The Impact of Social Commerce Driven by Trends and Technologies on Online Shopping Attitudes and Behaviors toward AI Search for Brands and Product Comparisons in the Age of Digitalization in Vietnam

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Abstract: The advent of artificial intelligence (AI) in the realm of social commerce has precipitated a paradigm shift in consumer behavior, particularly within the context of emerging economies such as Vietnam, where digital transformation is accelerating at an unprecedented pace (Nguyen et al., 2022; Tran & Le, 2023). This study delves into the multifaceted influence of AI-powered search and recommendation mechanisms on consumer attitudes, decision-making processes, and trust dynamics within the rapidly evolving digital commerce ecosystem (Huang & Rust, 2021; Li et al., 2023). Employing a robust mixed-methods research design, the investigation integrates a quantitative survey (n = 300) with qualitative in-depth interviews (n = 30) to rigorously examine six pivotal dimensions: AI-mediated information quality, entertainment-driven shopping experiences, the personalization paradox, algorithmic reliability, social influence, and interactivity (Zhang et al., 2022; Wang & Kim, 2023). Advanced analytical techniques, including Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM), were employed to dissect the intricate relationships between AI-driven engagement and key consumer behavior outcomes, such as decision autonomy, trust, and purchase intentions (Hair et al., 2021; Kline, 2023). The empirical findings underscore the profound impact of AI-driven social commerce on consumer psychology, offering novel theoretical insights into the interplay between algorithmic decision-making and consumer trust in emerging markets (Gefen et al., 2023; Kumar et al., 2022). Furthermore, the study provides actionable strategic recommendations for e-commerce platforms aiming to refine AI-based recommendation systems and enhance personalization frameworks, thereby fostering greater consumer engagement and loyalty in culturally nuanced environments (Venkatesh et al., 2022; Dwivedi et al., 2023).

Keywords: Social commerce, artificial intelligence, consumer trust, algorithmic decision-making, digital transformation, Vietnam, purchase intention, consumer psychology, emerging markets, personalization paradox, algorithmic reliability.

1. INTRODUCTION

The emergence of AI-driven social commerce signifies a transformative paradigm in digital consumerism, fundamentally reconfiguring the mechanisms through which consumers interact with brands and execute purchasing decisions (Kaplan & Haenlein, 2022). AI-mediated recommendation algorithms and personalized search functionalities, embedded within prominent social commerce platforms such as TikTok Shop, Shopee Live, and Facebook Marketplace, have precipitated a shift from traditional intent-driven shopping models to dynamic, algorithmically curated consumer experiences (Nguyen & Ho, 2022). While the capacity of AI to enhance search relevancy and streamline product comparisons has been extensively

documented (Gretzel et al., 2020), its broader implications for consumer trust, decision-making rationality, and autonomy remain insufficiently explored, particularly within the context of emerging markets such as Vietnam (Pham et al., 2022).

Although the role of AI in Western e-commerce ecosystems has been the subject of considerable scholarly inquiry (Gretzel et al., 2020; Huang & Rust, 2021), empirical investigations into AI-driven social commerce in Vietnam remain conspicuously absent from the literature. This gap is particularly salient given the rapid expansion of Vietnam's digital economy, which is projected to grow at an annual rate of 25% (Statista, 2023). Such growth underscores the urgency of understanding how AI-driven features—ranging from personalized recommendations to algorithmic decision-making— reshape online shopping behaviors in culturally and economically distinct contexts. This study addresses this critical lacuna by conducting a comprehensive empirical investigation into the cognitive, emotional, and behavioral dimensions of AI-driven shopping experiences, thereby contributing to a more nuanced understanding of the interplay between AI technologies and consumer behavior in emerging markets.

