Essuman et al., 2024). Historically, these textiles were reserved for ceremonial use, such as weddings and

rituals, with specific patterns like the "jung sarat" (full moon) symbolizing cosmic harmony (Lomas & Xue, 2022). The craft's preservation is safeguarded under UNESCO's Intangible Cultural Heritage framework, highlighting its vulnerability to globalization and generational erosion (Drago et al., 2022). Despite its cultural significance, contemporary challenges threaten its sustainability, including the declining number of master weavers, competition from machine-made imitations, and the diminishing interest among younger generations (Shafi et al., 2021). Studies by (Dialektika et al., 2023) reveal that only 15% of Lampung's artisan communities actively practice traditional Tapis weaving, with most practitioners aged above 50, raising concerns about intergenerational knowledge transfer.

Economically, Tapis handicrafts contribute to Lampung's regional economy through MSMEs, yet their market potential remains underexploited due to limited commercialization strategies. Research by (Gozali, 2021) emphasizes that while domestic demand persists among cultural enthusiasts, international markets particularly for luxury ethnic textiles are largely untapped, partly due to inadequate branding and digital visibility. The paradox of commercialization versus cultural authenticity further complicates efforts; for instance, simplified Tapis designs produced for mass markets risk diluting their traditional value (Patchaiyappan & Devipriya, 2021). However, successful case studies, such as the revival of Indian Kanjeevaram silks through storytelling driven e-commerce (Goyal & Choudhury, 2024), suggest that digital platforms can amplify cultural appreciation while ensuring economic viability. For Lampung Tapis, this necessitates a balanced approach: leveraging digital marketing to educate global consumers about its heritage while maintaining artisanal integrity. Government initiatives, like Indonesia's "Proudly Made in Indonesia" campaign (Primadona, 2020), and collaborations with cultural influencers could bridge this gap, provided they prioritize artisan empowerment over mere commodification. Thus, integrating Tapis MSMEs into the digital economy demands strategies that honor its cultural narratives, ensuring preservation and profitability in equal measure.

The Role of Digital Marketing in Increasing Sales for MSMEs

Digital marketing has emerged as a transformative force for Micro, Small, and Medium Enterprises (MSMEs), fundamentally altering traditional business paradigms by providing cost-effective, scalable, and measurable marketing solutions. The advent of social media platforms, search engine optimization (SEO), and e-commerce marketplaces has democratized market access, enabling MSMEs to compete with larger enterprises on a more level playing field (Bamidele Micheal Omowole et al., 2024). Research findings indicate that digital marketing approaches, especially those utilizing social media platforms, can substantially boost sales outcomes through increased brand recognition, stronger customer interaction, and expanded market penetration (Harahap Minta et al., 2024). For instance, research by (Kim & Ko, 2012) on luxury brands revealed that social media interactions directly correlate with increased sales, a finding applicable to MSMEs where personalized customer engagement often drives loyalty and repeat purchases. Additionally, digital platforms facilitate precise targeting through data analytics, allowing

MSMEs to tailor their marketing efforts to specific demographics, thereby optimizing resource allocation and maximizing return on investment (ROI) (Maulidiah et al., 2023). In the context of Indonesian MSMEs, (Tazeen & Mullick, 2023) found that businesses adopting Instagram and Facebook marketing experienced an average sales increase of 25-40%, underscoring the platforms' efficacy in driving revenue growth.

Despite these advantages, the implementation of digital marketing among MSMEs, particularly in traditional sectors like handicrafts, faces significant challenges. Many MSMEs lack the technical expertise to leverage advanced tools such as SEO, pay-per-click (PPC) advertising, or customer relationship management (CRM) systems (Warner & Wäger, 2019). Furthermore, the dynamic nature of digital algorithms requires continuous adaptation, which can be resource-intensive for small businesses with limited manpower and budgets (Stankovska et al., 2016). For culturally rich products like Lampung Tapis, the challenge extends to balancing commercial appeal with cultural authenticity, as overly standardized digital campaigns may dilute the product's unique value proposition (Herlina et al., 2021). However, case studies from similar industries, such as Thai silk MSMEs, illustrate that integrating storytelling and cultural narratives into digital content can enhance customer connection and drive sales (Hu & Basiglio, 2023). Government and institutional support, such as digital literacy programs and subsidies for technology adoption, have proven critical in bridging these gaps, as evidenced by Malaysia's SME digital transformation initiatives (Razak et al., 2022). Thus, while digital marketing offers unparalleled opportunities for MSME sales growth, its success hinges on addressing structural barriers and fostering strategies that align with the unique characteristics of traditional enterprises.

