# A Scientometric Analysis of Social Media and Consumer **Behaviour**

## Athira Bhaskaran

Research Scholar, Sree Narayana College, Kannur University, Kannur, Kerala-670007 Email Id: athirabhaskaran1201@gmail.com

# Dr. Swarupa R

Associate Professor, Mahathama Gandhi College, Iritty, Kannur University, Kerala-670007 Email Id: swarupa189@gmail.com

Abstract: This study provides a complete picture on "influence of social media on consumer behaviour", through conducting a comprehensive analysis of literature. For the analysis 1117 documents are retrieved from 323 sources during the period 2001-2024(April 2024) from relevant articles in the Scopus Database using specific keywords. The analysis was conducted using VOS Viewer and Biblioshiny application. This study focuses on the importance of social media influence among the consumers behaviour. This study enhances the understanding of influence of social media on consumer behaviour research through identifying and listing the prominent authors and their contributions, top listed articles, top listed universities and their contribution, most occurring keywords and most cited documents etc. The results revealed that there is change in consumer behaviour by virtue of the social media use. And this study also shows that social media have a potential to grow as a marketing space. On the other side there are lack of studies in the relevant area.

Keywords: Bibliometrix, Biblioshiny, Consumer Behaviour, Social media, Social media marketing, VOS viewer.

#### Introduction

Social media is an interactive computer enabled technology which facilitate users to share their views, opinions and knowledge. The fast-growing virtual communities and networks like YouTube, Instagram, WhatsApp and Twitter are striking examples (Cinelli.et.al., 2021). The concept of social media came into our life in the early 1990's. Since it became the integral part of our daily life (Chawla, 2021). Social media allows its users to comment, share and produce their own contents in the social media websites. The advancement of technology in mobile applications and easy accessibility of the internet enhanced the growth of social media. (Rahayuni,2023). Now, social

media became inevitable part of our daily life especially among the younger generation. They use social media websites/applications for interacting and sharing their views with friends and cohort. They make their own space for which is surrounded by their online community (Mikalef, 2013 The thriving growth of social media attract marketers also. Marketers are considering social media as a marketing space for marketing their products. They consider the higher acceptance rate of social media among users, which helps to reach of their products. With the help of social media applications or networks to market a product or service

establishes a relationship with customers or buyers is known as social media marketing (Li et al.,2021). As per the survey conducted by Neilson (2013) reported that most of the advertisers increased their budgeted amount for advertising in social media. And some others made separate budget for this specific purpose. It shows that substantial potential of social media and social media marketing. The consumer behaviour is complex and it is always an interested topic to the marketers and researchers. Wilkie gave a comprehensive definition of consumer behaviour. According to him, consumer behaviour encompasses rational, emotional and human activities. It involved when an individual making selection, purchasing, using and disposing decision of products and services to satisfy their wants or needs. Social media exhibits a potential influence on the consumer behaviour (constantinidies et.al, 2008). Social media empowered the customers or users in an unpredictable way (constantinides et. al, 2008) and other side erode the power of marketers (Mangold et.al, 2009).

The substantial growth of social media has drawn the attention of researchers in the area of consumer behaviour. Consumer behaviour is highly influenced by social media. So, it is imperative to analyse and study the existing literature on this topic. This study applies Bibliometric analysis for examining the available literature on social media and consumer behaviour. Output of this study will help the marketers as well as researchers to know the influence of social media on consumer behaviour.

## Review of literature

#### 1. Social media

Social media emerged around three decades back. It considered as a global phenomenon (Bannon, 2021). Social media is an application software that enable people to connect through online, where user can interact, share and comment with each other (Wu, Y,2015). According to Y. Akrimi, any website or online platform that enables users to share opinions, views, and content, while fostering

