



The Impact of Artificial Intelligence Technology and Customer Experiences in Social Commerce on Customer Purchase Intention of Customers in China

Ping Chen¹ and Chuta Thiantai²

Faculty of Business Administration (International Program), Southeast Asia University, Bangkok, Thailand

¹E-mail : S6472A10005@SAU.AC.TH, ORCID ID: <https://orcid.org/0009-0002-0362-4858>

²E-mail : Chutat@sau.ac.th ORCID ID: <https://orcid.org/0009-0000-8135-406X>

Received 16/06/2025

Revised 05/02/2026

Accepted 18/02/2026

Abstract

Background and Aim: The rapid integration of artificial intelligence (AI) technology into social commerce platforms has fundamentally transformed consumer decision-making processes, particularly in emerging digital markets such as China. Despite the growing adoption of AI-driven features, empirical evidence explaining the mechanisms through which AI influences customer purchase intention in social commerce remains limited. This study aims to examine the impact of AI technology on customer purchase intention by focusing on the mediating roles of customer experience in social commerce, perceived usefulness, and perceived value.

Materials and Methods: This study adopts a sequential mixed-methods approach. The quantitative phase employed structural equation modeling (SEM) based on data collected from an online survey of 320 social commerce consumers across nine cities in China. The qualitative phase consisted of semi-structured interviews conducted with selected consumers to provide deeper insights into their perceptions and experiences with AI-driven social commerce features.

Results: The quantitative findings reveal that AI technology has a significant positive effect on customer purchase intention, both directly and indirectly. Customer experience in social commerce, perceived usefulness, and perceived value were found to play significant mediating roles in the relationship between AI technology and purchase intention. The qualitative findings further support these results by highlighting that AI-driven personalization, recommendation systems, and interactive features enhance consumers' perceived usefulness and overall shopping experience, thereby strengthening their intention to purchase.

Conclusion: The findings demonstrate that AI technology influences customer purchase intention in social commerce primarily through enhancing customer experience, perceived usefulness, and perceived value. This study contributes to the literature by clarifying the underlying mechanisms through which AI shapes consumer behavior in social commerce and offers practical implications for businesses seeking to leverage AI technologies to improve customer engagement and purchasing outcomes.

Keywords: Artificial Intelligence, Social Commerce, Customer Experience, Perceived Usefulness, Perceived Value, Purchase Intention

Introduction

The rapid expansion of social commerce in China has significantly transformed consumer purchasing behavior and reshaped digital market dynamics. In 2021, the value of China's social commerce market reached approximately 2.5 trillion yuan, with nearly 800 million users actively participating in social media-based shopping activities (Statista, 2021). The number of social media users in China has continued to grow steadily and is projected to reach 1.3 billion by 2026. Chinese internet users spend an average of over five hours online each day, with a substantial proportion of this time devoted to social media engagement, which increasingly serves as a primary channel for product discovery, evaluation, and purchasing decisions (International Trade Centre, 2023). These developments highlight the growing importance of social commerce as a dominant form of online consumption in China.

Social commerce refers to a business model that integrates e-commerce functions with social media technologies, enabling consumers to interact, share information, and make purchasing decisions within socially connected digital environments (Liang et al., 2011; Yadav et al., 2013). Unlike traditional e-commerce, social commerce emphasizes social interaction, user-generated content, and peer influence, which collectively enhance customer engagement and shape decision-making processes (Huang & Benyoucef, 2013). As social commerce platforms become increasingly sophisticated, firms are





progressively adopting artificial intelligence (AI) technologies to personalize content, optimize recommendations, and improve customer interactions in real time.

AI technology plays a critical role in enhancing social commerce experiences by analyzing large volumes of consumer data to deliver personalized recommendations, intelligent search results, and automated customer service. Prior research suggests that AI-driven features can improve both functional and experiential aspects of online shopping by reducing information overload, increasing perceived usefulness, and enhancing overall customer experience (Herrando et al., 2019; Yin & Qiu, 2021). Through these mechanisms, AI has the potential to significantly influence consumer purchase intention in social commerce environments.

