International Journal of Computer Information Systems and Industrial Management Applications
ISSN 2150-7988 Volume 18 (2026) pp. 1-11
© Cerebration Science Publishing
https://doi.org/10.70917/ijcisim-2026-2815
Article

Mapping Sustainable Social Relationships in Live-Streaming Commerce: A Bibliometric Analysis of Customer Experience, Online Reputation and Trust Research

Linna Ma [1,2], Hooi Sin Soo [1,3,*] and Chin Wei Chuah [1,3]

[1] Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, Malaysia
[2] Baotou Light Industry Vocational and Technical College, Baotou, Inner Mongolia, 014000, China
[3] School of Business Management, Universiti Utara Malaysia, Kedah, Malaysia
* Correspondence author: malinnazhangjun@gmail.com

Abstract: With the development of internet technology, a boom in live-streaming e-commerce has rapidly emerged both domestically and internationally, attracting widespread attention from the academic community. However, the existing literature is vast and complex, and lacks systematic organization and synthesis. This paper examines live-streaming e-commerce from three perspectives—customer experience, online reputation, and trust. Using a sample of 708 Chinese and English-language articles published domestically and internationally from 2016 to 2025, it employs a mixed-methods systematic literature review approach to conduct a comparative analysis of domestic and international research on live-streaming e-commerce, perform a structured analysis of the integrated framework, and identify future research directions. First, through bibliometric analysis using advanced tools such as Citespace and VOSviewer, this study objectively reveals the current state of research, key research topics, and evolving trends in live-streaming e-commerce. Second, based on the Theory-Context-Characteristics-Method (TCCM) framework, an integrated framework for live-streaming e-commerce research was constructed to systematically evaluate the theoretical foundations, contextual factors, key characteristics, and research methods employed in this field, thereby enabling a structured analysis of the research trajectory and evolution of the literature in this domain. The results indicate that since the inception of live-streaming e-commerce research in 2016, the scope of topics has continuously expanded and evolved, gradually forming a three-dimensional knowledge structure centered on sustainable development and supported by "customer experience, online reputation, and trust."

Keywords: live-streaming e-commerce; customer experience; online reputation; trust mechanisms; TCCM framework; literature review

1. Introduction

Since 2016, the live-streaming e-commerce industry has developed rapidly, the pace of innovation in mobile internet technology has continued to accelerate, and the surge in online consumer demand has impacted the real economy. Traditional business models have hindered enterprises' digital transformation, and value creation has shifted toward a new model empowered by live-streaming. The digital economy paradigm is transitioning from an economic model centered on data and the internet to a new economic model driven by live-streaming [1]. The development of online live-streaming e-commerce holds significant theoretical and practical implications for the evolution of the digital economy paradigm and the nation's efforts to build an innovative digital economy.

In 2020, 13 Chinese government departments explicitly stated that, since the onset of the pandemic,

Copyright: © 2026 by the authors

the live-streaming industry has played a crucial role in driving national economic growth. On May 25, 2021, seven departments, including the Cyberspace Administration of China, issued regulations to ensure the orderly development of the live-streaming e-commerce market. Guided by the national strategy for the digital economy, live-streaming e-commerce has become the latest mainstream form of China's digital economy. On a theoretical level, research can be traced back to 2016, the "first year of live-streaming e-commerce." Prior to that, studies primarily focused on technical aspects, defining live-streaming e-commerce as a model for the real-time presentation and interactive dissemination of online video information, based on the internet infrastructure and supported by live-streaming applications [2–3]. Early research was conducted from the disciplinary perspective of journalism and mass communication; as live-streaming began to empower various industries, the scope of research expanded to include e-commerce, marketing, and other areas. Overall, both the breadth of research perspectives and the depth of analysis indicate that live streaming has gradually become a focal point in digital economy research.

In the 1980s, experts introduced the concept of "customer experience," defining it as the entirety of interactions between customers and consumer products and their providers [4]. Research on customer experience has gradually attracted the attention of numerous scholars in academia. In the context of live-streaming e-commerce, customer experience refers to the intuitive feelings customers have when using a product [5], including whether the interface is user-friendly, whether operations are smooth, and whether features meet their needs. It encompasses both the overall experiential process—such as aesthetic and entertainment experiences—and psychological dimensions of the experience, such as informational, interactive [6], emotional, and functional experiences. Currently, the live-streaming e-commerce industry is placing increasing emphasis on enhancing customer experience. Live-streaming platforms such as Douyin and JD.com are focusing their efforts on both the production and sales ends, vigorously promoting brand building, and continuously optimizing the customer experience in areas such as product sales channels and brand management.

