



OPTIMIZING DIGITAL MARKETING TO INCREASE AWARENESS, PURCHASE INTENTION, AND CONSUMER RETENTION: A CONCEPTUAL STUDY ON MSMEs IN TIMOR LESTE

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ABSTRACT

The development of digital technology has transformed traditional marketing patterns into digital-based strategies that are more interactive, efficient, and broad-reaching. For Micro, Small, and Medium Enterprises (MSMEs) in Timor Leste, the implementation of digital marketing presents a strategic opportunity to increase competitiveness, particularly in building awareness, driving purchase intention, and strengthening consumer retention. This article aims to examine the role of digital marketing optimization in influencing MSME consumer behavior through a review of current literature, relevant theoretical approaches, and primary data collection from MSMEs in Timor Leste. Through in-depth interviews with 15 MSME owners and a survey of 120 MSMEs across Dili, Baucau, and Maliana, this research highlights both the opportunities and challenges in digital marketing adoption. The study reveals the integration of various digital marketing elements, such as social media, content marketing, and e-commerce platforms, which are considered capable of expanding brand exposure, increasing consumer trust, and creating long-term relationships with customers. The primary data findings indicate that while 88% of MSMEs recognize the importance of digital marketing, only 35% actively implement comprehensive digital strategies due to challenges in digital literacy, infrastructure limitations, and resource constraints. Academically, this study contributes to enriching the digital marketing literature in the context of developing countries. Practically, the results of this study are expected to serve as a strategic reference for MSMEs in Timor Leste in optimizing the use of digital technology to expand markets and improve business sustainability.

Keyword: Digital Marketing; Awareness; Purchase Intention; Consumer Retention; MSMEs Timor Leste

INTRODUCTION

The shift from traditional marketing to digital marketing is a global phenomenon that has accelerated the transformation of business models and brand-consumer interactions. Researchers and practitioners emphasize that digital and social media marketing are not merely additional channels but core components of modern marketing strategies due to their ability to reach a wider audience, provide two-way interactions, and enable more precise performance measurement (Dwivedi et al., 2021). Systematic findings also indicate that an integrated digital strategy contributes significantly to improving the customer experience and the overall effectiveness of a company's marketing communications (Dwivedi et al., 2021; Digital Marketing Strategies review, 2023–2025).

In the context of consumer behavior, international empirical evidence consistently shows that digital marketing practices, including content marketing, social media advertising, and e-commerce presence, can increase brand awareness and purchase



intention. For example, cross-country studies have found a positive correlation between digital marketing activities and consumer purchase intention, with brand trust and brand image often mediating the relationship (Business Perspectives, 2024; Nyange, 2024). Furthermore, recent literature emphasizes that not all forms of digital marketing produce the same effects: effectiveness depends on content quality, interactivity, and the channel's relevance to the targeted consumer segment (Deepika, 2025; Social media marketing studies, 2024–2025).

Meanwhile, customer retention has become a major focus in modern digital marketing research because retaining customers is considered more economical than acquiring new ones. Literature reviews on retention confirm that consistent customer experiences, personalized communications, and digital-based after-sales services are important determinants of maintaining long-term loyalty (Customer Retention: A Literature Review, 2025). Systematic research also shows that digital approaches that prioritize customer experience and adapt to local culture tend to be more successful in retaining customers across various industry contexts (Gulati, 2024; Theseus thesis, 2024).

However, evidence from developing countries suggests an implementation gap: many MSMEs have yet to maximize the potential of full-stack digital marketing due to constraints on infrastructure, digital literacy, capital, and organizational capabilities. Adoption-prediction models such as the TOE (Technology-Organization-Environment) emphasize that technological, organizational, and external environmental factors collectively determine the success of digital marketing adoption by MSMEs (Digital Marketing Adoption in SMEs TOE-based assessment, 2025). This situation means that results achieved in developed countries may not automatically transfer to developing countries without adapting policies and strategies that are sensitive to local constraints (TOE studies, 2025).

