

A Bibliometric Analysis of Social Commerce Research Using Scopus Database

Hamisu Alhaji Ali^{1*,2}, Mahadi Bahari¹, Noorminshah A. Iahad¹

¹Department of Information System, Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru, Malaysia, ²Department of Computer Science, School of Science, Mai Idris Aloomo Polytechnic Geidam, Yobe State, Nigeria
Corresponding Author Email: alia1@graduate.utm.my

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Abstract

Social commerce (SC) has revolutionized e-commerce by integrating social media (SM) and Web 2.0 technologies to facilitate online shopping through user interaction. It is a subset of e-commerce that leverages SM to facilitate commercial transactions while encouraging social interactions and user-generated content. This bibliometric analysis examines the contemporary growth of research on SC from 2008-2023. Of the 1,028 documents analysed, the majority were journal articles (62.74%) and conference papers (27.63%), primarily published in English (98.83%). Computer science (67.80%) and business management (41.44%) were the dominant subject areas, reflecting SC's interdisciplinary nature. China (26.26%), the US (16.63%), and Malaysia (10.12%) were the most prolific countries. The most frequently used keywords were "social commerce", "commerce", "social networking", and "electronic commerce". The top cited articles focused on the role of social support, relationship quality, design features, and trust in driving SC adoption. While research on SC has grown exponentially since 2007, with a peak in 2023, the field remains fragmented. The study aims to provide a comprehensive overview of the intellectual structure and evolution of the SC field, identifying key themes, trends, patterns, and future research directions. The findings offer valuable insights for researchers and practitioners to guide the strategic direction of SC research.

Keywords: Social Commerce, Bibliometric, Scopus Database, VOSViewer

Introduction

The evolution of social commerce (SC) has paralleled the growth of e-commerce, with its roots tracing back to Yahoo's introduction in 2005 (Han et al., 2018). Major players like Amazon, Groupon, and eBay quickly recognized the value of user engagement, leading to the term "social commerce" being coined in academic literature by 2006 (Han et al., 2018). A significant milestone occurred in 2009 when Flowers.com pioneered the first Facebook store, marking

the official beginning of SC (Han et al., 2018). By 2016, the average value of online orders referred to through social media reached US\$89, indicating the rising influence of social platforms in driving commercial transactions. With enterprise social networks projected to surpass \$90 billion in revenue by 2020 Aladwani (2018), the landscape of online commerce has been transformed by the widespread adoption of mobile devices and wireless connectivity. The global proliferation of social media (SM), with approximately 4.33 billion users worldwide, has underscored the importance of SC in contemporary business strategies (Xiang et al., 2022). Facilitating SC decision-making has emerged as a critical challenge amidst this shift, necessitating a deeper understanding of consumer behavior in the context of social e-shopping. Despite the opportunities presented by SC, challenges such as the lack of social interaction in traditional e-commerce models persist, hindering its full potential.

SC represents a fusion of electronic commerce with SM and Web 2.0 technologies, reshaping customer-business interactions and influencing trust dynamics in online transactions. Its adoption has empowered businesses to strengthen customer relationships, accelerate product launches, and bolster brand visibility (Liang & Turban, 2011; Sutomo et al., 2020a). The surge in mobile phone usage, with over 5.112 billion unique users globally, highlights the significance of mobile platforms as key drivers of profitable SC transactions (Statista, 2020). SC has emerged as a significant research area in the field of e-commerce, driven by the rapid advancements in information and communication technologies, web 2.0, and social networking sites (SNS) (Kemp, 2021). SC leverages the interactive and collaborative aspects of SM to facilitate online buying and selling, creating a dynamic and participatory shopping experience. This emerging field has attracted considerable attention from both academia and industry, leading to a substantial body of literature that spans various disciplines, including marketing, information systems, and consumer behaviour (Barbosa & Santos, 2023).

The study examines scholarly literature on SC published over the past decades, with the goal of uncovering the intellectual structure, influential authors, institutions, and journals in this domain. By applying bibliometric techniques, the analysis sheds light on the evolution and maturity of SC research, highlighting the major research themes and their interconnections (Zhou et al., 2023). The importance of this bibliometric analysis lies in its ability to synthesize and interpret a large volume of research in a structured manner. It not only aids in recognizing significant contributions and foundational works but also facilitates the identification of gaps and opportunities within the field (Dhaigude & Mohan, 2024). Moreover, by visualizing the intellectual structure and thematic evolution of SC research, this study contributes to the strategic planning and advancement of this rapidly evolving domain. Through a comprehensive bibliometric approach, this analysis serves as a crucial tool for advancing our understanding of SC and guiding future scholarly endeavours. (Dhaigude & Mohan, 2024; Zhou et al., 2023).

The findings of this bibliometric analysis offer researchers and practitioners a holistic understanding of the SC research field, enabling them to identify emerging topics, influential works, and potential research gaps. Second, the insights generated can inform the development of future research agendas and help guide the strategic direction of SC research. Finally, the bibliometric approach employed in this study demonstrates the value of using quantitative methods to map the intellectual landscape of a rapidly evolving research domain. However, low adoption rates among businesses in developing countries underscore the need for comprehensive strategies to navigate the complexities of SC adoption (Abed, 2020). Given the dynamic nature of SC, a thorough examination of existing research is crucial to equip stakeholders with the necessary insights and understanding. This bibliometric analysis aims

to provide a comprehensive overview of the SC research landscape, identifying the key themes, trends, patterns, knowledge structures and future research directions within the field. The scope of this analysis encompasses a comprehensive examination of published works, including journal articles, conference papers, books, book series, and reviews, to provide a holistic overview of the research activity and development in SC. The remainder of the paper is in the following manner: A review of the previous literature, a highlight of the method used, results, discussion and findings, and finally, conclusion and recommendation.

Literature Review

A literature review serves as a comprehensive examination of existing research on a particular topic, aiming to establish a solid understanding based on available knowledge. It involves a systematic approach to identifying and synthesizing existing studies, which helps to validate the identification of a research problem and pinpoint gaps in the literature that require further exploration (Horani et al., 2023; Sururi, 2022).