Reputation is an intangible asset accumulated by a business (or individual) over the course of long-term operations; it represents stakeholders' long-term perceptions and comprehensive evaluations of the entity. A good reputation helps sellers earn the trust of a broad consumer base, stimulates consumer behavior, and thereby boosts sales performance [7]. With the development of internet technology, an increasing number of consumers are sharing their shopping experiences and reviews online—a trend that is particularly evident in sectors such as movies, books, and dining—and reputation has begun to extend steadily from offline to online [8]. Against this backdrop, since "payment-separated" transactions in e-commerce livestreaming involve greater risks than "payment-and-goods-exchanged" transactions in traditional retail models, e-commerce companies provide a trading platform for buyers and sellers, conduct eligibility reviews of sellers, and offer review channels for buyers. Compared to traditional reputation, online reputation exhibits significant differences due to the involvement of digital media. It is characterized by two-way interaction and low cost, and it transcends the original spatial and temporal boundaries of communication. At the same time, online reputation offers advantages such as rapid dissemination, high targeting, and broad coverage; the product transaction and after-sales information it discloses can influence consumers' purchasing behavior. In summary, online reputation is a comprehensive social evaluation of a specific entity (individual, organization, or product) generated, disseminated, and stored by diverse actors within the digital ecosystem through channels such as social media, rating platforms, and search engines.

Some scholars point out that consumers' in-person interactions in physical settings generate emotional resonance, and their sense of experience deepens through face-to-face interactions, thereby laying the foundation for trust [9]. In contrast, in the online model, the internet isolates individuals from the social and self-identities they establish based on social class, race, family, neighborhood, and occupation. E-commerce is also characterized by anonymity, a lack of interaction, and a temporal and spatial disconnect between payment and delivery; consequently, the factors influencing consumer trust in e-commerce must differ from those in offline shopping [10]. In psychology, trust is generally defined as a belief, willingness, or expectation on the part of the trustor; it is a psychological state assessed from the individual's perspective regarding the tolerability of anticipated risks [11]. According to statistics, in 2023, the live-streaming e-commerce market exceeded 5 trillion yuan, with 535 million users; however, the number of consumer complaints rose by 78% year-over-year, and a crisis of trust has become a bottleneck for the industry's development [12]. Consequently, the construction of consumer trust mechanisms in live-streaming e-commerce has become a hot topic of current academic research.

Based on three key research needs—"customer experience," "online reputation," and "trust"—this paper aims to address the following four core questions:

(1) What are the current research hotspots related to customer experience in the live-streaming e-commerce sector, and what are their specific mechanisms of influence?

(2) What are the current research hotspots related to online reputation in the live-streaming e-commerce sector, and what are their specific mechanisms of influence?

(3) What are the current research hotspots related to trust in the live-streaming e-commerce sector, and what are their specific mechanisms of influence?

(4) What are the future research directions in the field of live-streaming e-commerce?

To systematically address these research questions, this paper adopts a mixed-methods systematic literature review approach. By comprehensively considering multiple theoretical perspectives, literature sources, and a structured research framework, it conducts a thorough comparative analysis of Chinese and English-language literature. Based on the three dimensions of customer experience, online reputation, and trust, the paper provides an in-depth analysis of research progress in the field of live-streaming e-commerce both domestically and internationally. Utilizing the Theory-Context-Characteristics-Method (TCCM) research framework, it comprehensively evaluates the application of theoretical foundations, background and contextual factors, key characteristics, and research methods, and, based on this, provides a more systematic and comprehensive development path for live-streaming e-commerce research.

2. Research Design

2.1. Research Methods

This paper adopts a hybrid systematic literature review methodology, including bibliometric analysis (Phase 1) and a review method based on the TCCM framework (Phase 2). Specifically, this paper comprehensively utilizes visualization software such as CiteSpace and VOSviewer to statistically compare and analyze the current state, research hotspots, and trends in live-streaming e-commerce research both domestically and internationally. Based on the results of Phase 1, it conducts a structured analysis of research progress and future research directions in live-streaming e-commerce using the TCCM (Theory-Context-Characteristics-Method) integrated framework, as shown in Figure 1.