Specifically for Timor-Leste, recent data shows that internet penetration and digital users have increased rapidly in recent years, reaching approximately 51% in early 2022, representing significant opportunities for MSME digitalization efforts (DataReportal, 2022). However, regional reports and socio-innovation ecosystem studies indicate that Timor-Leste still faces challenges in infrastructure, digital entrepreneurship capacity, and access to funding for broader digital adoption (UNCTAD, 2024; UNICEF Timor-Leste, 2025). This combination of opportunities (internet user growth) and constraints (capacity and infrastructure) makes Timor-Leste an interesting case study to explore how digital marketing optimization can translate into tangible results: increased awareness, increased purchase intention, and sustained consumer retention.

The above review reveals two key research gaps. First, while international evidence suggests a positive relationship between digital marketing and consumer behavior indicators, there are still few studies that design an integrated framework that combines awareness, purchase intention, and retention within a single model of influence on MSMEs in developing countries, particularly with primary data from the field. Second, the existing literature tends to ignore the context of local capabilities and strategic adaptations required by MSMEs, resulting in practical recommendations often lacking applicability to environments like Timor-Leste (TOE adoption studies; UNCTAD, 2024). These gaps require studies that not only explain the relationships between variables but also identify the mechanisms (e.g., the role of content quality, digital distribution channels, personalized communication) and contextual factors (infrastructure, digital literacy) that moderate or facilitate these influences, grounded in actual experiences of MSMEs.

Based on the practical urgency and academic gap, this study aims to develop a framework that outlines how digital marketing optimization can increase brand awareness,



purchase intention, and customer retention in MSMEs in Timor-Leste. The proposed framework integrates key concepts from digital marketing literature, technology adoption theory (TOE), empirical findings related to the determinants of digital channel effectiveness, and primary data from MSMEs in Timor Leste through interviews and surveys. Thus, this study is expected to provide a strong theoretical basis for further empirical studies and contextual strategic recommendations for policymakers and MSMEs in Timor-Leste.

METHOD

This study uses a mixed-method approach combining conceptual analysis with primary data collection to formulate a comprehensive framework regarding the role of digital marketing optimization in increasing awareness, purchase intention, and customer retention among MSMEs in Timor Leste. The conceptual approach allows researchers to synthesize previous theories and empirical findings to generate a more comprehensive understanding of the phenomenon being studied (Jaakkola, 2020). However, to address the need for practical relevance and strengthen the applicability of this study, primary data collection was conducted to capture the actual challenges and opportunities faced by MSMEs in Timor Leste.

The research process was conducted through a systematic literature review by examining various academic and non-academic sources, such as reputable international journal articles, conference proceedings, international agency reports, and secondary data related to the development of MSMEs in Timor-Leste. To maintain validity, the literature used focused on publications from the last five to ten years, specifically research after 2020 that is relevant to the topics of digital marketing, consumer behavior, and customer retention (Snyder, 2019). Articles were obtained through academic databases such as Scopus, ScienceDirect, Emerald, Taylor & Francis, as well as reports from international organizations such as UNCTAD and the World Bank.

To provide practical insights into the challenges and opportunities faced by MSMEs in adopting digital marketing, this study conducted primary data collection through two complementary methods. First, semi-structured interviews were conducted with fifteen MSME owners and managers in Timor Leste between August and October 2024. Participants were selected using purposive sampling to ensure representation across different sectors including food and beverage, handicrafts, retail, and services, as well as geographical locations covering Dili, Baucau, and Maliana. Each interview lasted approximately forty-five to sixty minutes and covered topics including current marketing practices and digital tool usage, perceived benefits and challenges of digital marketing, barriers to digital marketing adoption, impact of digital marketing on business performance, and support needed for digital transformation. All interviews were conducted in Tetum and Portuguese, recorded with participants' consent, transcribed, and analyzed using thematic analysis to identify recurring patterns and themes.

