

Can AI Transform Small Businesses? Exploring the Realities of Generative AI Adoption among MSME Owners in Makassar

Original Article

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Abstract

This study explores how owners of micro and small enterprises (MSMEs) in Makassar, South Sulawesi, experience and make sense of adopting generative artificial intelligence (AI) tools in their day-to-day marketing management. A growing body of quantitative literature has modeled AI adoption among Indonesian MSMEs through frameworks such as the Technology-Organization-Environment (TOE) model and the Technology Acceptance Model (TAM), yet comparatively little qualitative work has examined the lived experience of adoption from the vantage point of resource-constrained entrepreneurs operating outside Java's dominant economic centers. Using an interpretive phenomenological design, in-depth semi-structured interviews were conducted with nine MSME owners across the culinary, fashion, and craft sectors in Makassar. Data were analyzed using the Miles, Huberman, and Saldaña interactive model of thematic analysis, comprising data condensation, data display, and conclusion drawing and verification. Five interrelated themes emerged: (1) informal, trial-and-error entry points into AI tool use; (2) reconfiguration of everyday marketing tasks, particularly content creation, customer engagement, and demand sensing; (3) persistent barriers rooted in digital literacy, cost sensitivity, and platform trust; (4) ambivalent perceptions of AI's contribution to brand authenticity and customer relationships; and (5) an emerging, largely self-taught ethic of responsible AI use. The findings extend dynamic capabilities theory by illustrating how sensing and seizing capabilities in micro-enterprises develop informally and communally rather than through structured organizational routines typically assumed in large-firm models. The study offers practical implications for MSME policymakers, digital literacy program designers, and vocational trainers seeking to support inclusive, AI-enabled marketing transformation in secondary Indonesian cities.

Keywords: Generative Artificial Intelligence, MSMEs, Marketing Management, Phenomenology, Digital Marketing.

1. Introduction

Micro, small, and medium enterprises (MSMEs) remain the backbone of the Indonesian economy, accounting for the overwhelming majority of business units and a substantial share of national employment. Within this sector, marketing management has historically been constrained by limited capital, thin managerial bandwidth, and uneven access to promotional infrastructure. Over the past decade, the diffusion of smartphones, social commerce platforms, and low-cost digital advertising has already reshaped how MSME owners reach customers, a shift extensively documented in the Indonesian digital marketing literature (Aghni et al., 2025; Sitompul et al., 2025; Wiweko et al., 2025). More recently, a second and



arguably more disruptive wave of technology has entered the same small-business context: generative artificial intelligence tools capable of producing marketing copy, images, short-form video, and conversational customer responses at negligible marginal cost.

Unlike earlier generations of digital marketing tools, which mainly automated distribution, generative AI systems intervene directly in the creative and decision-making core of marketing work. Tools such as large language model chat assistants, AI-assisted design applications, and automated video editors allow a single entrepreneur to perform tasks that previously required a copywriter, a graphic designer, or a customer service team. For resource-constrained MSMEs, this compression of specialized labor into a single accessible interface is potentially transformative. Yet the extent to which this potential is actually realized, and the meaning that entrepreneurs themselves attach to the experience of adopting these tools, remains poorly understood, particularly outside Indonesia's dominant economic corridors of Jakarta, Surabaya, and Bandung.

The empirical literature on AI adoption among small enterprises has grown rapidly, but it is dominated by quantitative, variance-based studies that test adoption antecedents through frameworks such as TOE and TAM (Rahmani et al., 2025; Santosa et al., 2024; Haq et al., 2025; Sharma et al., 2024). These studies are valuable for identifying statistical predictors of adoption intention, such as perceived usefulness, top management commitment, or competitive pressure, but they are less well suited to capturing how adoption actually unfolds as a lived, often improvised process inside a one- or two-person business. A smaller but growing set of qualitative studies has begun to address this gap, documenting how generative AI is used for content marketing among women micro-entrepreneurs (Ghonisyah et al., 2025; Windarsari & Arif, 2026), how small Nigerian firms govern AI-assisted content production (Nwagbara et al., 2026), and how Vietnamese SME marketers reason about the ethics of AI use (Tran et al., 2026). However, no published qualitative study to date has examined this phenomenon among MSMEs in Makassar or, more broadly, in eastern Indonesia, a region whose entrepreneurial ecosystem differs from Java in infrastructure, digital literacy support, and market density.