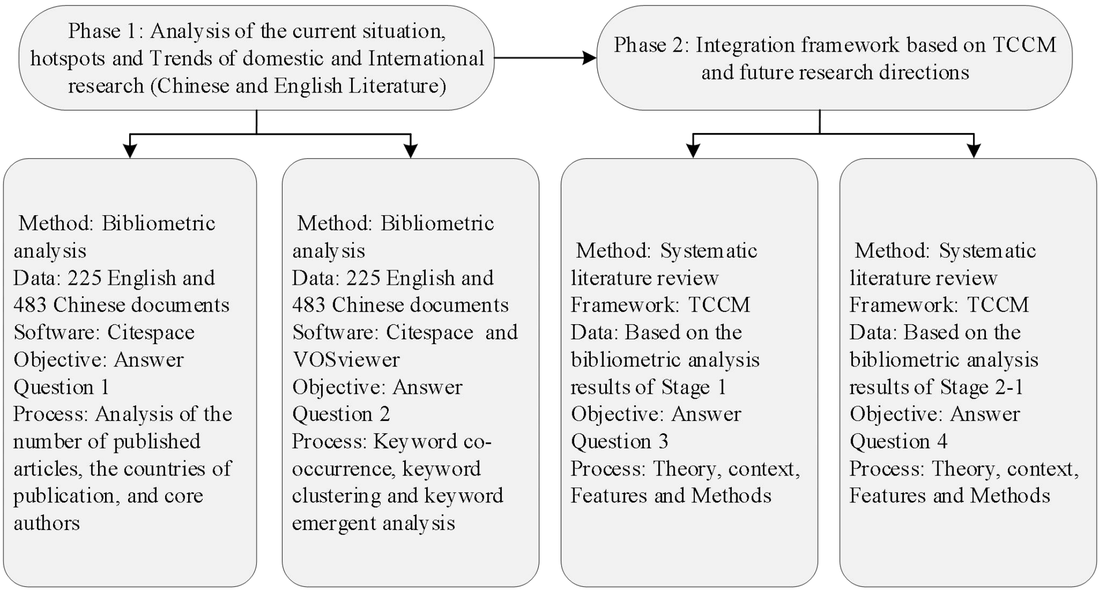

Figure 1. Research design

(1) Bibliometric analysis emphasizes the use of mathematical and statistical methods to examine the overall characteristics of the literature, scientifically and objectively describing the current state of research in the field, identifying key research areas, and predicting emerging topics. In particular, by constructing knowledge maps through analyses such as country-level collaboration, author collaboration, keyword co-occurrence, keyword clustering, and keyword emergence, this approach can clearly illustrate the research trajectory, hot topics, and development trends in the field of live-streaming e-commerce.

(2) The review methodology based on the TCCM framework aims to conduct an in-depth analysis of existing theories and research frameworks in live-streaming e-commerce and is dedicated to identifying areas for improvement or further development of the new framework. The adoption of this framework not only ensures the rigor of the scientific design but is also characterized by its clear, predefined, and reproducible methods, clearly mapping out the origins, evolutionary trajectory, research focus, and future

research directions of live-streaming e-commerce research.

2.2. Data Sources

This study conducted subject-field searches related to live-streaming e-commerce in the Web of Science Core Collection database, as well as in CSSCI and CSCD core journals. The search covered the period from 2016 to 2025, with search terms linked by "OR." After manually screening the results to exclude conference proceedings, articles with missing authors, and severely irrelevant literature, a total of 225 English-language articles and 483 Chinese-language articles were ultimately selected for data analysis.

3. Analysis of the Current State of Research

3.1. Post Volume Analysis

Figure 2 shows a comparison of the number of publications in this field. Although the number of international publications is lower than that of domestic ones, and they began appearing later than domestic ones, by 2025, the number of international publications had caught up with that of domestic ones. This indicates that domestic research on live-streaming e-commerce is generally in a phase of slow growth, while international research on the topic is in a phase of sustained growth, with research interest continuing to rise.

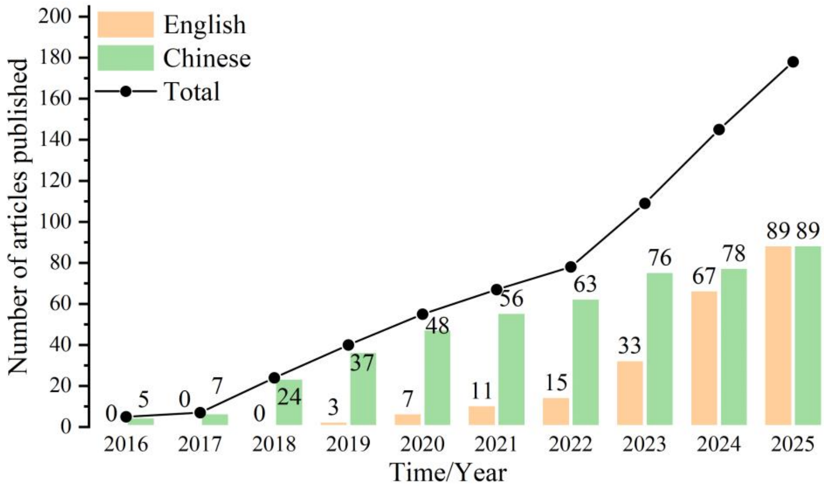

Figure 2. The comparison results of the number of published papers in related research

3.2. Analysis of Issuing Countries

This paper uses CiteSpace software to statistically analyze English-language literature and compiles rankings of countries with high publication frequency and high centrality; the results are shown in Table 1. A country's centrality reflects its importance in this research field; when centrality is $\geqslant 0.1$, it indicates that the country holds a prominent position and exerts significant influence in the specialized field. In terms of publication volume, China has published the most papers in the field of live-streaming e-commerce, demonstrating China's significant contributions to live-streaming e-commerce research at the international level. Among the top five, most of the publishing countries are in Asia, which to some extent reflects the relative maturity and widespread adoption of live-streaming e-commerce in the region. In terms of the centrality of publishing countries, China, Malaysia, the United Kingdom, France, and South Korea all have centrality values greater than 0.1, indicating that the literature they have published exerts strong international influence in the relevant field of live-streaming e-commerce.