Second, a structured survey was administered to 120 MSMEs across three municipalities, specifically sixty businesses in Dili, thirty-five in Baucau, and twenty-five in Maliana, between September and November 2024. The survey instrument consisted of four sections covering business demographics and characteristics, current digital marketing adoption level and practices, perceived impact on awareness, purchase intention, and retention, as well as challenges and support needs. The questionnaire used a five-point Likert scale for most questions and was distributed through both online using Google Forms and offline methods to ensure accessibility for all respondents. The response rate was eighty-seven percent, with 120 completed surveys out of 138 distributed. Data was



analyzed using descriptive statistics and cross-tabulation to identify patterns and relationships.

The analysis was conducted using an integrated approach that combined content analysis of literature to identify key themes, research gaps, and relationships between variables, thematic analysis of interview transcripts to extract main challenges and opportunities, descriptive statistical analysis of survey data to quantify adoption patterns and impacts, and triangulation of literature findings with primary data to develop a contextually relevant conceptual framework. This strategy enabled researchers to organize the literature based on research variables, specifically digital marketing as the independent variable, and awareness, purchase intention, and retention as dependent variables, while grounding these relationships in the lived experiences of MSMEs in Timor Leste. Furthermore, the analysis results were used to build a conceptual framework that explains the flow of relationships between variables and their relevance to the context of MSMEs in Timor Leste. This approach aligns with mixed-method research practices that prioritize the integration of theory, empirical evidence, primary data, and the development of research models (Meredith, 1993; Torraco, 2016; Creswell & Plano Clark, 2018).

RESULT AND DISCUSSION

Primary Data Findings from Timor Leste MSMEs

Profile of Participating MSMEs

The survey reflects a diverse MSME landscape in Timor-Leste. Among the 120 respondents, food and beverage businesses dominated the sample (32%), followed by handicrafts (25%), retail (23%), services (15%), and other sectors (5%), mirroring the country's main MSME economic activities.

Most businesses were relatively young, with 45% operating for two to five years and 28% for five to ten years, while only 9% had operated for more than a decade. This indicates a dynamic but still developing MSME sector. Employment data shows that 65% of firms were micro-enterprises employing one to five people, reflecting limited human resources.

Revenue levels further underline these constraints. Forty-two percent reported annual revenues below USD 5,000, and 38% earned between USD 5,000 and USD 15,000, while only a small minority exceeded USD 50,000. Overall, the findings highlight the modest scale of MSME operations in Timor-Leste and the financial limitations that affect their capacity to invest in advanced digital marketing tools and training.

Current Digital Marketing Adoption and Practices

The primary data shows uneven digital marketing adoption among MSMEs in Timor-Leste. Facebook is the dominant platform, used by 78% of respondents due to its accessibility and popularity, followed by WhatsApp Business (65%) for direct customer communication and Instagram (43%), mainly among visually oriented sectors. In contrast, more advanced tools remain marginal: only 15% of MSMEs had websites, 8% used e-commerce platforms, and 5% applied email marketing, while 12% did not use digital marketing at all.

Engagement intensity also varied. Thirty-five percent of MSMEs were active daily, 28% several times per week, and 22% weekly, whereas 15% engaged only irregularly. Content strategies were largely product-focused, with 87% posting product photos and descriptions and 62% sharing promotions. Fewer MSMEs leveraged testimonials (45%), educational content (38%), or storytelling and behind-the-scenes content (23%), indicating



that digital marketing is still viewed mainly as a sales promotion tool rather than a broader brand-building strategy.

Perceived Impact of Digital Marketing on Business Performance

The survey findings indicate that digital marketing has delivered measurable benefits to MSMEs across awareness, purchase intention, and customer retention. In terms of brand awareness, 72% of digitally active MSMEs reported increased brand recognition, while 68% reached new customer segments beyond traditional channels. Increased customer inquiries were observed by 55%, although 23% reported limited impact due to content quality and posting inconsistencies.

