

Bibliometric Analysis of the Evolution and Impact of Short Videos in E-Commerce (2015-2024): New Research Trends in AI

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Abstract—Over a decade of rapid growth in short video content has opened increasingly in-depth perspectives on this topic, with increasingly diverse scientific publications exploring different aspects of this phenomenon. Short videos have rapidly transformed the e-commerce landscape, influencing consumer behavior, marketing strategies, and technological advancements. This study used bibliometric analysis to evaluate existing research on short videos in e-commerce and identify key trends, research clusters, and influential publications. Using Scopus (2015-2024) data, co-citation, keyword co-occurrence, and bibliographic matching analyses were conducted. Publication analysis revealed three stages: initial (2015-2018) with limited research, growth (2019-2020) with increased interest, and explosive growth (2021-2024). Keyword co-occurrence analysis highlights interconnected research topics, with "video platforms," "short video," and "social media" forming a central cluster. The cluster indicates a recent focus on the "social context" of short videos in e-commerce. Co-citation analysis identifies key research clusters covering e-commerce and user behavior, user experience, advertising effectiveness of short videos, methodology, and underlying theories. These findings are helpful for researchers seeking to understand short-form video utilization in e-commerce. Insights are required to develop effective marketing strategies, improve user experiences, and capitalize on technological innovation in this rapidly evolving space.

Keywords—Short video; AI; co-citation analysis; keyword co-occurrence analysis; bibliographic coupling

I. INTRODUCTION

A few remaining questions regarding the term "short video" indicate that an intangible concept has emerged because of its development. The global production of information has seen an irreversible trend of mobilization, socialization, visualization, and amortization. The rise of short video platforms is a milestone in this process [1]. The application of this tool in the context of Industry 4.0 has become closely intertwined with economic development, with its most significant impact being on e-commerce, including shopping applications and social media platforms. Short videos also offer information dissemination advantages and provide a rich audio-visual experience, making communication livelier and engaging [2]. The existing world trends indicate the immense influence of short videos on mobility. Mobile usage and the advent of 5G technology have transformed the media industry, and short videos have become the dominant form of media

usage [3]. Short videos can communicate, transfer meaning, and reach people [4]. Furthermore, short videos use text, voice, images, and videos to capture users' attention instantly [5].

The rise of short videos on fragmented e-commerce platforms has become a topic of interest in recent studies. Zhan, Li and Guo [6] delved into data on consumer search behavior on AliExpress, a cross-border retail e-commerce platform, emphasizing the importance of data selection in understanding consumer preferences. Then Yuan, Xia and Wang [7] conducted an empirical study on the effectiveness of advertising strategies on short video-sharing platforms, emphasizing the importance of KOL endorsements and in-feed advertising in attracting traffic for online sellers. In turn, Wei and Yukun [8] explored the image construction of female food bloggers on the Douyin platform, contributing to understanding image characteristics and social contexts in the short video industry. Recently Jiao, et al. [9] explored how sports e-commerce influences consumer behavior through short-form video streaming platforms, emphasizing the importance of interactivity, identity, personalization, and entertainment in stimulating consumer engagement. Despite significant fragmentation, most studies on this topic are from China [10]. This prompted us to seek answers to whether studies on this topic are focused solely on the birthplace of short-form video, or to what extent is the coverage?

Although innovation and updating are essential, the broad scope of research and the need for a comprehensive review of short video research remain notable challenges. The term "short video" is not a new concept and has been mentioned in several studies for a long time. The popularity of short videos has skyrocketed globally, with applications attracting more than a billion users, demonstrating their importance in cross-cultural communication and media consumption [11]. However, the meaning of this term has shifted significantly in the context of the emergence of platforms solely dedicated to producing short videos, as seen today. E-commerce and short videos complement and promote each other, forming a platform for e-commerce short videos and a new way of marketing e-commerce short videos [8]. Firstly, current research on short videos primarily follows models of online communication and media studies. A few researchers have applied visual theories developed from studies of film and television [1]. Thus, the bibliometric approach helps map key research topics in the field of short videos in e-commerce. Studies have highlighted key areas, such as development

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trends, media convergence, video production, visual content management, and short video applications in various fields [12]. This can guide future research by identifying the areas that have been thoroughly explored, and which areas need further research. The second limitation, as mentioned earlier, is that the evolution of the topic is continuous and expanding, but no research article is considered a necessary synthesis. Analyzing bibliographies provides detailed information about the most cited articles, influential journals, and the overall impact of research in the field. This can help understand the importance and reach of various studies [13, 14]. Clara, et al. [15] argued that many methodological scholars have emphasized the need for a systematic review process to obtain more objective conclusions for scientific literature reviews. Bibliometric analysis allows subsequent studies to go deeper and broader in each topic cluster.