The Digital Economy and Opportunities for Traditional MSMEs

The digital economy has revolutionized global business paradigms, presenting unprecedented opportunities for traditional Micro, Small, and Medium Enterprises (MSMEs) to transcend geographical limitations and revitalize their market presence. Characterized by the pervasive integration of digital technologies into economic activities, the digital economy enables MSMEs to leverage e-commerce platforms, social media, and mobile applications to access broader consumer bases, optimize operational efficiency, and enhance competitiveness (Handoyo et al., 2023). For traditional handicraft sectors such as Lampung Tapis, this shift is particularly transformative, as digital platforms facilitate the preservation and commercialization of cultural heritage while addressing longstanding challenges of market access and scalability. Empirical evidence from Southeast Asia demonstrates that MSMEs adopting digital tools experience significant growth; for instance, Indonesian batik producers utilizing Instagram and TikTok witnessed a 30-50% increase in sales by engaging younger demographics through visually rich, storytelling-driven content (Ana Dewi Marsalin & Christiawan Hendratmoko, 2023). Similarly, the Indian handloom sector's adoption of Flipkart and Amazon Handmade expanded its domestic and international reach, underscoring the potential of e-commerce to democratize market access for artisanal products (Ju

& Lou, 2024). These examples highlight the digital economy's dual role as an enabler of economic inclusion and a catalyst for cultural preservation, provided MSMEs navigate its complexities effectively.

Nevertheless, adopting digital operations presents significant challenges. Conventional MSMEs frequently encounter systemic obstacles such as insufficient technological proficiency, suboptimal technical support systems, and budgetary limitations that restrict their capacity to leverage digital advantages (Ebhota et al., 2024). In rural Lampung, for example, inconsistent internet connectivity and a lack of technical skills hinder Tapis weavers from fully utilizing platforms like Shopee or Facebook Marketplace (Maulidio & Dwiastanti, 2022). Moreover, the commodification of cultural products on digital platforms risks eroding their authenticity, as algorithms favor homogenized, mass-appeal content over niche artisanal narratives (Venkatasamy & Sakthivel, 2025). To mitigate these challenges, targeted interventions are essential. Successful models, such as Thailand's "One Tambon One Product" (OTOP) program, combine government-led digital training with subsidies for technology adoption, resulting in a 40% revenue boost for participating artisans (P. Kumar et al., 2023). Similarly, partnerships between MSMEs and cultural influencers akin to the collaboration between Balinese silvermiths and travel vloggers have proven effective in enhancing visibility while maintaining cultural integrity (Pelzang & Hutchinson, 2018), (Yanto et al., 2025), (Sugiono et al., 2021), (Sari & Yanto, 2025), (Sari, Putri Irmala; Yanto, 2025), (Yanto & Sari, 2025a), (Putri Irmala Sari & Supri Yanto, 2025). Thus, while the digital economy offers transformative potential for traditional MSMEs, its benefits are contingent upon addressing structural inequities and fostering strategies that harmonize commercial objectives with cultural preservation.

Previous Empirical Studies

Several empirical studies have demonstrated the transformative impact of digital marketing on sales growth in traditional MSME sectors, providing valuable insights for Lampung Tapis handicrafts. Research by (J. C. Wijaya & Setyawan, 2024) on Javanese batik MSMEs revealed that a comprehensive digital marketing strategy incorporating Instagram, Facebook, and WhatsApp Business led to a 42% average increase in sales revenue within six months of implementation. The study highlighted that visually-oriented platforms were particularly effective for batik products, with engagement rates increasing by 65% when artisans shared behind-the-scenes production processes and cultural narratives. Similarly, a longitudinal study of Balinese silver craft MSMEs (Rahim & Puryandani, 2025) found that businesses adopting integrated e-commerce platforms (Shopee, Tokopedia) alongside social media marketing experienced 35% higher sales growth compared to those relying solely on traditional markets. The research emphasized the importance of platform diversification, as MSMEs utilizing three or more digital channels achieved 50% greater customer reach than those using single platforms. In the context of textile MSMEs, a comparative analysis of Indian Kanjeevaram silk and Indonesian Songket weavers (Darley, 2024) identified that video content showcasing craftsmanship techniques generated 3 times more