Regarding purchase intention and sales, 63% of MSMEs experienced higher orders linked to digital marketing, and 58% reported stronger customer engagement through online interactions. Nearly half of the respondents noted that customers actively sought product information via digital platforms before purchasing, and 39% received inquiries from outside their local areas, indicating expanded market reach.

Customer retention outcomes were less consistent. While 41% maintained regular communication with existing customers and 36% provided after-sales service through digital channels, only 32% implemented basic loyalty initiatives. More than half of the MSMEs had not yet adopted systematic retention strategies, highlighting substantial opportunities to further leverage digital marketing for long-term customer loyalty and business sustainability.

Challenges and Barriers to Digital Marketing Adoption

Primary data reveals multiple barriers that limit effective digital marketing adoption among MSMEs in Timor-Leste. The most significant challenge is limited digital literacy, reported by 78% of respondents, as many business owners lack practical skills in content creation, platform management, and performance analysis. Infrastructure and connectivity issues were cited by 65%, particularly outside Dili, where unstable internet and power disruptions hinder timely online engagement.

Financial constraints affect 61% of MSMEs, restricting investment in devices, content quality, paid advertising, and training. Time limitations and heavy workloads were reported by 57%, as owners manage multiple business functions, leaving little capacity for consistent digital engagement. Language and content creation challenges were identified by 43%, reflecting difficulties in producing engaging and culturally appropriate content across digital platforms.

Additionally, 38% of respondents reported limited understanding of digital analytics, resulting in weak strategy optimization and unclear returns on digital efforts. Concerns about payment systems and online transactions were raised by 31%, as cash-based practices and limited e-commerce infrastructure hinder the conversion of digital interest into actual sales. Together, these constraints highlight the need for targeted training, infrastructure support, and context-appropriate digital solutions to enhance MSME digital marketing effectiveness in Timor-Leste.

Opportunities and Support Needs Identified by MSMEs

Despite the numerous challenges, the primary data also revealed significant optimism about digital marketing's potential and clear articulations of the types of support that would enable more effective adoption.

Ninety-one percent of respondents expressed belief that digital marketing is important or very important for their business's future growth and sustainability. This



widespread recognition of digital marketing's value provides a strong foundation for capacity-building initiatives. Eighty-three percent indicated willingness to participate in training programs if they were made accessible and affordable. Preferred training topics included practical social media management, creating effective visual and written content, using digital marketing to increase sales, understanding customer behavior online, basic digital advertising and budgeting, and using analytics to improve marketing effectiveness.

Seventy-six percent of MSMEs requested support in the form of free or low-cost training workshops delivered in Tetum and Portuguese with practical, hands-on components. Sixty-eight percent expressed interest in mentoring or peer-learning opportunities where successful MSMEs who have effectively used digital marketing could share their experiences and strategies. Fifty-four percent sought support for improving internet infrastructure and connectivity in their areas, recognizing that technical barriers limit their digital marketing potential.

Forty-nine percent of respondents indicated interest in subsidized access to digital marketing tools and services, such as vouchers for professional product photography, subsidized website development, or credits for social media advertising. Forty-two percent requested the development of simplified, locally adapted guides and templates for digital marketing in Tetum and Portuguese languages. Thirty-seven percent sought assistance with establishing secure and accessible digital payment systems that could facilitate online transactions.

Interestingly, several interview participants emphasized the importance of community-based approaches to digital marketing development. One participant suggested, "It would be helpful if we could form groups of MSMEs in the same sector to learn together and share ideas. Sometimes when I see what other businesses are doing on social media, I get new ideas for my own business." This insight points to the potential value of fostering MSME networks and communities of practice around digital marketing.

Digital Marketing: Theoretical Framework and Literature Review

Digital marketing is a marketing approach that utilizes digital technology to create added value for consumers while achieving organizational goals. According to Chaffey and Ellis-Chadwick (2019), digital marketing is the use of digital technology to support marketing activities focused on managing online consumer interactions. In other words, digital marketing is not just about promotion, but also a strategy for building long-term relationships through digital channels.