This study will analyze publications published on the Scopus database from 2015 to 2024, marking the explosion of short videos in e-commerce. The objectives are: (1) to identify key research clusters and key topics in the field, (2) to analyze the relationship between research topics, and (3) to shape the research on short videos in commerce shortly. Through the combination of three methods of co-citation analysis, keyword co-occurrence, and bibliographic coupling, this article is expected to provide a comprehensive and updated perspective on the current state of research on short videos in e-commerce, thereby contributing to the development of this field.

Section II provides the research methodology, including how the data were collected. Section III provides the findings from conducting bibliometric analysis. Sections IV and V discuss and conclude the research results.

II. METHODOLOGY

A. Bibliometric Analysis

Peter and Carlota [16] pointed out that bibliometrics is a research methodology that has increasingly become a viable tool for understanding academic literature with the expanding availability of electronic copies. Bibliometrics is a general term encompassing various techniques that vary in nature and function, such as bibliographic coupling analysis, co-word analysis, citation analysis, and co-citation evaluation [17, 18]. This technique is commonly applied in libraries and information science and is regarded as an essential tool for planning, evaluation, and analysis. It often provides quantitative insights through citation analysis or content analysis, offering valuable data for assessing the impact, relevance, and development of scholarly works. Bibliometrics is mainly identified by the application of statistical analysis to the production of bibliographies. This study uses the science mapping method, which is a general process of analyzing and visualizing domains, which can then conduct a more effective literature survey [19].

In this study, the literature search and analysis activities are performed according to the bibliometric evaluation method proposed by Donthu, et al. [20]. It includes four main steps: Step 1: Defining the purpose and scope of bibliometric study. Step 2: Selecting the evaluation technique. Step 3: Collecting

data for bibliometric analysis. Step 4: Running the bibliometric analysis and reporting the findings.

B. Data Collection

The data collection phase for the article can be conducted from many sources of information or access to reputable academic databases such as Google Scholar, Scopus, and Web of Science [21]. This study uses output data information from SCOPUS because of its best coverage, comprehensiveness, and fast data updates. Sometimes, we can find similar documents on the Web of Science or Google Scholar [16]. We have extracted a total of 299 (samples/documents) in the scope of "Article title, Abstract, Keywords" with the search keyword "Short video" AND in the scope of "All fields" with the search keyword "E-commerce" OR "Electronic commerce." The research time range includes articles published in the most recent decade, from 2015 to 2024. This helps the article to be objective with updated data and to evaluate the overview of the topic of short videos, helping to guide the research most effectively. Fig. 1 details the actual process of conducting bibliographic analysis. This process includes filtering steps to collect data for the final analysis.

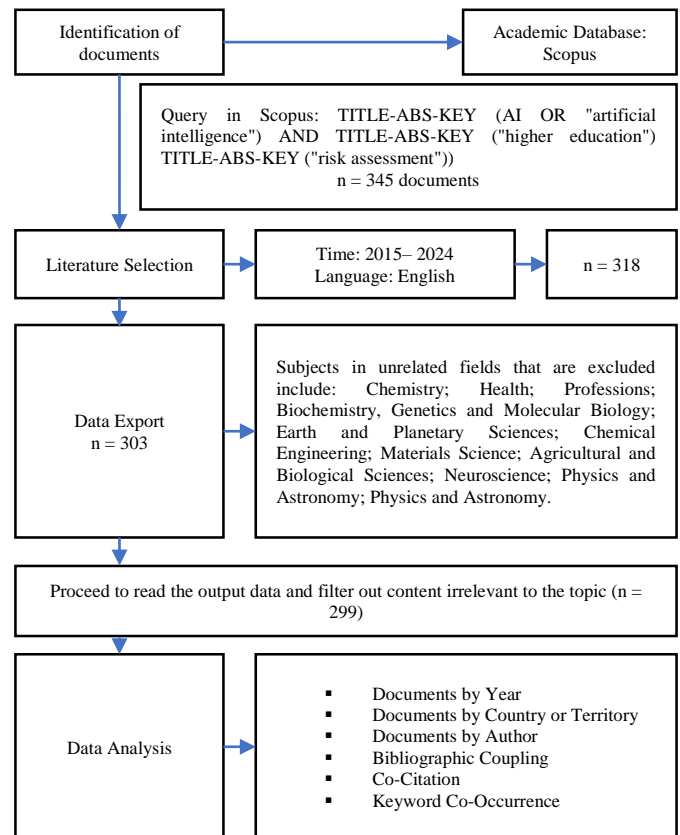


Fig. 1. The actual process of conducting bibliographic analysis.