Table 1. Ranking of high-frequency countries and high-concentration countries

Ranking	High-frequency country		High-centrality country	
	Country	**Frequency**	**Country**	**Centrality**
1	China	183	China	1.12
2	United States	32	Malaysia	0.35
3	South Korea	19	Britain	0.27
4	Malaysia	15	France	0.16
5	Britain	13	South Korea	0.13
6	Australia	10	United States	0.07
7	Canada	8	Australia	0.04
8	Singapore	7	Canada	0.03

3.3. Analysis of Core Authors

Table 2 shows the results for authors with high citation frequency and high centrality in live-streaming e-commerce research. Wongkitrungrueng was the most frequently cited author with 146 citations, and his centrality was 0.15; Guo and Park ranked second and third with 133 and 72 citations, respectively. An examination of centrality reveals that, with the exception of Xiang, all other authors have centrality scores greater than 0.1, indicating that they are all key authors in the field of live-streaming e-commerce research. Clearly, Wongkitrungrueng, Guo, Park, and others, as pioneers in the areas of "customer experience," "online reputation," and "trust" within live-streaming e-commerce, have become important central figures in this field.

Table 2. High-frequency and high centrality co-cited author

Ranking	High-frequency co-cited author		
	Author	**Frequency**	**Centrality**
1	Wongkitrungrueng and Assarut [13]	151	0.15
2	Guo et al [14]	133	1.14
3	Park and Lin [15]	72	0.13
4	Cai et al [16]	68	0.13
5	Kim et al [17]	65	0.13
6	Chen et al [18]	63	0.13
7	Sun et al [19]	61	0.12
8	Kang et al [20]	58	0.11
9	Hou et al [21]	58	0.10
10	Xiang et al [22]	56	0.09

4. Visual Analysis

This paper uses VOSviewer software to generate keyword co-occurrence network visualizations for 225 English-language articles and 483 Chinese-language articles, respectively. In VOSviewer, the time slice was set to 1, meaning statistical analysis was conducted using one year as the time unit. The selection criteria were set to 10%, meaning the top 10% of keywords with the highest frequency of occurrence each year were selected as the subjects of this study. The co-occurrence network threshold was set to 15, meaning that keywords appearing 15 or more times were selected for the co-occurrence network analysis of literature keywords. This resulted in a keyword co-occurrence network consisting of 583 nodes and 2,734 links, as shown in Figure 3. The keywords displayed in the figure represent research hotspots from 2016 to 2025, covering a broad scope. The larger the font size of a keyword in the figure, the higher its frequency of occurrence, indicating that it is a more popular topic in this research field. Observation reveals that keywords such as "e-commerce live-streaming sales," "customer experience," "consumers," "e-commerce platforms," "short videos," "online reputation," "trust," and "influencers" are research hotspots in the field of e-commerce live-streaming. Through a comprehensive analysis of the original database texts and the keyword visualization map, this paper summarizes the research hotspots in China's e-commerce livestreaming field into the following aspects.

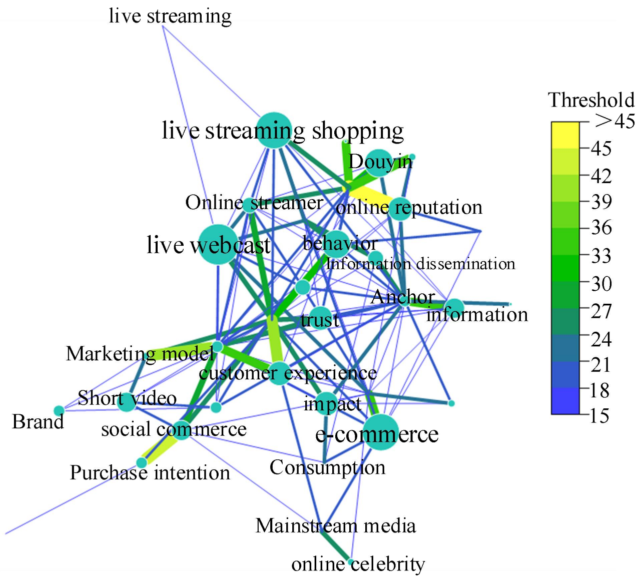

Figure 3. Keyword visualization graph analysis

4.1. Live-Streaming E-Commerce and Customer Experience

The rise of e-commerce live streaming has significantly influenced the customer experience. How to better understand and cater to consumer needs, enhance user engagement and loyalty, and convert traffic into sales has become a key strategic consideration for live-streaming e-commerce operators. Research on customer experience at the micro level is an essential component of the live-streaming e-commerce research framework. However, due to the real-time and interactive nature of live streaming, consumers' subjective perceptions are more diverse, making the customer experience in live-streaming e-commerce—and the underlying mechanisms of the decision-making process—more complex. In terms of research methods, some studies use simple descriptive analysis to examine the impact of e-commerce livestreaming on customer experience, while others employ methods such as interviews, questionnaires, and grounded theory to explore the mechanisms influencing customer experience in e-commerce livestreaming. From a theoretical and modeling perspective, the S-O-R (Stimulus-Organism-Response) model is the most frequently cited theoretical framework [23], followed by the AISAS model [24], the TAM model, the Interactive Ritual Chain Theory, and Flow Theory. These are primarily used to explore the mechanisms through which live-streaming e-commerce influences the customer experience—particularly that of followers—and their decision-making processes. By validating models involving direct or indirect effects, or moderated mediating effects, researchers aim to unlock the "black box" of consumer experience research in live-streaming e-commerce contexts.