2. RESEARCH PROBLEM AND RESEARCH GAP

2.1 Research Problem

The rapid proliferation of artificial intelligence (AI) within Vietnam's social commerce ecosystem has introduced transformative shifts in consumer behavior, necessitating a comprehensive examination of its implications for trust dynamics, decision-making rationality, and susceptibility to algorithmic influence. While AI-driven technologies have been lauded for their ability to enhance search efficiency, deliver hyper-personalized recommendations, and optimize user engagement (Gefen & Straub, 2003; Lepri et al., 2021), their deployment has simultaneously engendered critical concerns surrounding data privacy, algorithmic transparency, and the propensity for entertainment-driven impulse purchases. These issues are particularly salient in emerging markets like Vietnam, where regulatory frameworks remain nascent, and consumer awareness of AI's operational mechanics is limited (Nguyen et al., 2021). Consequently, there is an urgent need to investigate how AI-mediated social commerce platforms influence consumer behavior, particularly in terms of trust formation, decision autonomy, and the psychological impact of algorithmically curated shopping experiences.

2.2 Research Gap

While extant literature has extensively explored the role of AI in traditional e-commerce contexts, emphasizing its capacity to streamline transactional processes and enhance customer satisfaction (Wang & Kosinski, 2023), the intersection of AI-driven personalization, algorithmic reliability, and social commerce remains underexplored. This gap is especially pronounced in the context of Vietnam's rapidly evolving digital economy, which is characterized by high mobile penetration rates, a youthful and tech-savvy population, and a burgeoning social commerce sector (Statista, 2023). Existing frameworks fail to adequately address how AI-powered social commerce platforms reshape consumer decision-making paradigms, particularly in relation to the following phenomena:

1. Information Asymmetry in AI Search Mechanisms: The extent to which AI-mediated search functionalities exacerbate or mitigate information disparities between consumers and platforms, and the implications for consumer empowerment and market efficiency (Gefen & Straub, 2003).

2. Entertainment-Driven Consumer Decision Fatigue: The psychological and behavioral consequences of entertainment-centric shopping experiences, including their impact on decision fatigue, impulse purchasing, and long-term brand loyalty (Li et al., 2021).

3. Personalization vs. Privacy Paradox: The tension between consumers' desire for personalized experiences and their concerns over data privacy, surveillance, and the ethical use of personal data (Bleier & Eisenbeiss, 2018).

4. Trust in Algorithmic Recommendations vs. Perceived Fairness: The dynamics of consumer trust in AI-driven recommendations, particularly in relation to perceptions of algorithmic fairness, transparency, and accountability (Binns et al., 2018).

Addressing these underexplored dimensions is not only critical for advancing theoretical understanding but also for providing actionable insights to stakeholders navigating the complexities of AI-driven social commerce. For instance, e-commerce platforms can leverage the findings to design more transparent and ethical AI systems that balance personalization with privacy concerns, thereby fostering greater consumer trust and engagement. Policymakers, on the other hand, can use the insights to develop regulatory frameworks that promote algorithmic accountability and protect consumer

rights in the digital marketplace. By bridging the gap between theory and practice, this study aims to contribute novel insights into the interplay between AI technologies and consumer behavior, while offering practical recommendations for stakeholders operating in emerging markets like Vietnam.

3. RESEARCH OBJECTIVES

The primary objective of this study is to construct and empirically validate a comprehensive conceptual model that elucidates the intricate relationships between AI-driven features and consumer behaviors within Vietnam's dynamic social commerce ecosystem. By integrating theoretical insights from consumer psychology, algorithmic decision-making, and digital transformation (Huang & Rust, 2021; Li et al., 2023), this research aims to provide a nuanced understanding of how AI technologies shape consumer attitudes, trust, and purchasing decisions. Specifically, the study seeks to achieve the following objectives:

1. Examine the **Effect of AI-Powered Information Quality on Consumer Trust and Purchase Intention**: Utilizing Structural Equation Modeling (SEM), this objective aims to validate both direct and indirect pathways through which AI-mediated information quality influences consumer trust and purchase intentions (Gefen et al., 2003; Zhang et al., 2022). By assessing the reliability, accuracy, and relevance of AI-generated content, the study will uncover how information quality serves as a critical determinant of consumer confidence and decision-making in social commerce platforms (Wang & Kim, 2023).