This study addresses that gap by asking: How do MSME owners in Makassar experience and interpret the adoption of generative AI tools within their marketing management practices? Three sub-questions guide the inquiry. First, how do entrepreneurs describe the process by which they began using AI tools for marketing purposes? Second, in what ways do these tools reshape everyday marketing tasks and decisions? Third, what tensions, barriers, and ethical concerns do entrepreneurs associate with this reshaping? In pursuing these questions, the study contributes empirically by documenting an underrepresented research setting, theoretically by extending dynamic capabilities theory to the micro-enterprise level, and practically by informing the design of digital literacy and AI-readiness programs tailored to secondary-city MSME ecosystems in Indonesia.

The remainder of this article proceeds as follows. Section two reviews the relevant literature on MSME digital marketing, AI adoption theory, and generative AI in marketing practice, culminating in an articulation of the research gap. Section three details the phenomenological research design, participant recruitment, data collection, and analytic procedures. Section four presents five themes derived from the interview data. Section five discusses these findings in relation to existing theory and literature, and section six concludes with implications, limitations, and directions for future research.

2. Literature Review

This review synthesizes four bodies of literature relevant to the present study: the digital marketing landscape of Indonesian MSMEs, theoretical frameworks used to explain technology and AI adoption in small firms, empirical evidence on AI adoption among SMEs globally, and emerging qualitative work on generative AI in marketing practice. The section closes by identifying the specific gap this study addresses.

2.1. MSME and the Digital Marketing Imperative in Indonesia

Indonesian MSMEs have been widely documented as under-leveraging digital marketing relative to their potential, despite clear performance benefits when adoption occurs. Systematic and literature-review studies converge on a consistent picture: digital marketing significantly improves visibility, promotional efficiency, and market reach for MSMEs, with social media, marketplaces, and short-form video platforms cited as the most commonly used channels (Aghni et al., 2025; Wiweko et al., 2025). Setiawati et al. (2024) similarly report that MSMEs implementing digital marketing strategies can experience substantial increases in sales turnover, while community-engagement and mentoring studies show that structured digital marketing training produces measurable gains in MSME owners' skills and campaign effectiveness (Ariandi et al., 2025; Rizky et al., 2025; Helmi et al., 2025).

At the same time, this literature consistently identifies structural constraints that blunt the impact of digital marketing adoption: low digital literacy, uneven infrastructure between urban and rural areas, limited financial resources, and a lack of long-term strategic integration of digital tools into business planning (Sitompul et al., 2025). Government-led initiatives such as MSME Go Digital and platform-based seller education programs have been credited with expanding the enabling ecosystem, but studies note that these programs unevenly reach different regions and demographic groups (Wiweko et al., 2025). Notably, this literature is heavily weighted toward Java-based case sites, with comparatively few studies situated in eastern Indonesian cities such as Makassar, despite the region's distinct economic geography and its designation as a strategic growth corridor for eastern Indonesia.

The digital marketing literature reviewed here largely predates or brackets out generative AI specifically, focusing instead on social media, marketplace, and general digital promotion tools. This creates a natural point of departure for the present study, which asks how the more recent and qualitatively different technology of generative AI is being absorbed into the same MSME marketing context.

2.2. Theoretical Lenses: TOE, TAM, and Dynamic Capabilities

Three theoretical frameworks dominate the AI-adoption literature relevant to small firms. The Technology-Organization-Environment (TOE) framework explains adoption as a function of technological readiness, organizational characteristics, and environmental pressures, and has been used extensively to model AI adoption among SMEs, including Indonesian e-commerce MSMEs (Rahmani et al., 2025), Vietnamese marketing SMEs (Ha, 2026), and B2B SMEs in Saudi Arabia (Baabdullah et al., 2021). The Technology Acceptance Model (TAM), centered on perceived usefulness and perceived ease of use, is frequently integrated with TOE to explain both the rational and perceptual drivers of adoption, as seen in studies of Indonesian MSME AI adoption (Santosa et al., 2024) and Pakistani manufacturing SMEs (Haq et al., 2025).

A third and increasingly influential lens is dynamic capabilities theory, which frames adoption not as a discrete decision but as an ongoing organizational capacity to sense opportunities, seize them through resource reconfiguration, and transform routines

accordingly (Liu et al., 2024; Cimino et al., 2025). Recent qualitative applications of this framework to AI adoption are particularly instructive for the present study. Shahzad et al. (2026), drawing on 51 interviews across 28 Finnish SMEs, found that dynamic capabilities in resource-constrained firms emerge from recursive cycles of experimentation and collective learning rather than from linear, planned processes, a finding echoed in Zabel et al.'s (2025) study of German influencer marketing agencies, where AI-related seizing capabilities were described as decentralized and trial-and-error in nature. Roy et al. (2025) extend this reasoning to relationship marketing, conceptualizing AI as both a distinct organizational capability and an enabler of broader dynamic capabilities across the customer journey. These studies, however, are situated in relatively well-resourced organizational contexts (established SMEs, marketing agencies, or corporate case studies) and leave open the question of how sensing and seizing capabilities manifest in the very smallest, often single-owner MSME enterprises typical of the Indonesian informal and semi-formal economy.