In research on customer experience in live-streaming e-commerce, host interaction, customer satisfaction, flow experience, and perceived value appear most frequently as outcome variables. Influencing factors can be categorized into four types: influencer/host traits or attributes, the live-streaming context, product characteristics, and feature-customer fit. For example, the personal traits of hosts on live-streaming platforms have a significant positive impact on customer satisfaction [25], and the characteristics of the host's information sources have a significant positive impact on customer experience. Mediating variables primarily include intrinsic states such as perceived value, perceived enjoyment, perceived trust, and perceived usefulness, as well as factors like the flow experience. For example, perceived value and perceived enjoyment each play a full mediating role in the relationship between product characteristics and situational characteristics and their impact on customer experience [26]. Considering the relationships among these variables and the strength of their effects, to achieve better user support, organizations should not only focus on shaping and maintaining personal traits but also strengthen the display of authenticity and the incorporation of interaction, thereby earning trust to enhance the customer experience.

4.2. Live-Streaming E-Commerce and Online Reputation

Based on existing research on the relationship between live-streaming e-commerce and online reputation, the primary focus has been on online reputation evaluation and the underlying mechanisms. In the field of online reputation, the subjects of evaluation are generally C2C and B2C sellers; as research has become more specialized, a subfield has emerged focusing on product online reputation. Previous studies have indicated that product reputation plays a crucial role in whether live-streaming e-commerce platforms and consumers can establish a relationship of trust, particularly in fostering initial trust [27]. Customers who have never had any prior interaction with a business place greater emphasis on the company's reputation. Relying on the positive experiences of previous consumers to reduce perceived risks in online transactions helps potential consumers develop a sense of trust in the company's integrity, benevolence, and honesty, thereby fostering reliance on the business.

Online reputation has become an indispensable component of live-streaming e-commerce, influencing its sustainability, the trustworthiness of the transaction environment, market efficiency, transaction prices, and market performance to varying degrees.

First, online reputation is the foundation of live-streaming e-commerce's sustainability.

According to signaling theory, online reputation establishes a signaling mechanism for "honest behavior" among trading parties [28], which largely resolves information asymmetry in e-commerce markets, avoids the "lemons problem," and thereby sustains the sustainable development of live-streaming e-commerce. Zhou et al. demonstrated in their literature that the sale of high-quality products is unsustainable in online auction markets without a reputation feedback mechanism, whereas such a mechanism can promote the formation of a sustainable online auction market [29]. Other studies suggest that reputation mechanisms, as a form of spontaneous private contract, ensure the credibility of sellers' commitments and buyers' collective punishment under certain conditions; the subgame-refined Nash equilibrium thus formed can guarantee the platform's prosperity [30].

Second, online reputation helps establish an environment of trustworthy transactions.

The reputation mechanism in live-streaming e-commerce is a multilateral system that enables "collective" punishment for sellers who breach trust. Sellers, fearing that a poor reputation could lead to the loss of future business opportunities, are thereby incentivized to act in good faith. A study by Riced shows that online reputation mechanisms can encourage e-commerce sellers to engage in cooperative, honest behavior. There is a positive correlation between reputation mechanisms and sellers providing high returns (in the form of products and services) to buyers; sellers who provide returns higher (or lower) than agreed-upon levels are associated with positive (or negative) reviews, respectively [31]. The choice to act with integrity also helps improve seller performance, which in turn incentivizes sellers to act with integrity. That is, sellers can reap rewards from their honest behavior, particularly substantial rewards in the early stages (as the marginal returns on subsequent honest behavior diminish); thus, the reputation feedback mechanism can increase (or decrease) the profits of honest (or dishonest) sellers.

Third, online reputation can enhance transaction efficiency in live-streaming e-commerce.

Online reputation helps build market trust, reduce transaction risks, and lower transaction costs, thereby improving market transaction efficiency. Empirical research by Przepiorka et al. confirms that in anonymous online markets, reputation mechanisms can resolve trust issues and reduce transaction costs [32]. A good seller reputation can increase buyers' willingness to purchase and enhance market transaction efficiency. Furthermore, research findings on how seller reputation affects transaction prices are inconsistent; however, most studies suggest that seller reputation has a significant positive impact on product prices. Through a review of the relevant literature cited above, it is evident that current research has amply demonstrated that online reputation plays a significant role in promoting the sustainability of live-streaming e-commerce, establishing a trustworthy trading environment, and enhancing market efficiency. However, establishing such an effective reputation mechanism still poses numerous challenges.

4.3. Live-Streaming E-Commerce and Trust Mechanisms

Research on trust mechanisms in live-streaming e-commerce focuses on several key areas, with purchase intent, live-streamed product sales, and live-streaming e-commerce serving as core points of interest—reflecting a strong alignment between industry trends and research priorities. Trust mechanisms occupy a central position in this research, with numerous keywords revolving around the establishment of trust, influencing factors, and its impact on consumer behavior, highlighting its pivotal role in the development of live-streaming e-commerce. The research perspective is broad, covering both the industry's overall development and delving into specific sectors, such as live-streaming e-commerce for agricultural products. Some scholars argue that live-streaming e-commerce is shifting from expanding market breadth to exploring market depth, transitioning from a marketing logic of "traffic for low prices" to a service logic of "interest + trust" [33].