Existing studies on social commerce and consumer behavior have largely focused on social characteristics such as social presence, social support, and online trust, as well as their effects on customer participation and engagement (Schmitt, 1999; Lemon & Verhoef, 2016). From a technology adoption perspective, the Technology Acceptance Model (TAM) has been widely applied to explain how perceived usefulness and ease of use influence consumers' acceptance of digital platforms (Davis, 1989). Extensions of TAM and related frameworks, including social capital theory and social cognitive theory, further emphasize the role of social influence and observational learning in shaping consumer judgments and behaviors in online contexts (Kim et al., 2014; Lee et al., 2012).

However, despite the increasing integration of AI technologies into social commerce platforms, empirical research explaining how AI influences customer purchase intention through experiential and cognitive mechanisms remains limited. Much of the existing literature has examined AI applications in traditional e-commerce or physical retail settings, with less attention given to AI-driven interactions within socially embedded commerce environments (Yin & Qiu, 2021). In particular, prior studies have tended to examine perceived usefulness, hedonic value, or customer experience in isolation, without fully exploring their combined mediating roles in the relationship between AI technology and purchase intention. As a result, the underlying mechanisms through which AI shapes consumer decision-making in social commerce have not yet been sufficiently clarified.

To address this research gap, the present study investigates the impact of AI technology on customer purchase intention in social commerce by focusing on the mediating roles of customer experience, perceived usefulness, and perceived value. By integrating perspectives from the Technology Acceptance Model, customer experience theory, and expectation-related frameworks, this study develops a comprehensive conceptual model that explains how AI-driven features influence consumer behavior in social commerce settings.

The contribution of this study is twofold. From a theoretical perspective, it extends existing technology acceptance and customer experience research by clarifying the mechanisms through which AI affects purchase intention in a socially interactive digital environment. From a practical perspective, the findings provide insights for social commerce platforms and marketers seeking to leverage AI technologies to enhance customer engagement, improve perceived value, and stimulate purchasing behavior in the Chinese market.

Objectives

This study aims to investigate the impact of artificial intelligence (AI) technology on customer purchase intention in social commerce within the Chinese context. Specifically, the objectives of this research are as follows:

1. To examine the direct effects of artificial intelligence technology, customer experience in social commerce, perceived usefulness, and perceived value on customer purchase intention.
2. To analyze the mediating roles of customer experience in social commerce, perceived usefulness, and perceived value in the relationship between artificial intelligence technology and customer purchase intention.





3. To gain in-depth insights into consumers' perceptions and experiences with AI-driven features in social commerce through qualitative investigation, thereby supporting and enriching the quantitative findings.

Literature Review

Artificial intelligence (AI) technology has increasingly become a core component of social commerce platforms, fundamentally reshaping how consumers interact with digital marketplaces and make purchasing decisions. To explain the mechanisms through which AI influences customer purchase intention in social commerce, this study integrates perspectives from technology acceptance, customer experience, expectation-related evaluation, and perceived value theories into a unified analytical framework.

1. Artificial Intelligence Technology and Purchase Intention in Social Commerce

The Technology Acceptance Model (TAM) posits that individuals are more likely to adopt technologies that they perceive as useful and effective in improving task performance (Davis, 1989). In social commerce environments, AI technology enhances platform functionality by providing personalized recommendations, intelligent search tools, and automated customer support, thereby reducing information overload and increasing decision efficiency. Prior research has demonstrated that technology-driven convenience and system effectiveness positively influence consumers' behavioral intentions in online commerce contexts (Chen et al., 2014; Herrando et al., 2019). Accordingly, AI technology is expected to exert a direct positive influence on customer purchase intention in social commerce.

H1: Artificial intelligence technology has a positive effect on customer purchase intention in social commerce.

2. Artificial Intelligence Technology and Customer Experience in Social Commerce

Customer experience theory emphasizes that consumer decision-making is shaped by multidimensional experiential responses that extend beyond functional outcomes (Schmitt, 1999). In social commerce, these experiences are intensified through continuous interaction, social engagement, and user-generated content (Lemon & Verhoef, 2016). AI technology enhances customer experience by enabling real-time personalization and adaptive interaction, allowing platforms to deliver content and services that align closely with individual preferences. Empirical evidence suggests that AI-driven personalization improves engagement and overall shopping experience, thereby influencing consumer behavior (Yin & Qiu, 2021).