The implementation of digital marketing is becoming increasingly important, especially for MSMEs, as it allows small businesses to reach a wider market at a lower cost (Tiago & Veríssimo, 2014). Furthermore, Kannan and Li (2017) emphasize that digital marketing has a significant impact on consumer behavior, from the awareness stage to post-purchase behavior. Meanwhile, Lamberton and Stephen (2016) show that the integration of social media, mobile, and other digital technologies can accelerate interactions, increase engagement, and strengthen consumer loyalty.

In practice, Chaffey and Ellis-Chadwick (2019) suggest that digital marketing can be measured through several key indicators. First, websites and online presence involve using websites as centers for information, promotions, and transactions. This is important because consumers tend to search for information online before making a purchase decision (Boateng, 2016). Second, search engine marketing through SEO and SEM represents a strategy for increasing visibility in search engines to attract potential



customers. SEO has been proven to increase traffic and consumer conversions (Baye et al., 2016). Third, online advertising involves the use of digital advertising that can increase brand recall and influence purchasing decisions (Duffett, 2017).

Fourth, social media marketing encompasses the use of social media platforms to increase engagement. Cvijikj and Michahelles (2013) found that social media interactivity has a positive impact on consumer engagement. Fifth, email marketing represents a personal communication strategy that can strengthen long-term relationships with consumers (Kaplan & Haenlein, 2010). Sixth, mobile marketing involves the use of mobile devices that provide opportunities for fast, relevant, and location-based interactions (Varnali & Toker, 2010). Finally, digital analytics involves evaluation of digital data to measure campaign effectiveness and inform marketing strategy (Wedel & Kannan, 2016).

Awareness: Conceptual Foundation and Measurement

Brand awareness is an important dimension of brand equity that is directly related to consumers' ability to recognize, remember, and place a brand in their minds (Keller, 2016). In the digital context, awareness is increasingly important because consumers are exposed to many brands simultaneously, so that a brand's success depends on the extent to which it is able to become top-of-mind in a particular product category (Foroudi et al., 2017).

According to Šerić et al. (2020), brand awareness is the foundation of consumer behavior because without it, consumers will not include a brand in their consideration set. Strong awareness can also drive purchase intention and strengthen customer loyalty (Zhang et al., 2017). This is relevant for MSMEs in the digital era, as brand awareness enables local products to compete with major brands through social media, e-commerce, and digital content (Hutter et al., 2013; Iglesias et al., 2020).

In the digital marketing landscape, brand awareness indicators can be measured across several dimensions. According to Keller (2016), as supported by recent research (Mandal, 2017; Bilgin, 2018; Jalilvand et al., 2021), awareness indicators include brand recognition, which refers to the ability of consumers to recognize a brand when it is shown through a logo, packaging, or digital advertising (Keller, 2016; Bilgin, 2018). Brand recall represents the ability of consumers to remember a brand without the help of external stimuli, for example when searching for similar products (Mandal, 2017; Jalilvand et al., 2021). Top of mind awareness describes the first brand that comes to mind when consumers think about a particular product category (Foroudi et al., 2017). Finally, brand familiarity indicates the extent to which consumers feel familiar with a brand due to repeated digital exposure (Šerić et al., 2020; Iglesias et al., 2020).

Purchase Intention: Theoretical Perspectives and Indicators

Purchase intention is a consumer's psychological tendency to purchase a product or service after evaluating the information, experience, and marketing stimuli they receive (Morwitz & Fitzsimons, 2016). In the context of digital marketing, purchase intention is an important indicator because it connects promotional stimuli with actual consumer purchasing behavior in the digital marketplace (Diallo et al., 2018).

According to Keller (2016), purchase intention is influenced by a combination of cognitive factors such as awareness and knowledge, affective factors including attitude toward the brand, and conative factors representing readiness to act. Meanwhile, recent research shows that purchase intention is significantly influenced by consumer interactions with brands on social media, the quality of digital content, and trust built through electronic word of mouth or e-WOM (Bilgin, 2018; Jalilvand & Samiei, 2021).



