

# Study on Live-streaming of E-Commerce in China: Prospects and Issues

Xu Jinglan<sup>1</sup> and Anjeli Dewi<sup>2</sup>

<sup>1</sup>PhD Researcher, Binary University of Management & Entrepreneurship, Malaysia, <sup>2</sup>Senior Lecturer, Binary University of Management & Entrepreneurship, Malaysia

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## Abstract

With the continuous growth of e-commerce platforms, live-streaming e-commerce shopping has received a lot of attention, and live-streaming e-commerce has gradually become a research hotspot. From the perspectives of live-streaming e-commerce platforms, anchors, and government, this paper uses systematic literature review method to summarize the research results on the concept and types, platform and anchor characteristics, as well as consumer purchasing intentions of live-streaming e-commerce. It summarizes the current development status of live-streaming e-commerce, explores open issues, and attempts to propose feasible solutions to provide support and assistance for in-depth research in this field from three aspects including government, the live streaming e-commerce platform and the anchors.

**Keywords:** Live-streaming E-Commerce, Issues, Prospects, Systematic Literature Review

## Introduction

The growing trend of live streaming e-commerce has grown significantly in Asia (Ong et al., 2020), and China is leading the way in this innovative business trend (Chen, 2023). Since 2016, China's live streaming e-commerce industry has been developing rapidly, with a large Linux of capital, companies forming, and users rushing to it (Li et al., 2023). The live streaming e-commerce has become the fastest-growing form in 2019. Live streaming booths cover factories, fields, shopping malls, and so on, creating rich webcasts of content and scenarios (Zhang et al., 2022). In 2020, live streaming commerce model has further accelerated development (Lu & Chen, 2021; Zhou et al., 2021). To be specific, According to the data of China Internet Network Information Center (CNNIC), live-streaming e-commerce market in China is growing rapidly, with online retail sales reaching 13.78 trillion RMB in 2022, up 4% year on year (CNNIC, 2022). As of June 2022, the number of e-commerce live streaming users is 469 million, an increase of 5.33 million compared to December 2021.

Accounting for 44.6% of the overall internet users, only 27.3% of online shopping users consumed on traditional e-commerce platforms, while the proportion of users who purchased on live streaming e-commerce were 49.7%(CNNIC, 2022). According to the data

from CNNIC, the number of online buyers and live viewers has steadily increased in recent years. The cultivation of Online shopping and live streaming viewing habits also lays the foundation for the development of live-streaming e-commerce. Overall, existing research is insufficient to provide solid and systematic theoretical guidance for policymakers and relevant practitioners, and there is still a lack of SLR (systematic literature review) from the newest and comprehensive perspective. This study aims to explore Live-streaming E-Commerce in China from three aspects: anchor, the live-streaming e-commerce platform and government, cause prior studies in this field are still limited. So, the author intends to use the preferred reporting project methods of SLR, system evaluation and meta-analysis to comprehensively analyze the status and issues of live-streaming e-commerce from 2022 to 2023 (2023), and look forward to future research prospects, to improve the current knowledge system and assist in the sustainable development of live-streaming e-commerce in China.

#### *The definition of Live-streaming e-commerce*

Live-streaming e-commerce has both attributes of e-commerce and streaming media (Xie et al., 2022). It refers to a new marketing method in which anchors use internet platforms to explain product information to consumers through live streaming technology and interact with consumers in real-time. In live-streaming e-commerce, live-streaming is the means, and e-commerce is the foundation for developing live streaming e-commerce (Luo Q, 2020). And compared to traditional e-commerce, live streaming e-commerce has characteristics such as authenticity, visibility, real-time interactivity, and entertainment, which can provide consumers with a relatively rich shopping experience (Liu et al., 2020). Overall, it can be define that e-commerce live streaming as e-commerce platforms embedded with streaming media technology.

YEAR	AUTHOR	DEFINITION
2020	Xu et al.	The process of conducting e-commerce activities and transactions through live-streaming platforms.
2021	Lee & Chen	The Anchor uses network terminals such as computers and mobile phones to promote products in live-streaming and provides shopping links in a short period of time to promote marketing activities for transactions.
2022	Wang, X., & Lin, Y.	The behavior mode of e-commerce or anchors using online platforms and relying on live-streaming technology to display, promote, and sell goods or services.
2023	Gong, L., Zhan, S., Kong, D., & Yu, T.	A new marketing method in which anchors use internet platforms and live-streaming technology to explain product information to consumers and interact with them in real-time to promote product transactions.

Fig. 1 Different scholars' definitions of live-streaming e-commerce

#### *Live-streaming e-commerce platforms in china*

Live-streaming e-commerce has developed rapidly in recent years, starting from the activation of live streaming function on Taobao in China (Gong et al., 2023). Live streaming e-commerce can not only enhance user stickiness and better achieve product marketing, but also promote the development of e-commerce platforms themselves. Live streaming

platforms can be mainly divided into two categories (Li & Zhou, 2023). Moreover, live commerce platforms are dynamic and different from previous online shopping methods. It allow the seller and consumer to communicate in real time (Junic et al., 2023).

#### *Based on traditional e-commerce platforms*

Traditional e-commerce platforms directly launch live streaming functions within the platform. Such as Taobao Live (Dai & Cui, 2022). Such as Taobao Live. This type of platform, due to its early accumulation, has a large user base, and with its rich products and a complete supply chain system, it is far ahead of other platforms in carrying out live streaming sales. Traditional e-commerce platforms provide support for merchants to carry out live streaming e-commerce by opening live streaming functions and corresponding business segments, promoting the rapid development of the platform. On July 22, 2023, Alibaba Group announced its annual report for the fiscal year 2023, with impressive results. According to the annual report, Alibaba has successfully served 1 billion Chinese consumers. Alibaba International E-commerce Group also provided services to hundreds of millions of overseas consumers in the fiscal year 2023, reaching over 47 million active buyers from small and medium-sized enterprises worldwide.