Definition of Social Commerce

Social Commerce is a multidisciplinary field that draws from various disciplines including psychology, sociology, computer science, and marketing, resulting in diverse definitions. From a marketing standpoint, SC is described as a prevalent trend in online marketplaces where SM or Web 2.0 technologies are utilized as marketing platforms to aid users in making purchasing decisions (Constantinides & Fountain, 2008). From a technological perspective, SC involves online-mediated applications that integrate Web 2.0 technologies, such as Ajax and RSS, with interactive platforms like SNS and content communities within a commercial setting (Lee et al., 2008). Sociologically, SC refers to the use of internet forums by e-commerce firms to analyse the social effects that influence consumer relationships (Kim & Srivastava, 2007). Psychologically, SC encompasses social shopping, where individuals are influenced by cues from their networked peers during online purchases (Marsden, 2009). In summary, SC is a subset of e-commerce that leverages SM to facilitate commercial transactions while encouraging social interactions and user-generated content (Liang & Turban, 2011; Sutomo et al., 2020b). In other words, SC is the use of social networks in the context of e-commerce transactions, from browsing to checkout, without ever leaving a SM platform (Chandraa et al., 2024; Zhao et al., 2023).

The key aspects of SC include

- Allowing customers to discover, research, and purchase products directly within SM platforms like Facebook, Instagram, Pinterest, etc.
- Leveraging social interactions, user-generated content, and social sharing to drive product discovery and sales.
- Providing a seamless shopping experience where customers can complete the entire purchase journey without leaving the social platform.
- Utilizing features like shoppable posts, live shopping events, SM storefronts, etc. to facilitate transactions.

Social commerce aims to make the shopping process more engaging, social, and convenient for consumers, while also allowing businesses to reach and convert customers where they are already spending time on SM. It represents a shift from traditional e-commerce towards a more integrated, social-driven online shopping experience (Chandraa et al., 2024).

Evolution of Social Commerce

The evolution of SC traces back to the late 1990s, though it was officially termed by practitioners in trade papers in 2005 and later in academic literature in 2007 (Curty & Zhang, 2011). Early adopters of SC such as Amazon and Epinions implemented referral shopping strategies. For example, Amazon introduced features like "buy circles" in August 1999, akin to today's recommendation systems and customer forums. Epinions, launched in 1999, aimed to facilitate the exchange of experiences and ideas through open reviews, ratings, and community forums. This early concept of SC focused on leveraging user-generated content and peer recommendations to drive product discovery and sales (Chen et al., 2021). Over the next decade, various e-commerce startups with social shopping elements, like Wists and StyleFeeder, emerged to further develop the idea of integrating SM with online shopping. However, SC did not gain significant momentum until the mid-2010s when major platforms like Facebook and Instagram started introducing shoppable features (Olivares & Cheneffusse, 2022).

These platforms offered users wish lists, email notifications, and the ability to choose network members based on reputation, laying the groundwork for SC before it gained widespread recognition in the mid-2000s (Curty & Zhang, 2011). The evolution of SC has been driven by the rapid growth of SM usage, the increasing preference for user-generated and influencer content, and the desire for a more seamless, social shopping experience. Key developments include the rise of shoppable SM galleries, shoppable emails, and video commerce (Molota, 2023; Plazibat & Marunica, 2023).

Today, SM is a rapidly expanding market, expected to reach over \$3 trillion globally by 2025 (Molota, 2023; Plazibat & Marunica, 2023). It has become a crucial part of the e-commerce landscape, particularly for engaging younger consumers like Gen Z and millennials (Chen et al., 2021; Chen & Zhu, 2021). As SM platforms continue to enhance their shopping capabilities, SC is poised to be a dominant force in the future of online retail (Molota, 2023; Plazibat & Marunica, 2023). A graphical representation of SC's evolution is depicted in Figure 1.

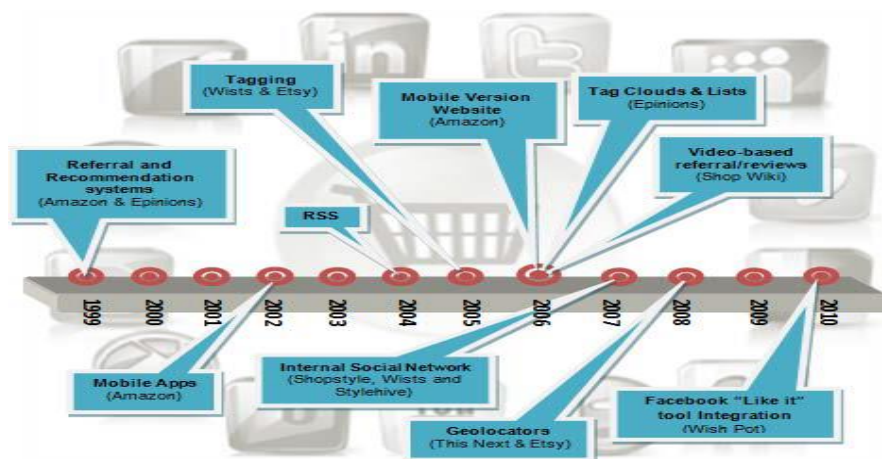


Figure 1: SC Evolution (adopted from Curty & Zhang, 2011)

Importance of SC

In recent times, SC has emerged as a powerhouse in the e-commerce arena (Liang & Turban, 2011). SM or new media has become the primary driver of traffic for e-commerce platforms (Hajli, 2012). The pivotal role of SM in promoting SC cannot be overstated, as e-commerce

giants like eBay and Amazon have significantly boosted their global sales. For instance, eBay saw a revenue increase from 8.6 to 9.5 billion USD in 2017, while Amazon's sales surged from 135.9 to 177.8 billion USD during the same period (Statista, 2017, 2020). Platforms such as Facebook facilitate user interaction and content sharing, enabling peer-to-peer recommendations which heavily influence purchasing decisions. Chen and Wang (2016) highlight the accessibility of smaller social circles within Facebook, ranging from real-life connections to more abstract networks. Businesses have shifted focus from mass advertising to building relationships with customers Kim & Srivastava (2007), a trend discussed by industry leaders globally, as seen in gatherings like Bazaar-voice in 2018. The trust in peer recommendations over traditional advertising is evident, with approximately 76% of consumers relying on peer referrals compared to only 15% trusting advertising (Qualman, 2012). The European Union acknowledges the significant impact of e-commerce, with Europeans spending over 191 billion euros online in 2017, a figure expected to grow faster than physical retail sales (Gill et al., 2012). SC advertising is predicted to be a major growth driver in the e-commerce sector TechNavio (2017), with the SC market projected to experience a compound annual growth rate of around 34% by 2021.

