



INTEGRATION OF PERSUASIVE COMMUNICATION AND ARTIFICIAL INTELLIGENCE FOR OPTIMIZING GLOBAL MARKET PENETRATION IN BIG BEE FARM AGRITOURISM, THAILAND

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Abstract

This study examines how the integration of persuasive communication and artificial intelligence (AI) in digital marketing can enhance the competitiveness of honey-based agritourism micro, small, and medium enterprises (MSMEs), using Big Bee Farm in Thailand as a community-service case. While previous work highlights the potential of AI-driven marketing, few studies explicitly address how suggestive, story-based communication strategies and human–technology collaboration shape MSME competitiveness in agritourism contexts, leaving a notable gap between technological adoption and strategic communication design. This study aimed to design and implement an integrated community-service program that combined suggestive-communication training, AI-based digital marketing tools, and participatory mentoring to strengthen marketing capacity and global competitiveness. The activity employed a participatory, experiential-learning design, involving farm managers, marketing staff, and tour guides, and applied qualitative and descriptive-quantitative methods, including needs assessment, training modules, hands-on AI workshops, mentoring, and pre-post evaluations. The findings showed that participants improved their ability to craft persuasive, emotionally engaging messages, adopted AI tools for content generation, chatbot support, and market analysis, shifted from conventional to integrated, data-driven promotion, and reported higher tourist engagement and sales potential. Theoretically, these results support a human-centric perspective on digital transformation, where AI functions as an augmenting resource when aligned with strategic communication. Practically, the study provides a replicable model for community-service programs seeking to strengthen MSME competitiveness through a holistic integration of technology, communication, and collaboration.

Keywords: Persuasive communication, Artificial intelligence, Agrotourism MSMEs

INTRODUCTION

In the era of globalization and digital transformation, the competitiveness of micro, small, and medium-sized enterprises (MSMEs) extends beyond product quality to encompass the integration of technology-driven marketing strategies and effective communication. This holds particular relevance for agritourism ventures, such as Thailand's Big Bee Farm, which leverages a blend of tourist experiences, education, and derivative honey product sales. Global competitiveness in this sector demands sustained innovation amid increasingly digitized and competitive international markets.

Traditional marketing approaches, reliant on on-site promotions and limited distribution networks, exhibit clear limitations in reaching global audiences. The shift toward digital marketing emerges as an imperative, particularly with the rise of artificial intelligence (AI)-based technologies. Haleem et al., (2022) demonstrated that AI enhances marketing effectiveness through consumer behavior analysis, content personalization, and real-time purchase prediction. Marvi et al., (2024)

reinforced this by showing that AI integration not only boosts efficiency but also fosters knowledge-based competitive advantages.

Furthermore, AI in marketing communication enables adaptive, responsive interactions tailored to consumer needs. Bormane & Blaus (2024); Nurgul & Senyapar (2024) explained that AI-driven communication optimizes customer experiences via chatbots, sentiment analysis, and personalized recommendation systems. Generative AI, in particular, develops contextual, preference-based marketing strategies (Lee et al., 2024; Sujatha & Rani, 2023). For MSMEs, AI implementation has proven effective in enhancing product appeal and promotional outcomes, as evidenced in community service programs focused on digital training (Putri, W. W. E., Cahyani, 2024; Nalendra et al., 2023).

However, marketing success hinges not solely on technology but also on communication aspects, notably persuasive communication. This concept emphasizes influencing consumer attitudes, perceptions, and decisions through structured psychological approaches. Lia & Wijaya, (2024) affirmed that persuasive communication in digital marketing builds consumer trust and engagement. In contrast, Qiu et al., (2025) indicated that transparency in AI usage bolsters trust via persuasion knowledge mechanisms. Suggestion techniques, as a core element, strengthen marketing message appeal through emotional and cognitive pathways.

In addition, digital collaboration and innovation serve as key drivers of MSME competitiveness at the international level. Collaborative approaches facilitate knowledge exchange, technology adoption, and expanded business networks. AI-based community service training programs, such as those by Alan Rakhmat Putra et al., (2025); Saputro et al., (2026) demonstrated that integrating digital technologies with apt communication strategies significantly elevates market share and competitiveness. This underscores the synergy between human elements (communication, creativity) and technology (AI, digital platforms) as the foundation for sustainable innovation.

Nevertheless, a significant research gap persists in AI implementation within agritourism, particularly for MSMEs centered on natural products like honey. Prior studies indicate that most operators face barriers in digital technology adoption, including limited technological literacy and access to relevant training. Moreover, training in suggestion-based marketing communication and consumer psychology remains scarce, resulting in suboptimal promotional strategies that inadequately influence purchase decisions.