A study by Chen and Lin (2019) found that purchase intention in e-commerce can increase significantly if consumers feel emotionally connected to the brand. This aligns with research by Putra et al. (2020), which showed that MSME consumers are more likely to purchase products if they trust digital reputation and customer reviews. Therefore, purchase intention is a key variable linking digital marketing effectiveness to MSME sales sustainability.

Referring to Ajzen's (2015) theory in the Theory of Planned Behavior updated with contemporary research (Morwitz & Fitzsimons, 2016; Diallo et al., 2018; Chen & Lin, 2019; Jalilvand et al., 2021), purchase intention can be measured through several indicators. Likelihood to purchase reflects the extent to which consumers have plans to purchase a particular product (Morwitz & Fitzsimons, 2016). Brand preference indicates consumer choice of a particular brand compared to competing brands (Diallo et al., 2018). Willingness to recommend represents consumer readiness to recommend a product to others as a strong signal of purchase intention (Bilgin, 2018). Repurchase intention reflects the consumer's willingness to repurchase a product after the first purchase (Chen & Lin, 2019; Putra et al., 2020).

Consumer Retention: Strategic Importance and Measurement Dimensions

Customer retention refers to a firm's ability to maintain customers and encourage repeat purchases over time, making it a core element of customer relationship management and a more efficient strategy than customer acquisition (Kaur et al., 2020; Hinson et al., 2019). In the digital era, retention has become increasingly important due to intense competition and the ease with which consumers can switch brands through online platforms (Rather, 2018).

Recent studies emphasize that digital marketing strategies contribute to retention by fostering satisfaction, trust, loyalty, and emotional engagement through ongoing digital interactions and positive online experiences (Lam et al., 2016; Bilgin, 2018; Jain et al., 2021). Consequently, customer retention is a key indicator of digital marketing effectiveness, particularly for MSME sustainability.

Based on contemporary literature, retention can be measured through repeat purchase, customer loyalty, advocacy, and emotional attachment, which collectively reflect the strength of long-term customer–brand relationships (Lam et al., 2016; Kaur et al., 2020; Hinson et al., 2019; Jain et al., 2021).

Discussion

Digital Marketing in Increasing Awareness

Digital marketing is essential for building brand awareness by expanding reach and increasing brand exposure. Brand awareness consists of brand recognition and brand recall (Keller, 2016), which can be strengthened through consistent digital strategies such as social media, online advertising, and search engine marketing (Nyange, 2024). Empirical data from MSMEs in Timor-Leste supports this view: 72% reported increased brand recognition after adopting digital marketing, particularly via Facebook and Instagram. Digital platforms enabled MSMEs to reach customers beyond their immediate communities, making brands more recognizable in everyday consumer encounters.

Social media emerged as the most influential channel. Prior studies confirm that informative and interactive social media activities significantly enhance brand awareness and equity (Seo & Park, 2018; Bilgin, 2018). In Timor-Leste, Facebook dominated MSME



usage (78%) due to accessibility, while Instagram (43%) was favored in visually oriented sectors. However, most MSMEs relied on basic product posting, with only 23% producing engagement-driven content such as storytelling, limiting deeper brand recall and emotional connection.

Other digital tools such as content marketing and SEO are proven to enhance awareness (Mandal, 2017; Nipa, 2024; Suryana, 2024), yet their adoption in Timor-Leste remains minimal. Only 15% of MSMEs had websites, and SEO awareness was very low, making social media the primary awareness channel. Although multi-channel strategies are more effective (Foroudi et al., 2017; Menon, 2019), practical constraints led most MSMEs to focus on one or two platforms. Those combining Facebook with WhatsApp Business achieved higher engagement and brand recall. Overall, both theory and evidence confirm digital marketing as a key driver of brand awareness, though its effectiveness in developing contexts depends heavily on capacity, skills, and context-appropriate implementation.