This growth is expected to accelerate post the Covid-19 pandemic, as the acceptance of social media as a secure platform for communication increases, influencing more individuals in the digital economy. Businesses can enhance their engagement with online customers by leveraging IT capabilities. Specifically, companies have utilized these capabilities to transform SM from simply connecting people socially to also facilitating the buying and selling of goods on the platform. This transformation has led to the development of SC (Burhanudin, 2024). Additionally, SC enables businesses to expand their reach to new customers and deepen their relationships with existing ones. Moreover, SC allows users to share their thoughts, such as product reviews, which helps other customers make more informed purchasing decisions through this shared information (Burhanudin, 2024).

Methodology

The research aims to explore the contemporary proliferation of publications on SC through bibliometric analysis. This method delves into the structure of networks to uncover major topics within a scientific discipline, their interrelations, and the progression of science. Bibliometric research, which typically focuses on quantitative studies in books, journal articles, and other written documents, is employed to achieve this goal (Sururi, 2022).

Bibliometric Analysis

Bibliometric analysis, as defined by Zyoud et al (2017), is a well-established approach for evaluating research output in a particular subject area. It involves mining databases to extract publication-related variables such as authorship, sources, geographical distribution, and various indicators (Dabirian et al., 2016). Pendlebury (2010) asserts that bibliometrics is a crucial tool for quantitative analysis in science, utilized by academics, government agencies, librarians, and researchers to assess research effectiveness. Ahmi et al (2019), notes the increasing use of bibliometric analysis to identify research trends in specific fields. Syed Hassan and Baharuddin (2021) define bibliometrics as the study and measurement of publication patterns across all forms of written communication and their authors. Through examining citation frequency, keyword frequency, authors, h-index, and publication types, bibliometric analysis offers valuable insights into targeted research fields.

In this study, VOSviewer, a freely available software tool, was employed to construct the bibliometric analysis. By utilizing databases such as Web of Science, Dimensions, Scopus, and PubMed, VOSviewer facilitates the creation and visualization of citation maps. It represents nodal networks based on overall link strength and quantity, with node size and connection lines illustrating the relevance and strength of links. Additionally, VOSviewer generates a co-occurrence network visualization based on phrases from reviewed literature. Scholarly citations were retrieved and analyzed using Publish or Perish, a software tool designed to help academics showcase their research impact and conduct bibliometric studies (Ciano et al., 2019; Donthu et al., 2020; Sweileh et al., 2018).

Source and Data Collection

Scopus, known for its capacity to provide bibliometric information efficiently, was utilized to collect data for this study. It is one of the most prominent academic databases available (Sweileh et al., 2018). The database was accessed to gather the necessary information for the bibliometric analysis. Following PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) standards, the authors conducted a document search using various query combinations related to social commerce. A Scopus search performed on April 20, 2024, yielded 1,129 documents. After applying filters to exclude incomplete duplicates, non-SC related documents, and papers in languages other than English, 101 papers were removed, while 1028 papers were retained for thorough evaluation. Additional analysis was conducted using Microsoft Excel, VOSviewer, and Publish or Perish (PoP) to finalize a dataset of 1,028 documents.

Two different file types (RIS and CSV) have been downloaded from the Scopus database. The CSV file was then imported into the VOSViewer to perform analysis, such as co-citation, co-authorship, co-occurrence, bibliometric coupling, etc. On the other hand, the RIS file was imported into the PoP software where the citation analysis was conducted in order to get the citation metrics and citation ranking (highly cited articles). The VOSViewer visualization result was extracted as a screen shot, while the PoP file was extracted as CSV and accessed using Microsoft Excel software.

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is a set of evidence-based guidelines used for reporting systematic reviews and meta-analyses. While originally developed for medical research, PRISMA has also been applied in bibliometric analyses to ensure a rigorous and transparent process for identifying, screening, and selecting relevant studies (Fu et al., 2023). The key aspects of PRISMA that are relevant to bibliometric analysis include: identification, screening, eligibility, inclusion, and reporting. By following the PRISMA guidelines, bibliometric analyses can ensure a rigorous and transparent process for identifying and selecting relevant studies, reducing the risk of bias and errors. The PRISMA flow diagram also provides a clear visual representation of the study selection process, which is an important component of reporting bibliometric analyses (Fu et al., 2023). In summary, while PRISMA was originally developed for systematic reviews and meta-analyses, its principles of transparency, rigor, and reporting can be effectively applied to bibliometric analyses to enhance the quality and reliability of the research process and findings.

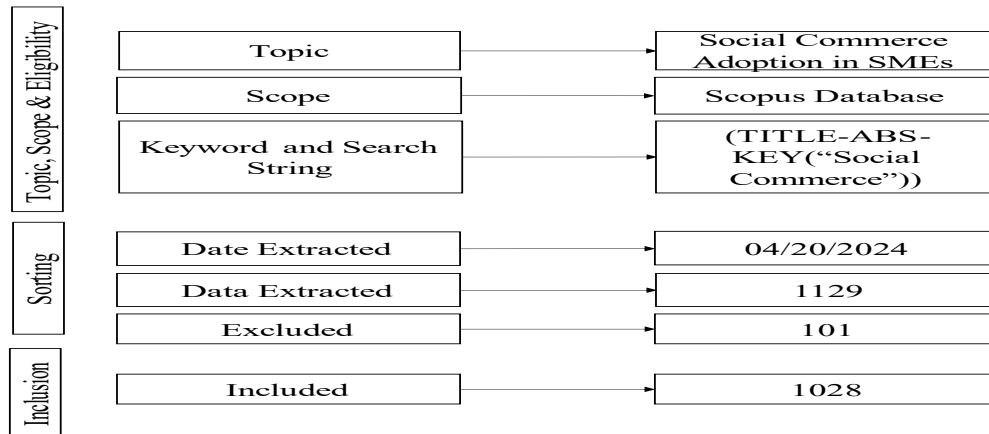


Figure 2. PRISMA Flow Chat

Results

The investigation employed several criteria to scrutinize academic work, including research productivity, document and source types, language, subject area, popular sources, publication distribution by country, prominent institutions, authorship, keyword, title, abstract, and citation analyses. Additionally, the findings encompass annual growth data up to 2024, as well as frequency and percentage breakdowns.