2. Analyze the **Impact of Entertainment-Driven AI Shopping on Rational Decision-Making**: Through moderated regression analysis, this objective will investigate the cognitive biases introduced by entertainment-centric shopping experiences (Li et al., 2021). Specifically, it will assess how AI-driven gamification, interactive content, and immersive features influence consumers' ability to make rational, informed decisions, potentially leading to decision fatigue or impulse purchasing behaviors (Kumar et al., 2022).

3. Investigate the **Personalization Paradox**: This objective employs mediation analysis to explore the trade-off between perceived relevance and intrusiveness in AI-driven personalization (Bleier & Eisenbeiss, 2018). By incorporating data privacy concerns as a moderating factor, the study will examine how consumers navigate the tension between desiring tailored recommendations and fearing the misuse of their personal data (Venkatesh et al., 2022).

4. Assess the **Influence of Perceived Algorithmic Reliability on Trust and Purchase Behaviors**: Using latent variable path modeling, this objective will evaluate how consumers' perceptions of algorithmic reliability—defined by accuracy, consistency, and transparency—impact their trust in AI-driven recommendations and subsequent purchase behaviors (Binns et al., 2018; Dwivedi et al., 2023). This analysis will provide insights into the mechanisms through which algorithmic trust is established and maintained.

5. Evaluate the **Impact of AI-Driven Social Influence on Consumer Autonomy**: Through hierarchical multiple regression models, this objective will examine how AI-powered social influence mechanisms—such as user reviews, influencer endorsements, and social proof—affect consumers' sense of autonomy in their purchasing decisions (Nguyen et al., 2021). The study will explore whether these features empower consumers or inadvertently constrain their decision-making independence (Gretzel et al., 2020).

6. Examine **How AI Interactivity Enhances Consumer Engagement and Perceived Brand Value**: Employing multi-group Confirmatory Factor Analysis (CFA), this objective will analyze how AI-driven interactivity—such as chatbots, virtual assistants, and real-time recommendations—enhances consumer engagement and perceived brand value (Kaplan & Haenlein, 2022). By comparing different demographic segments, the study will identify variations in how diverse consumer groups respond to interactive AI features (Pham et al., 2022).

By addressing these objectives, the study will not only advance theoretical understanding of AI-driven social commerce but also provide actionable insights for e-commerce platforms, marketers, and policymakers. For instance, the findings can guide the design of AI systems that balance personalization with privacy, enhance algorithmic transparency, and optimize interactive features to foster consumer trust and engagement (Hair et al., 2021; Kline, 2023). Additionally, the study's focus on Vietnam's unique digital economy will offer tailored recommendations for stakeholders operating in emerging markets, where cultural and infrastructural nuances significantly influence consumer behavior (Statista, 2023).

4. RESEARCH METHODOLOGY

A mixed-methods research approach was adopted to triangulate findings from quantitative and qualitative data, ensuring a comprehensive understanding of the research problem. The study integrates a quantitative survey (n = 300) with qualitative in-depth interviews (n = 30), allowing for both statistical generalizability and deep contextual insights. This dual approach enables the validation of findings across different data sources, enhancing the robustness and reliability of the results.

Demographic Profile of Respondents

To ensure robust representation of Vietnam's diverse online shopper population, this study examined a well-balanced sample across different demographic segments, including age, gender, education level, income, digital proficiency, and online shopping behavior. The majority of respondents were within the 18-34 age group (75%), reflecting the dominant demographic of Vietnam's digital consumers. Gender representation was relatively balanced, with 55% female, 44% male, and 1% identifying as non-binary or preferring not to disclose. Regarding education levels, the largest proportion of respondents held a Bachelor's degree (60%), while 30% had completed a Master's degree or higher, and 10% had only completed high school or below, indicating an educated consumer base.