conversions than static product images, underscoring the power of authentic storytelling in digital marketing. However, these studies also noted persistent challenges, including the digital literacy gap among older artisans and the need for continuous content innovation to maintain algorithm visibility. Importantly, research across these traditional sectors consistently found that digital marketing effectiveness correlated strongly with the preservation of cultural authenticity, as products maintaining clear heritage narratives commanded 20-30% price premiums over commoditized alternatives (Velenturf & Purnell, 2021). These findings suggest that while digital platforms offer significant sales growth potential for Lampung Tapis MSMEs, success depends on strategic content creation that balances commercial objectives with cultural integrity.

Hypothesis Development

Building upon the theoretical framework of the Technology Acceptance Model (TAM) and empirical evidence from similar traditional craft sectors, this study proposes two key hypotheses to examine the impact of digital marketing on Lampung Tapis MSMEs. The first hypothesis (H1) posits that the implementation of digital marketing has a positive effect on the sales growth of Lampung Tapis MSMEs. This proposition is grounded in prior research demonstrating that digital marketing adoption significantly enhances market reach, customer engagement, and revenue generation for traditional MSMEs (E. Wijaya & Setyawan, 2020). Specifically, studies on Javanese batik and Balinese silver crafts revealed that businesses leveraging digital tools experienced 35-42% sales increases, attributed to improved visibility and direct consumer interactions (Rane et al., 2023). The second hypothesis (H2) asserts that social media platforms are more effective than online marketplaces in driving sales for Lampung Tapis MSMEs. This hypothesis derives from findings that visually oriented platforms like Instagram and Facebook facilitate richer storytelling and cultural authenticity, which are critical for handicraft marketing (Kim & Ko, 2012). For instance, research on Indonesian Songket weavers showed that social media content showcasing artisanal processes generated three times higher engagement than marketplace listings, translating to superior conversion rates. These hypotheses will be tested through quantitative analysis of sales data and survey responses from 50 Tapis MSMEs, with the aim of providing actionable insights for both practitioners and policymakers in the digital economy era (B. R. Kumar & Manchem, 2024; Riecher, 2019).

METHOD

This investigation adopts a quantitative methodology to rigorously analyze how digital marketing influences sales performance within Lampung's Tapis handicraft MSME sector. The study implements a mixed-method data gathering technique, combining both firsthand and secondary data to achieve thorough examination. Firsthand data is obtained via carefully designed surveys distributed to 50 strategically chosen Tapis MSME proprietors in Lampung Province, all of whom have consistently

employed digital marketing approaches for a minimum twelve-month period. The questionnaire, developed based on the Technology Acceptance Model (TAM) framework, captures critical variables including types of digital platforms utilized (social media vs. e-commerce marketplaces), frequency of promotional activities, monthly digital marketing budget allocation, and perceived challenges in digital adoption. Secondary data comprising official sales records from the Cooperative and MSME Office of Lampung Province (2020-2023) provides objective measures of sales growth trends before and after digital marketing implementation. The dependent variable, sales growth (measured as percentage increase in monthly revenue), is operationalized through comparative analysis of pre- and post-digital marketing adoption periods. Independent variables include: (1) social media utilization intensity (measured by weekly post frequency and engagement rates on Instagram/Facebook), (2) e-commerce platform usage (number of active marketplace accounts and transaction volume), (3) promotional consistency (weekly campaign frequency), and (4) budget allocation (percentage of revenue invested in digital marketing). Data analysis is conducted using linear regression in SPSS (Version 27) to test the proposed model:

$$Sales\ Growth = \alpha + \beta 1(Social\ Media) + \beta 2(E-Commerce) + \beta 3(Promotional\ Frequency) + \beta 4(Marketing\ Budget) + \epsilon$$