Document and Source Type

The study delved into the sources and document types used in studies on SC. The majority of these studies were published as articles (59.90%), followed by conference papers (34.60%), book chapters (3.00%), and review (2.40%) as indicated in Table 1 and depicted in Figure 3. Furthermore, the analysis revealed a further breakdown into two main categories: books and periodicals (Table 2). Out of the 1028 documents examined, 62.74% were published in journals, 27.63% in conference proceedings, 7.49% in book series, and the lowest percentage, 2.14%, in standalone books.

Table 1

Document by Type

<i>Document Type</i>	<i>Total Publications</i>	<i>Percentage (%)</i>
Article	616	59.90
Conference Paper	356	34.60
Book Chapter	31	3.00
Review	25	2.40
Total	1,028	100

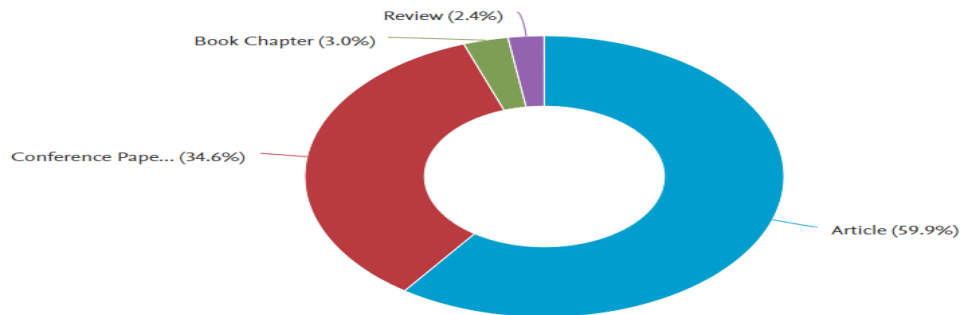


Figure 3: Document by Type

Table 2

Document by Source

Source Type	Total Publications	Percentage (%)
Journal	645	62.74
Conference Proceeding	284	27.63
Book Series	77	7.49
Book	22	2.14
Total	1,028	100

Year of Publication

The study also fathoms research productivity by analysing the annual output of documents. Examining the publication years of these documents provides insight into how the chosen topic has evolved over time (Ahmi, 2019). The initial studies on Supply Chain emerged in 1977. The volume of publications on this subject after 1977 exhibits irregular patterns until 2007. However, from 2007 onwards, there has been a consistent increase in academic articles on SC up to 2024. The peak year for publication in this field was 2023, with a total of 129 articles (12.55%) released. This trend continued with 127 articles (12.35%) in 2020, followed by 124 articles (12.06%) in 2019. Followed by 123 articles (11.96) in 2022, and 114 articles in 2021 (Table 3).

Figure 4 illustrates the growth of publication activities related to SC from 2008 to 2023. The increasing trend suggests a heightened interest among academics during this period. This finding is consistent with the observation made by Busalim and Hussin (2016), indicating that SC entered scholarly discourse in 2007. However, it is noteworthy that SC has been present since 1977, as documented in Scopus records.

Table 3

Document by Year of Publication

Year of Publication	Number of Publications	Percentage (%)
2023	129	12.55
2022	123	11.96
2021	114	11.09
2020	127	12.35
2019	124	12.06
2018	80	7.78
2017	78	7.59
2016	70	6.81
2015	50	4.86
2014	44	4.28
2013	46	4.47
2012	23	2.24
2011	10	0.97
2010	6	0.58
2009	2	0.19
2008	2	0.19
Total	1,028	100

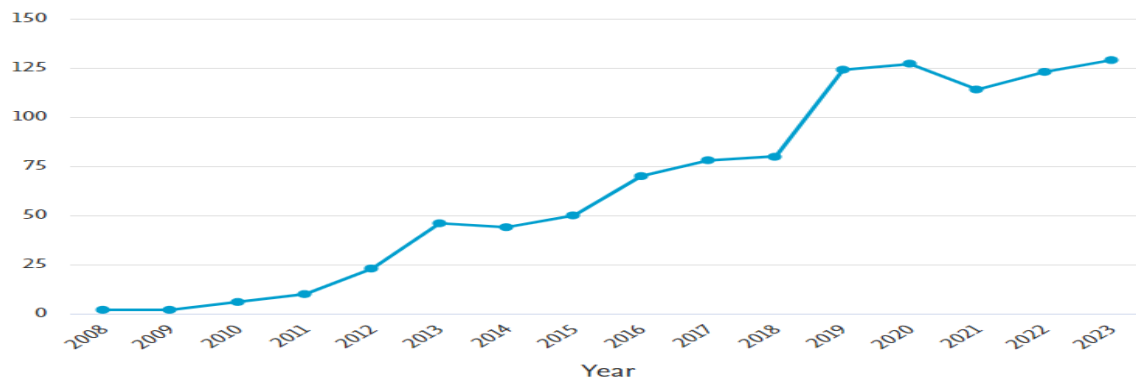


Figure 4: Document by Year of Publication (2008-2023) adopted from Scopus

Language of Document

The language employed in the publications has also been determined by analysing the collected data sets. As seen in Table 4, most papers on SC (9883.44%) are written in English. It's interesting that additional languages, including Portuguese, Chinese, Korean, German, and, Russian, were employed for some of the articles. Russian with 0.10%, was the least frequently used languages in the publications.