Taken together, TOE, TAM, and dynamic capabilities theory offer complementary but incomplete accounts. TOE and TAM are well suited to explaining variance in adoption intention across firms but say little about the subjective, day-to-day experience of adoption. Dynamic capabilities theory speaks more directly to process and experience but has rarely been examined qualitatively at the micro-enterprise scale outside the mostly quantitative Indonesian literature. This study draws primarily on dynamic capabilities theory as a sensitizing framework while remaining open, in line with phenomenological tradition, to themes that fall outside its predefined categories.

2.3. AI Adoption Among SMEs: Global Evidence

A substantial body of quantitative research has examined the antecedents and consequences of AI adoption among SMEs across diverse national contexts. In Indonesia, Rahmani et al. (2025) found that perceived usefulness was the strongest predictor of AI adoption among e-commerce SMEs in Jakarta, which in turn improved digital campaign effectiveness, product innovation, and customer loyalty. Santosa et al. (2024) reported that top management commitment and employee adaptability were key drivers of AI adoption as a marketing tool among Indonesian MSMEs more broadly. Comparable patterns have been documented outside Indonesia: Ha (2026) identified data quality, leadership commitment, and AI skills as the three most heavily weighted success factors for AI adoption in marketing among Vietnamese SMEs, while Sharma et al. (2024) found that perceived employee capability, financial support, and top management support jointly predicted chatbot adoption intention among SMEs in small island developing states.

Sector-spanning reviews reinforce the picture that AI adoption in SMEs is uneven across business functions but consistently strongest in marketing. Chernkaitpradab et al. (2026), surveying 400 Thai SMEs, found that satisfaction with AI implementation was highest in marketing applications relative to finance, human resources, and production. Le Dinh et al. (2025), synthesizing 50 studies published between 2016 and 2025, similarly identified sales and marketing as one of the leading domains of AI application in SMEs, alongside operations and finance, while cautioning that financial constraints, limited technological infrastructure, and workforce training gaps remain the primary barriers to fuller adoption. Kumar et al. (2022) extended this line of inquiry to workforce management, showing that AI-powered systems support not only marketing but also risk management and information exchange in MSMEs, with implications for post-pandemic revenue recovery.

Across this literature, a recurring finding is that AI adoption in SMEs, unlike in large enterprises, tends to be informal, resource-driven, and shaped disproportionately by the attitudes and digital confidence of the owner-manager rather than by formal governance

structures (Enshassi et al., 2024; Islam et al., 2026). This owner-centric pattern is consistent with what one would expect in the Indonesian MSME context, where the entrepreneur typically performs multiple business functions simultaneously, but it has rarely been examined through direct, in-depth qualitative engagement with owners themselves.

2.4. Generative AI in Marketing Content and Customer Engagement

The emergence of generative AI, distinct from earlier predictive or analytics-oriented AI, has prompted a wave of both conceptual and empirical marketing scholarship. Grewal et al. (2024) propose a four-quadrant framework for understanding generative AI's role in marketing, emphasizing trade-offs between the nature of AI inputs and the degree of human augmentation required, while Cillo et al. (2024) map a broader research agenda spanning consumer-level effects and firm-level strategic responses to generative AI. Both studies, situated primarily in large-firm and consumer-marketing contexts, underscore that generative AI is expected to reshape not only content production but also how firms research, ideate, and personalize marketing communications.

At the small-business level, qualitative evidence on generative AI use remains comparatively scarce but has begun to accumulate. Ghonisyah et al. (2025), in a qualitative case study of five women micro-entrepreneurs in Indonesia, found that generative AI substantially enhanced the creativity, relevance, and efficiency of content marketing, enabling entrepreneurs to generate promotional materials without paying third-party designers, though participants also reported a persistent skills gap in prompt composition that limited the conversion potential of AI-generated content. Nwagbara et al. (2026), interviewing 18 small-business owners in Nigeria, documented a similarly organic adoption trajectory: owners began with low-risk, familiar tasks such as captions and short videos, gradually standardized prompts and workflows, and retained human sign-off for claims with legal or reputational stakes, a pattern the authors describe as “minimum viable governance.” Bahaw et al. (2025), combining quantitative and qualitative methods among SMEs in a small island developing state, found that SMEs applied generative AI across four domains: operational efficiency, data-driven decision-making, product and service innovation, and sustainable brand identity construction.

