

## Bibliometric Analysis of Live Streaming Marketing Research: Trends, Themes, and Future Directions

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### ABSTRACT

The rapid expansion of live-streaming commerce has transformed digital marketing by combining real-time product presentation, social interaction, entertainment, and purchasing functions on a single platform. Yet the literature remains dispersed across marketing, electronic commerce, information systems, and consumer behavior. This study maps the growth, intellectual foundation, thematic structure, and emerging directions of live-streaming marketing research. The population comprised English-language Scopus articles published from 2019 to 21 July 2026 that matched the title-abstract-keyword search logic for live streaming and marketing. Total sampling retained all 252 query-matched records after a duplicate audit found no repeated titles, DOIs, or EIDs. Descriptive performance analysis was combined with citation analysis and all-keyword co-occurrence, network, and overlay visualization using VOSviewer. Full counting and a minimum threshold of five occurrences produced 43 eligible keywords, of which 40 formed the largest connected network and five clusters. The findings show rapid growth after 2023 and themes concerning consumer psychology and impulse buying; social media, retailing, and strategy; technology, trust, and purchase intention; sales and influencer marketing; and the integration of live-streaming commerce into digital marketing. Artificial intelligence, virtual streamers, profitability, trust, and sales performance are the newest topics. The study offers an updated, marketing-specific map and supports more credible, transparent, technology-enabled, and performance-oriented live-streaming strategies.

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## INTRODUCTION

Digital technology has changed how firms communicate with consumers and organize online transactions. One prominent development is live-streaming commerce, which combines real-time video, product demonstrations, social interaction, and purchasing functions within one digital environment. Unlike conventional e-commerce, which relies mainly on static images, written descriptions, and delayed communication, live-streaming commerce enables consumers to question streamers, observe products in use, and interact with other viewers while evaluating a purchase. This combination creates an immersive shopping experience and distinguishes live-streaming shopping from television home shopping, which is primarily based on one-way communication (Ki et al., 2024). Live streaming should therefore be understood not merely as a distribution technology but as an interactive marketing environment that integrates communication, entertainment, social influence, and commercial exchange.

The marketing effectiveness of live streaming arises from its ability to reduce information uncertainty, increase consumer participation, and strengthen relational ties. Kang et al. (2021) show that interactivity influences customer engagement through tie strength, although excessive interaction may create information overload and weaken engagement. From the seller perspective, Wongkitrungrueng et al. (2020) identify acquisition and retention strategies that enable live streaming to support immediate transactions and long-term relationship marketing. Emotional and social factors are equally important. Lin et al. (2021) find that positive streamer emotions increase audience responses, including chats, likes, and virtual gifting. Streamer expertise, warmth, humor, passion, and attractiveness also shape hedonic and utilitarian value, whereas popularity alone does not guarantee purchase intention (Guo et al., 2022). These findings indicate that live-streaming marketing outcomes depend on the combined effects of platform features, streamer characteristics, emotional communication, perceived value, and consumer participation.

The commercial growth of live streaming has been followed by rapid expansion of research on purchase intention, impulse buying, social presence, trust, engagement, streamer credibility, platform characteristics, and sales performance. Nevertheless, the literature is distributed across marketing, information systems, consumer behavior, retailing, tourism, communication, and electronic commerce. This multidisciplinary structure enriches the field but complicates efforts to identify its intellectual foundations and thematic evolution. Huang et al. (2024) report that consumer behavior and purchase intention have become prominent themes, while Bai et al. (2024) identify live-streaming commerce, social presence, and purchase intention as important research directions. Kawaf and Giroto (2024) further show that studies often concentrate on selected platform affordances and underexamine geographical, cultural, and platform-specific variation.

Previous reviews provide an essential foundation but do not eliminate the need for an updated and explicitly marketing-oriented map. Mai et al. (2023)

identify influential publications, authors, platforms, and thematic patterns in live-streaming commerce. Bai et al. (2024) combine performance analysis, co-citation, and keyword analysis to formulate a future research agenda. Huang et al. (2024) use CiteSpace to trace knowledge structure and topic evolution, whereas Kawaf and Giroto (2024) interpret social and live-stream commerce through an affordance lens. Table I positions the present study against these reviews. The gap is not the absence of prior bibliometric work; it is the need to capture the publication surge through July 2026 and clarify how emerging technologies and commercial outcomes are connected within the marketing domain.