Digital Marketing in Increasing Purchase Intention

Digital marketing plays a key role in shaping purchase intention by providing fast access to information, personalized messages, and interactive communication. Based on the Theory of Planned Behavior, digital marketing strengthens attitudes, subjective norms, and perceived behavioral control, thereby increasing consumer confidence to purchase (Ajzen, 2015; Kannan & Li, 2017). Empirical studies confirm that interactive and customized digital marketing, particularly on social media, positively influences purchase intention through trust and emotional engagement (Bilgin, 2018; Seo & Park, 2018).

Primary data from MSMEs in Timor-Leste supports these findings. Sixty-three percent of digitally active MSMEs reported increased purchases linked to digital marketing. Typically, consumers discover products through social media, engage via comments or messages, and then proceed to purchase through physical stores or direct communication channels such as WhatsApp. This pattern shows that digital marketing builds purchase intention mainly by facilitating information exchange and trust rather than immediate online transactions.

High-quality and transparent digital content further reduces consumer uncertainty and encourages purchasing decisions (Shareef et al., 2019; Boateng, 2016). Although most MSMEs regularly post product information, many struggle with content quality, leading to repeated customer inquiries and inefficiencies. In addition, electronic word-of-mouth plays a strong role: customer reviews and testimonials significantly influence purchase intention by strengthening trust (Jalilvand et al., 2021; Ismagilova et al., 2020). In Timor-Leste, positive comments and customer-generated content are especially persuasive due to strong community-based trust networks.

However, limitations in e-commerce adoption and online payment systems constrain the conversion of purchase intention into actual sales. While digital marketing effectively stimulates interest and intent, transactions often shift to offline or cash-based processes, creating friction and lost opportunities. Overall, digital marketing acts as a crucial catalyst for purchase intention among Timor-Leste MSMEs, but its full impact depends on improved integration between digital engagement and transaction infrastructure.

Digital Marketing in Increasing Consumer Retention

Digital marketing enhances customer retention by enabling continuous relationships, personalized communication, and digital after-sales services, all of which are central to relationship marketing and e-CRM. Frequent and personalized digital interactions reduce



churn and encourage repeat purchases (Reinartz et al., 2004). Empirical studies further show that social media marketing characterized by informativeness and interactivity strengthens customer engagement, loyalty, and retention, particularly for SMEs (Bilgin, 2018; Lim, 2022).

Primary data from Timor-Leste MSMEs indicates that retention through digital marketing is still underdeveloped. Although 41% of MSMEs used digital channels to maintain contact with existing customers, most focused on customer acquisition rather than systematic retention strategies. WhatsApp Business emerged as the main retention tool, used by 65% of MSMEs to send personalized messages, promotions, and greetings to repeat customers. Despite its simplicity, this approach effectively sustained engagement and repeat purchases.

More advanced retention mechanisms, such as digital loyalty programs and data-driven analytics, remain limited. Only 32% of MSMEs implemented basic loyalty incentives, and 38% did not systematically track repeat customers or churn risks. As a result, retention efforts are largely intuitive rather than proactive. Limited use of digital after-sales service and slow response times further constrained retention effectiveness.

Overall, both theory and empirical evidence confirm that digital marketing has strong potential to improve customer retention among Timor-Leste MSMEs. However, maximizing this potential requires low-cost, context-appropriate strategies, improved response management, basic transaction documentation, and practical training. Gradual adoption of simple tools aligned with local capabilities is essential to shift MSMEs from acquisition-focused practices toward sustainable, retention-oriented digital marketing strategies.

Conceptual Framework: Integrating Theory and Practice

The conceptual framework of this study synthesizes theoretical literature and primary data from Timor-Leste MSMEs to explain the relationship between digital marketing and three key outcomes: awareness, purchase intention, and customer retention. Digital marketing is positioned as the main independent variable influencing these outcomes through multiple pathways, with its effectiveness shaped by local contextual conditions.