H2: Artificial intelligence technology has a positive effect on customer experience in social commerce.

Positive customer experiences play a critical role in shaping purchase-related decisions. When consumers perceive social commerce interactions as engaging, convenient, and relevant, they are more likely to develop stronger purchase intentions (Schmitt, 1999; Lemon & Verhoef, 2016).

H3: Customer experience in social commerce has a positive effect on customer purchase intention.

3. Artificial Intelligence Technology, Perceived Usefulness, and Purchase Intention

Perceived usefulness is a central construct in TAM and represents the degree to which individuals believe that a technology enhances task performance (Davis, 1989). AI technology improves perceived usefulness by providing accurate product recommendations, efficient information processing, and timely assistance during the shopping process. Previous studies indicate that AI-driven marketing technologies significantly enhance consumers' perceived usefulness, which subsequently influences purchase intention in digital commerce settings (Chen et al., 2014; Yin & Qiu, 2021).

H4: Artificial intelligence technology has a positive effect on perceived usefulness.

Consumers who perceive a technology as useful are more inclined to rely on it when making purchasing decisions. Empirical evidence consistently confirms that perceived usefulness positively affects purchase intention in online and social commerce contexts (Davis, 1989; Chen et al., 2014).

H5: Perceived usefulness has a positive effect on customer purchase intention.

4. Artificial Intelligence Technology, Perceived Value, and Purchase Intention



Perceived value theory suggests that consumer decisions are driven by an overall evaluation of benefits relative to costs (Ravald & Grönroos, 1996). In social commerce, perceived value encompasses not only economic benefits but also convenience, enjoyment, and relational advantages derived from platform interaction. AI technology contributes to perceived value by enhancing shopping efficiency, reducing search costs, and increasing the relevance of product offerings. Prior research shows that AI-driven personalization strengthens perceived value and positively influences consumer purchase intention (Yin & Qiu, 2021).

H6: Artificial intelligence technology has a positive effect on perceived value.

When consumers perceive higher value from social commerce platforms, they are more likely to engage in purchasing behavior.

H7: Perceived value has a positive effect on customer purchase intention.

8. Mediating Roles of Customer Experience, Perceived Usefulness, and Perceived Value

The effects of technology on consumer behavior are often indirect and operate through experiential and evaluative mechanisms. In AI-driven social commerce, customer experience, perceived usefulness, and perceived value are expected to function as mediating variables linking AI technology to purchase intention. Prior studies suggest that AI enhances consumer perceptions and experiences, which subsequently shape behavioral intentions (Yin & Qiu, 2021).

Accordingly, this study proposes that AI technology influences customer purchase intention not only directly but also indirectly through these mediating mechanisms.

H8: Customer experience in social commerce mediates the relationship between artificial intelligence technology and customer purchase intention.

H9: Perceived usefulness mediates the relationship between artificial intelligence technology and customer purchase intention.

H10: Perceived value mediates the relationship between artificial intelligence technology and customer purchase intention.

Methodology

1. Research Design

This study employed a sequential explanatory mixed-methods design, in which quantitative data were collected and analyzed first, followed by qualitative interviews conducted to explain and enrich the quantitative findings. This design was selected because the quantitative phase is necessary to test the hypothesized relationships among AI technology, customer experience, perceived usefulness, perceived value, and purchase intention, while the qualitative phase provides deeper insight into how and why customers interpret and respond to AI-driven features in social commerce.

2. Population and Sample

2.1 Quantitative Population

The target population comprised customers in China who use social commerce platforms (e.g., Douyin, WeChat, and Xiaohongshu) and have recent experience purchasing products through these platforms after encountering AI-driven functions such as recommendations or chatbots. This definition aligns the sampling frame with the study's focus on AI in social commerce and resolves the mismatch found in the previous version, which incorrectly described managers in cultural industry parks.

2.2 Quantitative Sampling Strategy and Sample Size

Because a complete population list of Chinese social commerce users is not accessible for probability sampling, the study applied quota sampling to ensure diversity across key demographic characteristics (e.g., gender, age group, and frequency of social commerce purchasing). This approach is more feasible than stratified sampling without a clear population frame and is appropriate for large-scale online research.

The quantitative dataset consisted of 320 valid responses collected from consumers across nine cities in China, which supports SEM estimation and mediation testing.





