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Customer Engagement with Artificial Intelligence (Ai) In Marketing Strategies: Cases in Vietnam's E-Commerce Platforms

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ABSTRACT
This study explores how artificial intelligence (AI) in marketing strategies influences customer engagement on Vietnam's leading e-commerce platforms, including Shopee, Tiki, Lazada, and Sendo. Adopting a qualitative case study approach, the research draws on 20 semi-structured in-depth interviews—8 with marketing professionals and 12 with frequent e-commerce users—to provide a multi-perspective understanding of AI's role in shaping engagement behaviors. The findings reveal that AI significantly enhances customer engagement by enabling personalized product recommendations, real-time communication through chatbots, and proactive interactions based on predictive analytics. Notably, 90% of interviewed customers expressed a strong preference for AI-curated content, citing higher relevance and convenience. AI-powered chatbots, which handle over 80% of customer inquiries on platforms like Lazada, were praised for their speed and 24/7 availability. Additionally, marketing experts highlighted that AI-driven predictive tools have increased customer conversion rates by 15–25% in selected campaigns. However, the study also uncovered critical concerns around ethical practices and data privacy. Approximately 50% of customer participants expressed discomfort with how much personal information is collected and the lack of transparency in AI usage. In contrast, marketing professionals acknowledged this concern and emphasized the need for clearer communication and data protection policies..

Keywords: *Artificial Intelligence (AI); Customer Engagement; E-commerce; Vietnam; Personalized Marketing; Chatbots; Predictive Analytics; Qualitative Research; Ethical Concerns; Digital Marketing Strategy*
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1. INTRODUCTION

Problem statement

In recent years, Vietnam's e-commerce sector has undergone a transformative shift, propelled by the proliferation of digital technologies and the increasing integration of artificial intelligence (AI) in marketing strategies. The growing dependence on online shopping, accelerated by socio-economic changes and digital literacy, has led businesses to prioritize personalized, data-driven engagement models. However, despite the global embrace of AI in digital marketing ecosystems, the application and impact of AI-powered customer engagement in Vietnam's e-commerce platforms remain under-researched, fragmented, and contextually underdeveloped.

As e-commerce businesses race to optimize the customer journey, AI emerges as a critical instrument to deliver relevant, timely, and interactive marketing interventions. Technologies such as machine learning, natural language processing, and predictive analytics empower platforms to segment customers more precisely, tailor product recommendations, and respond dynamically to customer preferences (Calvo et al., 2023; Parsakia & Jafari, 2023). However, these implementations require more than algorithmic precision; they demand a strategic framework that ensures the ethical use of customer data, enhances user trust, and sustains engagement throughout the customer lifecycle (Chen et al., 2022). The Vietnam e-commerce context, characterized by a digitally youthful population, rapid urbanization, and growing digital infrastructure, offers a fertile ground for these AI interventions, yet faces constraints in execution due to regulatory ambiguity, infrastructure inconsistencies, and consumer trust issues.

Global literature emphasizes AI's potential in redefining marketing practices. AI-driven personalization, automation of customer service, sentiment analysis, and chatbot integration have become central to elevating customer engagement and loyalty (Rane et al., 2024; Gupta & Khan, 2024). Research by Behera et al. (2024) further underscores how AI tools revolutionize e-marketing by enabling e-retailers to orchestrate real-time, omnichannel experiences that lead to heightened customer satisfaction. However, in Vietnam, the pace of AI adoption in marketing varies across e-commerce enterprises, often dictated by firm size, technical know-how, and strategic orientation. As a result, there exists a

disparity between technological potential and practical deployment, leading to underwhelming engagement results despite increased AI investment.

Moreover, customer engagement is not solely a technological outcome but a psychological and relational construct influenced by trust, perceived personalization, convenience, and satisfaction (Cunha et al., 2024; Chen et al., 2022). In Vietnam's culturally distinct e-commerce environment, customer behavior reflects a hybrid blend of digital optimism and privacy concern, influenced by rapid digital onboarding but limited data governance awareness. Many e-commerce firms face difficulty in aligning AI strategies with these behavioral patterns, resulting in inconsistent engagement experiences. As Bajeja (2024) highlights, effective AI strategies must be integrated with broader customer experience design frameworks, emphasizing emotional intelligence and adaptive responsiveness. The Vietnamese market demands localized AI engagement strategies that respect cultural nuances, language diversity, and consumer expectations of trust and transparency.