In terms of the number of research publications on trust mechanisms in live-streaming e-commerce, a total of 72 papers were published between 2016 and 2025, with the number rising further to 25 in 2023, reaching a peak. Over time, new issues and phenomena have continually emerged in the development of the live-streaming e-commerce industry, such as false advertising and inconsistent product quality. At the same time, the trial implementation of the *Administrative Measures for Online Live-Streaming

Marketing* in 2021 further prompted scholars to delve deeper into the trust mechanisms of live-streaming e-commerce to seek solutions and theoretical support. In 2024, the number of publications dropped to 11, marking a significant decline. This may be due to the field gradually reaching a state of saturation, with certain research directions having already yielded some results, while new research perspectives and methods have not yet fully matured, leading to a reduction in research output. In 2025, the number of publications stood at 9. Overall, research on trust mechanisms in live-streaming e-commerce has experienced fluctuations in popularity over the past few years; future research in this field may need to identify new growth areas and breakthrough directions within the context of new industry developments and academic trends. A review of the relevant literature reveals that research on trust mechanisms in live-streaming e-commerce has evolved "from single factors to an ecosystem." Compared to traditional e-commerce trust research, it places greater emphasis on dynamic interactivity and the personification of live-streamers. In the future, it will be necessary to further integrate technological innovation with real-world needs to drive in-depth development in this field.

4.4. Research Trends in Live-Streaming E-Commerce

Based on a review of the research literature discussed above, this paper argues that research on sustainable social relationships in live-streaming e-commerce will develop in the following directions:

First, research on the business ecosystem of live-streaming e-commerce.

Some scholars have applied business ecosystem theory to analyze the "species" within the live-streaming e-commerce ecosystem and the relationships between them. They have also explored the causes and evolutionary pathways of the diversification of this business ecosystem, identifying its evolutionary characteristics and future trends [34]. However, current literature on the business ecosystem of live-streaming e-commerce remains scarce. Future research could delve deeper into the formation mechanisms of this business ecosystem, its evolutionary processes, evolutionary innovations, the co-creation of value within the ecosystem, and the construction of the business ecosystem itself.

Second, in-depth practical research on live-streaming e-commerce.

As can be seen from the preceding analysis, live-streaming e-commerce has attracted scholars' attention in the agricultural products and book sectors; however, the depth of research is limited, with most studies focusing on existing problems and application strategies. Some scholars have conducted empirical tests to examine the driving mechanisms behind the development of live-streaming e-commerce and fresh agricultural product e-commerce [35]. Furthermore, scholars could explore the application of live-streaming from the perspectives of different product categories—such as cosmetics, maternal and infant products, 3C electronics, and jewelry—and conduct comparative studies. At the same time, they could delve deeply into the practical applications of live-streaming on different platforms—such as Kuaishou, Douyin, Huya, and Douyu—and conduct differentiated research.

Third, theoretical innovation in online live-streaming research.

Some scholars have reconstructed the upstream value of agricultural products in live-streaming e-commerce using service-scenario theory as a logical foundation [36]. Others have developed an indicator system based on cyberspace theory to analyze the spatial distribution of Chinese live-streaming influencers, employing location entropy, the Moran's I index, and hot-spot/cold-spot analysis methods to conduct a knowledge graph analysis of the spatial clustering characteristics of these influencers [37]. Other scholars have examined the timeliness dilemma in live-streaming e-commerce from the perspective of consumer identity. Researchers can conduct innovative studies by integrating theories such as expectation confirmation theory, service-scenario theory, evolutionary game theory, and grey system theory with online live streaming.

Fourth, quantitative research on online live streaming.

Existing research literature is predominantly qualitative, with a lack of quantitative studies. In the existing quantitative literature, scholars generally employ survey methods to analyze user purchasing behavior in live-streaming. Some scholars have used experimental methods to compare the effects of different host types on consumers' brand attitudes and purchase intentions, as well as the moderating role of host-brand matching types [38]. However, there are still very few studies that use experimental or correlational methods to design quantitative research on live-streaming, and even the application of survey methods in live-streaming e-commerce remains relatively limited. Furthermore, few scholars have utilized quantitative tools, such as CiteSpace, to conduct quantitative research on live-streaming e-commerce. Therefore, in the future, scholars may choose to focus on a specific aspect of live-streaming to conduct quantitative research using correlational and experimental methods, or they may use software to conduct in-depth analysis of a particular topic within live-streaming e-commerce and carry out quantitative analysis.