Table 1. Positioning of the Present Study Against Previous Reviews

| Study                   | Focus and analytical orientation                                                                                                         | Gap addressed by the present study                                                                                                    |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Mai et al. (2023)       | Broad bibliometric mapping of the live-streaming commerce landscape, including influential publications, authors, platforms, and themes. | Updates the evidence after the recent publication surge and emphasizes the marketing-performance intersection.                        |
| Bai et al. (2024)       | Performance, co-citation, and keyword analysis of livestreaming e-commerce with a future research agenda.                                | Extends the temporal coverage and highlights artificial intelligence, virtual streamers, trust, profitability, and sales performance. |
| Huang et al. (2024)     | CiteSpace-based analysis of the knowledge structure and evolution of live-streaming commerce.                                            | Provides a marketing-specific interpretation of thematic links and managerial implications.                                           |
| Kawaf and Giroto (2024) | Bibliometric review of social and livestream commerce through the technological-affordance lens.                                         | Makes contextual concentration visible and connects affordances with consumer and commercial outcomes.                                |
| Present study           | Scopus performance analysis, citation ranking, and all-keyword co-occurrence and overlay mapping for 2019-21 July 2026.                  | Offers an updated marketing-specific map with transparent keyword thresholds and partial-year and boundary-record caveats.            |

*Source: Developed by the authors from the cited review studies.*

## **LITERATURE REVIEW**

Accordingly, this study analyzes 252 Scopus-indexed articles published from 2019 to 21 July 2026. It addresses three questions: (1) how have publication output and citation influence developed; (2) which keywords and thematic clusters dominate the field; and (3) how has the temporal focus shifted toward emerging topics? The contribution is an updated science map that links consumer psychology, digital platforms, influencer activity, artificial intelligence, trust, and business performance. The findings are expected to help researchers identify underexplored topics and assist marketers, platforms, sellers, and streamers in designing credible and effective strategies. The remainder of the article explains the bibliometric method, presents and discusses the findings, and concludes with implications, limitations, and recommendations.

## **METHODOLOGY**

This study uses a quantitative descriptive bibliometric design to evaluate the development and conceptual structure of live-streaming marketing research. Bibliometric analysis is appropriate because it combines performance indicators, such as publication and citation, with science-mapping techniques that reveal relationships among documents and concepts (Donthu et al., 2021). The unit of analysis was an article indexed in Scopus. Scopus was selected because it provides standardized bibliographic metadata, abstracts, citation information, author keywords, and indexed keywords that can be exported for reproducible analysis.

The strategy intentionally used a broad intersection to capture research in which live streaming is examined as a marketing, commerce, consumer-behavior, or sales phenomenon. The export contained 252 records. A metadata audit found zero duplicate titles, zero duplicate DOIs among records with a DOI, and zero duplicate EIDs; therefore, total sampling retained all 252 query-matched articles. Of these records, 229 were final publications and 23 were articles in press. No post-export content exclusions were imposed because doing so would change the reproducible query-defined population; however, adjacent streaming studies at the field boundary were interpreted cautiously. The 2026 total is partial and cannot be compared directly with complete years.

The records were exported in CSV format with authors, year, title, source, citation count, abstract, author keywords, indexed keywords, DOI, EID, and publication stage. Descriptive analysis was used to calculate annual output, rank cited publications, and identify frequent terms. Citation counts were treated as cumulative values at the retrieval date rather than direct indicators of article quality, because older publications have had more time to accumulate citations. VOSviewer was used for all-keyword co-occurrence analysis by combining author keywords and indexed keywords. Full counting was applied, and a minimum occurrence threshold of five was selected. Forty-three keywords met the threshold; 40 belonged to the largest connected component displayed in the map, and the software grouped these items into five clusters. Node size represents occurrence, link thickness indicates co-occurrence

strength, network color denotes cluster membership, and overlay color represents the average publication year.