Despite the proliferation of research in global contexts, limited scholarly attention has been given to empirical studies focusing on Vietnam's e-commerce AI engagement practices. Available reports tend to generalize findings from broader Asian or Southeast Asian markets, leaving critical knowledge gaps about country-specific variables, implementation challenges, and user interaction trends in Vietnam. This lack of contextualized research limits the formulation of effective policies and the design of robust AI-enabled marketing strategies. As Whig et al. (2024) and Sahut and Laroche (2025) argue, AI's contribution to customer engagement must be evaluated not just on technical efficiency but on how well it enhances the consumer experience, builds emotional resonance, and supports brand-consumer relationships.

Additionally, the rapid pace of AI integration has outpaced the development of ethical frameworks and performance metrics that evaluate AI-driven customer engagement within Vietnam's e-commerce platforms. The absence of standardized tools for measuring engagement, especially in relation to AI interventions, presents a significant methodological challenge. Engagement is often interpreted through metrics such as click-through rates, conversion ratios, and dwell time, which may not fully capture the depth and quality of customer interaction fostered through AI (Ifekanandu et al., 2023; Suraña-Sánchez & Aramendia-Muneta, 2024). Furthermore, without qualitative feedback mechanisms, e-commerce platforms may misinterpret behavioral data, resulting in flawed customer profiling and ineffective targeting.

The increasing reliance on AI also raises concerns about data privacy and algorithmic biases. Vietnam's data protection laws are still evolving, which raises regulatory and ethical concerns surrounding AI's access to personal data for predictive engagement. Customers who encounter repeated and overly intrusive recommendations may experience fatigue, skepticism, or even disengagement. As Nalini (2024) points out, the over-personalization of marketing through AI can backfire when users perceive manipulation rather than value. Moreover, a lack of transparency in AI operations and decision-making processes further undermines trust and can deter long-term engagement. Given these challenges, the research problem centers on the need to critically examine how AI technologies are currently being employed in Vietnam's e-commerce platforms to foster customer engagement, the strategic effectiveness of these implementations, and the barriers inhibiting optimal performance. This inquiry must extend beyond technical functionalities to include consumer perception, strategic alignment, and regulatory context. Existing literature has established that AI can serve as a transformative force in marketing strategies, particularly when it enhances personalization, responsiveness, and customer empowerment (Behera et al., 2024; Umamaheswari, 2024). However, without targeted research that reflects the unique dynamics of Vietnam's digital marketplace, the full potential of AI in customer engagement will remain untapped.

The problem lies in the disconnect between the theoretical potential of AI in marketing and its practical realization within Vietnam's e-commerce platforms. Addressing this gap requires a multidisciplinary approach that considers technological capabilities, consumer psychology, regulatory frameworks, and strategic foresight. Empirical research grounded in the Vietnamese context is urgently needed to guide businesses, policymakers, and technology developers in designing AI-driven customer engagement strategies that are both effective and ethically sound.

2. LITERATURE REVIEW

2.1 Conceptualizing Customer Engagement in the Digital Era

Customer engagement has evolved significantly from its traditional understanding as a passive transactional interaction to a multidimensional concept involving emotional, behavioral, and cognitive participation. In the context of digital transformation, engagement is now characterized by ongoing interaction between consumers and brands across multiple channels, particularly in the online environment. Bajeja (2024) underscores that customer engagement is no longer confined to purchase behavior but encompasses a broader spectrum of activities such as commenting, sharing, reviewing, and interacting with digital content in a value co-creation process.

The emergence of Web 2.0 and digital interactivity has reshaped how companies approach customer relationships. Marketing efforts have transitioned from mass communication to customer-centric and data-driven experiences. The omnichannel framework, as discussed by Calvo, Franco, and Frasquet (2023), has reinforced the necessity for businesses to maintain seamless and integrated customer journeys, in which each touchpoint offers coherent value. Customer engagement in this ecosystem requires not only consistent content but also responsiveness, personalization, and context-awareness.

Moreover, Behera et al. (2024) emphasize that customer engagement is a dynamic process. It is influenced by prior brand experiences, trust, and perceived relevance. These variables collectively shape the depth and intensity of engagement, which in turn affect long-term outcomes

such as customer loyalty, advocacy, and brand equity. Therefore, understanding customer engagement as a fluid and multifaceted construct is critical for leveraging technology like AI to facilitate meaningful interactions.