5. Conclusion

This paper employs a mixed-methods approach combining bibliometric analysis and the TCCM framework to conduct a structured, systematic, and comprehensive review of the live-streaming e-commerce field. Phase 1: A bibliometric analysis was used to conduct a visual comparative analysis of domestic and international literature on live-streaming e-commerce published between 2016 and 2025. Using CiteSpac software, we conducted basic statistical analyses of the number of publications, countries of origin, and core authors in the field of live-streaming e-commerce research. This provided a visual representation of the current state of domestic and international research in this area and revealed the development trends as well as the similarities and differences between domestic and international studies from multiple dimensions. Furthermore, using VOSviewer software, we constructed keyword co-occurrence maps, keyword clusters, and keyword emergence maps for the live-streaming e-commerce research field, thereby deeply exploring research hotspots and cutting-edge issues in this area. This not only comprehensively and objectively demonstrated the similarities and differences between domestic and international hot topics in live-streaming e-commerce but also revealed the evolutionary trajectory of its development trends in an intuitive and vivid manner.

Phase 2: Based on the analysis of hot topics and cutting-edge developments discussed above, this paper employs a systematic literature review method grounded in the TCCM framework to conduct an in-depth analysis and synthesis of the live-streaming e-commerce field, thereby constructing a logically rigorous and structurally comprehensive integrated research framework for live-streaming e-commerce. This framework not only presents, in a structured manner, the mechanisms of integration and synergistic development among various elements but also comprehensively reveals the intrinsic logic and developmental trajectory of this field. Furthermore, based on the TCCM framework, this paper proposes potential directions for future research. By systematically analyzing the research trajectory and evolutionary history of the live-streaming e-commerce field, it maximizes the exploration of research paths with rich future potential, effectively deepening the comprehensiveness, objectivity, and logical rigor of our understanding of future research content and directions.

References

1. Chen, Z. (2024). The evolution of e-commerce: From traditional e-commerce to live streaming sales. In *SHS Web of Conferences* (Vol. 199, p. 04003). EDP Sciences.
2. 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.
3. Wang, B., Tong, C., Chen, T., Yang, J., & Cong, G. (2024). Evaluation of China's live streaming e-commerce industry policies based on a three-dimensional analysis framework. *Plos one*, *19*(5), e0301451.
4. Waqas, M., Hamzah, Z. L. B., & Salleh, N. A. M. (2021). Customer experience: a systematic literature review and consumer culture theory-based conceptualisation. *Management Review Quarterly*, *71*(1), 135-176.
5. Peng, X., Ren, J., & Guo, Y. (2024). Enhance consumer experience and product attitude in E-commerce live streaming: based on the environmental perspective. *Industrial management & data systems*, *124*(1), 319-343.
6. Chen, A., Chen, Y., Li, R., & Lu, Y. (2024). The interaction between the anchor and customers in live-streaming E-commerce. *Industrial Management & Data Systems*, *124*(6), 2151-2179.
7. Baruah, L., & Panda, N. M. (2020). Measuring corporate reputation: a comprehensive model with enhanced objectivity. *Asia-Pacific Journal of Business Administration*, *12*(2), 139-161.
8. Şirzad, N. (2022). A review on online reputation management and online reputation components. *Doğuş Üniversitesi Dergisi*, *23*(1), 219-242.
9. Wang, C. (2022). A Dynamic CGE Model for Consumer Trust Mechanism within an E‐Commerce Market. *Mobile Information Systems*, *2022*(1), 5220654.
10. Ingriana, A. (2025). The influence of e-trust on consumer purchasing behavior in e-commerce. *JUMDER: Jurnal Bisnis Digital Dan Ekonomi Kreatif*, *1*(3), 16-31.
11. Lăzăroiu, G., Neguriţă, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' decision-making process on social commerce platforms: Online trust, perceived risk, and purchase intentions. *Frontiers in psychology*,

11, 890.