interaction and community building, can be considered a social network. Social media facilitates the development of relationships and offers costeffective, consistent methods for nurturing these new connections over time (Schirr, 2013). According to K.Burton, the amount of information shared by the user on social networks is positively correlated with the number of subscribers the user has. According to S. Ziyadin, social networks serve as channels for information exchange, allowing us to share our lives through images, words, and videos. Social media has been shown to influence consumer behaviour, not only in the informationgathering phase but also in post-purchase activities, such as expressing dissatisfaction and analyzing patterns of internet usage (Mangold & Faulds, 2014). Social media serves multiple functions, including shaping individuals' perceptions, attitudes, and ultimately influencing their behaviour. In the online environment, people gravitate toward activities like creating, contributing, and joining communities to fulfil their need for belonging, social connection, and recognition. Additionally, social media platforms offer businesses a unique opportunity to engage and interact with both current and potential customers, fostering a sense of intimacy in the relationship between the organization and its consumers (Noreen & Han, 2015). Marketers consider social media as a marketing space. They use social media for positioning the product in to mind of targeted consumers (Areebatoor, 2017). Companies are using distinct social media platforms such as YouTube, Facebook, Twitter, Instagram etc. (Liao, 2021). Social media is considered as the best platform for the interaction between companies and its users(soewandi, 2015). Companies uses the social media with a hope that they can easily interact with their customers via sharing offers and information through social media applications (Brodie.et.al., 2013). Sharing information through social media is considered as cost effective and valuable technique to build brand awareness (godes & mayzlin, 2019). Social media helps to increase brand awareness among the customers and it also gives opportunities to the customers in

negotiation on the price of the product or services (Constantinides & fountain, 2008).

#### 2. Consumer behaviour

Wilkie gave as comprehensive definition of Consumer buying behaviour. According him, Consumer Buying Behaviour (CBB) is full of rational, emotional and human activities which trigger when an individual participates in making selection, purchasing, using and disposing decision of products and services to satisfy their wants or needs. The concept of consumer is very closely connected to the concept of consumer behaviour. According to F. Kotler, consumer behaviour is defined as behaviour of individual Consumer is the end user who purchase services and goods for personal use. Consumer decisionmaking can be defined as the behaviour patterns of consumers that precede, determine, and follow the decision-making process for acquiring products, ideas, or services that satisfy their needs (Du Plessis et al., 1991). Consumer models have varied in complexity, ranging from simple frameworks to more intricate ones. The simplest models include the economic model, which posits that consumers aim to maximize utility while minimizing costs; the psychological model, grounded in Maslow's hierarchy of needs, which suggests that individuals are motivated by their most pressing needs; the Pavlovian learning model, which focuses on behaviour shaped by practice, learning, and experience; and the sociological model, which considers the influence of society and social norms on buying behaviour. By the late 1960s, more complex models began to emerge, including those developed by Nicosia (1966), Engel et al. (1978), and Howard and Sheth (1969). These three frameworks are often referred to as the 'grand models' of consumer behaviour. The Nicosia (1966) model identifies four key areas in the decision-making process: consumer attitude formation, information search and evaluation, the act of purchase, and postconsumption feedback. Similarly, the Howard and Sheth (1969) model comprises four sets of variables: inputs (stimuli), perceptual and learning constructs, outputs (consumer behaviour and

purchase decisions), and external variables (social, psychological, and marketing factors).

The Engel, Kollat, and Blackwell (EKB) model, later renamed the Engel, Blackwell, and Miniard (EBM) model in 1990, consists of four components: information input, information processing, decision stages, and decision process variables. According to this model, the consumer decision process unfolds in five sequential phases: need recognition, information search, alternative evaluation, purchase (choice), and post-purchase outcomes. Each of these phases is influenced by individual characteristics, environmental factors, and psychological processes. Consumers collectively create a consumer market. According to D. Mersey (2010). Social media provide a bigger space for companies. Companies consider social media as a space to interact with their existing and potential customers and thereby creating closer and deeper sense of relationship with customers. Social media influence consumer behaviour deeply (Mangold, 2009).