The analysis proceeded in four stages. First, annual publication output was examined to identify growth. Second, citation rankings were used to locate articles that form the field's intellectual foundation. Third, keyword frequency and cluster structure were interpreted to identify dominant themes and conceptual connections. Fourth, overlay visualization distinguished earlier and more recent topics. Keyword variants were retained rather than merged through a thesaurus so that the maps remained consistent with the exported metadata; consequently, terms such as live streaming, live-streaming, consumer behavior, and consumption behavior were interpreted at the thematic rather than purely lexical level. This decision improves auditability but may fragment conceptually similar terms and is treated as a limitation. The workflow combines transparent performance indicators with reproducible science mapping without imposing unverified post-export content classifications.

## RESEARCH RESULTS AND DISCUSSION

The dataset shows a pronounced increase in scholarly attention to live streaming and marketing. Annual output rose from 4 articles in 2019 to 8 in 2020, 8 in 2021, 13 in 2022, 21 in 2023, 55 in 2024, and 90 in 2025. A further 53 articles were indexed from January to 21 July 2026, producing the verified total of 252. The acceleration after 2023 confirms that live-streaming marketing has moved from an emerging topic to a rapidly expanding research domain. The partial 2026 figure should be interpreted cautiously, but its size indicates sustained activity. This pattern is consistent with reviews that describe live-streaming commerce as a developing multidisciplinary field (Bai et al., 2024; Huang et al., 2024; Mai et al., 2023). The inclusion of 23 articles in press also means that some 2026 records had not yet reached final issue assignment at retrieval.

Table 2. Ten Most-Cited Publications, 2019-21 July 2026

| No | Year | Author              | Title                                                                                                                                     | Source                                          | Citations |
|----|------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------|
| 1  | 2021 | K. Kang             | The dynamic effect of interactivity on customer engagement behavior through tie strength: Evidence from live streaming commerce platforms | International Journal of Information Management | 628       |
| 2  | 2020 | A. Wongkitrungrueng | Live streaming commerce from the sellers' perspective: implications for Online relationship marketing                                     | Journal of Marketing Management                 | 402       |
| 3  | 2021 | Y. Lin              | Happiness Begets Money: Emotion and                                                                                                       | Journal of Marketing                            | 369       |

|    |      |                 |                                                                                                                                                            |                                               |     |
|----|------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----|
|    |      |                 | Engagement in Live Streaming                                                                                                                               | Research                                      |     |
| 4  | 2022 | Y. Guo          | Way to success: Understanding top streamer's popularity and influence from the perspective of source characteristics                                       | Journal of Retailing and Consumer Services    | 360 |
| 5  | 2020 | M. Zhang        | The impact of live video streaming on online purchase intention                                                                                            | Service Industries Journal                    | 317 |
| 6  | 2019 | J. Zhou         | The magic of danmaku: A social interaction perspective of gift sending on live streaming platforms                                                         | Electronic Commerce Research and Applications | 252 |
| 7  | 2022 | C. Xie          | Tourism e-commerce live streaming: Identifying and testing a value-based marketing framework from the live streamer perspective                            | Tourism Management                            | 207 |
| 8  | 2020 | M. Zhang        | E-service quality on live streaming platforms: swift guanxi perspective                                                                                    | Journal of Services Marketing                 | 202 |
| 9  | 2021 | M.A. Camilleri  | Understanding motivations to use online streaming services: integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT) | Spanish Journal of Marketing - ESIC           | 201 |
| 10 | 2021 | P. Clement Addo | Customer engagement and purchase intention in live-streaming digital marketing platforms                                                                   | Service Industries Journal                    | 177 |

*Source: Scopus data processed by the authors*

Table II shows that the field's most visible intellectual foundation was established mainly between 2019 and 2022. Kang et al. (2021) received the highest citation count, reflecting the centrality of interactivity and relational ties in explanations of customer engagement. Wongkitrungrueng et al. (2020) extend this perspective by showing how sellers combine transactional and relational strategies, while Lin et al. (2021) demonstrate that streamer emotion is economically consequential because it affects chats, likes, and virtual gifting. Guo et al. (2022) and Zhang et al. (2020) connect source characteristics and richer product information to perceived value and purchase intention. Together, these studies establish that live-streaming performance cannot be explained by technology alone; it depends on how information, emotion, credibility, and social interaction are managed.