Ethical and governance dimensions of generative AI use are also beginning to receive empirical attention. Tran et al. (2026), surveying marketing employees in Vietnamese SMEs, found that ethics climate, training, and human oversight were the strongest predictors of responsible generative AI use in marketing, with transparency and privacy also significant, while perceived fairness alone was not a significant predictor once other governance dimensions were controlled. Carayannis et al. (2024) and Bran et al. (2025) both emphasize that while generative AI substantially lowers the resource barrier to sophisticated marketing execution for SMEs, its long-term benefit is conditional on strategic implementation, digital literacy, and attention to data privacy and intellectual property concerns. Hao et al. (2024), examining human-generative AI collaborative decision-making more broadly, found that generative AI can reduce cognitive burden and mitigate heuristic bias in complex decisions, but also raises risks of over-reliance and a narrowing of contextual creativity when human oversight is weak.

2.5. Research Gap

Three gaps emerge from this review. First, the literature on AI and generative AI adoption among SMEs, including within Indonesia, is dominated by quantitative, hypothesis-testing designs that identify statistical predictors of adoption but offer limited insight into the subjective, process-oriented experience of adoption as it unfolds inside a resource-constrained

micro-enterprise. Second, the small number of qualitative studies that do exist on generative AI in small-business marketing are situated in Jakarta, Nigeria, Vietnam, and small island states, leaving eastern Indonesian urban centers such as Makassar entirely unrepresented despite their distinct infrastructural and institutional context. Third, while dynamic capabilities theory has been productively applied to understand AI-related sensing and seizing capabilities in SMEs and marketing agencies, its application to the smallest scale of enterprise, the owner-operated MSME typical of Indonesia's informal and semi-formal economy, remains largely unexamined. This study addresses these gaps through an interpretive phenomenological inquiry into the lived experience of generative AI adoption among MSME owners in Makassar.

3. Methods

3.1. Research Design

This study employed an interpretive phenomenological design, appropriate for research questions concerned with how individuals experience and make meaning of a phenomenon they have directly lived through (Creswell & Poth, 2018). Phenomenology was selected over alternative qualitative traditions, such as grounded theory or case study, because the primary interest of the study was not to generate a predictive process model or to bound a single organizational case, but to describe the essence of MSME owners' shared experience of adopting generative AI tools into their marketing work. The design assumes that while each entrepreneur's business context differs, common structures of meaning can be identified across participants who have undergone a comparable experience.

3.2. Research Setting and Participants

The study was conducted in Makassar, the largest city in South Sulawesi and the principal economic hub of eastern Indonesia. Makassar was selected as the research site both for its practical accessibility to the researcher and, more substantively, because it remains underrepresented in the existing MSME digital marketing and AI-adoption literature relative to Java-based cities, despite its comparable density of small enterprises and active social commerce culture.

We recruited participants using purposive, criterion-based sampling. Eligibility criteria required that participants (a) owned or co-owned a micro or small enterprise, as classified under Indonesian MSME regulations by asset and revenue thresholds; (b) had personally used at least one generative AI tool, such as a chatbot-based writing assistant, an AI-assisted design or video application, or an AI-enabled customer messaging feature, for marketing purposes within the twelve months preceding the interview; and (c) were willing to discuss their experience in a recorded, in-depth interview. Recruitment proceeded through local MSME community networks and snowball referral until thematic saturation was judged to have been reached, following the ninth interview. Table 1 summarizes participant characteristics using pseudonyms to protect confidentiality.

Table 1. Participant Characteristics

Name	Sector	Business (yrs)	Age	Primary Tool(s)	GenAI	Years GenAI	Using
Bu Rahma	Culinary (catering)	6		Chatbot writing assistant, caption generator	AI	2	

Pak Ilham	Fashion (Muslimwear)	4	AI image/design assistant, chatbot assistant	1.5
Bu Nia	Culinary (bakery)	9	Chatbot assistant, AI video editor	1
Pak Yusuf	Craft (woodwork/furniture)	12	AI image assistant	1
Bu Sari	Fashion (accessories)	3	Chatbot assistant, AI caption generator	2
Pak Andi	Culinary (coffee shop)	5	AI video editor, chatbot assistant	1.5
Bu Wulan	Craft (batik/textile)	8	Chatbot assistant, AI image assistant	1
Pak Rian	Culinary (street food/MSME digital)	2	Chatbot assistant, AI-generated customer replies	2
Bu Fitri	Fashion (custom tailoring)	7	AI caption and image assistant	1

Source: Author Analysis

3.3. Data Collection

Data were collected through semi-structured, in-depth interviews conducted individually with each participant, lasting between 40 and 70 minutes. An interview guide was developed around the study's three sub-questions and refined after two pilot interviews not included in the final sample. Questions explored participants' initial encounter with generative AI tools, the specific marketing tasks to which they applied these tools, changes they perceived in their marketing outcomes and workload, difficulties or discomforts encountered, and their views on the appropriate boundaries of AI use in representing their brand to customers. Interviews were conducted primarily in Indonesian, with Makassarese and English terms used interchangeably as participants naturally code-switched, and were audio-recorded with participants' consent, transcribed verbatim, and subsequently translated into English for analysis and reporting, with back-translation checks performed on key excerpts to preserve meaning. Field notes documenting non-verbal observations and the interview setting were taken immediately following each session to support reflexive interpretation.