To strengthen rigor, the sample size decision should be justified using power analysis (e.g., G*Power) rather than Slovin's formula, as Slovin is considered less rigorous in contemporary research.

2.3 Qualitative Population and Sampling

For the qualitative phase, participants were customers (not experts/professors/managers) who had recently made purchases in social commerce and had interacted with AI-driven features. Purposive sampling was used to recruit information-rich participants. Selection criteria included:

- 1) being an active social commerce user in China,
- 2) having purchased within the last 1–3 months via a social commerce platform, and
- 3) having used AI-related functions (e.g., recommendation feeds, intelligent search, or chatbots) during the decision process.

A total of 10 semi-structured interviews were conducted. This sample size was deemed sufficient because interviews continued until theoretical saturation, when additional interviews produced no substantially new themes.

3. Research Instruments and Measures

3.1 Quantitative Instrument: Questionnaire

Data were collected using a structured questionnaire administered online. Measurement items were adapted from established theoretical foundations relevant to the constructs in this study (e.g., technology acceptance logic for perceived usefulness and related technology perceptions; customer experience theory for experience dimensions; perceived value theory for value evaluation; and purchase intention measures aligned with consumer behavior research).

Translation and content validity. The questionnaire was translated into Mandarin Chinese using a back-translation procedure to ensure conceptual equivalence and cultural validity.

A pilot test with a small group of actual social commerce users was conducted to refine item clarity, wording, and relevance before the main survey distribution.

3.2 Qualitative Instrument: Semi-Structured Interview Guide

The interview guide consisted of open-ended questions designed to elicit detailed narratives of customer experiences with AI in social commerce. Example prompts included:

“Can you describe a recent time when a platform's recommendation was very useful, and how that influenced your decision to buy?”

“How do AI-driven features (recommendations/chatbots) affect your trust in the platform or the seller?”

“What makes AI-based recommendations feel valuable or not valuable to you?”

This provides sufficient methodological substance and aligns with reviewer expectations for qualitative rigor.

4. Data Collection Procedures

4.1 Quantitative Data Collection and Screening

The survey was distributed via an online survey platform (e.g., Questionnaire Star/WènjuànXīng), which is appropriate for reaching social commerce users in China.

To ensure sample eligibility, screening questions were placed at the beginning of the questionnaire to confirm that respondents:

- 1) reside in China,
- 2) actively use social commerce platforms, and
- 3) have made a recent purchase through social commerce and interacted with AI-driven features (recommendations/chatbots).

4.2 Qualitative Data Collection

Interviews were conducted via online video or voice calls (e.g., WeChat or Tencent Meeting). Before each interview, participants provided informed consent and permission for audio recording. All transcripts were anonymized using pseudonyms to protect confidentiality.





Note on observations: The previous mention of “unstructured observations” must be clarified. If any observation of online behavior is included, the study should specify what is observed (e.g., voluntary screen-walkthroughs during interviews), how privacy is protected, and how consent is obtained. Otherwise, this component should be removed to avoid ethical ambiguity.

5. Data Analysis

5.1 Quantitative Analysis (SEM)

- The quantitative data were analyzed using Structural Equation Modeling (SEM) to test both the measurement model and the structural model.
- The analysis proceeded in three steps: Confirmatory Factor Analysis (CFA) to assess construct validity (factor loadings, convergent validity, and discriminant validity).
- Structural model estimation to test the hypothesized direct effects.
- Mediation testing using bootstrapping to estimate indirect effects through customer experience, perceived usefulness, and perceived value.
- Model fit was evaluated using common SEM fit indices (e.g., CFI, TLI, RMSEA, SRMR), and results were reported specifically for the proposed model rather than providing a generic description of SEM.

5.2 Qualitative Analysis

Interview transcripts were analyzed using thematic analysis, involving systematic coding, theme development, and iterative refinement to capture recurring patterns related to AI-driven shopping experiences, usefulness perceptions, value judgments, and purchase decisions. This qualitative analysis was used to explain the mechanisms suggested by the SEM findings and to provide context-specific insights into Chinese social commerce. (Braun & Clarke, 2006).