C. Data Analysis Procedure

Information can be easily understood and analyzed in graphs and helps in concluding, making decisions, predicting. VOSviewer is a free software for constructing and visualizing bibliometric analysis [22]; we can create various networks based on keywords, citations, publication sources, authors,

common citations, etc. [23]. In this paper, bibliometric analysis is completed using the software “VOSViewer”, which includes software for representing multidimensional data in graphical visualization.

III. FINDINGS

A. Bibliometric Analysis

As mentioned, “short video” is not a new concept. The first studies started around 2015, but since the end of 2016, when the TikTok platform was officially launched, it has completely redefined the above concept. In just two years, TikTok has emerged to rival companies like Netflix, YouTube, Snapchat, and Facebook, with more than one billion downloads in 150 markets worldwide and 75 languages [24]. Fig. 2 shows statistics by number of publications by year. Based on the statistical results, it is possible to analyze the development stages of short video research into three stages.

Stage 1. 2015-2018: The number of research papers is still relatively small, fluctuating around five papers yearly. This shows that short videos in e-commerce are still a new research field in this period.

Stage 2. 2019-2020: Since 2019, research around "short videos" has been widespread, most clearly demonstrated by the rapid increase in articles, especially in 2020. This growth can be related to the increasing popularity of short video platforms such as TikTok and the increase in online shopping during the COVID-19 pandemic.

Stage 3. 2021-2024: The number of research papers grew explosively, from about 30 in 2021 to more than 100 in 2024, and there are no signs of slowing down soon. This shows that short videos are becoming a "hot" research topic and attracting increasing attention from the scientific community.

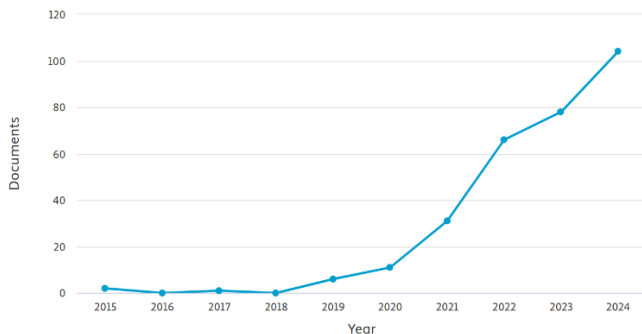


Fig. 2. Number of publications published by year from Scopus database.

B. Analysis of Documents by Country or Territory

The statistics on documents by territory have yet to offer any breakthrough conclusions. China is the dominant country in the number of publications, accounting for 77.26% of the total sample analyzed. The spread of short videos in China is mainly on two leading platforms, TikTok and Quick Hand, and reposting videos is standard on the country's social networking sites such as Baidu, Weibo, and Watermelon video [25].

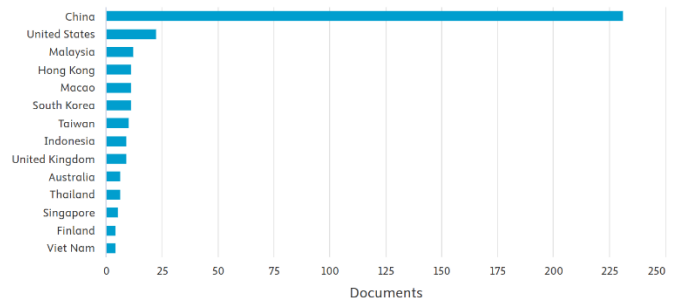


Fig. 3. Documents by country or territory by source from Scopus database.

China's dominance in the study of short video and e-commerce is evident from the fact that it is the country that owns the Douyin (TikTok) platform - the most downloaded App in the Apple App store in the first quarter of 2019, beating out social media heavyweights like Facebook, Instagram and YouTube [26]. Internet-based applications in China also receive the necessary support from the Government to thrive [27], but at the same time, they are subject to the same internet regulations as other Chinese applications [28, 29]. However, this field still has excellent potential for development in other countries. Strengthening international research cooperation will promote the development of short videos in e-commerce globally. Fig. 3 illustrates the number of studies (at least 4 papers) published by region or territory on short video and e-commerce.

C. Analysis of Documents by Author

Some authors have more publications than others, indicating a research concentration within a small group of scientists. This can lead to close research collaboration and rapid growth of knowledge in the field. Although there are a few prominent authors, many others contribute to research on short videos and e-commerce. This shows a broad interest in the field and the potential for diverse perspectives and methods. This paper analyzes the number of papers by the author, showing the significant contributions of a few researchers while also showing the diversity of the research team on short video and e-commerce. This information can help identify leading experts in the field and find research collaboration opportunities for future publications. Fig. 4 shows some authors with prominent research articles on short video and e-commerce with at least 3 or more publications.