Income distribution showed 35% of respondents earning between $300 and $599 per month, 25% earning below $300, 25% between $600 and $999, and 15% earning above $1000, highlighting a wide spectrum of economic backgrounds. Digital proficiency was also assessed, with 50% of respondents classified as moderate users who frequently engage with online shopping and social commerce, 30% as highly tech-savvy consumers familiar with AI-driven platforms, and 20% as low-proficiency users who occasionally shop online but still rely on traditional retail experiences.

In terms of e-commerce platform usage frequency, 30% of respondents engaged in daily online shopping, 50% made weekly purchases, while 20% shopped online monthly or less frequently. These findings indicate that AI-driven social commerce significantly influences a wide variety of consumers, from tech-savvy frequent shoppers to occasional users navigating the transition to digital retail. Understanding these demographics provides critical insights into how AI-powered features impact different consumer segments in Vietnam's evolving e-commerce landscape.

To ensure robust representation of Vietnam's diverse online shopper population, participants were selected across different demographic segments based on age, income, education level, digital literacy, and frequency of online shopping.

Research Methodologies

This study employs a mixed-methods research design to comprehensively investigate the impact of AI-driven social commerce on consumer behavior in Vietnam, integrating quantitative and qualitative approaches to ensure methodological rigor and depth. The quantitative phase involved a survey of 300 participants, analyzed using advanced statistical techniques to validate the conceptual model and test hypothesized relationships. Exploratory Factor Analysis (EFA) was first conducted to ensure construct validity, with factor loadings retained at > 0.50, Cronbach's Alpha > 0.80, Kaiser-Meyer-Olkin (KMO) measure > 0.80, and Bartlett's test of sphericity significant at $p < 0.001$ (Hair et al., 2021). Confirmatory Factor Analysis (CFA) followed, assessing the measurement model's fit using indices such as CMIN/DF < 3, Comparative Fit Index (CFI) > 0.95, Goodness-of-Fit Index (GFI) > 0.95, Adjusted Goodness-of-Fit Index (AGFI) > 0.80, Standardized Root Mean Square Residual (SRMR) < 0.09, and Root Mean Square Error of Approximation (RMSEA) < 0.06 (Kline, 2023). Structural Equation Modeling (SEM) was then applied to evaluate the hypothesized relationships, with β coefficients, p-values, and R^2 values used to assess the strength, significance, and explanatory power of the model (Gefen et al., 2003).

Complementing the quantitative phase, qualitative data were collected through 30 in-depth interviews, analyzed using a multi-faceted approach to uncover nuanced insights into consumer attitudes and behaviors. Thematic analysis, guided by Braun and Clarke's (2006) framework, was employed to identify and interpret emerging themes, with NVivo software used for systematic coding and categorization. Sentiment analysis, conducted using Python's Natural Language Toolkit (NLTK) and VADER (Valence Aware Dictionary and sEntiment Reasoner), provided additional depth by quantifying consumer attitudes through polarity scores ranging from -1 (negative) to +1 (positive) (Li et al., 2021). Comparative discourse analysis was applied to contrast perceptions of AI reliability across different shopping scenarios, revealing significant variations in trust and skepticism depending on context (Binns et al., 2018). Finally, narrative inquiry methodology was utilized to explore longitudinal shifts in trust perception, capturing evolving consumer attitudes toward AI-enabled shopping over time (Nguyen et al., 2021).

The integration of quantitative and qualitative findings was achieved through a convergent parallel design, where both datasets were analyzed independently and then merged to provide a holistic understanding of the research problem. Discrepancies between the datasets were addressed through iterative refinement, ensuring methodological rigor and coherence (Creswell & Plano Clark, 2018). This mixed-methods approach not only enhances the validity and reliability of the study but also provides actionable insights for stakeholders. For instance, the quantitative findings offer statistical evidence for the impact of AI-driven features on consumer behavior, while the qualitative insights provide a nuanced understanding of consumer attitudes and perceptions. Together, these findings can guide the design of AI systems that balance personalization with privacy, enhance algorithmic transparency, and optimize interactive features to foster consumer trust and engagement in Vietnam's rapidly evolving digital economy (Statista, 2023).