#### *Based on social platforms*

There are many KOLs and celebrities on this type of platform, which can provide support for the platform's transformation and development of live streaming e-commerce business. They can attract consumers to browse by recommending products and sharing their shopping experience on the platform, and recommend products to consumers (Kim et al., 2023). After consumers engage in purchasing behavior in the platform mall. These KOLs and celebrities can receive commissions. Due to the huge number of users obtained by such platforms in their early development, this also provides favorable conditions for the development of live streaming e-commerce. After the online celebrities on the platform start live streaming and selling products, they will attract many fans to purchase, thereby further improving the platform's purchase conversion rate. The various styles of live streaming products on the platform have attracted many consumers to enter the platform, further enhancing user stickiness.

#### *Anchors of Live-streaming e-commerce*

Anchors are the core of e-commerce live streaming. They create live streaming content, such as tastings, trials, and marketing methods. It provides real-time interaction and sales promotion to attract consumers. And quickly establish social relations with consumers (Yuan & Huang, 2022). There are two main types of anchors.

#### *KOLs*

This type of anchor has a large number of fans, with strong professionalism, great influence, and high fan loyalty (Xia, 2022). This types of anchor its own influence to attract a fan base to watch the live broadcast and convert it into strong purchasing power (Xia, 2022). They have professional sales skills that can quickly stimulate consumers' purchasing desire. Quickly generate purchasing behavior through timely and efficient interaction and limited-time coupons.

### *Merchants*

This type of anchor refers to the sales behavior of merchants in their live streaming rooms to better promote their brand (Wang et al., 2023). Due to the comprehensive understanding of product research and development design, functions, and usage methods by merchants themselves, it can help consumers shorten decision-making time and optimize the shopping experience (Li, 2023). In addition, merchants have strong control over the content of the live broadcast and a clear positioning of the product's purchasing audience, which can improve the conversion rate of purchases.

### **Problem Statement**

With the strong promotion of China's national policies, 5G communication technology, and internet platforms, live streaming e-commerce has entered a period of comprehensive development. But while bringing new opportunities, there are also some problems. To be specific, product quality and after-sales service cannot be guaranteed (Han, 2022). Moreover, the high return rate (Wang, 2022). The average return rate on Taobao Live in 2021 was about 20% (CNNIC, 2022). In 2022, the public opinion on rights protection involving Douyin (Tiktok) accounted for the highest proportion which is 55.41% (China Customer Net, 2022). Inadequate regulation of live streaming e-commerce by the industry and government (Gong et al., 2023).

Homogenization of live streaming methods (Li, 2022). Moreover, combing through the literature related to live streaming e-commerce, it can be found that scholars have increasingly conducted research on live streaming e-commerce. However, the current research on live streaming e-commerce is relatively messy, and the focus of analyzing live streaming e-commerce from different disciplinary backgrounds is different. As a result, there are few connections between the various studies, and more scientific research system has not been formed. This study attempted to summarize the issues and explore the solution in the development of live streaming e-commerce in China from three aspects include government, live streaming e-commerce platforms and anchors. Moreover, the author will provide the future prospects of live streaming e-commerce in China.

### **Limitations of The Study**

The research area is limited to the current situation, problems, and future development prospects of live streaming e-commerce in China. The research sample is limited to two typical live streaming platforms in China (Taobao Live & Douyin Live). The research period mainly focuses on the latest and most concentrated issues of China's live streaming e-commerce in the past year (2020 to September 1, 2023).

### **Literature Review**

In a study by Yin (2020), the researcher analyzes the reasons for the rise of live streaming e-commerce from the elements of the "COVID-19 Period", "logistics and payment system" and "number of Internet users". Therefore, it puts forward development paths such as realizing industry standardization under the management of the government, improving the entry threshold and professional quality of anchors, increasing technology upgrading, and broadening the sales model of live streaming e-commerce. Han (2021) examined the main problems in the regulation of live streaming e-commerce in China include poor governance effectiveness of regulatory entities, poor internal regulatory effectiveness of live streaming

platforms, insufficient effectiveness of regulatory basis, weak regulatory means, and ineffective operation of regulatory mechanisms.

The article proposes measures to improve the governance of e-commerce live streaming in China, with the joint participation of the government, industry self-regulation, live streaming platforms, broadcasters, and social supervision. Man (2022) explores false information dissemination in live streaming e-commerce and proposes solutions from the perspectives of practitioners, platforms, audiences, and government management: strengthening the moral construction of practitioners, enhancing the management ability of platforms, enhancing the rational understanding of audiences, and enhancing the legal capacity of relevant departments to promote the healthy development of live streaming e-commerce. Xiao et al. (2023) carried out a study to contribute to summarizing existing research on live streaming e-commerce, with a focus on analyzing potential research issues and directions worth paying attention to from the perspectives of operations and supply chain management. Sun (2023) conducted a research was performed to focus on tax issues.

Which is propose suggestions to strengthen the collection and management of personal income tax in the live streaming industry, including improving broadcasters' tax awareness, improving the level of data management by tax authorities, and standardizing tax competition between local governments. In summary, many scholars have conducted relevant research and analysis on the current situation, problems, and prospects of live-streaming e-commerce in China. However, few scholars have used systematic literature review methods to analyze and summarize the current situation, problems, and prospects of live-streaming e-commerce in China from different dimensions. Most researchers only through literature review for simple induction and organization.

### **Research Questions**

- 5.1 What is the current development status of live streaming e-commerce in China?
- 5.2 What are the issues with the development of live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors?
- 5.3 How to solve the current issues in live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors?
- 5.4 What are the prospects of live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors?

### **Research Objectives**

1. To investigate the current development status of live streaming e-commerce in China.
2. To summarize the issues in the development of live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors.
3. To guide to solve the issues of live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors.
4. To explore the development prospects of live streaming e-commerce in China from three aspects including government, the live streaming e-commerce platform, and the anchors.

### Research Methodology

The systematic literature review (SLR) method aims to summarize a large amount of existing information about a phenomenon and provide readers with comprehensive knowledge of literature in a certain field by following standard protocols in a holistic and organized manner (Widodo & Napitupulu, 2023). SLR helps to explain existing knowledge gaps and determine future research pathways. Therefore, this study adopts a systematic literature review method to conduct research. To make the research process more operational, some systematic evaluations and meta-analyses were used.