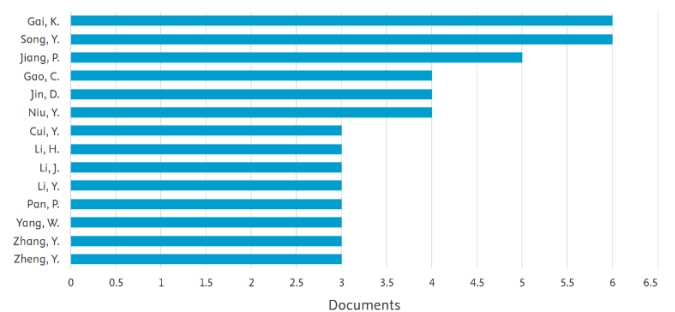


Fig. 4. Number of publications by author.

TABLE I. CORE RESEARCH AUTHOR ON SHORT VIDEOS

Authors		Title	General findings for the articles	No. of
Gai, K	Zhang, et al. [30]	Tag Tree-Guided Multi-grained Alignment for Multi-Domain Short Video Recommendation.	(1) Optimizing short video recommendation systems to improve user experience by delivering more accurate and relevant content. (2) Leveraging user feedback (such as WatchTime, Likes, Follows and Shares) to dynamically adapt and refine recommendation results based on changing user preferences. (3) Applying advanced machine learning techniques, including reinforcement learning and contrastive learning, to enhance the accuracy and efficiency of the recommendation algorithms. (4) Real-world deployment and testing on large-scale platforms like Kuaishou, demonstrating the effectiveness of the proposed models in live environments.	6
	Zheng, et al. [31]	Full Stage Learning to Rank: A Unified Framework for Multi-Stage Systems.		
	Cai, et al. [32]	Two-Stage Constrained Actor-Critic for Short Video Recommendation		
	Zhang, et al. [33]	Divide and Conquer: Towards Better Embedding-based Retrieval for Recommender Systems from a Multi-task Perspective		
	Zhang, et al. [34]	A Multi-Agent Framework for Recommendation with Heterogeneous Sources		
	Gong, et al. [35]	Real-time Short Video Recommendation on Mobile Devices		
Song, Y	Zheng, et al. [31]	Full Stage Learning to Rank: A Unified Framework for Multi-Stage Systems	(1) Optimization of recommendation systems to enhance user experience in short videos and e-commerce. (2) Leveraging accurate user data (feedback, viewing behavior, searches) to improve model accuracy. (3) Addressing data sparsity and bias using self-supervised learning and correction techniques. (4) Applying deep learning and graph-based models to improve user preference predictions. (5) Real-world experiments on large platforms like Kuaishou with A/B testing. (6) Resource efficiency and performance improvement without sacrificing model quality.	6
	Zhang, et al. [36]	SAQRec: Aligning Recommender Systems to User Satisfaction via Questionnaire Feedback		
	Sun, et al. [37]	KuaiSAR: A Unified Search and Recommendation Dataset		
	Zhang, et al. [38]	SHARK: A Lightweight Model Compression Approach for Large-scale Recommender Systems		
	Zheng, et al. [39]	Disentangling Long and Short-Term Interests for Recommendation		
	Liu, et al. [40]	Concept-Aware Denoising Graph Neural Network for Micro-Video Recommendation		
Jiang, P	Yang, et al. [41]	Spatiotemporal Fine-grained Video Description for Short Videos	(1) Focus on short videos: Improving recommendation systems for short video platforms. (2) Optimization of recommendation systems: Aiming to enhance the accuracy and effectiveness of recommendations based on user preferences and feedback. (3) Use advanced machine learning techniques: Implement reinforcement learning and multi-task learning. (4) Real-time feedback utilization: Adjusting recommendations based on immediate user feedback. (5) Real-world deployment: The methods are tested and deployed on real platforms, leading to improvements in user engagement.	5
	Cai, et al. [32]	Two-Stage Constrained Actor-Critic for Short Video Recommendation		
	Zhang, et al. [33]	Divide and Conquer: Towards Better Embedding-based Retrieval for Recommender Systems from a Multi-task Perspective		
	Gong, et al. [35]	Real-time Short Video Recommendation on Mobile Devices		
	Zhang, et al. [34]	A Multi-Agent Framework for Recommendation with Heterogeneous Sources		

Focusing on the top three authors with the most publications in the research field, Table I shows that the three authors' research focus is on developing and improving short video recommendation systems in e-commerce. Their research uses many advanced techniques and accurate user data to optimize user experience and improve the performance of the recommendation system. The research of Gai, K., Song, Y., and Jiang, P. has laid the foundation for the research on short video recommendation systems in e-commerce. Other researchers can take advantage of and further develop these results by applying new methods, extending the application to other fields, and building more significant and diverse datasets.