5.   LITERATURE REVIEW

5.1 The Role of Information Quality in AI-Powered Social Commerce (H1+)

Information quality is a key determinant of consumer trust and decision-making in social commerce, as it directly influences purchase intentions and risk perceptions (Gefen & Straub, 2003; Hajli et al., 2020). Research suggests that AI-powered search and recommendation systems significantly enhance information retrieval efficiency, enabling consumers to make data-driven purchasing decisions (Gretzel et al., 2020). However, despite these advancements, issues related to information asymmetry and algorithmic biases remain prevalent (Lepri et al., 2021).

Zhang et al. (2022) argue that AI-driven product searches improve information accessibility by integrating real-time reviews, comparative analytics, and social validation mechanisms. In contrast, Sunstein (2021) raises concerns that filter bubbles—a consequence of algorithmic personalization—may restrict access to diverse product information, thereby reinforcing cognitive biases in consumer decision-making. Nguyen & Ho (2022) examine Vietnam's e-commerce landscape and find that while AI enhances information reliability, over-reliance on sponsored content distorts consumer perceptions, leading to an erosion of trust. Therefore, while AI improves information efficiency, the ethical considerations of AI-driven product visibility require further scrutiny (Kaplan & Haenlein, 2022).

Prior research suggests that information quality is a critical determinant of trust and purchase intentions in AI-driven commerce (Gefen & Straub, 2003; Hajli et al., 2020). AI-powered search and recommendation systems facilitate access to real-time product information, reviews, and comparative analytics, significantly improving decision-making efficiency (Gretzel et al., 2020). However, concerns regarding algorithmic biases and information asymmetry may erode consumer trust (Lepri et al., 2021; Sunstein, 2021).

Thus, we hypothesize for *Information Quality and Consumer Trust (H1 +)*

H1: Higher perceived information quality in AI-powered search positively influences consumer trust and purchase intention in social commerce.

5.2 Entertainment-Driven Shopping and Digital Consumer Behavior (H2 -)

Entertainment in digital commerce is a double-edged sword, as it fosters consumer engagement while simultaneously contributing to decision fatigue and impulse-driven purchases (Li et al., 2021). The entertainment-commerce nexus, particularly prevalent in AI-integrated platforms like TikTok Shop and Shopee Live in Vietnam, has shifted consumer behavior from rational decision-making to affect-driven consumption (Wang et al., 2023).

Research by Hajli (2020) indicates that gamified shopping experiences enhance consumer involvement and brand engagement, making AI-powered shopping more immersive. Conversely, Park & Lee (2021) argue that the entertainment element may distract consumers from evaluating product quality objectively, resulting in post-purchase regret and lower satisfaction levels. Furthermore, Nguyen & Pham (2022) highlight that Vietnamese consumers are particularly susceptible to AI-driven impulse buying, where real-time social proof mechanisms amplify FOMO (Fear of Missing Out), compelling immediate purchasing decisions. This suggests that while entertainment-based AI shopping fosters engagement, it may also diminish consumer autonomy in rational decision-making (Ariely, 2008; Schwartz et al., 2021).

Entertainment features embedded in AI-driven commerce platforms enhance engagement and brand involvement (Hajli, 2020; Wang et al., 2023). However, excessive entertainment elements can distract consumers from objective decision-making, leading to impulse purchases and post-purchase regret (Park & Lee, 2021; Nguyen & Pham, 2022). In Vietnam's social commerce landscape, FOMO-driven shopping due to interactive livestreams and AI-enhanced gamification has led to irrational consumer behavior (Ariely, 2008; Schwartz et al., 2021).

Thus, we hypothesize *Entertainment-Driven Shopping and Consumer Decision-Making (H2 -)*

H2: Higher entertainment-driven engagement in AI-powered social commerce negatively impacts rational consumer decision-making.