Other highly cited studies broaden the field beyond conventional purchase intention. Zhou et al. (2019) explain how viewer-to-viewer interaction through danmaku generates social presence, competition, and gifting behavior. Xie et al. (2022) frame tourism live streaming as a value-marketing system involving product, content, platform, and interaction attributes. Zhang et al. (2020) emphasize service quality and swift guanxi, while Addo et al. (2021) link engagement indicators to followership and purchase intention. Camilleri and Falzon (2021), which addresses online streaming services more broadly, illustrates the boundary effect of the intentionally broad search strategy. Its presence does not invalidate the dataset, but it shows why the map should be interpreted as the live-streaming-and-marketing intersection rather than a narrowly screened corpus of live-commerce experiments. Citation rankings are also age-sensitive: recent articles may be influential but have had less time to accumulate citations.

Table 3. Most Frequently Occurring Keywords

| Rank and Keyword           | Count |
|----------------------------|-------|
| 1. Live Streaming          | 78    |
| 2. Marketing               | 53    |
| 3. Electronic Commerce     | 48    |
| 4. Purchase Intention      | 32    |
| 5. Consumption Behavior    | 28    |
| 6. Live Streaming Commerce | 24    |
| 7. Sales                   | 24    |
| 8. Social Media            | 22    |
| 9. Influencer Marketing    | 20    |
| 10. Consumer Behavior      | 16    |

*Source: VOSviewer output based on Scopus*

The keyword distribution in Table III confirms that the field is organized around the relationship between live streaming, marketing, and electronic commerce. Live streaming is the most frequent term with 78 occurrences,

followed by marketing with 53 and electronic commerce with 48. Purchase intention and consumption behavior occupy the next positions, showing that researchers are primarily concerned with how interactive streaming changes product evaluation, decision making, and purchasing. The simultaneous prominence of sales, social media, and influencer marketing demonstrates that live streaming is studied both as a transactional channel and as a communication system shaped by platforms and online personalities.

The frequency pattern also shows a conceptual imbalance. Consumer-response variables are strongly represented, whereas organizational capability, governance, long-term customer value, post-purchase behavior, and operating cost are less visible among the dominant terms. This result supports Kawaf and Girotto's (2024) observation that the literature often concentrates on selected affordances and immediate outcomes. It also clarifies the present study's contribution relative to earlier reviews: the updated corpus reveals growing attention to business performance, but retention, returns, customer lifetime value, compliance cost, and the sustainability of live-streaming business models remain underdeveloped.