To address this gap, the present community service initiative aims to enhance Big Bee Farm's competitiveness through training in suggestive communication and AI-based market penetration optimization. The program integrates persuasive communication strategies, AI utilization in digital marketing, and collaborative innovation development. Thus, it strengthens not only technical skills but also global-oriented communication and marketing capacities.

This initiative contributes an integrative model for MSME competitiveness development, combining persuasive communication with AI-driven marketing. It also offers a reference for

community service programs focused on digital transformation and international competitiveness in agritourism.

METHOD AND PROCEDURES

Research Design and Participants

This community service activity (Pengabdian kepada Masyarakat, PKM) adopted a participatory approach combined with experiential learning at Big Bee Farm, a honey-based agritourism destination in Thailand targeting domestic and international markets. Purposive sampling selected the site due to its high global competitiveness potential amid challenges in digital marketing and technology-based persuasive communication. Participants comprised key managers, marketing staff, and tour guides directly involved in consumer interactions and product promotion (n=12).

Instruments and Data Collection

Instruments included structured training modules, AI tools (e.g., generative AI for content creation, chatbots, data analytics platforms), simulation and role-play scenarios, pre- and post-tests, semi-structured interview guides, and observation checklists. Data collection occurred across five sequential phases:

1. Needs assessment: Initial observations and semi-structured interviews identified key issues, such as limited AI utilization, weak persuasive strategies, and suboptimal digital market penetration.
2. Suggestive communication training: Two-day workshops covered suggestion techniques, persuasive language, product storytelling, and consumer psychology, using role-plays and agritourism case studies to foster emotional engagement.
3. AI-driven digital marketing workshop: Hands-on sessions introduced AI tools for automated content generation, chatbots, market analysis, social media captions, and personalized promotions.
4. Digital marketing mentoring: Intensive collaborative guidance supported strategy implementation, including social media management, content optimization, market segmentation, product positioning, and international penetration.
5. Evaluation: Pre- and post-tests measured knowledge/skill gains; observations tracked behavioral changes; semi-structured interviews captured perceptions; and strategy implementation reviews assessed content quality and consumer interactions.

Data Analysis

Qualitative data from interviews, observations, and open-ended tests underwent thematic analysis to identify patterns in capacity building and strategy transformation. Quantitative pre/post-test scores received descriptive statistical analysis (means, paired t-tests) to quantify improvements. Triangulation across methods ensured comprehensive impact assessment.

This systematic, practice-oriented design facilitated human resource capacity enhancement and innovative marketing transformation, integrating suggestive communication with AI for Big Bee Farm's international competitiveness.

RESULTS

The community service activity (Pengabdian kepada Masyarakat, PKM) at Big Bee Farm, Thailand, yielded significant outcomes in human resource capacity and digital marketing strategy transformation. The findings revealed enhancements in suggestive communication skills, AI technology adoption, promotional strategies, and tourism appeal/sales potential.



Figure 1. PkM Documentation



Figure 1. Workshop Activity

First, participants, particularly marketing staff and tour guides, exhibited improved suggestive communication abilities. Pre-training communication patterns remained primarily informative and descriptive, focusing on product facts without strong persuasion. Post-training, participants demonstrated proficiency in crafting persuasive messages via storytelling techniques, positive

framing, and emotionally engaging language. In practice, tour guides integrated narratives on honey's health benefits, product authenticity, and unique experiences, rendering tourist interactions more compelling.

Second, AI adoption in marketing increased substantially. Participants utilized AI tools for social media content creation, product visual design, and engaging descriptions. Simple chatbots were implemented for rapid, consistent consumer responses. AI also facilitated market trend identification and consumer preference analysis, enabling data-driven marketing.

Third, promotional strategies shifted from conventional to integrated digital approaches. Big Bee Farm optimized platforms like Instagram, Facebook, and TikTok to reach broader, including international, audiences. Content emphasized tourist experiences, bee/honey education, and customer testimonials. Digital marketplace catalogs became more systematic and appealing, marking a transition from product-oriented to adaptive, customer-oriented marketing.

Fourth, qualitative indicators showed heightened tourism appeal and sales potential. Tourists displayed greater interest, evidenced by increased visit interactions, educational activity participation, and purchase intent. Digital content improvements boosted social media engagement (likes, comments, shares). Although quantitative sales data remained preliminary, market interest surges indicated sustainable business performance potential.

The integration of persuasive communication and AI technology proves effective in enhancing MSME competitiveness, particularly in agritourism. This finding supports Haleem et al. (2022), who affirmed that AI application in marketing boosts strategy effectiveness via consumer behavior analysis and data-based decisions. Similarly, Marvi et al. (2024) emphasized AI's role in fostering knowledge-based competitive advantages. Here, enhanced suggestive communication skills among participants illustrate how persuasive communication elevates consumer interactions and message appeal.