#### 3. Social media and consumer behaviour

Marketers around the world realized the importance of comprehending consumer behaviour as key point in ensuring the success in the market (Sheth, 2004). Now consumers are moving from conventional media to emerging platforms like social media, they have grown to become more demanding, craving for more information and content. And conscious about time and expressing more individualistic traits in their behaviour (Sheth, 2022). This changing and demanding behaviour of consumers taste and preference have created a notable change in consumer purchasing and decision making (Antosova, 2023). Marketers are considering social media as the key influencer of consumer's perception, attitude and final behaviour (M. Laroche, 2012). They also identified that online space issued by individuals to enjoy and express themselves, sharing their views and opinions, contributing, creating and participating in different communities to meet their needs of belonging, socially connecting or simply became part of

communication with like-minded individuals in the community. Major significant portion of consumer spending is originated from social shopping, due to the new changing behaviour of consumers (Canhoto, A. I, 2013). In social media platforms user generated content create a kind of trust and increased credibility of shared content among the social media users (Freshman Consulting, 2010). Nowadays, customers are heavily depending on social media throughout his/her purchasing process; from information searching, conducting actual purchase, developing their attitudes and influencing future behaviours such as commitment, retention and loyalty towards the company or products (Groothuis, 2020). According to Jaakonmäki (2017), more than 20% of customers strongly believe that social media provides trusted source of information and they consider this information when they finalize their purchasing decision. This makes social media as the forest factors of predicting customer behaviour and decision making (Huang, 2018). Social media acts as an influencing element among consumers. It helps marketers as well as consumers to influence each other (Kumar R, 2008). From the current market scenario, it is crucial to conduct researches in the field of social media and consumer behaviour. Thus, this study is using the tools of bibliometric analysis to review the network and descriptive analysis of social media and consumer behaviour. The systematic examination and review of published articles, books or conference paper are referred for bibliometric analysis. It serves as a valuable instrument for measuring the influence of academician's contributions for the society. Currently bibliometric analysis is available on social media, social media marketing consumer behaviour, consumer buying behaviour etc. whereas there is no study available in combined form of social media and consumer behaviour. This study is based on following questions: -

- What is the global tendency in production of scholarly articles in the area of social media and consumer behaviour?
- What type of information can be assembled from this trend?

- What are the prospective future directions in this trend?
- In order to analyse the research questions, the following research objectives are framed;
- To create bibliometric visualization of 1117 documents retrieved from Scopus database.
- To utilize the Biblioshiny and VosViewer for visualizing quantitative data extracted from various sources, authors articles.
- To analyse the future direction of social media and consumer behaviour in market.

## Research Methodology

The evolution, future potential and trend of a particular area of study can be evaluated through different review technique. It helps to attain specific research objectives too. A systematic literature review is one such method which is used to identify, analyse, evaluate and summarize the comprehensive body of research findings in the specific area of study. It gave importance to methodological aspects and theoretical framework of the research paper (Paul, et.al, 2021). Bibliometric technique is computer enabled application software that helps users in measuring the trend in the area of study by analysing the core themes, sub themes, most influential countries, most relevant authors or contributors, social and intellectual structure of the research (Hassan, et. al, 2023). For this study, bibliometric research was adopted because it helps to attain research objectives and helps to know the trends in the area of social media and consumer behaviour (Wasiq, et.al, 2023). Nowadays bibliometric research design is popularly used by researchers and academicians for evaluate and forecast the future growth of studies in the specific area. This technique is widely used (Bashar A, Hindley C, Kaur G, Rabbani MR, Rabbani MR, Kayani U) because it helps the users to visualize the research growth in a specific area of study (Rabbani MR, Ali MAM, Rahiman). For the current study review is conducted through two phases. In the first phase, descriptive analysis such as trend of research publication, top journals, top authors, top affiliations, countries contribution

over time are presented. In the second phase, cooccurrence and citation analysis are presented. For the first phase, Biblioshiny an open-source R based application is used to analyse the descriptive data. It helps the researcher to present their data in tabular as well as graphical format (Alshater MM, 2021). For the second phase, Vos Viewer application is used to produce citation and co-occurrence analysis in network form. The networks in the network form are the collection of different groups that helps the researchers identify the emerging themes and sub themes in the specific field of study (Van Eck, 2019). The Scopus data base is used for search and retrieves articles for the analysis. The articles are searched using the most appropriate keywords within the TITLE-ABS-KEY. Keywords includes social media, digital media, social media networks, social media platforms, consumer behaviour, consumer buying behaviour, consumer decision making etc. the phrases are used interchangeably. Using phrases created combination of words using Boolean operators like AND, OR syntax for getting sufficient articles for the analysis. The inclusion of articles followed specific criteria: they had to be published between 2001 and April 2024, which set the base limit for the analysis. The initial search resulted in 6,115 research articles. To refine this, only open-access articles were considered, which reduced the number to 2,044. After limiting the selection to articles written in English, 1,992 remained. The subject areas were narrowed down