### Data Analysis Plan

This study followed the internationally recognized systematic literature review method (PRISMA: Preferred Reporting Items for Systematic Reviews and Meta Analytics) for literature screening (Moher et al., 2009). Firstly, to effectively obtain high-quality research literature in the last year, a total of 42 articles were searched in the CNKI database using the keywords "live streaming e-commerce" or "live e-commerce" from 2022 to 2023 (September 1, 2023). In Google Scholar, a search was conducted using the keywords "live streaming e-commerce" OR "live e-commerce" from 2022 to 2023 (September 1, 2023), with a total of 202 articles.

*There are 12 duplicate articles in the two databases.*

In order to ensure the reliability and accuracy of literature analysis results, inclusion/exclusion criteria were established for 232 (42+202-12=232) initially retrieved articles based on research questions. The selection criteria for literature are ① the full text is available; ② Empirical research; ③ Research includes clear research questions, research methods, and research conclusions; ④ Research belongs to the field of management; ⑤ The research topic focuses on the current development status, problems, and prospects of live streaming e-commerce, including but not limited to research content such as solutions, optimization paths, and future research directions; ⑥ The research scope must cover the Chinese market and include anchors, live broadcast platforms or government policies or regulations. After repeated screening and evaluation of the literature titles, abstracts, and specific content, 90 eligible literatures were ultimately obtained, with good representativeness. The PRISMA process is shown in Figure 2.

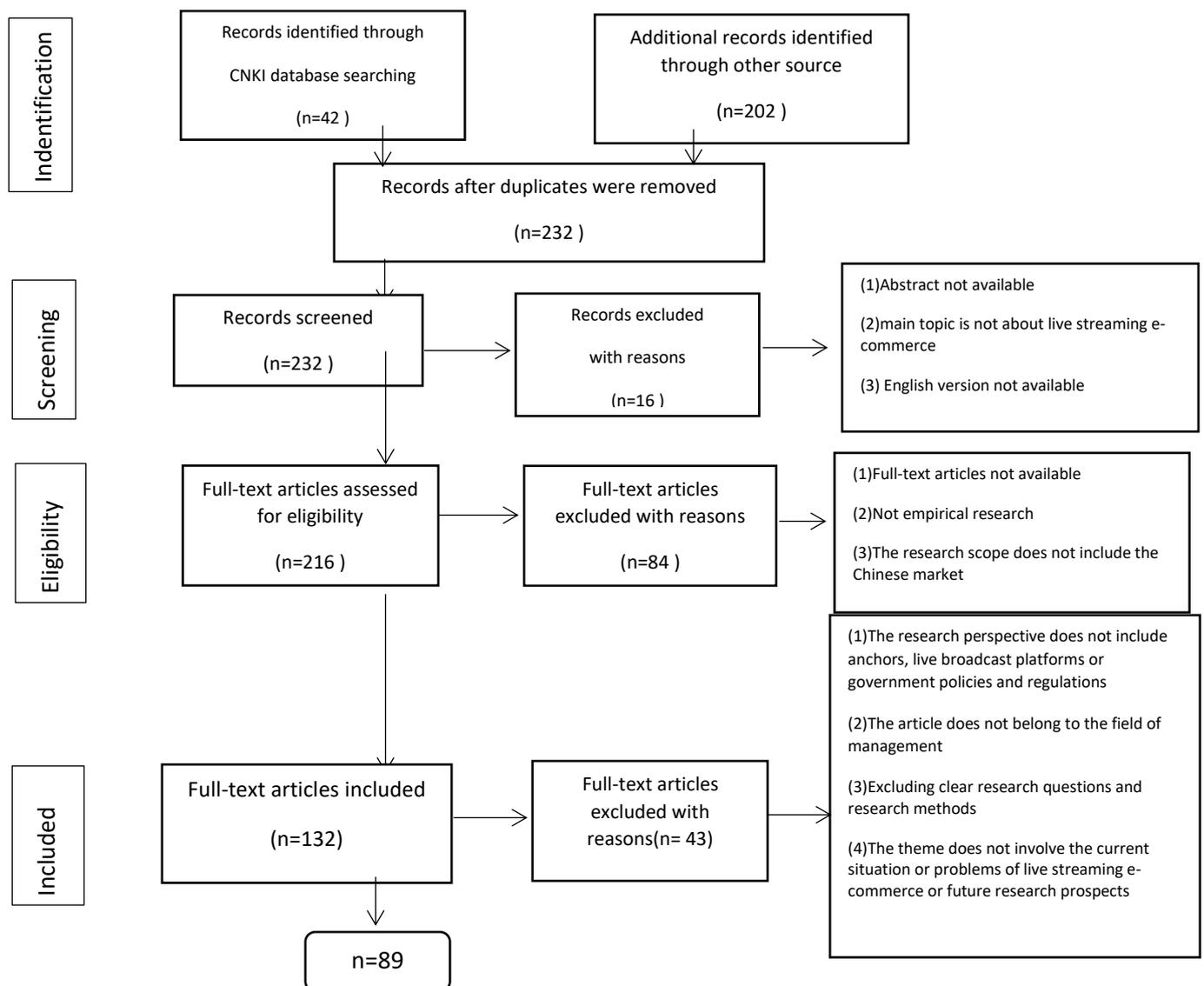


Fig. 2 PRISMA Flow Chart

## Data Analysis

### Data Coding and Classification

Through open coding and thematic analysis, 89 articles were manually coded. During the open coding process, each article was read and analyzed to identify similarities and differences in keywords and issues discussed in the 89 article and to create identifiable keywords and themes. Appropriate themes and sub-themes were created based on the similarities and differences identified across the 89 articles. The themes and subthemes were reviewed to ensure that the themes and sub-themes were within the main context of the selected article, and the themes and sub-themes were defined and named.