Table 4

Document by Language

<i>Language</i>	<i>Total Publications</i>	<i>Percentage (%)</i>
English	1,016	98.83
Portuguese	5	0.49
Chinese	4	0.39
Korean	2	0.19
Russian	1	0.10
Total	1,028	100

Subject Area

Table 5 provides a comprehensive breakdown of publications by topic, revealing that "Computer Science" accounted for the largest share, comprising 697 publications, or 67.80% of the total. Following closely behind was "Business Management and Accounting" with 426 publications (41.44%), "Social Sciences" with 213 (20.72%), "Decision Sciences" with 168 (16.34%), and "Engineering" with 150 (14.59%). Additionally, "Mathematics" accounted for 112 (10.89%), "Economics, Econometrics and Finance" accounted for 107 publications (10.41%), and other disciplines including Psychology (60 publications, 5.84%), Arts and Humanities (44, 4.28%), Energy (27, 2.63%), Environmental Science (26, 2.53%), Medicine (15, 1.46%), Agriculture and Biological Science (13, 1.26%), finally, Physics and Astronomy (6, 0.58%).

The dominance of "Computer Science" and "Business Management and Accounting" underscores the interdisciplinary nature of SC, which integrates computing, management, and social sciences. Given its reliance on SM and web 2.0 technologies, along with its examination of the social impact on e-commerce, SC research inherently requires a multi-faceted approach spanning these domains.

Table 5

Document by Subject Area

<i>Subject Area</i>	<i>Total Publications</i>	<i>Percentage (%)</i>
Computer Science	697	67.80
Business Management and Accounting	426	41.44
Social Sciences	213	20.72
Decision Science	168	16.34
Engineering	150	14.59
Mathematics	112	10.89
Economics, Econometrics and Finance	107	10.41
Psychology	60	5.84
Arts and Humanity	44	4.28
Energy	27	2.63
Environmental Science	26	2.53
Medicine	15	1.46
Agriculture and Biological Science	13	1.26
Physics and Astronomy	6	0.58

Most Active Source Title

The ten (10) most popular sources on SC are included in Table 6 and outlined in Figure 5. However, the overall number of papers shown in this table is outstanding given that Electronic Commerce Research and Applications, and International Journal of Information Management came in first and second, with 30 (2.92%) publications each. With a total of 21 (2.04%), 17 (1.65%), and 15 (1.46%) papers, Information and Management, Computers in Human Behaviour, and the Journal of Retailing and Consumer Services came 3rd, 4th, and 5th respectively. This is then followed by Internet Research in 6th place with 14 papers (1.36%), and Sustainability Switzerland in 7th with 13 papers (1.26%). Furthermore, Journal of Theoretical and Applied Electronic Commerce Research came 8th with 12 papers (1.17%), and Technological Forecasting and Social Change in 9th place with 11 papers (1.07%). Finally, Electronic Commerce Research and Information System Frontiers joined in seven with 10th place with 9 articles (0.88%) each. However, ACM International Conference Proceedings Series has 31 articles (3.02%) of total publications from 2008-2023, it was not included in the table to avoid confusion with journal articles information.

Table 6
Most Active Source

Source Title	Document/Year by Source	Percentage (%)
Electronic Commerce Research and Applications	30	2.92
International Journal of Information Management	30	2.92
Information and Management	21	2.04
Computers in Human Behavior	17	1.65
Journal of Retailing and Consumer Services	15	1.46
Internet Research	14	1.36
Sustainability Switzerland	13	1.26
Journal of Theoretical and Applied Electronic Commerce Research	12	1.17
Technological Forecasting and Social Change	11	1.07
Electronic Commerce Research	9	0.88

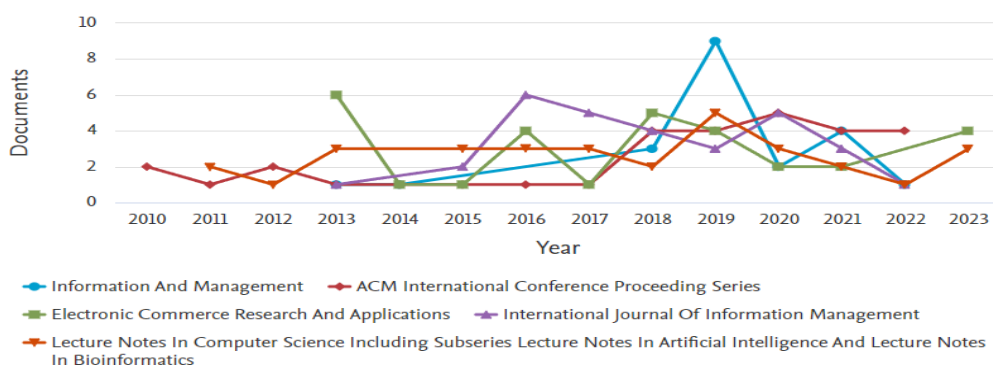


Figure 5: Document Per Year by Source

Keyword Analysis

Table 7 presents the primary search terms identified through bibliometric analysis. Notably, keywords such as "Social Networking," "Commerce," and "Electronic Commerce" emerged frequently in papers related to this field. Furthermore, the study conducted a detailed keyword analysis using WordStat, generating both a word cloud (Figure 6a) and a phrase cloud (Figure 6b) to visualize the most significant terms and phrases. These figures depict the top 100 keywords from articles published on SC, with the size of each word indicating its frequency. While the initial search terms were prominent, the word cloud also highlights emerging keywords like SM, Sales, Trust, e-commerce, Purchase intention, Human-Computer Interaction, Shopping, Information system, Recommendation, and Community. Even smaller-sized words have made substantial contributions to SC research. It's worth noting that each phrase depicted in Figure 6a represents a trending or popular term within SC studies, indicating potential areas of focus for future research.