Digital marketing is treated as a multidimensional construct, but empirical evidence from Timor-Leste shows that social media platforms, particularly Facebook and WhatsApp Business, are the most feasible and widely used tools. More advanced components such as SEO, email marketing, and digital analytics remain limited due to resource and capability constraints. In this context, digital marketing primarily drives awareness through repeated brand exposure, recognition, and recall, with content quality and consistency acting as important moderating factors.

Purchase intention is influenced through information provision, trust building via social proof and e-WOM, and brand-consumer interaction. However, limited e-commerce infrastructure means that purchase intention often leads to offline transaction completion, making digital marketing an important but incomplete stage in the sales process. Customer retention is influenced through ongoing digital communication, personalization, after-sales service, and loyalty incentives, yet these practices are still underdeveloped among most MSMEs, indicating high potential for improvement.

The framework also incorporates key moderating factors such as infrastructure quality, digital skills, financial and time constraints, content creation capacity, analytics understanding, and payment systems. Finally, it recognizes feedback loops among

awareness, purchase intention, and retention, where gains in one outcome reinforce the others over time. Overall, the framework integrates universal theoretical mechanisms with context-specific realities, offering a relevant foundation for analyzing and guiding digital marketing strategies for MSMEs in Timor-Leste.

By referring to the problem formulation, theoretical studies both empirically and conceptually, and discussions of the relationship between variables, the framework for thinking in this article is compiled as shown below.

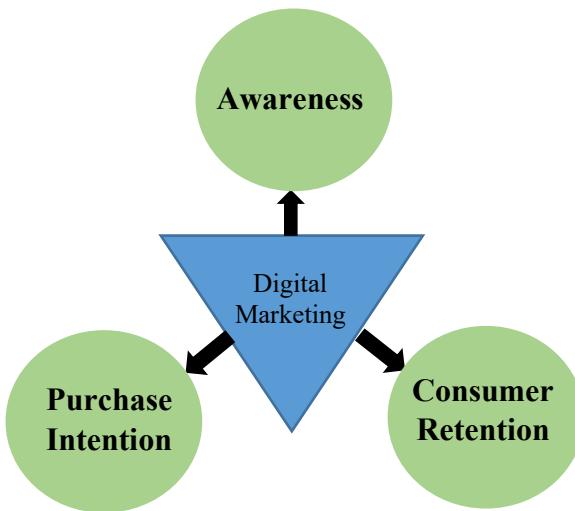


Figure 1. Conceptual Framework

CONCLUSION

This study confirms that digital marketing plays a strategic role in increasing awareness, purchase intention, and customer retention among MSMEs in Timor-Leste. Using literature review and primary data from 120 surveys and 15 interviews, the findings show that even basic digital marketing, especially through Facebook and WhatsApp Business, can generate positive consumer behavior outcomes in a developing country context. High adoption of these platforms is associated with increased brand awareness (72%), purchase intention and sales (63%), and customer retention (41%).

Despite these benefits, digital marketing adoption remains constrained by limited digital skills, infrastructure challenges, financial limitations, and time constraints. As a result, digital marketing is often used as a promotional tool rather than a fully optimized strategic function for long-term business development. The findings reinforce existing theories while emphasizing that effectiveness depends on contextual readiness, capacity building, and institutional support.

The study also acknowledges several limitations, including sample scope, geographic concentration, variable selection, reliance on cross-sectional data, and limited local literature. Future research is encouraged to adopt longitudinal designs, examine additional moderating variables, and explore offline–online integration challenges in greater depth.

Practically, MSMEs are advised to focus on sustainable, low-cost digital strategies that strengthen awareness, stimulate purchase intention, and maintain customer relationships. For policymakers, coordinated support in the form of localized training, infrastructure investment, financial incentives, and digital payment system development is essential. Overall, the study provides a relevant theoretical and empirical foundation for



advancing digital marketing as a driver of MSME competitiveness and economic development in Timor-Leste.

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