### Data Description

#### Distribution of Keywords

The high-frequency keywords in the sample articles are shown in Figure 3. The rankings are e-commerce, live streaming, consumer, purchase intention, anchor (streamer), platform. It can be seen from this: (1) Consumer and Purchase intention are high-frequency keywords in the articles. This shows that in the field of live streaming e-commerce, consumers are the



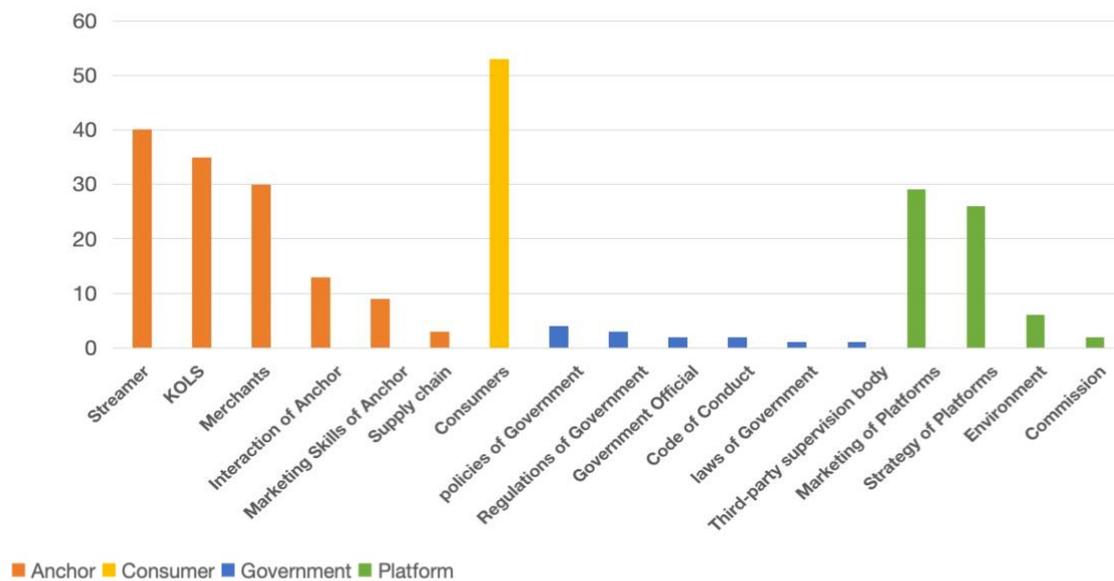


Fig. 5 Research status of main sub-themes

In general, most of the articles study China's live streaming e-commerce from four aspects. To be specific, consumers (64), platforms (51), Anchors (50), Government (15). Moreover, this study mainly conducts in-depth research from three aspects: anchors, platforms and government. Therefore, these three themes are divided into 16 sub-themes. Research on anchors mainly includes KOLs (35), merchants (30), Interaction of Anchor (13), marketing skills of anchor (9), supply chain (3). Research on platforms mainly includes marketing of platforms (29), strategy of platforms (26), environment (6), commission (2). Research on government mainly includes policies (4), regulations (3), Government Official (2), code of conduct (2), laws (1), Third-party supervision body (1). So, in addition to studying consumers, the existing literature is dominated by research on anchors and platforms. There are relatively few studies on government management.

### Finding and Conclusion

*The current development status of live streaming e-commerce in China.*

#### Anchors

The strong marketing influence of anchors on consumers has attracted scholars' research attention. Anchors, as sales in live streaming e-commerce, greatly affect the sales of the live streaming room (Ma et al., 2023). The interactivity of anchor language will also affect consumers' purchase intention. Some researchers concentrate on the impact of communicators on consumers' purchasing decisions, including KOLs, celebrities and professional anchors (Chen & Yang, 2023). Anchors are showing a trend of diversification. KOLs, celebrities, and government officials have all begun to engage in live streaming e-commerce (Shang et al., 2023).

#### *Live streaming e-commerce platform*

Live streaming e-commerce platforms offer a highly engaging and interactive shopping experience with real-time product display which leads to increased customer satisfaction and loyalty. On the contrary, traditional e-commerce platforms offer static and impersonal shopping experiences (Kim et al., 2023). And almost all traditional e-commerce platforms

have embedded live broadcast functions. Such as Taobao, JD.com. Social platforms have also started live streaming functions. Such as Douyin, Redbook.

#### *Government*

To promote the sustainable development of live streaming e-commerce, relevant government departments have also proposed some regulatory policies in response to the chaos that has occurred in live streaming e-commerce. In March 2021, the State Administration for Market Regulation issued the "Online Transaction Supervision and Management Measures" to target A series of institutional rules have been formulated to address issues of great concern such as personal information security and consumer rights protection. In 1 May 2021, "The Measures for the Supervision and Administration of Online Transaction" be issued. Which is to Adhere to the principle of online and offline integrated supervision, and strengthen the combination of online transaction supervision and the protection of consumers' legitimate rights and interests. Clarify provisions on key issues such as the registration of network operators, the responsibility of platform and refine consumer rights protection measures, and intensify supervision over unfair competition (Chen et al., 2022).

#### *The issues of live streaming e-commerce in China.*

##### *Anchors*

Anchors may enhance marketing performance, it also bring negative effects such as advertising fraud and malicious competition. Understanding the effecting mechanisms and key factors of anchors in marketing ethics is an important but less explored social issue that merits further investigation (Chen & Yang, 2023). To attract consumers' attention and obtain commissions, many anchors exaggerate the performance of products, falsely advertise, and even sell fake and shoddy products on the live streaming platform without qualifications and understanding of the products. Moreover, the content and method of the anchor's live streaming are similar which another prominent issue is.

##### *Live streaming e-commerce platform*

Existing studies on live streaming e-commerce are insufficient compared to the level of interest in the industry. Most previous studies were conducted as cases studies. They contained little quantitative analysis, and although the research focused mainly on system-level or platform-level studies. Furthermore, the analysis from a different perspective was incomplete (Kim et al., 2023). Live streaming platforms lack supervision over anchors and merchants. There is no relevant platform management system for improper behaviors such as false sales and illegal sales. For instance, the capital flow management and control of live-streaming transactions are not secure, the technical experience in the field of live-streaming is not professional, the public domain traffic support of live-streaming rooms is not sufficient, the competition pressure from other retailers or platforms is high, the cold chain logistics system is not mature (Su et al., 2023).

#### *Government*

Few studies on the implementation effect of the live streaming e-commerce policies, let alone analyzing the implementation effect of policies in this industry by using online comments (Chen et al., 2022). On the other hand, in response to the violations and illegal behaviors that occurred in live streaming e-commerce, government departments did promulgate policies

and laws in a timely manner. After the policy implementation, although the problem of industry norms is optimized, problems such as false publicity and after-sales rights protection still appear frequently.