Table 7

Top Keywords

<i>Keyword</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Social Commerce	642	63.50
Social Commerces	473	46.79
Commerce	352	34.82
Social Networking	255	25.22
Electronic Commerce	247	24.43
Social Media	222	21.96
Sales	221	21.86
Trust	131	12.96
Economics and Social Effect	98	9.69
Information System	93	9.20
Purchase Intention	93	9.20
e-Commerce	86	8.51
Purchasing	77	7.62
Consumer Behavior	72	7.12
Behavioral Research	57	5.64
Decision Making	50	4.95
Website	48	4.75
Information Use	46	4.55
Social Support	46	4.55
Survey	46	4.55
Marketing	43	4.25
Facebook	41	4.06
Social Interaction	38	3.76
Social Networking Site	34	3.36



Figure 6a: Word Cloud-All Keyword (phrase analysis) Figure 6b: Word Cloud-All Keyword (Word frequency)

Geographical Distribution of Publication

The most active nations that have published papers on SC are also listed in this study. With 270 publications China is the country with the most publications in SC, followed by the United States with 171, Malaysia with 104, the United Kingdom with 80, Taiwan with 78, and South Korea with 66. In addition, Indonesia, Australia, Canada, and India followed with 59, 43, 42, and 38 publications respectively as shown in Table 8. Figures 7 a and b show bibliometric coupling and co-authorship analysis based on Country.

Table 8

Countries with the highest Publication

Country	Total Publication	Percentage (%)
China	270	26.26
United State of America	171	16.63
Malaysia	104	10.12
United Kingdom	80	7.78
Taiwan	78	7.59
South Korea	66	6.42
Indonesia	59	5.74
Australia	43	4.18
Canada	42	4.09
India	38	3.70
Hong Kong	37	3.60
Iran	29	2.82
Saudi Arabia	27	2.63
Germany	25	2.43
Jordan	25	2.43
Spain	25	2.43

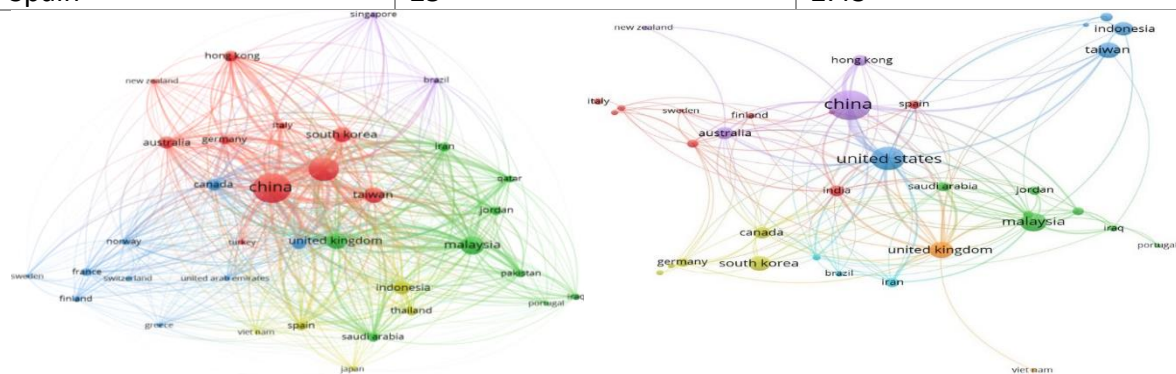


Figure 7a: Bibliometric coupling based on Country Figure 7b: Co-Authorship analysis based on Country

Text Analysis

Using VOSviewer software, an analysis of titles, abstracts, and keywords from the collected documents was conducted employing the full counting approach. In the binary counting method utilized, the frequency of a noun in an article is determined by its occurrence (Van Eck & Waltman, 2017). Figure 8 presents a visualization of noun occurrences derived from these components. In the visualization, the size of nodes indicates the strength of occurrences, while the thickness of lines between nodes represents the strength of their connection. The clustering of similar words illustrates their relationship. The analysis reveals the interconnectedness and frequent co-occurrence of terms such as social commerce, s-commerce, social media, Trust, E-commerce, and social shopping. From this analysis, six distinct colours were assigned, each representing one of the six major groups identified.



Figure 8: VOSviewer visualization Co-occurrence of all keywords

Most Influential Institutions

Table 9 provides a summary of the most significant institutions in publishing articles on SC, with further highlighting in Figure 9. Topping the list is the City University of Hong Kong, contributing 24 publications, followed closely by the Universiti Teknologi Malaysia came second with 22 publications, While Swansea University, and the University of Science and Technology of China jointly occupy third place with 21 publications each. Bina Nusantara University Indonesia followed in fourth place with 19 publications. Universiti Tenaga Nasional came fifth with 17 articles. Hefei University of Technology and University of Indonesia were jointly sixth with 14 articles. In addition, Dalian University of Technology China, Newcastle University, and Chaoyang University of Technology Taiwan became seventh, with 13 publications each. Finally, Universiti Teknologi Mara Malaysia, University of Ottawa Australia, and Wuhan University Canada share the eighth position with 11 publications each.

Table 9
Summary of the most Influential Institution

Affiliation	Country	Total Publication	Percentage (%)
City University of Hong Kong	Hong Kong	24	2.33
Universiti Teknologi Malaysia	Malaysia	22	2.14
School of Management, Swansea University	UK	21	2.04
University of Science and Technology of China	China	21	2.04
Bina Nusantara University	Indonesia	19	1.85
Universiti Tenaga Nasional Selangor	Malaysia	17	1.65
Hefei University of Technology Anhui	China	14	1.36
Universitas Indonesia	Indonesia	14	1.36
Dalian University of Technology	China	13	1.26
Newcastle University	UK	13	1.26
Chaoyang University of Technology	Taiwan	13	1.26
Universiti Teknologi Mara	Malaysia	11	1.07
University of Ottawa	Australia	11	1.07
Wuhan University	Canada	11	1.07