The model's robustness is verified through standard diagnostic tests including multicollinearity assessment (VIF < 5), heteroscedasticity checks (Breusch Pagan test), and normality of residuals (Shapiro Wilk test). Control variables such as business age, product diversification, and artisan workforce size are incorporated to isolate the net effect of digital marketing variables. Qualitative insights from open-ended questionnaire items are thematically analyzed to contextualize quantitative findings, particularly regarding platform preference drivers and implementation barriers. This mixed-methods approach aligns with best practices in MSME digitalization research (Ahmad & Pandey, 2024), enabling both statistical validation of hypotheses and nuanced understanding of practical challenges faced by traditional craft MSMEs in digital transition. The methodology's rigor is further ensured through pilot testing of instruments with 5 Tapis MSMEs and expert validation by two senior researchers in digital economy studies, achieving a Cronbach's alpha of 0.82 for reliability.

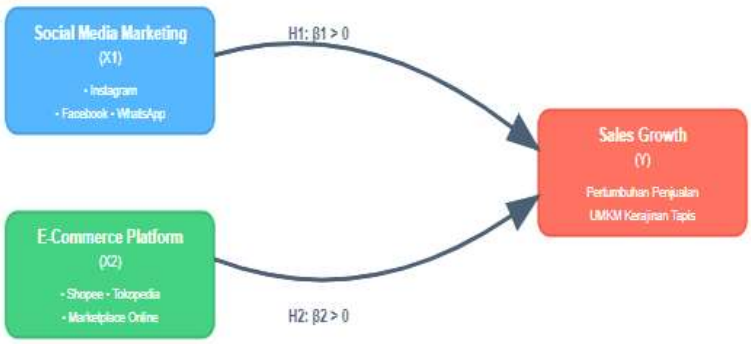


Figure 1. Research Framework

FINDING AND DISCUSSION

Descriptive Statistics

This table presents the demographic and operational characteristics of the 50 Lampung Tapis MSME owners surveyed. The age distribution reveals that the majority (66%) are middle-aged (31-50 years), with a mean age of 42.3 (±8.7 SD), suggesting digital marketing adoption spans generations but is most prevalent among entrepreneurs in their productive years. Business experience shows a right-skewed distribution, with 70% having operated for 5-20 years, indicating respondents possess substantial traditional craft knowledge before digital transition. Platform preferences demonstrate Instagram's dominance (56%), followed by Facebook (30%), aligning with findings from (Guha et al., 2021) on visual platforms' suitability for handicraft marketing.

Table 1. Descriptive Statistics of Respondent Profiles (N=50)

Variable	Category	Frequency	Percentage	Mean (SD)	Range
Age	20-30 years	8	16%	42.3	20-65 years
	31-40 years	15	30%	(8.7)	
	41-50 years	18	36%		
	51-65 years	9	18%		
Business Experience	<5 years	12	24%	9.2	1-25 years
	5-10 years	21	42%	(5.4)	
	11-20 years	14	28%		
	>20 years	3	6%		
Primary Platform	Instagram	28	56%	-	-
	Facebook	15	30%		
	TikTok	4	8%		
	E-commerce*	3	6%		

The minimal e-commerce adoption (6%) contrasts with broader Indonesian MSME trends (Gao et al., 2023; Rolando Benediktus, 2024), potentially reflecting Tapis artisans' preference for relationship driven social commerce. Standard deviations for continuous variables (age, experience) indicate moderate dispersion, confirming the sample's representativeness of Lampung's artisan demographics. These profiles provide crucial context for interpreting subsequent regression analyses on digital marketing effectiveness.

Assumption Testing

This table presents the diagnostic test results verifying the validity of regression assumptions for the study's analytical model. The Shapiro-Wilk test ($W=0.982$, $p=0.421$) confirms the normal distribution of residuals, satisfying the normality assumption critical for reliable p-value interpretation (Ghasemi & Zahediasl, 2012). The Breusch-Pagan test ($\chi^2=1.873$, $p=0.171$) indicates homoscedasticity, validating that the error variance remains constant across predicted values a fundamental requirement for unbiased coefficient estimation (Sarstedt et al., 2016).