From a persuasive communication perspective, suggestion techniques serve as key instruments for building positive consumer perceptions. Suggestion operates through cognitive and emotional mechanisms, influencing consumers beyond rational processing via evocative narratives. This aligns with Lia & Wijaya, (2024), who found storytelling-based persuasive communication effective for trust and engagement. Furthermore, Qiu et al., (2025) demonstrated, through persuasion knowledge, that transparent, structured strategies enhance message acceptance, including AI-supported ones. In contrast, AI adoption amplified these communication strategies' effectiveness. AI enables precise message personalization, rendering content highly relevant to consumer needs and preferences. This corroborates Lee et al., (2024), who developed generative AI for personalized, adaptive customer experiences. Yao et al. (2025) further affirm that AI embeddedness in marketing systems improves

data-strategy-execution integration. In this PKM, generative AI elevated digital content quality, visuals, and narratives while accelerating production, allowing responsiveness to market dynamics.

Moreover, AI's role in global market expansion emerged as a pivotal finding. AI-supported digital platforms enabled Big Bee Farm to reach cross-border consumers without geographic constraints. This supports Bormane & Blaus, (2024) and Nurgul & Senyapar, (2024), who highlighted AI-driven digital marketing communication for efficient cross-border interactions. AI implementation in MSMEs also boosted promotional appeal and market penetration, as shown in PKM studies by Parini et al., (2025) and Saputro et al.(2026).

In community service contexts, these results reinforce prior evidence that AI training significantly uplifts business capacities. Alan Rakhmat Putra et al., (2025) showed ChatGPT socialization expanded rural MSME market shares, while Cahya et al. (2024) confirmed AI digital marketing training enhanced promotional technology use. Nalendra et al. (2023) and Zainal Abidin Achmad, (2024) similarly demonstrated AI's impact on product displays and digital strategies for consumer appeal.

Collaboration and innovation proved critical to program success. The participatory approach facilitated knowledge transfer between the PKM team and partners, streamlining technology adoption. Innovations stemmed from both technology and creative, contextual message packaging. This aligns with Juriah & Susilastuty (2024), who stressed that digital marketing's future relies on human creativity and communication alongside AI.

Analysis further revealed strong human-technology synergy for business competitiveness. Suggestive communication, representing human emotional bonding, combined with AI's analytical/automation capabilities, yields comprehensive marketing strategies. Jeovannie et al. (2025) support this, showing ChatGPT enhances message consistency, productivity, and consumer interactions as an augmenting tool rather than replacement.

This indicates holistic digital transformation in MSMEs requires integrating technology, communication, and collaboration. Technology-only training yields limited impacts, whereas combining suggestive communication and AI produced marked strategy shifts. This bolsters Susanti et al. (2024), who argued AI-based digital marketing success hinges on apt communication-technology integration.

Theoretically, this study contributes an integrative model merging persuasive communication with AI-driven marketing, extending frameworks from Haleem et al. (2022) and Marvi et al. (2024) to agritourism MSMEs. Practically, it provides a replicable PKM blueprint for sustainable technology-communication empowerment, enhancing international competitiveness in similar sectors.

CONCLUSION

The community service activity (Pengabdian kepada Masyarakat, PKM) conducted at Big Bee Farm, Thailand, demonstrates that the integration of persuasive communication and artificial

intelligence (AI) in marketing constitutes an effective strategy for enhancing the competitiveness of honey-based agritourism enterprises. The findings indicate that training in suggestive communication improves participants' ability to design and deliver more persuasive, emotionally engaging, and consumer-oriented messages. Furthermore, the adoption of AI in digital marketing enhances the quality and efficiency of promotional content, supports more accurate market analysis, and drives a shift from conventional to integrated, data-driven marketing strategies. These changes are associated with observable improvements in tourism appeal and sales potential, as reflected in higher consumer engagement both on-site and through digital platforms.

Theoretically, this study underscores that AI-driven marketing alone is insufficient; sustainable competitive advantage emerges when technology is combined with strategic communication and human-centered practices. The resulting model highlights the importance of aligning AI tools with persuasive, narrative-based communication, human creativity, and collaborative learning in MSME contexts. Practically, the findings suggest that community-service programs for MSMEs should adopt a holistic approach that integrates digital-technology training, persuasive-communication skills, and ongoing mentoring. This approach not only strengthens managerial and marketing capacities but also prepares agritourism actors for international market engagement through digital platforms.

For future research, the study opens several avenues. First, longitudinal and mixed-methods designs are needed to track the long-term impact of AI-integrated marketing training on sales performance and business growth. Second, more advanced AI applications such as predictive analytics, marketing automation, and integration with global e-commerce platforms should be explored to deepen competitiveness. Third, comparative studies across different agritourism or MSME subsectors can test the transferability of this integrated model. Finally, research on collaboration networks involving educational institutions, government agencies, and industry stakeholders can help scale up digital-innovation programs and support broader economic empowerment.

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