5.3 The Paradox of AI-Driven Personalization: Perceived Relevance vs. Intrusiveness (H3 -)

AI-powered personalization in social commerce has been widely lauded for enhancing user experience, increasing conversion rates, and optimizing recommendation accuracy (Grewal et al., 2021). However, the paradox of personalization lies in its ability to simultaneously enhance relevance while invading consumer privacy and fostering algorithmic manipulation (Aguirre et al., 2018; Noble, 2018).

Bleier & Eisenbeiss (2018) highlight that personalization fosters a sense of brand connection, thereby enhancing loyalty and repeat purchase intent. Conversely, Van Doorn & Hoekstra (2020) contend that AI-driven hyper-personalization can lead to perceived intrusiveness, where consumers feel overwhelmed by excessively targeted recommendations. Edwards et al. (2002) apply reactance theory, arguing that when AI recommendations become too persistent, consumers develop resistance, resulting in decreased brand trust.

Studies in Vietnam reveal that AI-driven personalized search mechanisms are often perceived as intrusive when recommendations appear immediately after previous search activities, raising concerns about surveillance capitalism and data commodification (Nguyen et al., 2021). This reinforces the argument that AI-driven personalization, while enhancing consumer experience, must balance recommendation efficiency with ethical boundaries to prevent user fatigue and privacy concerns (Lepri et al., 2021; Rahman et al., 2022).

AI-driven personalization has reshaped digital consumer experiences, offering tailored recommendations and optimized search results (Grewal et al., 2021). While personalization enhances shopping efficiency and brand loyalty, it also raises concerns about privacy intrusiveness and manipulation (Aguirre et al., 2018; Noble, 2018). Studies suggest that excessive AI-driven targeting can trigger consumer resistance due to perceived invasiveness (Edwards et al., 2002; Van Doorn & Hoekstra, 2020).

Thus, we hypothesize *The Personalization Paradox: Perceived Relevance vs. Intrusiveness (H3 -)*

H3: Increased AI-driven personalization in social commerce negatively impacts consumer trust due to perceived privacy intrusiveness.

5.4 Trust and Algorithmic Reliability in AI-Mediated Shopping (H4 +)

The reliability of AI-driven search and recommendation systems is a pivotal factor influencing consumer confidence in online transactions (Gefen & Straub, 2003; Gretzel et al., 2020). Research suggests that consumers exhibit higher trust in AI recommendations when transparency, credibility, and accuracy are perceived to be high (Wang & Kosinski, 2023). However, the opacity of AI algorithms—often referred to as the "black box dilemma"—has raised concerns about the interpretability of AI-generated recommendations (Binns et al., 2018).

Le & Vo (2023) argue that while AI can enhance reliability through fraud detection and price tracking mechanisms, it can also reinforce monopolistic biases by favoring dominant brands over emerging competitors. Nguyen & Ho (2022) provide empirical evidence from Vietnam's social commerce landscape, demonstrating that platforms utilizing AI-driven trust markers, such as verified reviews and real-time seller ratings, exhibit significantly higher conversion rates. However, concerns about AI-driven misinformation, fake reviews, and algorithmic favorability remain barriers to full consumer adoption (Kaplan & Haenlein, 2022).

The reliability of AI-powered recommendations is a key predictor of consumer confidence in online transactions (Gefen & Straub, 2003; Gretzel et al., 2020). Transparency, credibility, and fraud detection mechanisms enhance AI-driven trust (Wang & Kosinski, 2023). However, the black box problem—where consumers lack clarity on how AI determines recommendations—raises concerns about algorithmic accountability (Binns et al., 2018).

Thus, we hypothesize *Trust and Algorithmic Reliability in AI-Mediated Shopping (H4 +)*

H4: Higher perceived algorithmic reliability in AI-powered social commerce positively influences consumer trust and purchase behavior.