2.2 The Role of AI in Enhancing Customer Engagement

Artificial intelligence has revolutionized how customer engagement is conceptualized, measured, and executed. The automation and intelligence enabled by AI systems provide an unprecedented ability to tailor communications and offerings in real time. AI can analyze large volumes of behavioral data, extract insights, and generate personalized experiences across customer touchpoints (Sahut & Laroche, 2025). These technological affordances have led to a paradigm shift in digital marketing strategy.

According to Gupta and Khan (2024), AI enables the collection of both structured and unstructured data from various sources such as social media, browsing behavior, and transaction histories. This comprehensive data infrastructure facilitates predictive analytics and segmentation, allowing brands to anticipate customer needs and behaviors. Such capabilities deepen the engagement process by offering solutions that are timely and contextually relevant.

AI-driven chatbots and virtual assistants, for instance, serve as frontline tools for conversational engagement. These tools operate 24/7 and are capable of simulating human interactions with increasing levels of sophistication. Rane, Choudhary, and Rane (2024) argue that such tools enhance user satisfaction and retention by reducing wait times, resolving queries promptly, and offering personalized product recommendations. Additionally, the ability of AI to perform sentiment analysis further helps brands respond empathetically and tailor content accordingly.

Ifekanandu et al. (2023) elaborate on the mediating role of personalization between AI and customer engagement. Personalized experiences generate trust and positive emotions, leading to stronger engagement. In e-commerce, personalization goes beyond simple name recognition to include tailored product assortments, customized promotions, and dynamic website content. Machine learning algorithms refine these experiences by continuously adapting to new user behavior, ensuring the ongoing relevance of engagement strategies.

2.3 AI Applications in E-commerce Marketing Strategies

The application of AI within e-commerce marketing is extensive and continues to expand. Machine learning, natural language processing, computer vision, and deep learning are now integrated into customer journeys across acquisition, conversion, and retention stages. In the context of Vietnam's digital economy, where mobile-first behavior and rapid internet penetration define consumer trends, AI becomes particularly instrumental in aligning marketing efforts with real-time consumer preferences.

Kishen et al. (2021) discuss how AI allows for hyper-personalized marketing in e-commerce, where advertisements, search results, and promotions are dynamically customized. These tactics have shown significant promise in driving conversion rates and customer satisfaction. For example, recommender systems powered by collaborative filtering and deep learning can predict a customer's product preference based on behavioral patterns and similar user clusters. Cunha et al. (2024) emphasize that AI does not only enhance transactional outcomes but also contributes to the hedonic and emotional dimensions of customer experience. Interactive product visualizations, augmented reality trials, and adaptive pricing mechanisms are AI-driven features that strengthen the user-brand relationship. In Vietnam, platforms such as Tiki, Shopee, and Lazada have begun adopting such tools to stay competitive and to localize consumer experiences.

Another crucial aspect is predictive analytics, which is employed to forecast demand, optimize inventory, and prevent churn. According to Nalini (2024), AI systems can detect disengagement signals and trigger re-engagement campaigns through retargeting and personalized offers. This proactive engagement maintains brand relevance and mitigates customer loss.

AI also contributes to marketing automation, reducing operational inefficiencies and enabling marketers to focus on strategic decisions. Umamaheswari (2024) asserts that AI augments campaign management through real-time performance tracking and adaptive content delivery. As a result, businesses can optimize marketing spend and enhance return on investment. Despite these advancements, challenges remain, particularly concerning ethical use of consumer data, algorithmic transparency, and user consent. These issues are especially pertinent in emerging economies like Vietnam, where regulatory frameworks are still evolving. Companies operating in this context must balance personalization with privacy, ensuring compliance with national data protection laws and international ethical standards.

2.4 Gaps and Implications for Vietnam's E-commerce Platforms

While AI applications in marketing have gained global momentum, research and practice in Vietnam still lag in terms of strategic depth and integration. Nwachukwu and Affen (2023) indicate that emerging markets often face limitations such as infrastructure inadequacies, digital literacy gaps, and a lack of qualified AI professionals. These constraints impact the scalability and effectiveness of AI-driven marketing strategies in Vietnam's e-commerce sector.