D. Bibliographic Coupling

Bibliographic coupling is a scientific mapping technique that operates on the assumption that two published studies that share standard references will have similar content [42, 43]. In this study, when analyzing data based on common keywords used by authors in clusters, keywords used as “search keywords” (which will be analyzed in the keyword co-occurrence analysis method below) were excluded because these keywords will be a practical evaluation direction reveal their content [44].

Fig. 5 shows the four main research clusters identified, including: (1) Impact and effectiveness. This cluster focuses on

measuring the impact of short videos on consumer shopping behavior and the effectiveness of short video advertising. Important studies include Ge, et al. [45], Kopf, Graetzer and Huh [46], and Xu [47]; (2) User experience. User Experience. This cluster focuses on factors affecting user experience on short video platforms, including interface design, video content, and user interaction. Notable studies include Zhang, et al. [48] and Song, et al. [49]; (3) Trends and business models. This cluster focuses on the development and trends of short videos in e-commerce, as well as new business models. Important studies include [50] and [51]; and (4) Technology. This cluster focuses on the application of new technologies, such as artificial intelligence (AI) and machine learning, in the production and distribution of short videos.

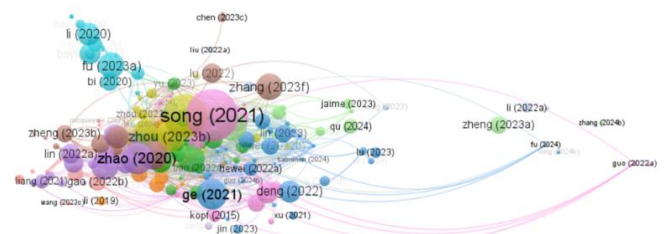


Fig. 5. Bibliographic coupling analysis results from VOSviewer.

The analysis's results show a diversity of research topics on short videos in e-commerce. Studies have examined the impact of short videos from various perspectives, from economic efficiency to user experience and technology application. Research trends show a growing interest in applying new technologies, especially artificial intelligence, to producing and distributing short videos.

E. Co-Citation

Co-citation analysis focuses on the number of times other documents cite two documents together, so it can be considered a method to measure the cohesion between publications [52, 53]. This paper focuses on co-citation analysis of author data. Author co-citation analysis is a way to determine whose publications are being cited in the same article and how the research community develops [54]. The results of the co-citation analysis show four distinct clusters as shown in Fig. 6.

Cluster 1, with the central red representation, focuses on “electronic commerce and factors influencing user behavior.” Most of this cluster corresponds to co-citations from Davis, Bagozzi and Warshaw [55] study on the technology acceptance model (TAM); this cluster often uses quantitative analysis based on Fornell and Larcker [56] on structural equation modeling; Hu and Bentler [57] on model fit criteria; and Lou and Yuan [58] on influencer marketing. This cluster focuses on factors influencing the acceptance and use of technology in electronic commerce, including the role of influencers. These studies use quantitative methods and modeling to assess the impact of perceived usefulness, perceived ease of use, and perceived credibility on consumer behavior.

Cluster 2, with the upper green branch, focuses on “user experience and influencing factors”. Studies in this cluster often cite Henseler, Ringle and Sarstedt [59] on discriminant credibility assessment in structural equation modeling; Sundar [60] on the MAIN (Modal, Agency, Interactivity, Navigability) model and the influence of technology on credibility; followed by co-integration from Wang [61] on the influence of humor and camera angles on user experience on TikTok; Zhang, Wu and Liu [62] on addiction to short-form video apps. This cluster focuses on user experience on short-form video platforms, especially the factors influencing engagement, engagement, and addiction. These studies combine psychology, communication, and technology theories to better understand user behavior in the digital environment.

Cluster 3, with the leftmost cluster shown in blue, focuses on "the effectiveness of short-video advertising". This cluster focuses on the studies of Ge, et al. [45] on the impact of short-video advertising on social media sales, Xiao, Li and Zhang [63] on factors influencing consumer engagement behavior with short-video advertising; Zhao and Wang [51] on user attitudes toward medical advertising on short-video social media. This cluster focuses on the effectiveness of short video advertising on e-commerce platforms. These studies consider factors such as advertising content, content creators, and platform characteristics to assess the impact of advertising on consumer purchase behavior and attitudes.