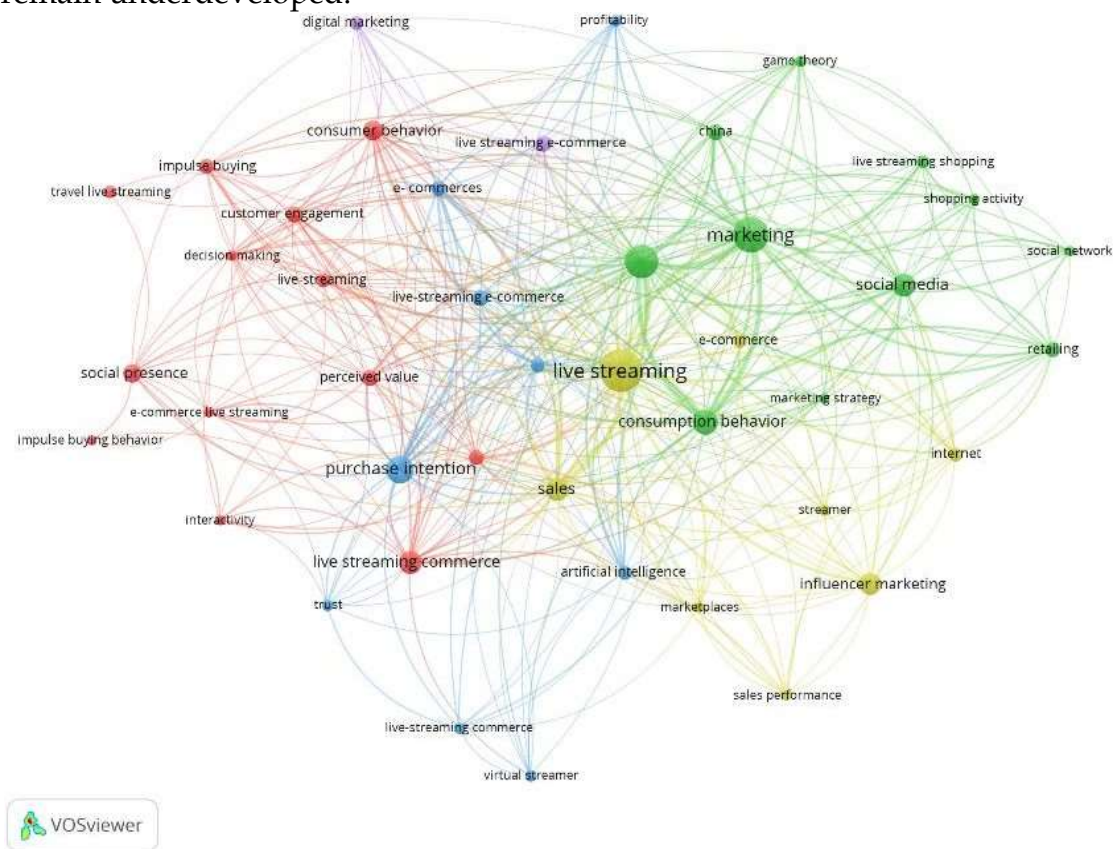


Figure 1. Keyword Co-Occurrence Network Visualization  
Source: VOSviewer output based on Scopus

Figure 1 displays 40 connected keyword items grouped into five clusters. The network is dense, indicating that consumer psychology, platform strategy, technological development, and commercial performance are interdependent rather than isolated research streams. Node size confirms the central positions of live streaming and marketing, while the numerous links to purchase

intention, social media, sales, and consumption behavior connect communication processes with measurable commercial outcomes. The five-cluster structure is broadly consistent with earlier reviews that emphasize consumer response and platform affordances, but the placement of artificial intelligence, virtual streamers, profitability, and sales performance gives the updated map a stronger technology-and-performance frontier.

The red cluster concentrates on consumer behavior, impulse buying, customer engagement, decision making, social presence, interactivity, perceived value, and live-streaming commerce. It represents the psychological and behavioral mechanisms through which real-time interaction affects purchasing. Social presence and interactivity may reduce uncertainty and increase involvement, but the inverted U-shaped result reported by Kang et al. (2021) warns that more interaction is not always better. This cluster reinforces the purchase-intention and consumer-behavior emphasis identified by Bai et al. (2024) and Huang et al. (2024), while indicating that effective design requires relevant and manageable interaction rather than maximal message volume.

The green cluster links marketing, social media, consumption behavior, China, game theory, live-streaming shopping, shopping activity, social networks, retailing, and marketing strategy. It reflects the ecosystem in which platforms, retailers, streamers, and consumers interact. The prominence of China is consistent with the rapid development of live-commerce practices in that market, but it also exposes the contextual concentration highlighted by Kawaf and Giroto (2024). Cross-country research is needed to determine whether mechanisms developed in one platform and cultural environment remain valid under different regulations, consumer norms, payment systems, and levels of digital trust.

The blue cluster connects purchase intention and trust with artificial intelligence, virtual streamers, profitability, and live-streaming e-commerce. It captures the field's technological and financial frontier and is the clearest extension beyond the dominant themes reported in earlier reviews. Artificial intelligence can support personalization, automated response, product matching, and virtual presentation, but its commercial value depends on credibility, disclosure, and consumer trust. Profitability appearing in the same cluster is important because technological novelty does not necessarily generate sustainable returns. Research should therefore compare the costs and benefits of human, hybrid, and virtual-streamer models rather than focusing only on novelty effects.