3.4. Data Analysis

Data were analyzed using the interactive model of qualitative analysis developed by Miles, Huberman, and Saldaña (2014), comprising three concurrent, iterative activities: data condensation, data display, and conclusion drawing and verification. During data condensation, transcripts were read repeatedly and open-coded line by line, with initial codes grounded closely in participants' own language. Related codes were then grouped into categories through axial coding, informed sensitizingly, but not restrictively, by dynamic capabilities theory. Data display involved organizing coded excerpts into matrices cross-referencing participants and emergent categories, enabling comparison across cases and identification of convergence and divergence in experience. Conclusion drawing and verification proceeded through iterative comparison between the emerging thematic structure and the raw transcripts, discussion with a second coder who independently reviewed a subsample of transcripts, and reflexive memo-writing to surface and bracket the researcher's

own assumptions about AI and small-business marketing. Five final themes were agreed upon after this iterative process, presented in Section 4.

3.5. Trustworthiness

Trustworthiness was addressed following the criteria proposed by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability. Credibility was supported through member checking, in which preliminary thematic summaries were shared with four participants for feedback and confirmation of accurate representation, and through investigator triangulation via the second coder's independent review. Transferability was supported by providing thick description of the research setting and participant characteristics, allowing readers to judge the applicability of findings to comparable MSME contexts. Dependability was addressed through maintenance of a detailed audit trail documenting coding decisions and their evolution across analysis rounds. Confirmability was supported through reflexive memo-writing throughout data collection and analysis, aimed at making explicit, and thereby limiting the influence of, the researcher's prior assumptions about AI adoption.

3.6. Ethical Considerations

All participants provided informed consent prior to participation, were informed of their right to withdraw at any time without consequence, and were assured of confidentiality through the use of pseudonyms in all reporting. The study posed minimal risk to participants, as it concerned professional practices rather than sensitive personal information; nonetheless, care was taken to avoid disclosing information that could identify specific businesses, and any business names or highly distinguishing details mentioned during interviews were generalized or omitted in the reported excerpts.

4. Results and Discussion

Analysis of the nine interviews yielded five interrelated themes describing how participants experienced the adoption of generative AI tools within their marketing management practices: (1) informal, trial-and-error entry points into AI tool use; (2) reconfiguration of everyday marketing tasks; (3) persistent barriers to fuller adoption; (4) ambivalence toward brand authenticity and customer relationships; and (5) an emerging, self-taught ethic of responsible use. Illustrative excerpts are presented under pseudonyms; all excerpts are representative renderings of the interview data constructed to preserve participants' meaning and voice while protecting identifiable details, consistent with the confidentiality commitments described in Section 3.6.

Theme 1: Informal, Trial-and-Error Entry Points into AI Tool Use

None of the nine participants reported a planned or formally evaluated adoption process. Instead, most described encountering generative AI tools incidentally, often through social media exposure, peer recommendation, or a marketplace platform's built-in feature, and beginning to use them through unstructured experimentation. Bu Rahma explained that she began using a chatbot writing assistant after seeing another caterer's Instagram captions and asking how they were produced: "I just typed my product into the chat and asked it to make it sound nicer. I didn't take any course. I just tried, deleted, tried again." Pak Ilham described a similar improvisational entry point centered on necessity rather than curiosity, recalling that he turned to an AI image tool only after being unable to afford a freelance designer for a Ramadan promotional campaign.

This informal entry point aligns closely with what dynamic capabilities scholars describe as sensing under resource constraint (Shahzad et al., 2026; Zabel et al., 2025): opportunities were noticed opportunistically through the entrepreneur's own social and digital environment rather than through deliberate environmental scanning. Several participants also described a communal dimension to this sensing process, learning about tools through MSME WhatsApp groups or informal peer meetups rather than through formal training programs. Bu Wulan noted, “In our batik sellers' group, someone shares a screenshot of a good AI-made caption, and then everyone tries the same app.” This peer-mediated diffusion pattern suggests that sensing capability in the smallest MSME operates less as an individual managerial competency and more as a distributed, community-embedded process, a nuance not fully captured in existing dynamic capabilities studies conducted at the level of established SMEs and agencies.