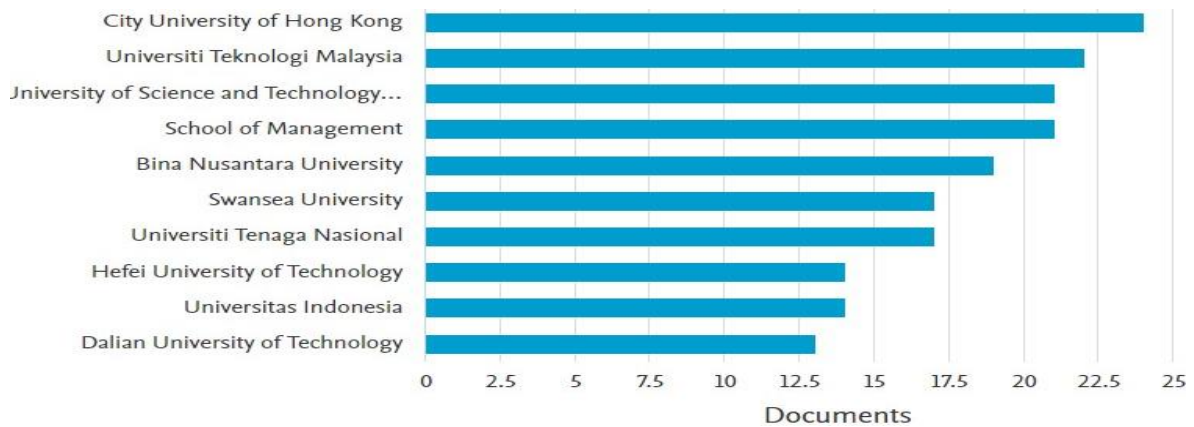


Figure 9: Most influential Institution

Citation Analysis

The citation measures for the documents that were retrieved as of 04/20/2024 were shown in Table 10. The metadata that was accessed via the Scopus database was analysed using PoP to determine the citation metric. The number of citations, along with the number of citations per paper, author, and year, are listed in the brief description. There were a total of 1028 papers on SC, with 34757 citations, or an average of 2172.31 citations each year. Each paper had 33.81 citations, and the overall h-index and g-index (named after the inventor: Leo Egghe, 2006) for all publications were 94 and 164, respectively. Table 11 shows the top 25 papers on SC that have received the most citations.

Table 10

Citation Metrics

<i>Metrics</i>	<i>Data</i>
Publication Years	2008-2024
Citation Years	16
Papers	1028
Citations	34757
Citations/Year	2172.31
Citations/Paper	33.81
Citations/Author	15683.93
Papers/Author	433.35
Authors/Paper	2.95
h_index	81
g_index	137

The most frequently cited article has 953 total citations and was written by Liang et al., (2011) with the title " What drives SC: The role of social support and relationship quality". Huang and Benyoucef (2013), and Kim and Park (2013), were the authors immediately after, with 856 and 722 citations, respectively, for their articles titled " From e-commerce to SC: A close look at design features" and "Effects of various characteristics of SC (s-commerce) on consumers' trust and trust performance" respectively. Although there are many studies on SC, most of the studies discussed consumer adoption of SC, the power shift from sellers to buyers, the impact of trust, and social influence. This highlighted the need for, and importance of research on SC adoption in SMEs.

Table 11

Highly Cited Articles

<i>Authors</i>	<i>Title</i>	<i>Year</i>	<i>Citation s</i>	<i>Citations/Yea r</i>	<i>Citations/Autho r</i>
T.-P. Liang, Y.-T. Ho, Y.-W. Li, E. Turban	What drives SC: The role of social support and relationship quality	2011	953	73.31	238
Z. Huang, M. Benyoucef	From e-commerce to SC: A close look at design features	2013	856	77.82	428
S. Kim, H. Park	Effects of various characteristics of SC (s-commerce) on consumers' trust and trust performance	2013	722	65.64	361
B. Lu, W. Fan, M. Zhou	Social presence, trust, and SC purchase intention: An empirical research	2016	683	85.38	228
T.-P. Liang, E. Turban	Introduction to the special issue SC: A research framework for SC	2011	669	51.46	335
A.T. Stephen, O. Toubia	Deriving value from SC networks	2010	620	44.29	310
H. Zhang, Y. Lu, S. Gupta, L. Zhao	What motivates customers to participate in SC? the impact of technological environments and virtual customer experiences	2014	580	58	145
A. Wongkitrungrueng, N. Assarut	The role of live streaming in building consumer trust and engagement with SC sellers	2020	552	138	276
J. Hamari	Transforming homo economicus into homo ludens: A field experiment on gamification in a utilitarian peer-to-peer trading service	2013	549	49.91	549
N. Hajli	SC constructs and consumer's intention to buy	2015	537	59.67	537

Y. Sun, X. Shao, X. Li, Y. Guo, K. Nie	How live streaming influences purchase intentions in SC: An IT affordance perspective	2019	480	96	96
C. Wang, P. Zhang	The evolution of SC: The people, management, technology, and information dimensions	2012	438	36.5	219
K.Z.K. Zhang, M. Benyoucef	Consumer behavior in SC: A literature review	2016	416	52	208
N. Hajli, J. Sims, A.H. Zadeh, M.-O. Richard	A SC investigation of the role of trust in a SNS on purchase intentions	2017	411	58.71	103
M.N. Hajli	The role of social support on relationship quality and SC	2014	386	38.6	386
J. Chen, X.-L. Shen	Consumers' decisions in SC context: An empirical investigation	2015	379	42.11	190
L. Xiang, X. Zheng, M.K.O. Lee, D. Zhao	Exploring consumers' impulse buying behavior on SC platform: The role of parasocial interaction	2016	357	44.63	89
L. Zhou, P. Zhang, H.-D. Zimmermann	SC research: An integrated view	2013	349	31.73	116
C.S.-P. Ng	Intention to purchase on SC websites across cultures: A cross-regional study	2013	345	31.36	345
M.S. Yadav, K. de Valck, T. Hennig-Thurau, D.L. Hoffman, M. Spann	SC: A contingency framework for assessing marketing potential	2013	343	31.18	69
K. Kang, J. Lu, L. Guo, W. Li	The dynamic effect of interactivity on customer engagement behavior through tie strength: Evidence from live streaming commerce platforms	2021	315	105	79

C.M.K. Cheung, B.S. Xiao, I.L.B. Liu	Do actions speak louder than voices? the signaling role of social information cues in influencing consumer purchase decisions	2014	284	28.4	95
D.-H. Shin	User experience in social commerce: In friends we trust	2013	264	24	264
A.H. Busalim, A.R.C. Hussin	Understanding SC: A systematic literature review and directions for further research	2016	261	32.63	131
I.B. Yahia, N. Al-Neama, L. Kerbache	Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage	2018	254	42.33	85

Figure 10a gives the VOSviewer network visualization of citation analysis based on authors, while Figure 10b displayed density visualization of citation analysis based on document.