*The solution to the current issues in live streaming e-commerce in China.*

*Anchors*

Anchors should pay emotional appeal strategies to recommend to customers in the live streaming room (Ma, 2023). Anchors should improve their professional skills, strictly control product quality, and provide good after-sales service. In the live streaming room, Danmu and other methods are relied on to deeply explore the interests and needs of consumers to enhance the richness of the live broadcast content (Zhou et al., 2022).

*Live streaming e-commerce platform*

Live streaming e-commerce platforms could identify and promote anchors brand-ing. Moreover, live streaming e-commerce platforms could pay attention to identify anchors with strong expressive abilities who can effectively demonstrate the platform's advantages and establish a reliable image. Furthermore, it should select friendly anchors to enhance its ability to resonate with consumers through speech, facial expressions, body movements, and so on. And platforms can provide training courses and case studies to anchors (Chen & Yang, 2023). Increase the supervision of anchors and merchants on the platform, strengthen the supervision of promotional advertisements, increase penalties for the sale of counterfeit products, and formulate relevant management systems to form a standardized governance system. There is a need to delve deeper into understanding the correlation between culture and the effectiveness of live streaming e-commerce, as well as the interplay between live streaming and marketing strategies (Kim et al., 2023).

*Government*

The government could intensify the policy implementation, strengthen supervision, and improve the transparency of the industry (Hossain et al., 2022). Meanwhile, the government needs to guide to improve public satisfaction. Moreover, the government could provide sufficient rewards and penalties for anchors, merchants and live streaming e-commerce platforms, allowing them to voluntarily monitor and manage violations to reduce the regulatory loopholes (Chen et al., 2022). It is necessary to promptly introduce policies for violations and illegal behaviors that occur in live streaming e-commerce. Relevant government departments must work together to formulate a set of effective rules and regulations, strengthen supervision of the live streaming e-commerce industry, and promote the standardized development of live streaming e-commerce.

*The prospects of live streaming e-commerce in China.*

*Anchors*

Chen & Yang (2023) recommends expanding future research to include marketing ethics theory. And it can research the cultivation and selection of live broadcast capabilities of anchors, and customer service after live streaming. Furthermore, virtual anchors have brought good profits to brands in the live streaming e-commerce industry. It has attracted many users who love anime. And due to the ability of virtual anchors to live 24 hours a day, they meet the live streaming needs of different periods (Deng et al., 2023)

### *Live streaming e-commerce platform*

Live streaming e-commerce platforms should pay more attention to the quality of platform management and service systems. Live streaming e-commerce platform operators should consider publicity, such as by holding festival advertising events on social platforms (Kim et al., 2023).

### *Government*

Most research on government focuses on the policy and regulatory level. In the future, research can be conducted from the perspective of third-party supervisor and social supervision (Zhao & Huo, 2022).

### **Recommendation**

(1) Anchors no longer only pursue low prices but focus more on product and service quality to better meet consumer needs. (2) Platforms have entered the stage of compliance development. Whether it is laws and regulations, code of conduct, industry standards, platform self-supervision, they are constantly being improved. (3) Live streaming e-commerce can play a positive role in boosting consumption and driving new industry groups. For example, in Southeast Asia, the live streaming e-commerce industry has played a certain leading role. In Lazada, Shopee, etc. (4) From a global perspective, the rapid development of China's live streaming e-commerce industry can not only serve as a demonstration effect but also provide paths and experiences worth learning from for the development of the live streaming e-commerce industry in other countries and regions.

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### **References**

- Chang, Y., Zhu, Y., & Li, H. (2023). Live E-Commerce Multi-entity Value Co-creation Behavior: A Consumer Engagement Motivation Perspective. International Conference on E-commerce and Internet Technology, Springer.
- Chen, A. (2022). Planned Impulse Consumption in Live Streaming E-commerce—Evidence from Tiktok. 2022 4th International Conference on Economic Management and Cultural Industry (ICEMCI 2022), Atlantis Press.
- Chen, N., & Yang, Y. (2023). The Role of Influencers in Live Streaming E-Commerce: Influencer Trust, Attachment, and Consumer Purchase Intention. *Journal of Theoretical and Applied Electronic Commerce Research* 18(3): 1601-1618.
- Chen, T., Tong, C., Bai, Y., Yang, J., Cong, G., & Cong, T. (2022). Analysis of the Public Opinion Evolution on the Normative Policies for the Live Streaming E-Commerce Industry Based on Online Comment Mining under COVID-19 Epidemic in China. *Mathematics*, 10(18), 3387.
- Chen, Y. (2023). Relationships between Live-streaming e-Commerce and Consumers' Purchase Intentions and Corporate Brand Marketing: A Survey Based on China. *International Journal of Trade, Economics and Finance*, 14(3).
- Cheng, H., Sun, W., and Liu, B. (2022). Key Characteristics and Driving Factors of Live E-commerce. Proceedings of the International Conference on Information Economy, Data Modeling and Cloud Computing, ICIDC 2022, 17-19 June 2022, Qingdao, China.