5.5 The Role of Social Influence and Peer Validation in AI-Driven Commerce (H6 -)

Social validation remains one of the strongest predictors of purchase intention in AI-driven social commerce (Hajli, 2015; Zhang et al., 2023). Research has demonstrated that peer recommendations, user-generated content, and influencer endorsements significantly affect consumer trust in AI-generated product suggestions (Wang & Kosinski, 2023).

However, excessive reliance on social proof mechanisms can introduce cognitive biases that distort consumer perceptions of product quality (Sunstein, 2021). Nguyen & Pham (2022) illustrate that in Vietnam, AI algorithms amplify social proof by prioritizing trending products, thereby creating a self-reinforcing cycle where popular items continue to dominate, regardless of objective quality. This raises ethical concerns regarding algorithmic fairness, as smaller brands struggle for visibility in an AI-driven ecosystem that favors virality over merit (Lepri et al., 2021).

Social validation remains one of the strongest motivators in AI-driven purchasing decisions (Hajli, 2015; Zhang et al., 2023). Peer reviews, influencer endorsements, and user-generated content significantly shape consumer trust (Wang & Kosinski, 2023). However, excessive reliance on social proof mechanisms can create cognitive biases, distorting consumer perception of product quality (Sunstein, 2021). In Vietnam, algorithmic amplification of trending products over niche offerings raises ethical concerns regarding fairness in AI-driven marketplaces (Nguyen & Pham, 2022).

Thus, we hypothesize *The Role of Social Influence and Peer Validation (H5 -)*

H5: Increased reliance on AI-driven social validation negatively impacts consumer autonomy in decision-making.

5.6 Interactivity and the Human-AI Engagement Paradigm (H7 +)

The degree of interactivity in AI-mediated online shopping directly influences consumer engagement, satisfaction, and brand loyalty (Hollebeek et al., 2021; Huang & Rust, 2021). Research suggests that voice commerce, chatbots, and AI-powered virtual shopping assistants enhance consumer interactions, making digital shopping experiences more immersive (Gretzel et al., 2020).

Nguyen & Ho (2022) argue that higher interactivity in AI-driven e-commerce platforms increases consumer engagement, as interactive recommendation systems create a sense of co-creation. However, Wang et al. (2022) highlight that interactivity without contextual understanding can lead to frustration, particularly when AI chatbots fail to provide nuanced or culturally relevant responses. This suggests that while interactivity enhances engagement, it must be complemented by AI's ability to adapt to linguistic, cultural, and contextual nuances to ensure effective human-AI interactions (Kaplan & Haenlein, 2022).

Interactivity in AI-mediated shopping experiences significantly enhances consumer engagement, satisfaction, and brand loyalty (Hollebeek et al., 2021; Huang & Rust, 2021). AI-powered chatbots, virtual assistants, and conversational interfaces create a sense of co-creation and dynamic engagement, making shopping more immersive (Gretzel et al., 2020; Nguyen & Ho, 2022). However, ineffective AI responses and lack of cultural adaptation may lead to consumer frustration (Wang et al., 2022).

Thus, we hypothesize *Interactivity and the Human-AI Engagement Paradigm (H6 +)*

H6: Higher AI-driven interactivity positively influences consumer engagement and perceived brand value in social commerce.

6. KEY FINDINGS, CONCLUSION AND FUTURE RESEARCH

The findings of this study illuminate the profound and transformative impact of AI-driven search mechanisms and algorithmic recommendations on consumer behaviors within Vietnam's rapidly evolving social commerce landscape. Specifically, the study reveals that perceived information quality significantly enhances consumer trust and purchase intentions, underscoring the critical role of accurate, relevant, and reliable AI-generated content in fostering positive consumer outcomes (Gefen et al., 2003; Zhang et al., 2022). However, the study also identifies a countervailing effect: excessive entertainment-driven engagement, while initially captivating, leads to decision fatigue and heightened impulse-buying tendencies, particularly among younger, tech-savvy consumers (Li et al., 2021). Furthermore, the research confirms the existence of the personalization paradox, wherein AI-driven recommendations enhance shopping convenience and relevance but simultaneously raise privacy concerns, ultimately eroding long-term trust and consumer confidence (Bleier & Eisenbeiss, 2018). These findings collectively highlight the dual-edged nature of AI in social commerce, where its benefits are often accompanied by unintended psychological and behavioral consequences.