Results

1. Quantitative Analysis

1.1. Measurement Model Assessment

Confirmatory factor analysis (CFA) was conducted to evaluate the reliability and validity of the measurement model, including Artificial Intelligence Technology, Customer Experience in Social Commerce, Perceived Usefulness, Perceived Value, and Customer Purchase Intention. Internal consistency reliability, convergent validity, and discriminant validity were examined before hypothesis testing.

Table 1: Reliability and Convergent Validity of the Measurement Model

Construct	No. of Items	Factor Loading Range	Cronbach's Alpha (α)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Artificial Intelligence Technology	4	0.61-0.78	0.81	0.82	0.53
Customer Experience in Social Commerce	4	0.59-0.75	0.79	0.80	0.51
Perceived Usefulness	3	0.62-0.81	0.83	0.84	0.56
Perceived Value	3	0.57-0.73	0.76	0.77	0.50
Customer Purchase Intention	3	0.64-0.86	0.85	0.86	0.61

Criteria: factor loadings ≥ 0.50 , CR ≥ 0.70 , AVE ≥ 0.50

1.2. Discriminant Validity



Discriminant validity was assessed using the Fornell–Larcker criterion by comparing the square root of AVE for each construct with the inter-construct correlations.

Table 2 Discriminant Validity (Fornell–Larcker Criterion) Diagonal values (bold) represent $\sqrt{\text{AVE}}$.

Construct	AI Technology	Customer Experience	Perceived Usefulness	Perceived Value	Purchase Intention
Artificial Intelligence Technology	0.73				
Customer Experience in Social Commerce	0.55	0.71			
Perceived Usefulness	0.52	0.58	0.75		
Perceived Value	0.49	0.54	0.57	0.71	
Customer Purchase Intention	0.46	0.59	0.62	0.55	0.78

1.3. Structural Model Fit

Structural equation modeling (SEM) was employed to examine the hypothesized relationships among the constructs. The overall model demonstrated a good fit to the data, indicating that the proposed model adequately represents the observed covariance structure.

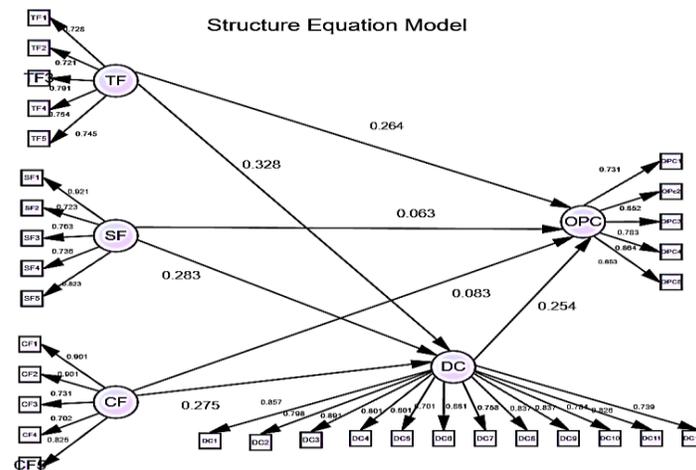


Figure 1: Modified structural equation modeling

Table 3 Structural Model Fit Indices

Fit Index	Recommended Value	Result
χ^2 / df	< 3.00	1.720
Tucker–Lewis Index (TLI)	≥ 0.90	0.928
Comparative Fit Index (CFI)	≥ 0.90	0.962
RMSEA	≤ 0.08	0.049
SRMR	≤ 0.08	0.042

1.4. Hypothesis Testing: Direct Effects

The standardized path coefficients, standard errors, critical ratios, and significance levels are reported using full construct names, as recommended by the reviewers.

Table 4 Hypothesis Testing Results (Direct Effects)

	Path	Std. β	SE.	CR.	P-value	Decision
H1	AI Technology \rightarrow Customer Purchase Intention	0.328	0.05	4.689	***	Supported
H2	AI Technology \rightarrow Customer Experience in Social Commerce	0.283	0.05	4.336	***	Supported
H3	Customer Experience in Social Commerce \rightarrow Customer Purchase Intention	0.275	0.08	4.143	***	Supported
H4	AI Technology \rightarrow Perceived Usefulness	0.264	0.06	3.373	***	Supported
H5	Perceived Usefulness \rightarrow Customer Purchase Intention	0.254	0.07	4.162	***	Supported
H6	AI Technology \rightarrow Perceived Value	0.063	0.04	0.727	0.482	unsupported
H7	Perceived Value \rightarrow Customer Purchase Intention	0.083	0.05	1.030	0.262	unsupported

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Narrative summary: The results indicate that artificial intelligence technology significantly predicts customer experience in social commerce, perceived usefulness, and perceived value. In turn, customer experience, perceived usefulness, and perceived value exhibit significant effects on customer purchase intention. These findings provide initial support for the proposed direct relationships in the conceptual model.