Cluster 4 on the correct branch is shown in yellow. This cluster focuses on “methodology and underlying theories”. Typical co-cited studies include Fornell and Larcker [56] study on structural equation modeling and Mehrabian and Russell [64] study on environmental psychology. This cluster includes studies that provide theoretical and methodological foundations for other studies in the graph. Specifically, it provides a widely used model evaluation method in consumer behavior research and references environmental psychology, which can be applied to understand how users interact with digital environments.

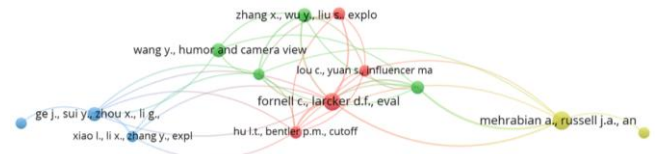


Fig. 6. Co-citation analysis results on VOSviewer.

F. Keyword Co-Occurrence

Zhang and Wang [65] argued that keyword co-occurrence analysis helps clarify research topics, while keyword co-occurrence analysis (i.e., two keywords appearing in a document) can better reveal the structure of research topics in a field. Elucidating the above opinion Rose, et al. [66] asserted that keywords are a condensed form of important content researchers present in a paper. This method explores the links between keywords in a document to reveal a scientific field's knowledge components and structure. Keywords can provide a concise overview of important content and key points of a piece of article content as an essential textual element. We increased the frequency of keyword occurrence in a publication to a minimum of 5 times to reinforce the research topic as having a high concentration. A total of 2,147 keywords emerged from the 299 research papers. After data processing, 84 standardized keywords were included in the analysis. Table II below lists the 15 keywords with the highest frequency of occurrence in the study of short videos in e-commerce.

TABLE II. FREQUENCY OF CO-OCCURRENCE OF KEYWORDS

Rank	Keywords	Frequency
1	Short video	45
2	Electronic commerce	36
3	Video-platforms	36
4	Social media	35
5	Marketing	27
6	E - commerce	26
7	Sales	23
8	Recommender systems	23
9	Tiktok	23
10	Purchase intention	22
11	Consumer behavior	19
12	Learning systems	19
13	Behavioral research	18
14	Multi-modal	18
15	Social networking (online)	16

The keyword clusters are closely related, reflecting the interaction between different aspects of short videos in e-commerce, as shown in Fig. 7. For example, "video platforms" (cluster 1) are connected to "short video platforms" (cluster 2) and "social media" (cluster 3), showing the interaction between technology, content, and user behavior—the directory links of the research visualized in Fig. 6 shows quite clearly the differentiation by keywords. The yellow cluster is considered the new direction of this research content in recent years; researchers are focusing more on analyzing the "Social context" for short videos in e-commerce. Other clusters focus on technology, content, and consumer behavior, while this cluster considers the human factor in the social and cultural context. Previous studies may have focused little on analyzing short video consumption behavior differences among different user groups. The yellow cluster represents a new and potential research direction in short video and e-commerce. Studies in this cluster can provide insights into the impact of short videos on different user groups in specific social and cultural contexts. These factors will contribute to a deeper analysis of the entire topic, reinforce other clusters, and serve as a foundation for further development.

Cluster 1 (Red): "Technology and Platforms". Keywords: "artificial intelligence", "deep learning", "e-commerce platforms", "video-platforms", "multi-modal", "recommend systems", "search engines", "user behaviors". This cluster focuses on the technological aspects of short-form video in e-commerce, including using artificial intelligence and deep learning to analyze data, personalize user experiences, and develop product recommendation systems. Research also

focuses on e-commerce and video platforms, indicating interest in optimizing these platforms to support short-form video.

Cluster 2 (Green): "Content and Interaction". Top keywords "user experience", "flow experience", "TikTok", "Douyin", "short video", "social media". These keywords indicate an interest in studying how users interact with short videos on social media platforms, especially TikTok (Douyin), and the factors influencing their satisfaction and experience. "Flow experience" is an important concept in psychology, referring to a state of high concentration and immersion in an activity. Research on "flow experience" in short videos can help better understand how to create engaging content and retain users.

Cluster 3 (Blue): "Consumer Behavior". Highlighted Keywords: "purchase intention", "consumer behavior", "perceived usefulness", "perceived value", "technology acceptance model". These keywords indicate interest in studying how short videos influence consumer purchase behavior. Factors such as perceived usefulness, value, and technology acceptance drive purchase intention. The Technology Acceptance Model (TAM) is a popular theoretical framework used to study the acceptance and use of new technologies, including short videos in e-commerce.