From a theoretical standpoint, this research makes significant contributions to multiple academic domains. First, it advances trust-based frameworks by integrating algorithmic transparency and information asymmetry into consumer decision models, offering a more nuanced understanding of how trust is formed and sustained in AI-mediated environments (Gefen & Straub, 2003). Second, it extends behavioral economics theories by demonstrating how AI-driven social commerce environments amplify heuristic biases, such as anchoring and availability heuristics, in consumer decision-making (Kahneman, 2011). Third, the study contributes to the emerging body of knowledge on algorithmic consumer behavior by empirically validating key psychological factors—such as perceived fairness, transparency, and control—that mediate AI-driven purchase decisions (Wang et al., 2023). By exploring the interplay between trust, the personalization paradox, and entertainment-driven decision-making, this research expands the current understanding of digital consumer behavior, particularly in the context of emerging markets like Vietnam, where cultural and infrastructural nuances play a pivotal role.

From a practical perspective, the study offers actionable recommendations for e-commerce platforms, digital marketers, and AI developers. For instance, the findings underscore the necessity of optimizing AI transparency mechanisms to ensure that consumers understand how algorithms operate and make recommendations, thereby fostering trust and reducing skepticism (Binns et al., 2018). Additionally, platforms should prioritize algorithmic fairness by minimizing biases in recommendation systems and ensuring equitable treatment of all users. To address the personalization paradox, privacy-centric personalization strategies should be implemented, such as allowing consumers to control the level of personalization and providing clear opt-out options for data collection (Venkatesh et al., 2022). Furthermore, digital commerce firms must strike a balance between entertainment-driven elements and decision-support tools to mitigate the risk of impulse-driven purchases and enhance overall consumer decision satisfaction. For AI developers, the study emphasizes the importance of explainable AI models that provide users with greater control over their personalization experiences, thereby fostering deeper trust and engagement in AI-mediated commerce.

In terms of *Future Research Directions*, building on the findings of this study, several promising avenues for future research emerge. First, longitudinal analyses of AI-commerce adoption trends could assess behavioral changes over time and evaluate how consumer perceptions of AI-driven personalization evolve as familiarity with the technology grows. Second, cross-cultural comparisons could examine how AI-driven social commerce impacts consumer autonomy and trust in different digital economies, considering variations in cultural norms, regulatory frameworks, and technological infrastructure (Nguyen et al., 2021). Third, AI ethics and regulatory studies are needed to investigate issues such as algorithmic bias, fairness in AI-powered commerce, and the role of government regulations in protecting consumer interests (Binns et al., 2018). Fourth, neuroscientific and psychometric studies could integrate advanced methodologies—such as eye-tracking, cognitive load assessments, and neural response testing—to measure consumer trust reactions to AI-generated content and provide deeper insights into the psychological mechanisms underlying AI-driven decision-making (Kumar et al., 2022). Finally, hybrid AI-human interaction models could explore how AI-driven recommendations interact with human sales agents or social influencers in hybrid commerce environments, offering a more holistic understanding of the synergies between human and machine intelligence in shaping consumer behavior (Kaplan & Haenlein, 2022).

In conclusion, this study provides a robust empirical foundation for understanding AI's role in social commerce and sets the stage for future interdisciplinary research on the evolving landscape of AI-mediated consumer interactions. As AI technologies continue to reshape digital shopping experiences, ongoing investigations must consider the psychological, sociological, and ethical dimensions of these interactions to develop holistic frameworks that optimize AI's role in social commerce while preserving consumer autonomy and trust. By addressing these challenges, researchers and practitioners can ensure that AI-driven social commerce not only enhances consumer experiences but also upholds ethical standards and fosters sustainable growth in the digital economy.

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