The yellow cluster brings together live streaming, e-commerce, sales, influencer marketing, streamers, marketplaces, the internet, and sales performance. It represents the core promotional and transactional structure of live commerce. Streamers operate simultaneously as product demonstrators, sales agents, entertainers, and relationship builders. This role concentration can improve conversion but also creates governance risks involving disclosure, exaggerated claims, and dependence on individual personalities. For managers,

streamer selection should be based on expertise, credibility, audience fit, and compliance rather than follower size alone.

The purple cluster, consisting of digital marketing and live-streaming e-commerce, functions as a conceptual bridge across the network. Although it contains fewer terms, its connections to consumer behavior, purchase intention, marketing, and e-commerce show that live streaming is increasingly integrated into broader digital marketing systems. The cluster structure therefore extends earlier reviews by showing that current research is no longer limited to adoption of a new channel; it examines an ecosystem in which content, technology, social influence, trust, and business performance are jointly produced.

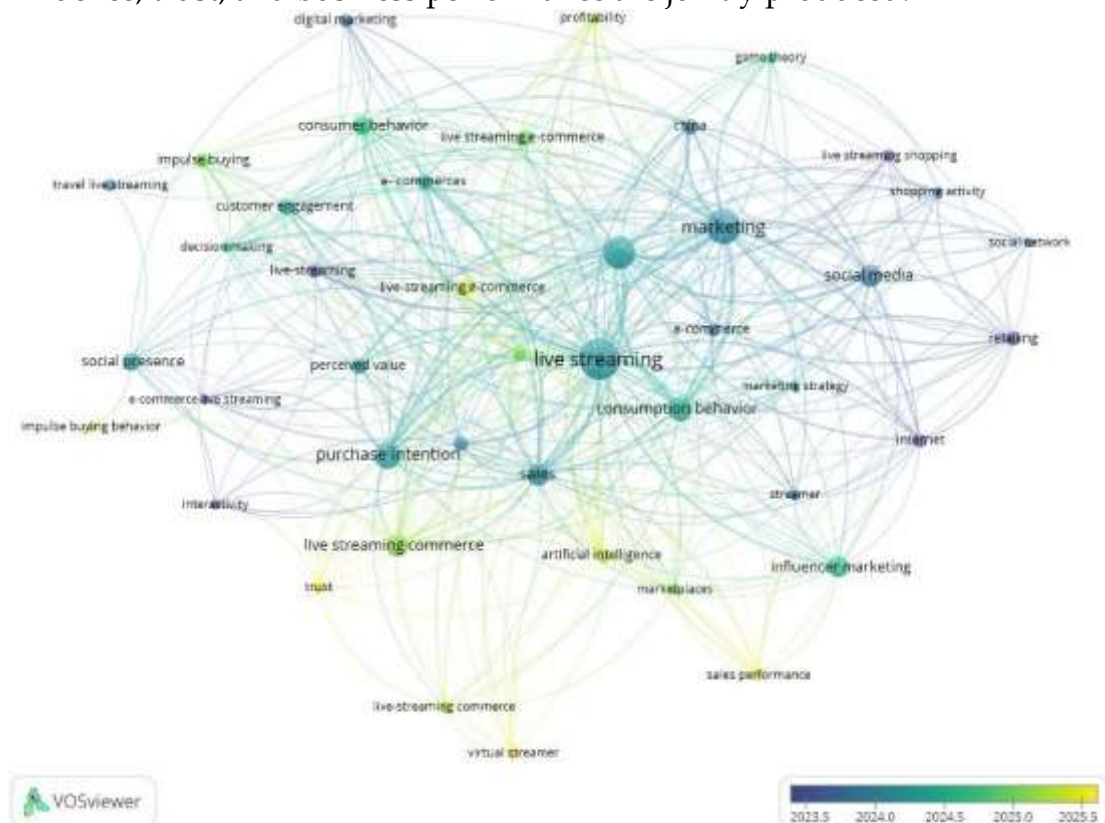


Figure 2. Keyword Co-Occurrence Overlay Visualization

Source: VOSviewer output based on Scopus

Figure 2 illustrates the temporal development of the keywords. Darker blue and purple nodes represent earlier themes, while green and yellow nodes indicate more recent average publication years, approximately from 2023.5 to 2025.5. Earlier research focused on social media, the internet, retailing, social networks, live-streaming shopping, and e-commerce live streaming. These topics reflect an initial concern with platform adoption and the basic commercial functions of interactive streaming. Because overlay color reports average publication year rather than causal development, the sequence should be interpreted as a descriptive shift in emphasis.

The middle period shifts toward customer engagement, consumer behavior, perceived value, influencer marketing, marketing strategy, and purchase intention. This transition shows that researchers moved from asking whether live streaming could function as a retail channel to examining why it

affects consumer responses. The shift is consistent with the foundational studies in Table II, which emphasize interactivity, relationship quality, emotion, information richness, and streamer characteristics. It is also consistent with the themes synthesized by Bai et al. (2024) and Huang et al. (2024).

The most recent terms include profitability, sales performance, trust, artificial intelligence, virtual streamers, impulse-buying behavior, and live-streaming e-commerce. These topics indicate a more mature agenda concerned with technological transformation and measurable business outcomes. Trust becomes especially important when streamers are generated or supported by artificial intelligence because consumers must assess authenticity, responsibility, and the reliability of product claims. The overlay therefore suggests that future research should integrate technology adoption with disclosure, ethical governance, financial performance, post-purchase outcomes, and long-term relationship quality.