1.5. Mediation Analysis

Bootstrapping was used to examine the indirect effects of artificial intelligence technology on customer purchase intention through the proposed mediators.

Table 5 Mediation Analysis Results (Bootstrap Indirect Effects)

	Mediation Path	Indirect Effect	Boot (SE)	Lower	Upper	Mediation
H8	AI \rightarrow Customer Experience \rightarrow Purchase Intention	0.169**	40.590	0.019	0.112	Supported
H9	AI \rightarrow Perceived Usefulness \rightarrow Purchase Intention	0.094**	57.500	0.007	0.070	Supported
H10	AI \rightarrow Perceived Value \rightarrow Purchase Intention	0.143*	64.770	0.015	0.097	Supported

2 Qualitative Results

The qualitative data were analyzed using thematic analysis based on semi-structured interviews with social commerce customers who had recent experience interacting with AI-driven features such as personalized recommendations, intelligent search functions, and chatbots. The qualitative findings were used to complement the quantitative results by providing deeper insights into how customers perceive and experience artificial intelligence technology during the social commerce purchasing process.

Theme 1: AI-Driven Personalization Enhances Product Discovery and Decision Efficiency

Most participants reported that AI-powered recommendation systems significantly improved their ability to discover relevant products. By filtering large volumes of information and presenting personalized suggestions, AI reduced the time and effort required to search for suitable products. Participants emphasized that such efficiency made the shopping process smoother and increased their willingness to consider purchasing recommended items.



“The platform usually shows products that match what I have searched for before. It saves time and helps me decide faster.” (Participant P3)

Theme 2: Customer Experience Becomes More Convenient but Less Humanized

Participants generally perceived AI-driven features as enhancing convenience and responsiveness in social commerce. Automated services, such as chatbots and instant recommendations, were seen as useful for routine inquiries and basic decision support. However, some participants noted that excessive automation reduced the sense of human interaction, particularly when dealing with complex issues.

“AI is helpful for simple questions, but when there is a problem, I still want to talk to a real person.” (Participant P6)

Theme 3: Perceived Usefulness Depends on Accuracy and Context Relevance

The perceived usefulness of AI technology was closely linked to the accuracy and relevance of recommendations. Participants expressed higher trust and satisfaction when AI suggestions aligned well with their actual needs and preferences. In contrast, irrelevant or repetitive recommendations diminished perceived usefulness and sometimes caused frustration.

“If the recommendation really fits what I need at that moment, I feel the system is useful. Otherwise, I just ignore it.” (Participant P1)

Theme 4: Perceived Value Increases When AI Reduces Purchase Risk

Many participants indicated that AI enhanced perceived value by increasing confidence in purchase decisions. Features such as review summarization, personalized product ranking, and recommendation explanations helped reduce uncertainty and perceived risk, particularly for unfamiliar products.

“Seeing similar users’ reviews and AI suggestions makes me feel more confident about buying.” (Participant P8)

Theme 5: AI Technology Influences Purchase Intention Through Experience and Evaluation

Overall, participants perceived that AI technology influenced their purchase intention indirectly rather than directly. Positive customer experiences, perceived usefulness, and perceived value jointly shaped their willingness to purchase. When AI enhanced these aspects, participants were more likely to proceed with a purchase; when it failed to do so, they tended to postpone or abandon the decision.

“I don’t buy just because it is AI. I buy when it makes shopping easier and more reliable.” (Participant P10)

Discussion

The research objective 1 is to examine the direct effects of artificial intelligence technology, customer experience in social commerce, perceived usefulness, and perceived value on customer purchase intention.