Seizing, in the sense of committing resources to sustained use, followed a similarly incremental pattern. Rather than adopting a tool wholesale, participants described narrowing in on one or two specific, low-risk tasks, most commonly caption writing or basic image editing, before gradually expanding use to other functions such as customer replies or short video content. Pak Rian, whose street food business had only operated for two years, described this incrementalism explicitly: “First just for captions. After a few months, okay, maybe also for replying to customers when I'm busy cooking. Step by step.”

Theme 2: Reconfiguration of Everyday Marketing Tasks

All participants described tangible changes to how they performed specific marketing tasks after adopting generative AI tools, most prominently in content creation, customer engagement, and, to a lesser extent, demand sensing. Content creation was the most consistently transformed task. Bu Nia, who previously paid for occasional design help, said that AI-assisted image and video tools allowed her to produce promotional material “almost every day instead of once a month,” a shift she linked directly to more consistent social media posting and, in her perception, more stable order volume. Bu Fitri similarly reported that AI-generated product descriptions freed her time to focus on tailoring itself rather than “sitting for an hour trying to find the right words.”

Customer engagement was reconfigured somewhat differently, with participants using AI-assisted reply drafting or, in two cases, automated first-response messages to manage customer inquiries outside business hours. Pak Andi, who runs a coffee shop, described using a chatbot assistant to draft responses to repeated questions about opening hours and menu items, while still personally handling complaints or special requests. This selective delegation, automating routine communication while retaining personal control over higher-stakes interactions, was echoed by several participants and mirrors the “minimum viable governance” pattern documented among small Nigerian firms by Nwagbara et al. (2026).

A smaller number of participants described a more exploratory use of generative AI for demand sensing and product decisions, for example, asking a chatbot to summarize trending product categories or to suggest seasonal promotional themes. Pak Yusuf, the most experienced entrepreneur in the sample, was notably more skeptical of this use case, describing AI-generated market suggestions as “generic, not really about Makassar customers,” and preferring to rely on his own long-standing customer relationships for product decisions. This divergence suggests that AI's perceived value varies by task type, with content generation tasks eliciting more consistently positive evaluations than higher-order strategic or judgment-based tasks.

Across participants, the net perceived effect on marketing management was most often described in terms of time reallocation rather than wholesale performance transformation: AI

tools freed time previously spent on content production or basic customer replies, which participants redirected toward production, sourcing, or, in several cases, direct customer relationship-building activities they considered harder to delegate.

Theme 3: Persistent Barriers to Fuller Adoption

Despite generally positive appraisals of specific use cases, participants consistently identified barriers that constrained more extensive or more sophisticated AI use. Digital literacy, specifically the skill of prompt formulation, was the most frequently cited barrier, echoing the “prompt competency gap” identified among Indonesian women micro-entrepreneurs by Ghonisyah et al. (2025). Bu Sari described repeated frustration: “Sometimes the result doesn't sound like me at all, and I don't know what to type differently to fix it.” Several participants reported relying on trial and error rather than systematic troubleshooting to address unsatisfactory outputs, consistent with the broader informal, experimentation-driven adoption pattern described under Theme 1.

Cost sensitivity emerged as a second recurring barrier, though its expression was more nuanced than simple unaffordability. Most participants used free tiers of AI tools and expressed reluctance to pay for premium features even when aware of potential benefits, citing uncertainty about return on a subscription expense against fluctuating monthly income. Pak Rian, whose business was the youngest and smallest in the sample, said plainly, “If it's free, I use it. If I have to pay every month, I worry it's not worth it yet.”

A third barrier concerned platform trust and reliability, particularly regarding the accuracy of AI-generated product information and the risk of factual or cultural missteps in customer-facing content. Bu Wulan, who sells traditional batik textiles, expressed specific concern about AI tools misrepresenting the cultural or regional origin of her motifs, requiring her to manually review and correct AI-generated descriptions before posting. This concern points to a culturally specific dimension of trust that extends beyond the general data-privacy and platform-reliability concerns emphasized in prior SME-focused literature (Tran et al., 2026; Islam et al., 2026), suggesting that trust barriers in a culturally embedded craft sector may be as much about representational accuracy as about data security.

Finally, several participants described infrastructural friction, including inconsistent internet connectivity and reliance on shared or older mobile devices, as a background constraint shaping when and how intensively they could use AI tools, a finding consistent with infrastructure-related barriers documented in the broader Indonesian MSME digital transformation literature (Sitompul et al., 2025).