Taken together, the performance and science-mapping results show that live-streaming marketing has evolved from a platform-centered topic into an interactive commercial ecosystem. For researchers, the main opportunity lies in longitudinal, cross-country, and cross-platform studies that compare human and virtual streamers, model trust and emotional engagement over time, and connect consumer responses with profitability, retention, and returns. For practitioners, the results imply that effective strategy requires balanced interaction, credible and knowledgeable streamers, useful product information, transparent use of artificial intelligence, and performance measures extending beyond short-term views or gross sales. These implications retain the field's established emphasis on engagement and purchase intention while responding to the newer technology, governance, and performance concerns visible in the overlay map.

## CONCLUSIONS AND RECOMMENDATIONS

This study maps 252 English-language Scopus articles on live streaming and marketing published from 2019 to 21 July 2026. The annual counts and top-cited records were verified against the exported dataset. Research output increased sharply after 2023, and the most influential publications established interactivity, relationship marketing, emotion, source characteristics, information quality, and purchase intention as the field's intellectual foundation. Keyword analysis shows that live streaming, marketing, electronic commerce, purchase intention, consumption behavior, sales, social media, and influencer marketing dominate the literature. The five-cluster network integrates consumer psychology and impulse buying; social media, retailing, and marketing strategy; technology, trust, and purchase intention; sales and influencer marketing; and the integration of live-streaming commerce into digital marketing.

The overlay visualization indicates a progression from platform adoption and online retailing toward consumer psychology, marketing effectiveness, artificial intelligence, virtual streamers, profitability, trust, and sales performance. The central conclusion is that live streaming is not merely a

promotional feature but an interactive commercial ecosystem in which technological design, streamer credibility, social interaction, customer engagement, and business outcomes are closely connected. Researchers should prioritize longitudinal, cross-cultural, and cross-platform studies that evaluate trust, disclosure, emotional engagement, retention, returns, and profitability. Businesses should manage interaction quality, select streamers on credibility and expertise, disclose AI-generated or AI-assisted presentation, protect consumer data, and evaluate performance beyond immediate sales.