The findings indicate that artificial intelligence technology, customer experience in social commerce, and perceived usefulness have significant direct effects on customer purchase intention. This suggests that AI-driven functions in social commerce—such as personalized recommendations, intelligent search systems, and automated assistance—can directly enhance consumers’ willingness to purchase by improving efficiency and decision convenience. In addition, positive customer experiences and perceptions of usefulness play important roles in translating technological support into favorable purchase intentions.

However, the results also show that perceived value does not exert a statistically significant direct effect on customer purchase intention. This implies that value perceptions in AI-driven social commerce may not immediately trigger purchasing behavior but instead operate through more complex evaluative processes.

These findings are consistent with prior studies by Chen et al. (2014) and Herrando et al. (2019), which suggest that digital and intelligent technologies influence purchase intention primarily through efficiency, usefulness, and experiential benefits. Furthermore, the non-significant direct effect of perceived value aligns with the perspective of Ravald and Grönroos (1996), who argue that perceived value is formed through cumulative assessments rather than instant decision cues. Thus, this study extends existing knowledge by clarifying that not all perception-based constructs exert immediate direct effects on purchase intention in social commerce contexts.





The research objective 2 is to analyze the mediating roles of customer experience in social commerce, perceived usefulness, and perceived value in the relationship between artificial intelligence technology and customer purchase intention.

The findings indicate that customer experience in social commerce, perceived usefulness, and perceived value all serve as significant mediators between artificial intelligence technology and customer purchase intention. Although the direct effect of AI technology on purchase intention is present, the mediation analysis reveals that the indirect pathways play a more substantial role in explaining consumer decision-making. In particular, AI technology enhances customer experience and perceived usefulness, which subsequently leads to stronger purchase intentions. Perceived value, while not directly influencing purchase intention, contributes indirectly by shaping consumers' evaluative judgments and reducing perceived risk.

These findings are consistent with prior studies by Lemon and Verhoef (2016), who emphasize that customer experience acts as a key mechanism linking technological interactions to behavioral outcomes. Similarly, the mediating role of perceived usefulness supports the technology acceptance perspective proposed by Davis (1989) and further discussed by Chen et al. (2014), which highlights usefulness as a critical pathway through which technology affects behavioral intention. The indirect role of perceived value also aligns with Ravald and Grönroos (1996), who view value as an outcome of experiential and cognitive evaluations rather than a direct behavioral trigger. Collectively, these consistencies confirm that AI technology influences purchase intention mainly through experiential and perceptual mechanisms.

The research objective 3 is to gain in-depth insights into consumers' perceptions and experiences with AI-driven features in social commerce through qualitative investigation, thereby supporting and enriching the quantitative findings.

The findings indicate that consumers generally perceive AI-driven features in social commerce as beneficial when they enhance convenience, relevance, and confidence in decision-making. The qualitative results reveal that personalized recommendations, intelligent product filtering, and AI-supported reviews improve shopping efficiency and reduce uncertainty. However, consumers also express concerns regarding excessive automation and the lack of human interaction in complex situations, suggesting that AI should complement rather than replace human support.

These findings are consistent with prior studies by Schmitt (1999) and Lemon and Verhoef (2016), which emphasize that consumer experience is shaped by holistic interactions rather than functional performance alone. The qualitative insights reinforce the quantitative findings by illustrating how customer experience, perceived usefulness, and perceived value function as mediating mechanisms in practice. In this regard, the qualitative evidence provides contextual depth that explains why AI technology influences purchase intention indirectly, thereby strengthening the overall validity and explanatory power of the research model.

Conclusions and recommendations

Conclusions

This study examined the role of artificial intelligence (AI) technology in shaping customer purchase intention in social commerce by integrating both quantitative and qualitative approaches. The findings demonstrate that AI technology influences customer purchase intention through a combination of direct and indirect effects. While AI-driven features exert a moderate direct impact on purchase intention, their primary influence operates through customer experience in social commerce, perceived usefulness, and perceived value.

The quantitative results confirm that customer experience and perceived usefulness play significant mediating roles in translating AI capabilities into purchasing behavior, highlighting the importance of experiential and functional evaluations in AI-enabled environments. Although perceived value does not





directly affect purchase intention, it contributes indirectly by supporting consumers' evaluative processes and reducing uncertainty during decision-making. These results indicate that AI technology functions more effectively as a decision-support mechanism rather than as a direct persuasive force.

