
Original Research Article**A study of factors influencing users' purchase intention of Top Influencers' live streaming***Meng Yang**Communication University of China, Nanjing, Jiangsu, 210000, China*

Abstract: The study examines factors influencing consumers' purchase intentions in live-streaming e-commerce, focusing on top influencers. Based on the DeLone and McLean Information System Success Model, the impact of product characteristics, information quality, interaction strategies, service quality, and perceived value is analyzed. Data from 151 respondents show that all these factors significantly influence purchase intentions, with service quality and information quality having the strongest effects. The findings offer practical insights for optimizing influencer strategies and enhancing consumer engagement in China's growing live-streaming market.

Keywords: Live-streaming e-commerce; Purchase intention; Influencers

1. Introduction

As of December 2024, Online retail sales in China reached 15.5 trillion yuan in 2024, marking an 11% increase year-on-year and maintaining China's position as the world's largest online retail market for 12 consecutive years. From January to November 2024, live-streaming sales totaled 4.3 trillion yuan (CNNIC, 2025)^[1]. IResearch forecasts an 18% CAGR for 2024-2026, indicating steady growth and a shift towards more regulated development^[2]. Therefore, this study will provide critical insights for optimizing platform governance and advancing the industry's standardized development.

2. Literature review**2.1. Live-streaming E-commerce**

Niu and Song (2020) analyzed live-streaming e-commerce, concluding that it is a novel online sales model where influencers promote products by disseminating information and guiding consumer decisions^[3]. Song (2020) categorized the live-streaming e-commerce model into three types: independent influencers promoting products for brands or merchants; businesses or brands employing employees or celebrity endorsers as live-streaming hosts; and influencers, often business founders, promoting their own products^[4].

2.2. Top influencers

The China Employment Training Technical Guidance Center (2020) introduced the role of "Internet Marketing Specialists," highlighting professionals who leverage online platforms to sell products^[5]. Pan (2016) characterized top influencers as those with significant resources and large, engaged fan bases, holding considerable industry influence. While their numbers are limited, they set the benchmark for the live-streaming industry due to their high resource availability and widespread popularity^[6].

2.3. Purchase intentions

Purchase intention refers to the likelihood of a consumer engaging in a specific behavior, influenced by subjective factors. Fishbein, Martin, and Icek (1975) extended the concept of intention to purchasing behavior,

identifying it as a critical predictor of consumer decisions^[7]. Purchase intention reflects both consumer preference and the probability of a purchase.

2.4. D&M model

Delone and McLean (1992) developed the Information System Success Model (D&M Model), which assesses factors such as system quality, information quality, usage, individual and organizational influence, and user satisfaction^[8]. Wang (2008) enhanced this model by incorporating perceived value and repurchase intention, revising the factors to include information quality, service quality, system quality, and user satisfaction^[9].

3. Hypotheses development

Based on the Information System Success Model, this study proposes the following hypotheses:

H1: Product characteristics positively influence consumer purchasing intentions.

H2: Information quality positively influences consumer purchasing intentions.

H3: Interaction strategy positively influence consumer purchasing intentions.

H4: Perceived value positively influences consumer purchasing intentions.

H5: Service quality positively influences consumer purchasing intentions.

4. Results and analysis

4.1. Reliability analysis

To assess the reliability of the collected data, reliability analysis was conducted to determine the consistency and stability of the sample results. The results showed that all α values exceeded 0.8, confirming the high reliability of the questionnaire. This reliability assessment validates the data for further analysis.

Table 1. Reliability test results.

Variable	Cronbach's Alpha
Product Characteristics	0.960
Information Quality	0.946
Interaction Strategy	0.914
Service Quality	0.935
Perceived Value	0.963
Purchase Intention	0.949

4.2. Validity analysis

The results, presented in **Table 2**, indicate that the validity of this questionnaire was satisfactory.

Table 2. Validity test results.

KMO		.965
	Approximate chi-square	6252.970
Bartlett sphericity test	Degree of freedom	465
	Significance	.000

4.3. Correlation analysis

Correlation analysis was conducted to determine the relationships between variables. The results show a strong positive correlation ($r=0.886$) between product characteristics and purchase intention, with significance

confirmed at the 0.01 level ($p < 0.01$). The Pearson correlation coefficient between service quality and purchase intention is 0.931, indicating that higher service quality significantly enhances purchase intention ($p < 0.01$). The correlation coefficient of 0.915 between information quality and purchase intention, confirming a significant positive relationship ($p < 0.01$). This highlights the critical role of high-quality information in driving purchase decisions. With a correlation coefficient of 0.891 ($p < 0.01$), interaction strategy also demonstrates a strong positive impact on purchase intention. Effective engagement strategies are thus crucial in influencing consumer behavior. The correlation coefficient of 0.872 ($p < 0.01$) between perceived value and purchase intention underscores the importance of value perception in consumer decision-making.

4.4. Regression analysis

Regression analysis was performed to evaluate the impact of independent variables on purchase intention. The analysis used the MEAN function to generate average values for the independent variables and the dependent variable. The results presented in **Table 3** confirm that the hypotheses (H1-H5) are valid.

Table 3. Regression analysis results.

Variable	B	Std. Error	Beta	t	Significance	Tolerance	VIF	R ²	Adjusted R ²	F	Durbin-Watson
Product Characteristics	.935	.047	.886	19.729	.000	.050	19.950	.784	.782	.80340	.834
Service Quality	.955	.036	.931	26.434	.000	.150	6.666	.867	.866	698.746	1.958
Information Quality	.959	.041	.915	23.396	.000	.075	13.350	.836	.835	547.373	1.340
Interaction Strategy	.931	.046	.891	20.349	.000	.100	10.023	.795	.793	414.092	1.386
Perceived Value	.914	.050	.872	18.439	.000	.054	18.569	.761	.758	339.991	1.075

5. Implications

5.1. Enhance content quality

Influencers should focus on authentic and innovative content, leveraging personal traits to build a recognizable image. Ensure live-streaming content is accurate, professional, and engaging to build trust and elevate the overall experience.

5.2. Improve service quality

Service quality is crucial for influencer credibility. Influencers must maintain a positive image, use professional language, and provide efficient after-sales support to reinforce trust and create a reliable shopping environment.

5.3. Utilize AI-powered interaction

AI-enabled digital avatars can enhance interaction efficiency and user experience by providing real-time, accurate responses and personalized recommendations. This technology can reduce labor costs while improving engagement and purchase intentions.

5.4. Strengthen product selection

Influencers should prioritize high-quality products, using their influence to promote trustworthy brands.

Implement rigorous selection processes, including supplier reviews and quality checks, to ensure transparency and reduce risks.

5.5. Deliver multi-dimensional value

Influencers can enhance perceived value by actively engaging with viewers, addressing questions promptly, and using emotive storytelling. This approach builds emotional connections and drives purchase intentions.

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