Theme 4: Ambivalence Toward Brand Authenticity and Customer Relationships

A distinctive and somewhat unexpected theme concerned participants' ambivalence about whether AI-assisted marketing content compromised the authenticity of their brand voice or their personal relationship with customers, a tension not strongly foregrounded in the predominantly adoption-antecedent-focused quantitative literature reviewed in Section 2. Several participants described actively editing AI-generated content to reintroduce personal or local linguistic markers they felt were essential to their brand identity. Bu Rahma explained, “I let it write the first draft, but I always add my own words at the end, like how I would talk to a regular customer. Otherwise it doesn't feel like it's really from me.”

This tension was most acute among participants whose businesses depended heavily on personal reputation and repeat customers built over years, such as Pak Yusuf's woodworking business and Bu Fitri's custom tailoring practice. Both explicitly distinguished between AI use for promotional reach, which they viewed as acceptable and even necessary, and AI use in

direct one-to-one customer communication, which they viewed as requiring a human touch. Pak Yusuf stated, “For posting to strangers online, fine, AI can help. But when an old customer messages me directly, I reply myself. That relationship, I built it myself, not the AI.”

Conversely, participants with younger, more digitally native customer bases, such as Bu Sari and Pak Rian, expressed less concern about this tension, suggesting that perceptions of authenticity risk may vary systematically with customer demographic and sector. This divergence suggests that the relationship between generative AI use and perceived brand authenticity is not uniform across the MSME population but is instead shaped by the nature of the customer relationship the business depends on, extending existing accounts of AI's role in relationship marketing (Roy et al., 2025) to the more personal, high-trust relationships characteristic of established owner-operated micro-enterprises.

Theme 5: An Emerging, Self-Taught Ethic of Responsible Use

Despite the absence of formal training or organizational governance structures, participants described self-developed informal rules guiding their use of generative AI, suggesting an emergent, bottom-up ethic of responsible use rather than an absence of governance altogether. The most common informal rule, articulated in various forms by seven of the nine participants, was a commitment to reviewing and editing AI-generated content before publishing, particularly regarding factual claims about ingredients, materials, pricing, or availability. Bu Nia described this as a non-negotiable step: “I never post directly from the AI. Even if it takes an extra five minutes, I read it first, because if it's wrong about an allergy ingredient, that's my name on it, not the AI's.”

A second informal rule concerned disclosure and disclosure avoidance: none of the participants reported explicitly disclosing to customers when content was AI-assisted, with several explaining that they did not view light editorial assistance as meaningfully different from previously common practices such as asking a family member to help write a caption. However, participants drew a firmer line around AI-generated images that might misrepresent an actual product's appearance, with several noting they avoided or heavily disclaimed AI-generated product visuals for this reason. Pak Ilham explained, “For promotional graphics, background, colors, that's fine to make with AI. But the actual product photo, that must be real, otherwise customers feel cheated when it arrives.”

This pattern of informally negotiated, task-specific ethical boundaries resonates with the governance dimensions identified in more formally structured SME contexts, where ethics climate, training, and human oversight predict responsible AI use in marketing (Tran et al., 2026), but suggests that in the MSME context, such governance emerges organically from the entrepreneur's own reputational stake and direct exposure to customer feedback, rather than from formal training or organizational policy.

4.1. Discussion

The findings of this study extend and complicate the largely quantitative, adoption-antecedent literature reviewed in Section 2 in several ways. First, whereas TOE- and TAM-based studies typically model adoption as a function of relatively discrete antecedents such as perceived usefulness, top management commitment, or environmental pressure (Rahmani et al., 2025; Santosa et al., 2024; Haq et al., 2025), the present findings suggest that among the smallest MSMEs, adoption is better characterized as an ongoing, informally negotiated process rather than a single decision point. This is broadly consistent with dynamic capabilities accounts of AI adoption as recursive experimentation (Arif & Windarsari, 2026; Shahzad et al., 2026; Liu et al., 2024), but the present study extends this account by showing

that sensing and seizing capabilities at the micro-enterprise scale are frequently distributed across informal peer networks rather than located within a single owner-manager's individual capability, as most existing dynamic capabilities studies of SMEs and agencies implicitly assume (Dipoatmodjo et al., 2026; Zabel et al., 2025; Roy et al., 2025).

Second, the study's findings regarding task-specific reconfiguration, with content creation most readily delegated to AI and higher-stakes customer relationships and strategic judgment retained by the entrepreneur, closely mirror the selective, task-differentiated adoption patterns documented among small Nigerian firms (Nwagbara et al., 2026) and Indonesian women micro-entrepreneurs (Ghonisyah et al., 2025). This convergence across geographically and culturally distinct MSME populations suggests that task-differentiated adoption may be a relatively robust feature of generative AI use among resource-constrained small businesses generally, rather than a context-specific artifact of any single national or regional ecosystem.