The qualitative findings further enrich these conclusions by revealing that consumers appreciate AI-driven features when they enhance convenience, relevance, and confidence, but express concerns when automation diminishes human interaction. Together, the integrated findings provide a nuanced understanding of how AI technology shapes consumer behavior in social commerce.

Overall, this study contributes to the literature by clarifying the mediating mechanisms through which AI technology influences purchase intention and offers practical insights for designing AI applications that align with consumers' experiential and cognitive needs.

Recommendations

Based on the findings of this study, several recommendations can be proposed for both practitioners and future research in the context of AI-driven social commerce.

First, social commerce platforms should prioritize the development of artificial intelligence technologies that enhance customer experience rather than focusing solely on technological sophistication. AI applications such as personalized recommendations, intelligent search, and automated assistance should be designed to reduce decision effort, improve interaction quality, and create seamless shopping journeys, as customer experience was found to be a key mechanism influencing purchase intention.

Second, practitioners should focus on improving the functional accuracy and contextual relevance of AI-driven features to strengthen perceived usefulness. Continuous learning from user behavior data and feedback can help ensure that AI outputs align with consumers' actual needs, thereby increasing trust and supporting purchase decisions.

Third, although perceived value did not directly influence purchase intention, its mediating role suggests that AI should be leveraged to reduce perceived risk and enhance confidence rather than aggressively promoting sales. Features such as review summarization, transparent recommendation logic, and decision-support tools may help consumers better evaluate alternatives and indirectly encourage purchasing behavior.

Finally, future research is encouraged to examine AI-driven social commerce in different cultural or platform contexts and to incorporate additional moderating variables, such as trust or privacy concerns, to further refine the understanding of consumer responses to AI technology.

Reference:

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chen, J., Su, B., & Widjaja, A. E. (2014). Facebook C2C social commerce: A study of online impulse buying. *Decision Support Systems*, 59, 230–239. <https://doi.org/10.1016/j.dss.2013.11.008>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Herrando, C., Jiménez-Martínez, J., & Martín-De Hoyos, M. J. (2019). Tell me your age, and I'll tell you what you trust: The moderating effect of generations. *Internet Research*, 29(4), 799–817. <https://doi.org/10.1108/IntR-02-2018-0075>
- Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications*, 12(4), 246–259. <https://doi.org/10.1016/j.elerap.2012.12.003>
- International Trade Centre. (2023). *Social commerce trends and global consumer behavior*. ITC Publications.
- Kim, D., Kim, J., & Park, K. (2014). The effects of consumer social capital on social commerce involvement and purchasing intentions. *Asia Pacific Journal of Marketing and Logistics*, 26(2), 298–316. <https://doi.org/10.1108/APJML-08-2013-0107>





- Lee, D., Hosanagar, K., & Tan, Y. (2012). Do I follow my friends or the crowd? Information cascades in online movie ratings. *Management Science*, 58(8), 1422–1434.
<https://doi.org/10.1287/mnsc.1110.1500>
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Liang, T.-P., Ho, Y.-T., Li, Y.-W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, 16(2), 69–90.
<https://doi.org/10.2753/JEC1086-4415160204>
- Ravald, A., & Grönroos, C. (1996). The value concept and relationship marketing. *European Journal of Marketing*, 30(2), 19–30. <https://doi.org/10.1108/0309056961010662>
- Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1–3), 53–67.
<https://doi.org/10.1362/026725799784870496>
- Statista Research Department. (2021). *Number of social media users in China from 2017 to 2026*. Statista.
<https://www.statista.com>
- Yadav, M. S., De Valck, K., Hennig-Thurau, T., Hoffman, D. L., & Spann, M. (2013). Social commerce: A contingency framework for assessing marketing potential. *Journal of Interactive Marketing*, 27(4), 311–323. <https://doi.org/10.1016/j.intmar.2013.09.001>
- Yin, Y., & Qiu, L. (2021). How does artificial intelligence (AI) enhance customer experience? A study on AI-driven marketing technology. *Journal of Retailing and Consumer Services*, 60, 102433.
<https://doi.org/10.1016/j.jretconser.2021.102433>