12. Zhao, J., Zhou, J., Wu, P., & Liang, K. (2026). Boosting e-commerce sales with live streaming: The power of barrages. *Electronic Commerce Research*, *26*(1), 147-184.
13. Wongkitrungrueng, A., & Assarut, N. (2020). The role of live streaming in building consumer trust and engagement with social commerce sellers. *Journal of business research*, *117*, 543-556.
14. Guo, L., Hu, X., Lu, J., & Ma, L. (2021). Effects of customer trust on engagement in live streaming commerce: mediating role of swift guanxi. *Internet Research*, *31*(5), 1718-1744.
15. Park, H. J., & Lin, L. M. (2020). The effects of match-ups on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. *Journal of retailing and consumer services*, *52*, 101934.
16. Cai, J., Wohn, D. Y., Mittal, A., & Sureshbabu, D. (2018, June). Utilitarian and hedonic motivations for live streaming shopping. In *Proceedings of the 2018 ACM international conference on interactive experiences for TV and online video* (pp. 81-88).
17. Kim, I., Ki, C. W., Lee, H., & Kim, Y. K. (2024). Virtual influencer marketing: Evaluating the influence of virtual influencers' form realism and behavioral realism on consumer ambivalence and marketing performance. *Journal of Business Research*, *176*, 114611.
18. Chen, C. D., Zhao, Q., & Wang, J. L. (2022). How livestreaming increases product sales: role of trust transfer and elaboration likelihood model. *Behaviour & Information Technology*, *41*(3), 558-573.
19. Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic commerce research and applications*, *37*, 100886.
20. Kang, K., Lu, J., Guo, L., & Li, W. (2021). The dynamic effect of interactivity on customer engagement behavior through tie strength: Evidence from live streaming commerce platforms. *International journal of information management*, *56*, 102251.
21. Hou, F., Guan, Z., Li, B., & Chong, A. Y. L. (2020). Factors influencing people's continuous watching intention and consumption intention in live streaming: Evidence from China. *Internet Research*, *30*(1), 141-163.
22. Xiang, L., Zheng, X., Lee, M. K., & Zhao, D. (2016). Exploring consumers' impulse buying behavior on social commerce platform: The role of parasocial interaction. *International journal of information management*, *36*(3), 333-347.
23. Zhu, L., Li, H., Wang, F. K., He, W., & Tian, Z. (2020). How online reviews affect purchase intention: a new model based on the stimulus-organism-response (S-O-R) framework. *Aslib Journal of Information Management*, *72*(4), 463-488.
24. Desmayonda, A., Slamet, A. S., Munandar, J. M., & Hidayatulloh, F. S. (2025). Live Streaming and Short Video Marketing in E-Commerce: an AISAS Model Analysis. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *8*(3), 14464-14485.
25. Wang, Y., Fang, L., & Pan, J. (2024). The antecedents of customer satisfaction in the live-streaming commerce of green agricultural products. *Plos one*, *19*(7), e0305527.
26. Kuppelwieser, V. G., Klaus, P., Manthiou, A., & Hollebeek, L. D. (2022). The role of customer experience in the perceived value–word-of-mouth relationship. *Journal of Services Marketing*, *36*(3), 364-378.
27. Jiang, H. B., Fan, Z. Y., Wang, J. L., Liu, S. H., & Lin, W. J. (2025). The determinants of product trust in live streaming E-commerce: a hybrid method integrating SEM and fsQCA. *Asia Pacific Journal of Marketing and Logistics*, *37*(2), 273-293.
28. Liang, X., Li, G., Ma, J., & Jiang, G. (2025). How do signaling and reputation function as critical clues to e-commerce platform governance? Evidence from Chinese rice transaction data. *Electronic Commerce Research*, *25*(5), 3637-3661.
29. Zhou, M., Dresner, M., & Windle, R. J. (2008). Online reputation systems: Design and strategic practices.

Decision support systems, *44*(4), 785-797.

30. Kumar, B., & Bhuyan, B. (2020). Game theoretical defense mechanism against reputation based sybil attacks. *Procedia Computer Science*, *167*, 2465-2477.
31. Rice, S. C. (2012). Reputation and uncertainty in online markets: An experimental study. *Information Systems Research*, *23*(2), 436-452.
32. Przepiorka, W. (2013). Buyers pay for and sellers invest in a good reputation: More evidence from eBay. *The Journal of Socio-Economics*, *42*, 31-42.
33. Zhao, D., Yang, J., & Zhao, C. (2024). Exploring how the application of live-streaming in E-commerce influences consumers' trust-building. *IEEE Access*, *12*, 102649-102659.
34. Xue, J., & Liu, M. T. (2023). Investigating the live streaming sales from the perspective of the ecosystem: the structures, processes and value flow. *Asia Pacific Journal of Marketing and Logistics*, *35*(5), 1157-1186.
35. Zhang, L., & An, N. (2026). E-Commerce Platform, Live Streaming or Combinations? Dynamic Decision Analysis of Fresh Agricultural Supply Chain. *Journal of Theoretical and Applied Electronic Commerce Research*, *21*(2), 44.
36. Li, Y., Wang, Y., Zhou, J., Ning, Y., & Ye, F. (2026). Co-opetition strategies in live streaming commerce: a game theory perspective. *International Journal of Production Research*, 1-18.
37. Zhu, Y., Zhang, X., Yan, S., & Zou, L. (2023). Research on spatial patterns and mechanisms of live streaming commerce in China based on geolocation data. *ISPRS International Journal of Geo-Information*, *12*(6), 229.
38. Zilong, W., Wenkai, Z., & Zecheng, L. (2023, May). A Study of Consumer Purchase Intentions in E-Commerce Live Broadcast for Eye Health Products Based on Product and Host Discourse Attributes. In *Wuhan International Conference on E-business* (pp. 47-59). Cham: Springer Nature Switzerland.

About the Author

Linna Ma is a PhD candidate at Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, Malaysia[1]. She obtained her master's degree from Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia.

Hooi Sin Soo serves as an academic staff at Universiti Utara Malaysia. Her research interests cover organizational behavior, leadership, stress management, organizational performance and games-based educational research.

Chin Wei Chuah serves as a senior lecturer at UUM College of Business, Universiti Utara Malaysia. He earned his Bachelor's (Honours) and Master's degrees in Business Management from Universiti Utara Malaysia, and completed his PhD in Management at Universiti Putra Malaysia. His research focuses on strategic execution, organizational behavior, structural equation modelling and multivariate data analysis.