to social sciences (557 articles), business, management, and accounting (544 articles), economics, econometrics, and finance (201 articles), and psychology (183 articles). Only research articles or reviews were included and articles in progress were excluded from consideration. Importantly, the primary focus of each article needed to be on the application of social media in consumer behaviours. The final search yielded 1,117 research articles, which were then meticulously reviewed based on the defined inclusion criteria.

## Data analysis and Interpretation

Following part of this article deals the evaluation of data with the help of Biblioshiny application. The data downloaded from Scopus database save as .CVS file. The final data file was uploaded to Biblioshiny for the further analysis.

## **Descriptive Statistics**

For the current study documents are retried in the time span of 2001-2024(April 2024) is presented in TABLE 1. Finally, 1117 documents are retrieved from 323 sources. The documents include articles from journals, conference papers and books, review papers etc. Total of 2742 authors 136 authors are single authors. International co- authorship percentage rate is 29.99%. Total of 68303 reference were cited for these documents. Average citation per document is 44.56%.

2001-2004 Time span Sources (Journals, Books, etc.) 323 1117 Documents 17.71% Average annual growth rate % Average citation per document 44.56 Reference 68303 Keywords Plus (ID) 1521 Author's Keywords (DE) 3181 2742 Authors Authors of single-authored docs 136 Co-Authors per Doc 2.92 International co-authorships % 29.99

**Table 1: Descriptive statistics** 

Source: Research data

## Most influential journals

Table 2 presents the most influential journals in the field of social media and consumer behaviour. Top 10 influential journals are selected for the analysis. The journals are selected on the basis of their h, grand m index. Total citation and number of production of journals are also considered. 'Journal of Retailing and Consumer Service' is the most influential journal among top 25 influential journals. This journal produced 115 articles and it cited by 5844. This journal mainly focuses on retailing and consumer behaviour, policy and managerial decisions. The h, g and ma index of the journal are 41, 75 and 2.929 respectively. The second most influential source in the field is Journal of Research in Interactive Marketing. The journal started in the year 2010.it secured second position with 45 publication and 2577 citation. It h, g and m index are respectively

28, 45 and 1.867. While considering the number of production and total citation, is less than half of the first influential source. This journal mainly focuses on interactive, relationship, electronic, direct and multi-channel marketing research. Technological forecasting and social change are the third most prominent journal in the field of social media and consumer behaviour. Its number of publications is 45 with total citation of 1320. This journal focuses on technological forecasting. More relevant in the field of growth of social media and its influence in consumer behaviour. All remaining journals in the list are highly relevant in the area of social media and consumer behaviour. Their immense contribution for the growth in this field is highly considerable. If we consider only the total citation and number of publication of journals, the ranks of journals will be altered. So, all journals are highly influential in the field of social media and consumer behaviour.

**Table 2: Most influential journals** 

Journal	h_index	g_index	m_index	TC	NP	PY_start
JOURNAL OF RETAILING AND CONSUMER SERVICES	41	75	2.929	5844	115	2011
JOURNAL OF RESEARCH IN INTERACTIVE MARKETING	28	45	1.867	2577	45	2010
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	17	26	1.545	1320	26	2014
JOURNAL OF BUSINESS RESEARCH	15	27	1.25	1408	27	2013
JOURNAL OF INTERACTIVE MARKETING	15	19	0.938	2697	19	2009
ELECTRONIC COMMERCE RESEARCH AND APPLICATIONS	13	17	1.083	770	17	2013
INTERNATIONAL JOURNAL OF CONTEMPORARY HOSPITALITY MANAGEMENT	12	14	0.75	638	14	2009
EUROPEAN JOURNAL OF MARKETING	11	16	0.524	476	16	2004
JOURNAL OF BUSINESS ETHICS	11	12	0.611	1940	12	2007
JOURNAL OF FASHION MARKETING AND MANAGEMENT	11	14	0.733	640	14	2010