- Ding, S. (2023). Research on the Influence of Promotion Types and Scarcity on Consumers' Purchase Intention in The Context of E-commerce Live Broadcasting. *Frontiers in Business, Economics and Management*, 8(1): 164-171.
- Fan, H., & Li, H. (2022). An analysis of person deixis in E-commerce live-streaming advertising. *International Journal of Language and Linguistics*, 10(1): 1-4.
- Fei, W., & Wang, K. (2023). Analysis on Dynamic Strategy of Food Safety between Brand Owners and Anchor in Live E-commerce. *Journal of Macro-Quality Research*, 11(1), 87-98.
- Feng, Y. (2022). Research on Live E-Commerce Based on Digital Marketing: Tiktok E-Commerce Live Streaming as an Example. *Highlights in Business, Economics and Management* 2: 125-130.
- Fu, B., & Hsieh, M. (2023). The Impact Model of Consumer Rights Safeguard Trigger in The Context of Live Stream E-commerce Grounded research based on the consumer's perspective. *Romphruek Journal*, 41(1): 57-84.
- Fu, K. (2022). The Effect of Social Media on Customers' Behaviors in E-commerce: Live Streaming Shopping as an Example. *2021 International Conference on Public Art and Human Development (ICPAHD 2021)*, Atlantis Press.
- Gong, L., Zhan, S., Kong, D., & Yu, T. (2023). Development Status, Research Subjects And Prospects Of Live Streaming E-Commerce-A Systematic Literature Review, *Journal of Nanyakn Institute of Technology*, 70-75.
- Gopalakrishanan, S., Ganeshkumar, P. (2013). Systematic reviews and meta-analysis: understanding the best evidence in primary healthcare. *Journal of Family Medicine and Primary Care*, 2( 1) :9—14.
- Hameedi, K. S. (2023). Role of Live E-Commerce on Consumer Purchase Intentions. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.* 8(6): 18.
- Han, M. (2021). Research on the supervision problems and countermeasures of E-commerce live streaming in China -- Take Taobao Live Streaming as an example (Master's thesis, Shandong University of Finance and Economics).
- Han, W. (2022). Research on the Current Business Model and Future Development Trends of China's Live Streaming E-Commerce Industry. In *2022 8th International Conference on Humanities and Social Science Research (ICHSSR 2022)* (pp. 1819-1823). Atlantis Press.
- Han, Z., Du, G., & Xiong, A. (2023). Research on the Influence of E-Commerce Live Streaming Type on Consumers' Purchase Intention of New Products. *Economy and Management*, 45(4), 133-150.
- Hossain, M. I., San, O. T., Ling, S. M., Said, R. M., & The, B. H. (2022). Nexus of Stakeholder Integration, Environmental Investment, Green Technology Adoption and Environmental Sustainability Practices: Evidence from Bangladesh Textile SMEs. *Journal of Social Sciences and Humanities*. 30 (1), 253 – 281.
- Hong, Z. (2022). *The influence of online celebrity live streaming e-commerce on consumers' purchase intention* (Master's thesis).
- Hou, J., & Chen, J. (2023). Research on the Impact of E-commerce Live Broadcast on Consumer Purchase Behavior under Perceived Value. *E3S Web of Conferences*, EDP Sciences.
- Hu, C., Chen, W., Zhou, Y., Chen, C., & Sun, S. (2023). Regulation mechanism of live streaming e-commerce based on evolutionary game theory. *Journal of Management Sciences in China*, 26(6), 126-141.
- Huang, J. (2023). Research on the Influencing Factors of the Return and Exchange Rate of E-commerce Live Broadcast. *SHS Web of Conferences*, EDP Sciences.

- Jia, Y. (2022). E-commerce Live Broadcasting: Media Consumption and Reconsumption Driven by Technology. *Journal of Henan University (Social Sciences)*, 62(1), 126-132,156.
- Jiang, L., & Wang, Y.(2022). Research on The Influence of E-commerce Live Broadcast Consumers'Presence Perception on Purchasing Behavior. *Price: Theory&Practice* (3), 139-142.
- Kim, J., He, N., & Miles,I. (2023). Live Commerce Platforms: A New Paradigm for E-Commerce Platform Economy. *Journal of Theoretical and Applied Electronic Commerce Research* 18(2): 959-975.
- Kit-fong, A., Wenyue, L., & Zhaole, L. (2022). The Future of e-Commerce: Live Stream Shopping and Purchase Intention Post-COVID-19. *International Journal of Electronic Commerce Studies* 13(3): 147-184.
- Lee, C., & Chen, C. (2021). Impulse buying behaviors in live streaming commerce based on the stimulus-organism-response framework. *Information*, 12(6), 241.
- Li, C., Cao Y., Wang C., & Hao L. (2022). Evolutionary Game Simulation of Tripartite Strategy in E-commerce Live Streaming Under Platform Regulation. *Complex Systems and Complexity Science*, 19(1), 34-44.
- Li, H., Ding, Y., & Liu, X. (2023).Strategies for improving customer satisfaction of apparel products under e-commerce live. *Wool Textile Journal*, 51(6), 63-72.
- Li, M., Wang, Q., & Cao, Y. (2022). Understanding consumer online impulse buying in live streaming e-commerce: A stimulus-organism-response framework. *International journal of environmental research and public health* 19(7): 4378.
- Li, S. (2022). From Infancy to Maturity, the Rapid Growth of E-commerce Live Streaming Industry: Opportunities, Challenges and Countermeasures. 2022 2nd International Conference on Enterprise Management and Economic Development (ICEMED 2022), Atlantis Press.
- Li, X., Wang, J., Cheng, A., & Fang, Q. (2023). E-Commerce Live Streaming And Local Entrepreneurship: The Role Of Government Officials' participation. *ECIS 2023 Research-in-Progress Papers*. 80.  
[https://aisel.aisnet.org/ecis2023\\_rip/80](https://aisel.aisnet.org/ecis2023_rip/80)
- Li, Y., Miao, R., Mao, Y., & Yan, Y. (2022). Clothing e-commerce design-making analysis under different webcast marketing modes from the perspective of game theory. *Journal of Silk*, 59(2), 68-76.
- Li, Y., Yang, W., & Zhou, Y. (2023). Research on the Profit Model of Tiktok Live Broadcast E-commerce Platform. *Highlights in Business, Economics and Management* 11: 77-82.
- Liang, X., Liu, H., & Hu, S. (2022). The effect of Investor Sentiment on Commonality in Stock liquidity. *Price: Theory&Practice* (9), 154-157,207.
- Liu, C., Sun, K., & Liu, L. (2023). The Formation and Transformation Mechanisms of Deep Consumer Engagement and Purchase Behavior in E-Commerce Live Streaming. *Sustainability* 15(7): 5754.
- Liu, L. (2022). Factors Affecting Consumers' Purchasing Behaviours in Live Streaming E-Commerce: A Review. 2022 2nd International Conference on Economic Development and Business Culture (ICEDBC 2022), Atlantis Press.
- Liu, X., Zhang, L., & Chen, Q. (2022). The effects of tourism e-commerce live streaming features on consumer purchase intention: The mediating roles of flow experience and trust. *Frontiers in Psychology* 13: 995129.