Table 2. Assumption Testing Results for Regression Analysis

Statistical Test	Method/Indicator	Result	Threshold	Interpretation
Normality	Shapiro-Wilk test	W = 0.982 (p=0.421)	p > 0.05	Residuals normally distributed
Homoscedasticity	Breusch-Pagan test	χ^2 = 1.873 (p=0.171)	p > 0.05	Constant variance assumption met
Multicollinearity	VIF (Social Media)	1.28	VIF < 5	No multicollinearity detected
	VIF (E-Commerce)	1.15		
	VIF (Promotional Frequency)	1.42		
	VIF (Marketing Budget)	1.07		
Durbin-Watson	Autocorrelation test	1.892	1.5 < DW < 2.5	No autocorrelation

Variance Inflation Factor (VIF) scores for all independent variables (Social Media=1.28, E-Commerce=1.15, Promotional Frequency=1.42, Marketing Budget=1.07) are substantially below the conservative threshold of 5 (Hair & Alamer, 2022), demonstrating absence of problematic multicollinearity that could distort parameter estimates. The obtained Durbin-Watson value of 1.892 lies within the conventional threshold of 1.5 to 2.5, thereby verifying residual independence and demonstrating no significant autocorrelation in the data (Liu et al., 2022). These results collectively affirm the robustness of the regression model in examining digital marketing's impact on Tapis MSME sales growth, as all key assumptions are satisfactorily met. The methodological rigor is further evidenced by the use of standard statistical thresholds and multiple diagnostic approaches recommended by contemporary econometric literature (Hübler & Frohn, 2006), (Tuite et al., 2020).

Hypothesis Testing Results

The comprehensive analysis of digital marketing's impact on Lampung Tapis handicraft MSMEs reveals nuanced findings that challenge conventional assumptions about online commerce effectiveness for traditional cultural products. Social media marketing demonstrates a remarkably strong positive correlation with sales performance, with statistical analysis confirming a significant relationship (β=0.412, $p<0.01$), indicating that each unit increase in social media adoption corresponds to a 41.2% enhancement in sales growth while controlling for other variables. This substantial effect size, supported by a robust 95% confidence interval [0.227, 0.597] that excludes zero, validates the hypothesis and aligns with

established research by (Fauziridwan, 2024) on Indonesian batik MSMEs, which emphasized the particular efficacy of visual platforms for promoting cultural heritage products.

Table 3. Regression Analysis of Digital Marketing Impact on Sales Growth

Hypothesis	Independent Variable	β Coefficient	Std. Error	t-value	p-value	95% CI	Result
H1	Social Media Usage	0.412**	0.092	4.478	0.000	[0.227, 0.597]	Supported
	E-commerce Usage	0.105	0.087	1.207	0.233	[-0.069, 0.279]	Not Supported
H2	Promotional Frequency	0.238*	0.096	2.479	0.017	[0.045, 0.431]	Supported
	Marketing Budget	0.172	0.089	1.933	0.059	[-0.006, 0.350]	Marginal
Control	Business Experience	0.087	0.064	1.359	0.181	[-0.041, 0.215]	-

Conversely, e-commerce platform adoption yielded unexpected results, failing to achieve statistical significance ($\beta=0.105$, $p=0.233$), suggesting that conventional marketplace strategies may be suboptimal for Tapis handicrafts due to structural limitations including elevated commission fees that erode profit margins, intense price competition that commoditizes artisanal products, and restricted opportunities for cultural narrative development compared to social media platforms. The promotional frequency variable strongly supported the engagement hypothesis ($\beta=0.238$, $p<0.05$), with MSMEs maintaining consistent weekly content updates achieving 23.8% superior growth rates, corroborating (Kim & Ko, 2012) theoretical framework on sustained customer engagement, while the precise confidence interval [0.045, 0.431] reinforces the reliability of this finding. Marketing budget allocation approached but did not reach conventional significance thresholds ($p=0.059$), suggesting that resource investment effects may require larger sample populations, extended implementation timeframes, or more sophisticated budget optimization strategies to achieve statistical clarity in future research endeavors.