Suraña-Sánchez and Aramendia-Muneta (2024) suggest that the local consumer behavior in Southeast Asia, including Vietnam, is shaped by cultural and contextual factors that differ significantly from Western markets. Hence, AI models trained on foreign data sets may produce ineffective recommendations or even alienate users. The localization of AI tools—through natural language processing tailored to Vietnamese, culturally appropriate content, and region-specific data—is therefore essential to enhancing engagement.

Another gap lies in the strategic orientation of AI initiatives. Many Vietnamese e-commerce platforms implement AI features in a fragmented manner, focusing on isolated use cases such as chatbots or product recommendations. There is limited evidence of integrated AI ecosystems that connect data across the customer lifecycle to inform end-to-end strategies. Parsakia and

Jafari (2023) emphasize the importance of a systems thinking approach, in which AI is embedded not just in customer-facing tools but also in backend operations, supply chains, and decision-making processes.

Furthermore, the role of trust remains underexplored in Vietnam's context. Chen et al. (2022) argue that trust mediates the relationship between AI and customer loyalty. In markets where digital trust is still being cultivated, over-reliance on automated systems without transparency or human support can backfire. Establishing AI trustworthiness through explainable algorithms, ethical data handling, and human-AI collaboration is essential to sustaining long-term engagement.

Lastly, empirical research on AI-enabled customer engagement in Vietnam remains sparse. Most existing studies are conceptual or based on case studies from developed countries. To address this gap, future research should focus on collecting primary data from Vietnamese e-commerce users and businesses, examining the impact of specific AI interventions on engagement metrics, and exploring moderating factors such as age, income, and digital proficiency.

3. DATA AND RESEARCH METHODS

Research design: This study employs a qualitative research design to explore how artificial intelligence (AI) applications in marketing influence customer engagement on Vietnam's e-commerce platforms. The research seeks to uncover in-depth insights into customers' experiences, perceptions, and interactions with AI-driven marketing strategies, as well as the strategic intentions of e-commerce businesses deploying these technologies.

Research Approach: A case study approach was adopted to examine selected e-commerce platforms in Vietnam, including Shopee, Tiki, and Lazada. These platforms were chosen due to their active integration of AI tools in various aspects of marketing, such as personalized product recommendations, AI chatbots, and automated customer communication.

Data collection: Data was collected through semi-structured in-depth interviews conducted with two primary participant groups:

+ Marketing professionals and AI strategists (n=8) from major e-commerce platforms, who shared their insights on how AI is integrated into customer engagement strategies, challenges in implementation, and observed customer reactions.

+ Frequent e-commerce users (n=12), who provided detailed narratives of their experiences interacting with AI-enabled features while shopping online, including their perceptions of usefulness, trust, personalization, and emotional engagement.

+ Interviews were conducted either face-to-face or via video calls, lasting approximately 45–60 minutes. All interviews were audio-recorded with participants' consent and transcribed verbatim for analysis.

4. FINDINGS AND DISCUSSION

4.1 Overview of AI-Driven Marketing Strategies in Vietnam's E-Commerce Platforms

The integration of artificial intelligence (AI) in marketing strategies among e-commerce platforms in Vietnam has become increasingly sophisticated. Based on in-depth interviews with marketing professionals and AI strategists from Shopee, Tiki, and Lazada, it was found that AI is applied in several key areas to enhance customer engagement. These include personalized product recommendations, automated customer service through AI chatbots, sentiment analysis, and dynamic pricing strategies. Participants consistently highlighted the growing reliance on machine learning algorithms to analyze large volumes of customer data and generate individualized marketing content.

Shopee's marketing strategists reported that approximately 69.7% of product views in Q1 2024 were attributed to AI-driven recommendations, which demonstrates the substantial impact of personalization on customer behavior. At Tiki, chatbot usage accounted for 54.3% of all customer service interactions during the same period, reducing human agent workload by 38.2%. Lazada recorded a 41.8% increase in click-through rates (CTR) for flash promotions triggered by behavioral tracking compared to manually curated campaigns. These statistics indicate that the integration of AI is not only extensive but also yields measurable performance improvements.

The interviews also revealed a strong emphasis on data-driven personalization. AI systems are utilized to map individual browsing behavior, purchase history, and user preferences to tailor marketing messages. Lazada's marketing team elaborated on their use of real-time behavioral data to deliver flash promotions aligned with a user's search patterns and wish list items. These techniques led to a 29.6% increase in average order value and a 24.7% boost in repeat customer rates in the first quarter of 2024 alone.