Source: Research data

## **Most relevant Authors**

Authors are the persons who are loud about the things which are important to the society. Table 3 present most relevant authors in the field of social media and consumer behaviour. The authors are

chosen based on their number of contributions in the sense of publication of articles, total citation and h index are considered for the better comprehension. Mr. ParkJ is the most influential author in this area as per the list. His published 10 papers and it has been cited by a count of 341.

His remarkable contribution in the area of social media and consumer behaviour are; "social network analysis and domestic and international retailers; an investigation of social media networks of cosmetic brand (2021), a study of antecedents and outcomes of social media WoM (Word of Mouth) towards luxury brand purchase intension (2021), the effect of benefit driven commitment on usage of social media for shopping and positive word of mouth (2020) etc. Mr. Park J got highest citation forthe paper"A Study of Antecedents and Outcomes of Social Media WoM Towards Luxury Brand Purchase Intension" published in Journal of Retailing and Consumer Services in the year 2021. In the authors list the second one is Mr. Kumar S. His contribution includes 7 articles with total citation of 504 and h index is 7. His relevant works are "A

Bibliometric Retrospection of marketing firm in the lens of psychology: Insight from psychology and marketing (2021), Mapping the electronic word of mouth (EWOM) research: A systematic review and bibliometric analysis (2021), what drives brand love and purchase intentions towards the local food distribution system? A study of media based REKO (fair consumption) groups (2021) etc. Third influential author in this list is Mr. Watanabe NM. He contributed 6 papers with total citation of 127. His remarkable contributions are; social network analysis and domestic and international retailers: an investigation of social media networks of cosmetics brands (2021), big data and analytics in sport management (2021). All other authors are also important in this field because each one contributed towards the growth.

Table 3: Most relevant Authors

Author	h_index	TC	NP	PY_start
PARK J	7	341	10	2011
KUMAR S	7	504	7	2021
WATANABE NM	6	127	6	2016
AKRAM U	5	100	6	2019
DWIVEDI YK	5	1129	6	2017
GUPTA S	5	540	6	2016
RANA NP	5	496	5	2017
BIGNE E	4	147	5	2018
CARLSON J	4	1185	5	2018
KIM J	4	89	5	2017
CHEN H	4	65	4	2016
CHEN Y	4	420	4	2011
CHEUNG ML	4	264	4	2021
CHU S-C	4	203	4	2012
FERNANDES T	4	302	4	2018

Source: Research data

## Most cited documents

Table 4 illustrate the most cited documents in the field of social media and consumer behaviour. Highest cited top 10 document are selected for the analysis. Documents are selected based on their total citation. The most influenced or cited

document in social media and consumer behaviour is "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities" written by Robert V. Kozinets. et.al in the journal of marketing. The document has been cited by 1326 times. This

paper discusses how the marketers are using social media marketing techniques to deals with online collaborative creation of narratives. It also discusses and extent WOM theory. This paper finds that marketers should plan their target and leverage before applying WOM in the market. Goh.et.al written "Social Media Brand Community and Consumer Behaviour: Quantifying the Relative Impact of User- and Marketer-Generated Content" has secured the second position in the list. The document has been cited by 1024 with annual citation of 85.40, the paper was published in the journal of information system research in the year 2013. This paper discusses how marketer generated content (MGC) and consumer generated content (CGC) influence the consumer

apparel purchase expenditure. Their findings revel that when consumer engage with social media brand communities, it leads a positive increase in purchase expenditure. They find that MGC and CGC both influence the consumer purchase behaviour. CGC influence more than MGC on consumer behaviour. The paper published by Journal of Product & Brand Management written by Dessart.et.al, in 2015 secured the third position in the list. This paper discusses conceptual boundaries and consumer engagement dimension in the online platforms. It finds that consumers are engaged in the online social network platforms communicate with other individuals and brands. All other documents are equally considerable.