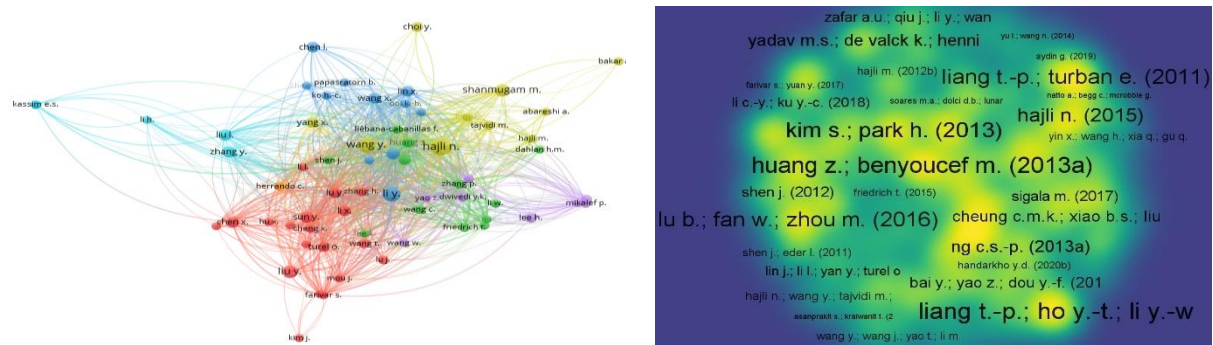


Figure 10a: Citation-analysis based on Authors Figure 10b: Citation-analysis based on Document

Discussion and Findings

Primary Findings

The majority of SC research has been published as journal articles (59.90%), followed by conference papers (34.60%), book chapters (3.00%), and reviews (2.40%). This indicates that SC is an active and evolving field of study. Publication on SC has seen a consistent increase since 2007, with the peak years being 2023 (12.55%), 2020 (12.35%), and 2019 (12.06%). This suggests growing academic interest and importance of SC research. English is the dominant language, accounting for 98.83% of publications, with other languages like Portuguese, Chinese, and Korean making up the remaining 1.17%. The top subject areas for SC research are Computer Science (67.80%), Business Management and Accounting (41.44%), and Social

Sciences (20.72%). This multidisciplinary nature highlights the diverse applications and perspectives of SC. China, the United States, Malaysia, the United Kingdom, and Taiwan are the most prolific countries in publishing SC research, accounting for over 70% of total publications. Citation analysis reveals the most influential SC papers, with the top 3 most cited articles focusing on the role of social support, relationship quality, and the drivers of SC.

Practical Implications

The increasing volume of SC research indicates its growing importance for businesses and consumers. Practitioners can leverage these insights to better understand consumer behaviour, develop effective social commerce strategies, and enhance customer engagement. The multidisciplinary nature of SC research suggests the need for collaboration between researchers and practitioners from diverse backgrounds, such as computer science, marketing, and social sciences, to address the complex challenges in this field. The dominance of English publications highlights the need for researchers and practitioners to effectively communicate their findings and best practices globally, ensuring the dissemination of knowledge across different regions and cultures.

Policy Implications

The geographic distribution of SC research, with China and the US leading, suggests the need for policymakers to foster collaborative research initiatives and knowledge-sharing between different countries to drive the global development of SC. The rapid growth in SC research calls for policymakers to develop regulatory frameworks and guidelines that address emerging issues, such as data privacy, consumer protection, and the integration of social media platforms with e-commerce. Policymakers should consider incentivizing interdisciplinary research and promoting the adoption of SC technologies, particularly in developing countries, to ensure inclusive and equitable growth in this domain.

In summary, this bibliometric analysis provides a comprehensive overview of the social commerce research landscape, highlighting key trends, influential publications, and the multidisciplinary nature of the field. The insights generated can inform the development of future research agendas, guide strategic decision-making for businesses, and support policymakers in shaping the regulatory environment for the continued growth and evolution of social commerce.

Conclusion

In conclusion, the bibliometric review of SC literature spanning from 2008 to 2024 offers a thorough understanding of the field's evolution, trends, and dynamics. Through meticulous analysis of publication trends, document types, language preferences, geographical distribution, keyword trends, institutional contributions, citation analysis, and more, this study provides valuable insights for stakeholders, policymakers, entrepreneurs, and scholars. The findings underscore the significant growth and global reach of SC research, with a notable surge in publications observed from 2007 onwards. Journal articles emerge as the primary form of publication, predominantly in English, reflecting the interdisciplinary nature and global accessibility of SC scholarship. Geographically, China leads in SC research output, followed by the United States and Malaysia, highlighting the diverse perspectives and collaborative efforts shaping the field.

Furthermore, Subject areas such as computer science and business management dominate, but SC intersects with a wide range of disciplines, including social sciences, engineering,

economics, and psychology. Keyword analysis reveals key themes and emerging trends within SC research, such as social networking, trust, e-commerce, and social media. Institutional contributions from universities worldwide demonstrate the collaborative and global nature of SC scholarship, with certain articles garnering substantial citations, indicating their significance within the scholarly community. Overall, this bibliometric review provides a comprehensive overview of the SC research landscape, guiding future scholarship, policymaking, and practice in this dynamic and evolving field. By identifying key trends, research directions, this study contributes to a deeper understanding of SC's impact on e-commerce and society at large.

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