## ADVANCED RESEARCH

The study is limited by its reliance on one database, the broad query-defined boundary, retention of keyword variants, inclusion of 23 articles in press, incomplete 2026 data, and the age advantage inherent in citation counts. The broad search improves reproducibility and marketing coverage but admits a small number of adjacent streaming studies, while keyword mapping cannot fully explain theoretical, methodological, or contextual differences among individual articles. Future research should validate the search with complementary databases, report full screening logs when content-based exclusions are used, apply thesaurus-assisted keyword normalization and sensitivity tests, and combine co-occurrence mapping with systematic review, co-citation analysis, bibliographic coupling, and qualitative content analysis. These steps would improve conceptual precision and provide stronger evidence for managerial and policy decisions.

## REFERENCES

- Addo, P. C., Fang, J., Asare, A. O., & Kulbo, N. B. (2021). Customer engagement and purchase intention in live-streaming digital marketing platforms. *The Service Industries Journal*, 41(11-12), 767-786. <https://doi.org/10.1080/02642069.2021.1905798>
- Bai, X., Aw, E. C.-X., Tan, G. W.-H., & Ooi, K.-B. (2024). Livestreaming as the next frontier of e-commerce: A bibliometric analysis and future research agenda. *Electronic Commerce Research and Applications*, 65, Article 101390. <https://doi.org/10.1016/j.elerap.2024.101390>
- Camilleri, M. A., & Falzon, L. (2021). Understanding motivations to use online streaming services: Integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT). *Spanish Journal of Marketing-ESIC*, 25(2), 217-238. <https://doi.org/10.1108/SJME-04-2020-0074>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>

- Guo, Y., Zhang, K., & Wang, C. (2022). Way to success: Understanding top streamer's popularity and influence from the perspective of source characteristics. *Journal of Retailing and Consumer Services*, 64, Article 102786. <https://doi.org/10.1016/j.jretconser.2021.102786>
- Huang, Y., Makmor, N., & Mohamad, S. H. (2024). Research progress analysis of live streaming commerce based on CiteSpace. *Heliyon*, 10(16), Article e36029. <https://doi.org/10.1016/j.heliyon.2024.e36029>
- 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, Article 102251. <https://doi.org/10.1016/j.ijinfomgt.2020.102251>
- Kawaf, F., & Giroto, M. (2024). Mapping the terrain of social and livestream commerce research through the affordance lens: A bibliometric review and research agenda. *Electronic Commerce Research and Applications*, 65, Article 101399. <https://doi.org/10.1016/j.elerap.2024.101399>
- Ki, C.-W. C., Chenn, A., Chong, S. M., & Cho, E. (2024). Is livestream shopping conceptually new? A comparative literature review of livestream shopping and TV home shopping research. *Journal of Business Research*, 174, Article 114504. <https://doi.org/10.1016/j.jbusres.2024.114504>
- Lin, Y., Yao, D., & Chen, X. (2021). Happiness begets money: Emotion and engagement in live streaming. *Journal of Marketing Research*, 58(3), 417-438. <https://doi.org/10.1177/00222437211002477>
- Mai, X., Sheikh Ahmad, F., & Xu, J. (2023). A comprehensive bibliometric analysis of live streaming commerce: Mapping the research landscape. *SAGE Open*, 13(4), 1-17. <https://doi.org/10.1177/21582440231216620>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Wongkitrungrueng, A., Dehouche, N., & Assarut, N. (2020). Live streaming commerce from the sellers' perspective: Implications for online relationship marketing. *Journal of Marketing Management*, 36(5-6), 488-518. <https://doi.org/10.1080/0267257X.2020.1748895>
- Xie, C., Yu, J., Huang, S. S., & Zhang, J. (2022). Tourism e-commerce live streaming: Identifying and testing a value-based marketing framework from the live streamer perspective. *Tourism Management*, 91, Article 104513. <https://doi.org/10.1016/j.tourman.2022.104513>

Zhang, M., Qin, F., Wang, G. A., & Luo, C. (2020). The impact of live video streaming on online purchase intention. *The Service Industries Journal*, 40(9-10), 656-681.

<https://doi.org/10.1080/02642069.2019.1576642>

Zhang, M., Sun, L., Qin, F., & Wang, G. A. (2020). E-service quality on live streaming platforms: Swift guanxi perspective. *Journal of Services Marketing*, 35(3), 312-324. <https://doi.org/10.1108/JSM-01-2020-0009>