- Liu, X., & Zhang, K. (2022). Web Celebrity Economy under the Background of E-commerce Live Streaming with Goods Marketing Model. 2022 4th International Conference on Economic Management and Cultural Industry (ICEMCI 2022), Atlantis Press.
- Liu, Z. (2020). Research on the current situation and future trend of web celebrity e-commerce live streaming industry. In *2020 The 4th International Conference on Business and Information Management* (pp. 133-137).
- Lu, Y., He, Y., & Ke, Y. (2023). The influence of e-commerce live streaming affordance on consumer's gift-giving and purchase intention. *Data Science and Management*, 6(1), 13-20.
- Lyu, M. (2022). Opportunities and Reflections of Paying for Knowledge Online in the Context of E-Commerce Live Streaming. 2022 7th International Conference on Modern Management and Education Technology (MMET 2022), Atlantis Press.
- Ma, E., Liu, J., & Li, K. (2023). Exploring the mechanism of live streaming e-commerce anchors' language appeals on users' purchase intention. *Frontiers in Psychology*, 14.
- Ma, X., Jin, J., & Liu, Y. (2023). The influence of interpersonal interaction on consumers' purchase intention under e-commerce live broadcasting mode: The moderating role of presence. *Frontiers in Psychology*, 14, 1097768.
- Man, R. (2022). Research on false information dissemination based on e-commerce live broadcast (Master's thesis, Hebei University of Economics and Trade).
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group\*. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine*, 151(4), 264-269.
- Ong, S. T., Teh, B. H., Kasbun, N. F., Mahroeian, H., Hossain, M. I. (2020). Electronic Commerce Adoption among Malaysian SMEs. *Journal of Critical Reviews*. 7(19), 555-565.
- Peng, Y., & Hao, L. (2022). Influence of Soft and Hard Information on Consumer Response in E-Commerce Live Broadcasting. *Economy and Management*, 36(4), 68-75.
- Qing, C., & Jin, S. (2022). What drives consumer purchasing intention in live streaming e-commerce?. *Frontiers in Psychology*, 13, 938726.
- Ray, P., & Zou, L. (2022). Live Stream e-Commerce: Factors that Motivate the Evolving Consumer Patterns. *African Journal of Economics, Politics and Social Studies*(1): 155-170.
- Sarah, S., & Sobari, N. (2022). The effect of live streaming on purchase intention of e-commerce customers. In *Proceeding of the International Conference on Family Business and Entrepreneurship* (Vol. 3, No. 1).
- Shang, Q., Ma, H., Wang, C., & Gao, L. (2023). Effects of Background Fitting of e-Commerce Live Streaming on Consumers' Purchase Intentions: A Cognitive-Affective Perspective. *Psychology Research and Behavior Management*, 149-168.
- Shao, P., & Yi, W. (2022). Analysis on influencing factors of anchors' clothing sales capacity on live streaming platforms. *Journal Of Silk*, 59(10), 91-98.
- Shi, Y., Fei, W., & Wang, K. (2022). Analysis of the Influencing Factors on Consumers' Food Purchase Intention Under the Background of Live E-Commerce. *Economy And Management*, 36(6), 77-83.
- Su, J., Wang, D., Zhang, F., Xu, B., & Ouyang, Z. (2023). A Multi-Criteria Group Decision-Making Method for Risk Assessment of Live-Streaming E-Commerce Platform. *Journal of Theoretical and Applied Electronic Commerce Research* 18(2): 1126-1141.
- Su, Y., & Zhou, X. (2023). Digital Opportunity Co-creation Mechanism within Live Broadcast E-commerce Context: A Qualitative Study based on the Digital Affordance Theory. *Nankai Business Review*, 26(1).

- Sun, J. (2023). Research on Personal Income Tax Issues in Live-Streaming E-commerce (Master's thesis, Shandong University of Finance and Economics).
- Tan, Y. (2023). Research on the return of e-commerce live broadcast. SHS Web of Conferences, EDP Sciences.
- Wang, C., Xu, J., & Shang, Q. (2023). The Mechanism of Virtual Anchor Interactivity on Consumer Purchase Behavior in E-Commerce Live Streaming. *Economy And Management*, 37(2), 84-92.
- Wang, J. (2022). A Study on Factors Influencing Consumer Usage of Live Streaming E-Commerce. *The World Of Survey And Research*, (340), 58-66.
- Wang, L. (2022). Research on the Existing Problems and Countermeasures of Live E-Commerce Economy in China. *Accounting and Corporate Management* 4(6): 41-49.
- Wang, X., & Lin, Y. (2022). The Governance Mechanisms Construction of "Roll-over" Events in Live Streaming E-commerce. *Economic management*, 44(2), 178-191.
- Wang, Y. (2022). The Impact Of E-Commerce Live Streaming On Consumer Purchase Intention During The Covid-19 Pandemic: 10.2478/Bjlp-2022-002065. *Baltic Journal of Law & Politics*, 15(3), 900-910.
- Wang, Y., Lu, Z., Cao, P., Chu, J., Wang, H., & Wattenhofer, R. (2022). How live streaming changes shopping decisions in E-commerce: A study of live streaming commerce. *Computer Supported Cooperative Work (CSCW)*, 31(4), 701-729.
- Wen, Y., & Wen, H. (2023, July). Research on the Influence of Live Streaming E-commerce on Consumers' Impulsive Purchasing Behavior. In 2023 4th International Conference on E-Commerce and Internet Technology (ECIT 2023) (pp. 126-134). Atlantis Press.
- Widodo, R., & Napitupulu, T. (2023). Exploring The Impact Of Live Streaming For E-Commerce Business: A Systematic Literature. *Journal of Theoretical and Applied Information Technology* 101(16).
- Wu, Y., & Huang, H. (2023). Influence of Perceived Value on Consumers' Continuous Purchase Intention in Live-Streaming E-Commerce—Mediated by Consumer Trust. *Sustainability*, 15(5), 4432.
- Xia, S. (2022). The Impact of Live-Streaming E-commerce Key Opinion Leader Traits on Consumer Engagement—Based on the Mediating and Moderating Effect of Consumer Confusion and Platform Enabling. In *SHS Web of Conferences* (Vol. 148, p. 03021). EDP Sciences.
- Xiao Y., Wang, X., Yu, J., & Zhao, C. (2023). Live-streaming E-Commerce: Management Challenges and Potential Research Directions. *Chinese Management Science*. doi:10.16381/j.cnki.issn1003-207x.2021.1113.
- Xiao, Z., Hu, D., & Wang Z. (2023). Research on e-commerce Governance Based on Credit System Supervision Take the Live Streaming Industry as an Example. *Journal of Nanjing University of Science and Technology (Social Sciences)*, 36(2), 44-51.
- Xie, X., & Liu, L. (2023). Trust Repair Mechanism in Live E-commerce Model from Perspective of Multi—interaction *Journal of Beijing University of Posts and Telecommunications (Social Sciences Edition)*, 25(2), 56-67.
- Xing, P., You, H., & Fan, Y. (2022). Optimal quality effort strategy in service supply chain of live streaming e-commerce based on platform marketing effort. *Control and Decision*, 37(1), 205-212.
- Xiong, H., Chen, J., Yan, H., & Guo, H. (2023). Pricing and coordination of live e-commerce dual-channel supply chain considering the characteristics of anchors. *Journal of Industrial Engineering/Engineering Management*, 37(4), 188-195.