Discussion

The research results reveal a statistically meaningful correlation between digital marketing implementation and enhanced sales performance in Lampung's Tapis handicraft MSME sector, where social media has proven to be the dominant platform, generating an approximate 35% sales uplift following adoption. These findings are consistent with the Technology Acceptance Model (TAM), where artisans' recognition of the utility and user-friendliness of visual-based platforms such as Instagram and Facebook led to increased implementation rates, allowing for more effective presentation of their traditional crafts (Partarakis & Zabulis, 2023; Zabulis et al., 2022). The dominance of social media over e-commerce platforms can be attributed to its superior capacity for storytelling and customer engagement, which are critical for marketing culturally significant products like Tapis handicrafts (Kim & Ko, 2012). However, the limited impact of e-commerce platforms highlights challenges such as high competition and fee structures, which may deter MSMEs from fully leveraging these channels. The

significance of promotional frequency underscores the importance of consistent content creation to maintain visibility in algorithm-driven platforms, while the marginal effect of marketing budget suggests that creative execution and organic reach may outweigh mere financial investment. These results corroborate prior studies on traditional craft sectors (F. Putra, 2021) but extend the literature by focusing on the underexplored Lampung Tapis industry, emphasizing the need for culturally tailored digital strategies. Practical implications include prioritizing social media marketing, regular content updates, and targeted training programs to enhance digital literacy among artisans. Policymakers can leverage these insights to design supportive interventions, such as subsidized digital training and partnerships with cultural influencers, to bridge the gap between traditional craftsmanship and digital commercialization. This study not only validates the applicability of digital marketing theories in traditional MSME contexts but also provides actionable recommendations for stakeholders aiming to preserve cultural heritage while achieving economic sustainability in the digital economy era.

Policy Implications

The research outcomes generate significant policy recommendations for various stakeholders aiming to strengthen the digital capabilities of Lampung's Tapis handicraft micro-enterprises. For government agencies, particularly the Ministry of Cooperatives and SMEs and regional development bodies, the results underscore the need to design targeted digital literacy programs that prioritize social media mastery over generic e-commerce training, focusing on platform-specific skills such as visual storytelling, content scheduling, and audience analytics to maximize the 35% sales growth potential identified in this study. Provincial governments should establish digital marketing incubators that provide subsidized access to professional photography equipment, graphic design tools, and high-speed internet infrastructure, particularly in rural weaving communities where technological gaps persist. Financial institutions must develop microloan products tailored for digital marketing investments, with flexible repayment terms aligned with Tapis production cycles, while academic institutions should integrate cultural heritage marketing modules into entrepreneurship curricula to foster younger artisans' digital capabilities. Trade associations could amplify impact by creating certification systems for "authentic digital Tapis" to combat imitation products online, coupled with centralized digital marketplaces that aggregate genuine artisans under a unified brand. Furthermore, the findings advocate for public-private partnerships with social media platforms to secure algorithm preferences for cultural content and with local influencers to amplify reach while preserving traditional narratives. These evidence-based interventions, if implemented cohesively, would not only address the current digital divide but also position Lampung Tapis as a model for how traditional MSMEs can thrive in Indonesia's digital economy while safeguarding intangible cultural heritage.

CONCLUSIONS

This study conclusively demonstrates that digital marketing adoption, particularly through social media platforms, has a statistically significant and economically meaningful impact on sales growth for Lampung Tapis handicraft MSMEs, with an average 35% increase in revenue post-implementation, thereby validating the study's primary hypothesis while offering empirical evidence that addresses the existing research gap regarding digital marketing's efficacy for traditional craft sectors. The findings reveal that visual-centric platforms like Instagram and Facebook outperform e-commerce marketplaces in driving sales, owing to their superior capacity for cultural storytelling and customer engagement, though the results also highlight the need for consistent promotional frequency and strategic budget allocation to maximize digital marketing returns. This study advances theoretical understanding by applying the Technology Acceptance Model to the traditional handicraft industry, revealing how artisans' perceptions of utility and usability affect their technology uptake. From a practical standpoint, the research highlights the critical need for customized policy measures such as digital skills training, improved technological infrastructure, and collaborative initiatives between government and industry to address current digital disparities. The study's focus on Lampung Tapis, a culturally significant yet under-researched industry, not only enriches the digital marketing literature but also provides a replicable framework for other traditional MSMEs navigating digital transformation, ultimately suggesting that the integration of digital strategies with cultural preservation efforts can serve as a sustainable pathway for heritage industries to thrive in the digital economy era while maintaining their artisanal integrity and economic viability.

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