Cluster 4 (Yellow): "Social Context". Keywords highlighted: "adult", "china", "human", "performance", "video applications". This cluster focuses on the social and demographic context of short video consumption. "China" indicates a particular interest in the Chinese market, where short videos are proliferating. "Adult" suggests that research may focus on adult user behavior.

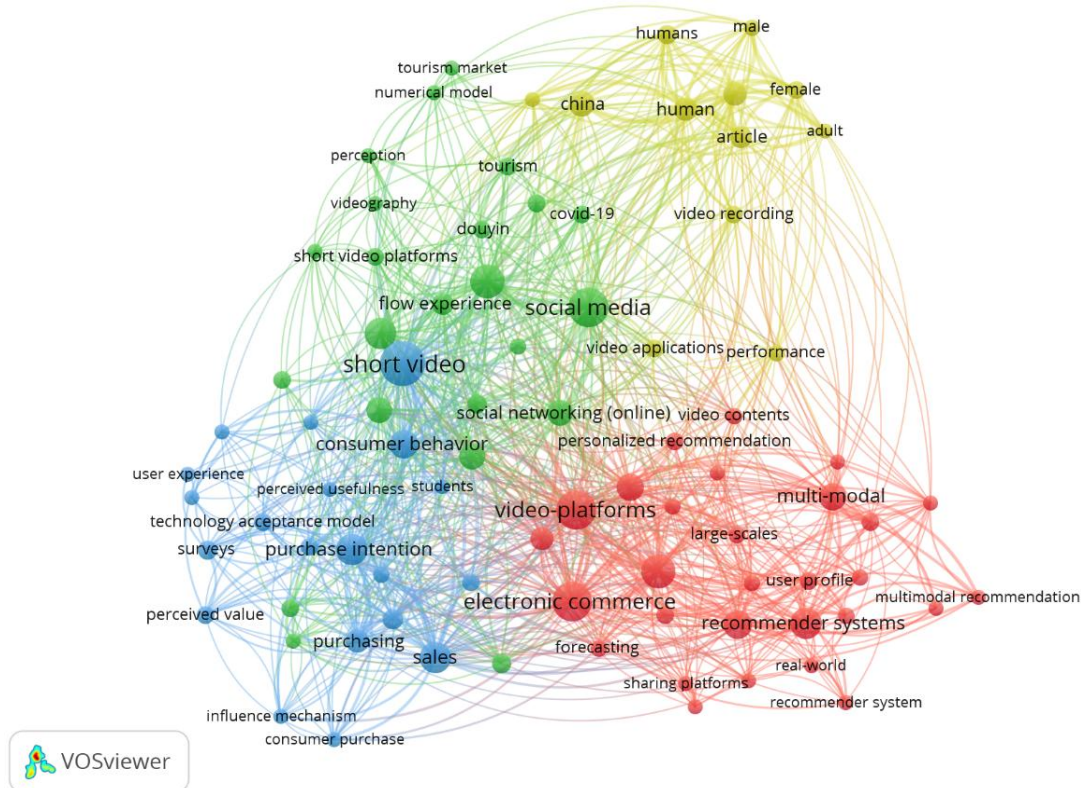


Fig. 7. Keyword co-occurrence analysis results from VOSviewer.

IV. DISCUSSIONS

This study used bibliometric analysis to investigate the growth and impact of short videos in e-commerce. Based on the study's main findings, this discussion focuses on providing detailed answers to the research questions posed earlier.

The first research question (RQ1) sought to identify the main thematic clusters and research topics in the field.

Keyword co-occurrence analysis and bibliometric pairing offer a balanced view of the focus areas in e-commerce and short-video research. Keyword co-occurrence analysis revealed that several keyword clusters had strong interrelations, reflecting the interrelations between different aspects of the field. Remarkably, the research revealed an overall high level of congruence between "video platforms," "short videos," and "social media." The core cluster is a marker for the importance of the websites upon which short-form video content resides, the format of the content itself, and the social connections around it. The occurrence of a yellow cluster near "social context" reflects how the acknowledgment of the role of social and cultural considerations in short-form video viewing and e-commerce is growing. This suggests that recent research is moving beyond simply looking at technology or individual user behavior and increasingly considering the broader social impacts of short-form video in e-commerce.