- Xu, C., & Li, X. (2022). Sales Mode Selection of E—Commerce Enterprises and Analysis of Opening Conditions of Live Broadcasting. *Economy And Management*, 36(2), 69-76.
- Xu, P., Cui, B., & Lyu, B. (2022). Influence of streamer's social capital on purchase intention in live streaming E-commerce. *Frontiers in Psychology* 12: 748172.
- Xu, Y., & Ye, Y. (2020). Who watches live streaming in China? Examining viewers' behavior, personality traits, and motivations. *Frontiers in Psychology*, 11, 1607.
- YAN, R. (2022). Analysis on The Factors of Consumers' Prurchase Intention in Live Streaming E-commerce in The Context of Digital Era (Doctoral dissertation, 부경대학교).
- Yan, T. (2022). *The Impact of Live Streaming E-Commerce Features on Chinese Consumers' Attitude and Purchase Intention* (Doctoral dissertation, Syracuse University).
- Ye, M., & Ching, T. C. (2022). Research economic impact of big data technology on sustainable production and consumption in live streaming e-commerce consumer behaviors. *International Conference on Cyber Security, Artificial Intelligence, and Digital Economy (CSAIDE 2022)*, SPIE.
- Yin, H. (2020). Rise and Future Development of E-commerce Live Streaming Mode. *Journal of Wuhan Engineering Vocational and Technical College*(04), 41-43.
- Yu, T., Guan, Z., Dong, J., & Qu, Y. (2022). Research on Live E-Commerce Supply Chain Decision-Making Considering Social Media Influencer's Marketing Efforts under Different Power Structures. *Chinese Journal of Management*, 19(5), 714-722, 748.
- Yu, Y., & Liu, Z. (2022). Research on impulse purchase of live e-commerce platform users based on ELM model in China." *한국컴퓨터정보학회논문지* 27(11): 295-304.
- Yuan, H., & Huang, L. (2022). Research on Interactive Mode of E—commerce Live Broadcast Based on Platform Heterogeneity. *Journal Of Harbin University Of Commerce*, (6), 19-30.
- Yue, X., Yang, Y., Gu, X., Wang, Q., & Chen, S. (2023). Research on the Impact of Perceived Interaction on User Stickiness in the Context of Tiktok E-commerce Live Broadcast--The Mediating Role Based on Emotional Attachment. In *SHS Web of Conferences* (Vol. 165). EDP Sciences.
- Zhang, B., Li, J., Feng, Y., & Liu, D. (2023). Factors analysis of Consumers' purchasing intention under the background of live E-commerce shopping. *Journal of Internet Technology*, 24(3), 809-815.
- Zhang, G., Peng, L., & Wang, F. (2022). Research on the Influence Mechanism of Consumers' Purchase Intention in E-commerce Live Broadcast based on the Extended TAM Model.
- Zhang, R., & Jing, X. (2023). Pricing Strategy of Dual-channel Supply Chain with E-commerce Live Broadcast. *Highlights in Business, Economics and Management* 6: 6-14.
- Zhang, R., & Chen, M. (2023). Predicting Online Shopping Intention: the Theory of Planned Behavior and Live E-Commerce. *SHS Web of Conferences*, EDP Sciences.
- Zhang, S., & Feng, J. (2023). The Mechanism of Consumers' Impulsive Purchasing Behavior in E-commerce Live Broadcast-Based on the Perspective of Interaction and Match-up Hypothesis. *Journal of Hit (Social Sciences Edition)*, 25(3), 138-144.
- Zhang, X., Chen, H., & Liu, Z. (2022). Operation strategy in an E-commerce platform supply chain: whether and how to introduce live streaming services?. *International Transactions in Operational Research*.
- Zhao, X., & Huo, Y. (2022). The Evolutionary Game Analysis and Simulation Research on E-Commerce Live Broadcast Counterfeit Sales with the Participation of a Third-Party Supervisor. *2022 2nd International Conference on Education, Information Management and Service Science (EIMSS 2022)*, Atlantis Press.

- Zhou, J., Zhang, L., & Ren, J. (2022). The Role of Group Interaction in Danmu Comments for Live E-Commerce. 2022 International Conference on Artificial Intelligence, Internet and Digital Economy (ICAID 2022) 2022 International Conference on Artificial Intelligence, Internet and Digital Economy (ICAID 2022), Atlantis Press.
- Zhou, L., Xu, J., & Shen, P. (2023). Study on Customer Participation Behavior in E-commerce Live Broadcast Scenario—Analysis Based on Stimulating Customers' Sense of Social Presence and Self-efficacy. *Price: Theory & Practice* (2), 152-155, 203.
- Zhou, X. (2022). Research on the Development Prospect of E-Commerce Live Broadcast Based on SWOT Analysis. *Highlights in Business, Economics and Management* 2: 131-135.
- Zimiao, X., & Shenggui, C. (2023). Study on The Influence of Situational Factors of E-commerce Live Broadcasting on Consumers' Impulse Buying Behavior. In *SHS Web of Conferences* (Vol. 171, p. 01026). EDP Sciences.