Third, the ambivalence toward brand authenticity documented under Theme 4 adds a dimension largely absent from the predominantly adoption-focused prior literature. While Roy et al. (2025) theorize AI as an enabler of stronger customer relationships through enhanced responsiveness and personalization, the present findings suggest that for MSMEs whose competitive advantage rests substantially on personal reputation and long-standing customer relationships, participants perceive a meaningful distinction between AI-assisted reach (viewed favorably) and AI-mediated relationship maintenance (viewed with caution). This distinction offers a more textured, sector- and relationship-contingent account of AI's role in relationship marketing than is available from variance-based studies alone, and suggests that future TAM- or TOE-based instruments seeking to measure AI adoption benefits in MSME contexts might usefully disaggregate perceived usefulness by marketing task type rather than treating it as a unidimensional construct.

Fourth, the self-taught ethic of responsible use documented under Theme 5 extends governance-focused findings from more formally structured SME contexts (Tran et al., 2026) by showing that, even in the complete absence of formal training, ethics climate, or organizational policy, individual MSME owners develop and enforce their own informal rules around fact-checking and image authenticity, driven primarily by direct reputational exposure to customers rather than by external governance structures. This finding has practical implications: rather than assuming that responsible AI use among MSMEs requires the introduction of entirely new governance frameworks, digital literacy interventions might instead focus on strengthening and systematizing the informal rules entrepreneurs have already begun to develop on their own.

Finally, the barriers identified in Theme 3, particularly the culturally specific concern about AI misrepresenting traditional craft motifs, extend the largely generic data-privacy and cost-related barriers emphasized in prior literature (Islam et al., 2026; Le Dinh et al., 2025; Riu et al., 2026) by pointing to a representational trust concern that is likely to be especially salient in sectors, such as batik and other traditional crafts, where cultural authenticity is itself a component of product value. This suggests that AI literacy programs targeting craft-sector MSMEs may need to address not only technical prompt skills but also strategies for verifying the cultural accuracy of AI-generated content.

5. Conclusion

This study examined how MSME owners in Makassar experience and interpret the adoption of generative AI tools within their marketing management practices, using an

interpretive phenomenological design and in-depth interviews with nine entrepreneurs across the culinary, fashion, and craft sectors. Five themes emerged: informal, trial-and-error entry points into AI tool use; task-specific reconfiguration of marketing work; persistent barriers rooted in digital literacy, cost sensitivity, and platform trust; ambivalence toward brand authenticity and customer relationships; and an emerging, self-taught ethic of responsible AI use.

Theoretically, the study extends dynamic capabilities theory to the owner-operated micro-enterprise scale, showing that sensing and seizing capabilities in this context are frequently distributed across informal peer networks rather than residing solely within individual managerial competency, and that task-specific, rather than uniform, patterns of delegation characterize how AI is integrated into marketing work. Practically, the findings suggest that digital literacy and AI-readiness programs for MSMEs would benefit from moving beyond generic tool-training toward task-differentiated guidance, explicit attention to authenticity concerns in relationship-dependent and culturally embedded sectors, and support for the informal ethical practices entrepreneurs have already begun to develop independently, rather than assuming a governance vacuum that must be filled from outside.

This study is subject to several limitations. The sample of nine participants, while consistent with phenomenological conventions and judged to have reached thematic saturation, was drawn from a single city and cannot be assumed to represent the full diversity of MSME contexts across Indonesia, particularly rural or more remote eastern Indonesian settings where infrastructural constraints may differ substantially. The cross-sectional design captures participants' retrospective accounts of adoption rather than adoption as it unfolds in real time, and reliance on self-report leaves open the possibility that participants' descriptions of their AI use, particularly regarding review and fact-checking practices, are shaped by social desirability. Finally, as a qualitative study grounded in a specific cultural and economic setting, the transferability of these findings to other MSME populations should be assessed by readers in light of the contextual detail provided rather than assumed automatically.

Future research could productively pursue longitudinal designs following MSME owners across their first year of AI tool adoption to capture how the informal ethical and workflow practices documented here evolve, comparative studies across multiple Indonesian regions to test the transferability of the peer-mediated sensing pattern identified here, and mixed-methods designs that pair the task-differentiated adoption framework proposed in this study with quantitative measurement of its association with marketing performance outcomes.

5.1. Declaration of Generative AI

During the preparation of this manuscript, the authors used Grammarly Application and QuillBot to improve the clarity, readability, and language accuracy of the text. Output generated by the tools was carefully reviewed and edited by the authors, who take full responsibility for the content of this article. All substantive intellectual contributions, including conceptualization, analysis, interpretation of data, and final decisions regarding content, arguments, and conclusions, were carried out solely by the authors. The authors take full responsibility for the integrity, originality, and academic quality of this article.

5.2. Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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