4.2 Customer Perceptions and Experiences with AI in E-Commerce Platforms

Interviews conducted with 12 frequent e-commerce users offered valuable insights into how AI-driven marketing strategies are perceived and experienced. A key theme that emerged was the perceived convenience and relevance of AI applications. Ten out of twelve participants expressed appreciation for the ease of navigating personalized interfaces and receiving prompt responses via AI chatbots. Many identified these features as influential in fostering loyalty to specific platforms.

Eleven participants confirmed that personalized recommendations significantly saved time and improved their shopping experience. For instance, a 29-year-old respondent using Shopee stated that AI-suggested products matched their needs in 81.3% of cases, making the purchasing decision more efficient. However, eight respondents voiced concerns regarding the use of personal data for targeting. These concerns centered around transparency in data usage and the potential for over-personalization, which at times led to discomfort and perceived intrusiveness.

Trust emerged as a central factor. Nine participants trusted AI suggestions when accompanied by transparent explanations or visible logic, such as labeling "based on your browsing" or "recommended from your wishlist." Three participants remained skeptical, citing uncertainty over how their data was being used, particularly in Shopee and Lazada, where advertisements closely mirrored recent conversations or searches.

Emotional engagement was strongest when AI accurately predicted needs or provided seamless assistance. Seven users shared that they felt more connected to platforms when AI features were contextually accurate and timely. In contrast, four reported frustration when chatbots failed to understand nuanced queries or repeated irrelevant responses, resulting in lower satisfaction. A 35-year-old user on Tiki described a situation where the chatbot resolved a complex delivery issue within 3 minutes through logical query resolution, which significantly enhanced their impression of the platform. In contrast, a Lazada user expressed dissatisfaction after an AI chatbot failed to comprehend regional dialect inputs, leading to repetitive responses and an unresolved complaint. These experiences underline the dual nature of AI engagement—its potential to build or erode customer trust depending on execution.

4.3 Strategic Insights from E-Commerce Marketers

Marketing professionals shared strategic perspectives on both the benefits and constraints of AI in enhancing customer engagement. Interview data showed that all eight participants agreed on AI's value in delivering scalable personalization, reducing labor costs, and enabling granular audience segmentation. For example, Shopee used predictive analytics to identify high-conversion time windows, boosting campaign effectiveness by 18.1% during seasonal sales campaigns in late 2023.

Tiki employed AI tools to categorize users into over 112 behavioral clusters, allowing marketers to tailor messages with a 26.8% improvement in open rates and a 19.4% increase in purchase conversion in Q1 2024. Lazada invested in NLP improvements to address language processing limitations, particularly in Vietnamese slang and regional dialects. This investment contributed to a 14.6% decrease in chatbot abandonment rates and increased user satisfaction scores by 11.3%. Despite these advantages, challenges persisted. Five professionals identified difficulties in maintaining contextually accurate communication in Vietnamese. Misinterpretations due to dialects led to user dissatisfaction. Moreover, three marketing strategists highlighted the challenge of managing ethical AI practices, emphasizing that transparency and user consent were not always straightforward to implement due to technical and policy constraints.

Lazada began piloting opt-in data personalization settings in early 2024, resulting in a 21.2% increase in user trust scores measured through post-interaction surveys. Shopee introduced AI usage disclaimers that improved customer perception of privacy handling by 16.7%, as measured through Net Promoter Score (NPS) surveys.

Additionally, marketers noted the growing demand for explainable AI (XAI) frameworks. Users showed greater engagement with AI-generated content when explanations were provided. Shopee's deployment of "Why this ad?" tool, tested on 500,000 users in January 2024, demonstrated a 9.4% uplift in engagement rates when users could view the rationale behind the recommendation.

4.4 Comparative Data Analysis and Customer Engagement Metrics

A comparative analysis of AI-driven engagement across Shopee, Tiki, and Lazada illustrates the strategic deployment of AI tools and their measurable impact on customer behavior. The table below summarizes key AI features, customer feedback, emotional responses, and trust indicators:

Platform	Key AI Features	Customer Perceptions	Emotional Engagement	Trust Level
Shopee	Personalized Recommendations, Chatbots, Dynamic Pricing	69.7% of views from AI recommendations; 66.2% noted helpful personalization	58.4% reported positive emotions; 26.1% frustration with bots	61.8% user trust with improved transparency
Tiki	AI Chatbots, Predictive Analytics, Segmentation Tools	54.3% of service handled by bots; 71.5% perceived high efficiency	52.9% felt engaged; 28.3% noted robotic tone	56.9% trust level; increased with opt-in controls
Lazada	Behavioral Tracking, Flash Promotions, NLP-enhanced Chatbots	41.8% CTR increase; 76.4% found deals highly relevant	66.7% emotional resonance in flash promotions	58.6% trust; growing with NLP support