**Table 4: Most cited documents** 

Document	Authors	Journal	Year of Publication	TC	TC per year
Networked Narratives: Understanding Word- of-Mouth Marketing in Online Communities	Robert V. Kozinets, Kristine De Valck, Sarah J.S. Wilner	Journal of Marketing	2010	1326	88.40
Social Media Brand Community and Consumer Behaviour: Quantifying the Relative Impact of User- and Marketer- Generated Content	Khim-Yong Goh, Cheng- Suang Heng, Zhijie Lin	Journal of Information System Research	2013	1024	85.33
Consumer engagement in online brand communities: a social media perspective	Laurence Dessart, Cleopatra Veloutsou, Anna Morgan- Thomas	Journal of Product & Brand Management	2015	743	74.30
Setting the future of digital and social media marketing research: Perspectives and research propositions	Yogesh K. Dwivedi a, Elvira Ismagilova b, D. Laurie Hughes c, Jamie Carlson d, Raffaele Filieri e, Jenna Jacobson f, Varsha Jain g, Heikki Karjaluoto h, Hajer Kefii, Anjala S. Krishen j, Vikram Kumar k l, Mohammad M. Rahman m, Ramakrishnan Raman k l, Philipp A. Rauschnabel n, Jennifer Rowley o, Jari Salo p, Gina A. Tran q, Yichuan Wang r	International Journal of Information Management	2021	727	181.75
An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness	Bobby J. Calder calder, Edward C. Malthouse eem, and Ute Schaede	Journal of Interactive Marketing	2009	693	43.31

Social media marketing efforts of luxury brands: Influence on brand equity and consumer behaviour	Bruno Godey a, Aikaterini Manthiou , Daniele Pederzoli, Joonas Rokka, Gaetano Aiello, Raffaele Donvito, Rahul Singh	Journal of Business Research	2016	675	75.00
Determining Uses and Gratifications for the Internet	Thomas F. Stafford, Marla Royne Stafford, Lawrence L. Schkade	Decision Sciences Journal	2004	668	31.81
Customer engagement in a Facebook brand community	Johanna Gummerus, Veronica Liljander, Emil Weman, Minna Pihlström	Management Research Review	2012	658	50.62
Initial trust and online buyer behaviour	Yu-Hui Chen, Stuart Barnes	Industrial Management & Data Systems	2007	570	31.67
Do We Believe in TripAdvisor?" Examining Credibility Perceptions and Online Travelers' Attitude toward Using User- Generated Content	Julian K. Ayeh, Norman Au, and Rob Law	Journal of Travel Research	2013	546	45.50

Source: Research data

# Relevant affiliations, countries and its production over time

#### 1. Most relevant affiliations

For the analysis we selected top most 1 affiliation in the area of social media and consumer behaviour based on their production of article in this field. Griffith University from Australia placed on the first position. This university produced 26 articles in the respective area. The second place secured by University of South Carolina

from Columbia. This university produced 19 articles. The University of North Texas from Texas on the third position, produced 18 articles. All affiliations in the list produced more than 10 articles. It indicates that researcher in the world over conduct research in the area of social media and consumer behaviour. Growth of any area is highly depending on the root study of the topic. So, each and every study in the field is highly important to marketers and researchers to make advancement in the area.

**Table 5: Relevant affiliations** 

Affiliation	Articles
GRIFFITH UNIVERSITY	26
UNIVERSITY OF SOUTH CAROLINA	19
UNIVERSITY OF NORTH TEXAS	18
NOTREPORTED	16
UNIVERSITY OF NEVADA	16
UNIVERSITY OF CENTRAL FLORIDA	15
UNIVERSITY OF NEWCASTLE	15
UNIVERSITY OF VALENCIA	15
LOUGHBOROUGH UNIVERSITY	13
MONASH UNIVERSITY	13

Source: Research data

## Most relevant country and its production over time

The most relevant countries in the area of social media and consumer behaviour are listed in table 6. Figure 1 shows the countries production over time. The countries are listed on the basis of number of citations received for their articles. The largest number of research articles are contributed by USA. USA produced up to 731 article still 2024 April. Articles are cited by 10886 with an average annual citation of 49.00. United Kingdom is in the second position when we considered only total citations. They produced 235 articles till 2024

with total citation of 3990 and annual citation of 64.40. When we consider the countries production over time, China is the second largest producer of articles. China produced 302 article still 2024 with total citation of 2368. Their annual citation is 35.30. When we consider the countries production over time India is in the third position. India produced 256 articles. Whereas United Kingdom and Australia produced 235,182 articles respectively. This list and countries production over time shows that countries with high network facility are exploring more in the field of social media. That's why their contribution in the area is high compared to other countries.