The bibliometric analysis identified four principal research clusters, each representing a distinct area of focus: Impact and Effectiveness, User Experience, Trends and Business Models, and Technology. The Impact and Effectiveness cluster examines the influence of short-form videos on consumer behavior and the efficacy of short-form video advertising. Research within this cluster typically assesses the impact of short-form videos on sales, consumer engagement, and overall marketing outcomes. The User Experience team explores factors affecting the user experience of short-form videos on e-commerce sites, such as interface design, video content features, user interactions, and psychological impacts on user satisfaction and engagement. The Trends and Business Models theme addresses the evolutionary trends for short-form videos in e-commerce and emerging business models that technology enables. This involves exploring new applications for short-form videos in marketing, sales, and customer engagement. The Technology theme addresses using new emerging technologies, such as artificial intelligence (AI) and machine learning, in creating, delivering, and personalizing short-form videos. Research in this category would involve discovering recommendation algorithms for videos, content creation, and insights.

The second research question (RQ2) was formulated to explore the relationships between different research topics in this field.

The co-citation technique gives meaningful information about the interconnectedness and cross-influence of various research domains. Outcomes from the co-citation analysis revealed several clusters that captured various facets of short-form video e-commerce research. E-Commerce and User Behavior: This cluster presents aspects of user behavior regarding e-commerce. Studies within this cluster frequently

employ the Technology Acceptance Model (TAM) to comprehend how users adopt and utilize e-commerce technologies. User Experience and Factors That Affect: This cluster looks at user experience on short-form video sites and the various factors that may affect it. Research in this cluster can explore how humor, camera angles, and the addictive nature of short-form video apps affect user experience. Short-Form Video Advertising Effectiveness: This cluster considers the performance of short-form video advertising as a marketing platform. Research in this cluster can investigate how platform features, content creators, and ad messages impact consumer behavior and attitudes. Methodology and Underlying Theories: This cluster involves studies that provide theory and methodological foundations for other studies in the field. This may involve research in environmental psychology and structural equation modeling.

These clusters show how different research areas in the field are connected. As an example, influencer marketing research (cluster 1) can adopt user experience theories (cluster 2) and performance metrics methods (cluster 4) to examine the impact of influencers on purchase behavior on short-form video platforms. This shows the necessity of interdisciplinarity in research into the multifaceted phenomenon of short-form video shopping online.

The third research question (RQ3) traces the trajectory of research on short videos in e-commerce.

According to publications by year reveals that there has been a significant rise in research on short videos in e-commerce. There has been a remarkable spike in publications over the past few years, which indicates a greater interest in the subject. During the initial period (2015-2018), a relatively small number of publications showed that short videos in e-commerce are still an emerging area of research. The subsequent period of development (2019-2020) was characterized by a significant increase in publications, which can be attributed to factors such as the popularity growth of short video platforms such as TikTok and the online shopping boom. Since 2021, research output has boomed, highlighting that short videos have become a mainstream research topic. This indicates the dynamic development of the industry and increasing recognition of the significance of short videos in e-commerce.

V. CONCLUSION

This study has compiled data and drawn comprehensive conclusions about the research direction on "Evolution and Impact of Short Videos in E-commerce," Nevertheless, it is worth mentioning some limitations that affect the interpretation of the findings and imply directions for further research.

One of the most significant disadvantages is the availability of a single database. Although Scopus is a highly inclusive repository, it does not include all the scholarly literature. Therefore, there is a possibility that research relevant to the investigation published in less-indexed journals, conference proceedings, or non-English language publications was excluded from the analysis. Using bibliometric analysis, the research gives rich statistics regarding research trends, dominant themes, and short video production in e-commerce.

However, limitations must be provided that impinge on result interpretation and identify possible areas for further research. Although bibliometric analysis provides an aggregated quantitative view of research trends, it does not provide detailed qualitative remarks regarding the content and quality of individual research. The analysis identified research clusters and broad topics. It does not assess the quality of the research methods employed, the validity of the findings, or literature biases.

To address these limitations, future research should consider several avenues. Wider Data Sources: Future studies need to encompass data from a more fantastic range of academic databases, including Web of Science, Dimensions, PubMed, and Google Scholar, as well as specific e-commerce and media studies databases. This provided a rich and representative image of the research setting. Combining Qualitative Analysis: Follow-up studies can be combined with bibliometric analysis and other qualitative methods, such as systematic reviews or meta-analyses, to understand research findings further. Future studies should continue to study and monitor trends in the field, such as the use of artificial intelligence in short video creation and personalization, consumer culture impacts on short videos in different cultures, and ethical considerations of marketing through short videos. Applying More Sophisticated Bibliometric Tools: Future studies can use more sophisticated bibliometric tools and methods, such as SciMAT, CiteSpace, or R Biblioshiny, to report more sophisticated analysis and visualization of the data. This may yield new insights into the dynamics and structure of research landscapes.

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