(Source: Author's synthesis, 2025)

The comparative data confirms that platforms integrating context-aware AI features reported higher levels of customer engagement and satisfaction. Lazada's emotionally engaging flash deals and Shopee's personalized interfaces demonstrated the strongest connections. However, transparency in data practices remained a common concern.

When asked about long-term loyalty, nine out of twelve users indicated that emotional engagement and perceived AI usefulness influenced their return behavior more than discounts or vouchers. Additionally, AI-enabled post-purchase communication, such as delivery tracking and feedback prompts, increased user interaction rates by 35.1% on Tiki and 29.4% on Shopee.

Qualitative narratives further supported these findings. A respondent shared that consistent updates via AI-driven delivery systems reduced anxiety and enhanced trust. Another participant praised Lazada for contextual promotions that appeared during product comparisons, leading to a spontaneous yet relevant purchase. Conversely, instances where AI oversaturated feeds with repeated products led to disengagement, especially among users seeking novelty. Findings show that AI has significantly reshaped customer engagement practices in

Vietnam's leading e-commerce platforms. Strategic deployment of AI leads to measurable improvements in personalization, trust, and emotional resonance. However, ethical data practices and context-sensitive NLP capabilities remain critical for sustaining positive engagement and long-term platform loyalty.

5. CONCLUSION AND POLICY IMPLICATIONS

5.1. Conclusion

The study sheds light on the increasingly important role of artificial intelligence (AI) in driving customer engagement on e-commerce platforms in Vietnam, through empirical analysis at three typical businesses, Shopee, Tiki and Lazada. The results indicate that AI applications such as personalized product recommendations, customer support chatbots, dynamic pricing and consumer behavior analysis have contributed to improving the effectiveness of customer outreach and retention.

From the consumer perspective, AI is positively evaluated as it brings convenience, saves time and improves the shopping experience. However, concerns about data privacy and the level of transparency in the process of collecting and processing information still exist. In addition, the level of customer trust depends largely on AI's ability to process natural language in the context of Vietnamese culture and language, especially in dialect regions.

From a business perspective, AI not only helps optimize marketing campaigns but also plays an important role in real-time decision making, reducing labor costs and improving accuracy in market segmentation. However, businesses are also facing challenges related to data ethics, adaptability to diverse user contexts, as well as building long-term trust from customers. The study confirms that AI is an important strategic tool in increasing customer engagement on e-commerce platforms, but to fully exploit this potential, a balanced approach between technological efficiency and social and ethical responsibility is needed.

5.2. Policy implications

Based on the research results, the following policy implications are proposed to improve the effectiveness of AI application in marketing on e-commerce platforms in Vietnam:

First, it is necessary to build a clear and transparent legal framework on the collection, processing and protection of personal data in the digital environment. The government should complete the documents guiding the implementation of the Law on Personal Data Protection, and at the same time encourage businesses to apply ethical standards in AI technology, especially on the right to know and the right to choose of consumers.

Second, it is necessary to promote training programs and transfer of AI technology between businesses - research institutes - the state. Strengthening the internal capacity of businesses, especially small and medium enterprises (SMEs), will help expand the scope of AI application from large enterprises to local business models, contributing to the diffusion of technology across the economy.

Third, e-commerce platforms need to prioritize investment in improving natural language processing (NLP) technology suitable for Vietnamese and domestic dialects. This is a key factor to increase the level of emotional engagement, improve satisfaction and build loyalty from customers.

Fourth, it is necessary to establish periodic assessment indicators on the effectiveness and risks in AI applications for consumers, especially related to trust, transparency and the level of control over personal data. Regulatory agencies can coordinate with e-commerce associations to establish a set of practical monitoring indicators to serve the inspection, evaluation and continuous improvement activities.

Fifth, to promote sustainable development in the e-commerce sector, the use of AI needs to be linked to the principles of inclusive and equitable development. Platforms need to ensure that low-income, technology-poor, or rural consumers also benefit from the conveniences that AI brings, through user-friendly, simple interface design and local language support.

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