**Table 6: Relevant countries** 

Country	TC	Average Article Citations
USA	10886	49.00
UNITED KINGDOM	3990	64.40
CHINA	3181	35.30
AUSTRALIA	2368	45.50
FRANCE	2235	149.00
FINLAND	2027	184.30
INDIA	1716	24.20
HONG KONG	1644	126.50
ITALY	1231	47.30
KOREA	1225	43.80

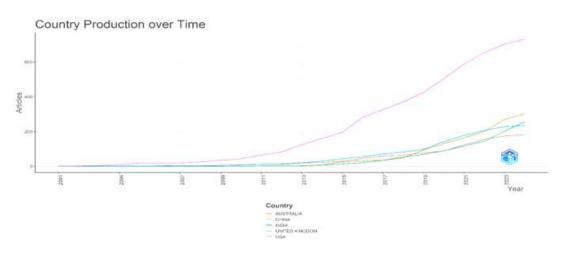


Figure 1: Countries production over time

#### Keyword co-occurrence analysis

The keyword co-occurrence analysis is a method used to analyse the relationship and similarities between knowledge structures. It focuses on the semantic relationship between closely related words but they are not identical. For this analysis VosViewer software was used, a prominent tool for visualizing scientific data and mapping the co-occurrence of connected keywords to identify emerging trends in specific research areas. The keywords are included in the network based on its frequency. Frequency of keywords is set as at least 10. The frequency helps the inclusion of significant keyword, it essential for visualizing scientific landscape for the analysis. Out of 4189 keywords, 272 meet the threshold. Number of keywords suitable for the study is 114. Network visualization is based on 6 clusters. Social media is the largest cluster in the network visualization. It occurred 650 times. The first cluster includes 40 items. Social media is mainly connected with social media marketing, e-commerce, online consumer behaviour, social networks, generation z, electronic word of mouth, branding, brand engagement etc. These network visualization shows that nowadays consumer behaviour is influenced by social media networks. Consumers are getting influenced through social media marketing and electronic word of mouth. Another important fact that generation z is highly

influenced other than any other generation. The first cluster shows red colour in the network visualization. The second largest cluster in the network is consumer behaviour. It visible in green colour in network visualization. It occurred 207 times and this cluster includes 22 items. It mainly connected technological aspects. Consumer behaviour get influenced through artificial intelligence, big data, machine learning, social media platforms, social networking, text mining etc. Consumer behaviour is getting influenced through online platforms. Consumers are more aware about marketing strategy and they ready interact with brands and different communities. Now consumers are joining different community platforms and they share their views with them. That why consumer behaviour is getting influenced through user generated content than marketers generated content. Theory of planned behaviour another aspect connected with consumer behaviour. This theory helps to understand consumer behaviour at different situations. It assumes that consumer behaviour is planned. The third largest cluster (blue) is consumer behaviour, it included 22 items. It is connected with information and communication technologies, internet, media role, perception, psychology, social behaviour etc. other remarkable cluster in the visualization are: consumer, marketing and brand loyalty.

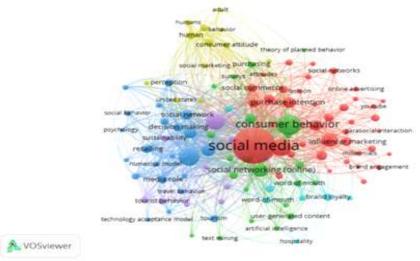


Figure 2: Keyword co-occurrence analysis

#### Citation analysis of documents

VosViewer is a popular tool used for analysing and visualizing bibliometric data, including the citation analysis of documents. Citation analysis is the technique for evaluating the quality and impact of an organisation, source, and author by quantitative analysis of the citations referring of their work (Rabbani, et.al, 2022). When Vos Viewer is used for citation analysis it helps the researchers to gain value insights about the pattern of citations between the specific clusters of documents. For the analysis purpose minimum citation of documents was set to 10 for getting relevant documents in the area of social media and consumer behaviour. For the analysis network made up of 657 documents, the largest

cluster includes 332 items. Largest cluster made by Goh et.al written document social media brand community and consumer behaviour: Quantifying the relative impact of user and marketer generated content in the journal of Information Systems Research in the year 2013. This journal gets sited by 1024 times. This cluster mainly focuses on how social media influence the consumer behaviour (Goh). The user generated and marketer generated content posted in social media makes visible impact in consumer behaviour. There is a significant relationship between consumers attitude towards social media advertising and consumer behavioural response. Social media also made influence on the purchase intention of consumers especially in millennial.

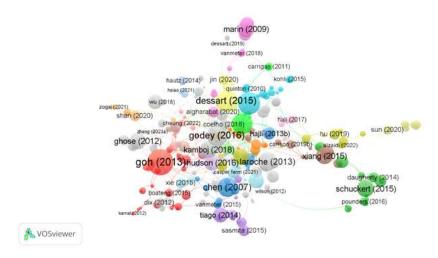


Figure 3: Citation analysis of documents

The second largest citation gets for Dessert et. al written article named "Consumer engagement in online brand communities; a social media perspective". It has been cited by 743 times. The second cluster deals with social media marketing. Marketers considered social media as a marketing tool to advertise and sell their product and services. Marketers are building a relationship with their customers through social media networks. Social media helps the marketers to develop a brand community (Goh, K. Y, 2012 & 2013). The third largest citation gets for Dwidedi.et.al written article. It has been cited by

727 times. This cluster discuss the future of digital and social media marketing.

## Conclusion

Each study is relevant in terms of its contribution towards the society. Studies are getting relevant when the topic is current growing. "Social media and its influence on consumer behaviour" is such a discussible topic in the current situation. Now a days consumers are affected by the influence of social media. For the current study, Bibliometric and VosViewer applications are used for data visualization. Data for the analysis are retrieved

from Scopus. Data analysis revealed that there is an increase in the number of publications in the field of social media and consumer behaviour from the year 2001 to 2024. The average annual growth rate percentage is above 15%. The most relevant journal in the field is found to be Journal of Retailing and Consumer Services based on their contribution in terms of publication and total citation of the journal. Park. J is the largest individual contributor in the field. He contributes 10 articles Whereas Griffith University is the largest institutional contributor in this area. Most cited article is Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. USA is the largest producer of articles based on the citations. Social media and consumer behaviour are the most relevant theme based on the keyword occurrence analysis. The findings provide a detailed guide to relevant journals, authors, and key papers in this area, serving as a valuable resource for researchers aiming to delve deeper into the subject. For marketers, the study presents an opportunity to evaluate the trends and gaps in existing research, helping them to design more targeted and effective social media marketing strategies. Despite its contributions, the study highlights a significant limitation: the scarcity of comprehensive research in this domain.

## Recommendations and Suggestions

When considering perspective of research, it clear that social media and consumer behaviour growing simultaneously. It requires more in-depth investigation into the area of study. Firstly, needed to analyse the influence of technological advancement in consumer behaviour. Technological advancement makes an enormous growth of social media. Easy availability of internet is one of the basic reasons of growth of social media. The second important field of research in the perspective of firm is how social media marketing makes influence in consumer buying behaviour. Marketers are need to deeply analyse the potential social media marketing. Thirdly, social media is equally important to firms as well as small entrepreneurs. It opens a wide market in front of them to start their own ventures without much

effort. Every research paper has some limitation and it has no exception. A significant limitation of this study is citation analysis. The articles are selected for the study based on its citation. Due to lack of citation some important papers may not be included in this analysis. Another limitation is that we consider only the articles which are written in English. Time span is also fixed for this study.

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