GST A Robust Tax Regime: A Bibliometric Analysis on GST

Yashraj Sharma,

Research Scholar, Faculty of Management Studies, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India.

Dr. Bindu Arora,

Professor, Department of Management Studies, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, India.

Abstract:

A value-added tax placed on the delivery of goods and services is known as the goods and services tax (GST), and it is one of the most critical tax changes implemented in many countries worldwide. Indirect taxes, including sales tax, service tax, excise duty, and value-added tax, will be rolled into a single, all-encompassing tax system called the goods and services tax (GST). The introduction of the Goods and Services Tax (GST) has been the topic of substantial study and analysis. This literature review aims to summarise the most important results and insights from the existing literature on GST. This review will focus on the research that has been conducted. The goods and services tax, sometimes known as the GST, has been adopted by several countries worldwide, including Australia, Canada, New Zealand, Malaysia, Singapore, and India. The evolution of the Goods and Services Tax (GST) has been affected by several issues, including the necessity to simplify the tax system, expand the tax base, increase revenue collection, encourage economic development, and make it easier to do business across international borders. In addition, the research underlines that the design and execution of the Goods and Services Tax (GST) differ from country to country due to each nation's specific economic, social, and political conditions. Increasing the amount of money that the government takes in is one of the most important objectives of the GST. According to the research findings, the GST's effects on the income collected are complex. While some studies suggest that an increase in revenue collection has occurred as a result of the adoption of the Goods and Services Tax (GST), other studies highlight the challenges that have arisen as a result of the GST, including revenue leakage, compliance concerns, and the requirement for ongoing monitoring and enforcement. In addition, the research analyses elements that impact revenue collection, such as the tax rate, tax base, exemptions, and the efficiency of tax administration. These factors all have a role in determining how much money is brought in. This study focuses on scientific visualization based on the bibliometric analysis of 426 publications, of which 180 were completed after applying the filters on the keywords "Goods and services tax" in the Scopus database from 2017 to 2022. The articles were analyzed for a period ranging from 2017 to 2022. Bibliometric analysis, appraisal, and visualization are some of the uses that R has seen. The examination produced a scientific map that included co-occurrence analysis, network analysis, a co-citation network, and a collaboration network. These elements contributed to a better understanding of the research topic as conceptual, intellectual, and social structures. The outcome of the bibliometric analysis demonstrates that the evolution of the Goods and Services Tax (GST) has resulted in the introduction of a new tax regime in several nations. Furthermore, the outcome of the social collaboration analysis demonstrates that many nations, including India, the United Kingdom, Canada, and Australia, are collaborating to conduct more fruitful research.

Introduction:

The Goods and Services Tax (GST) is a comprehensive tax reform implemented in India on July 1, 2017. It replaced the multiple indirect taxes the central and state governments previously levied. Implementing the Goods and Services Tax (GST) has been widely regarded as a meaningful tax reform in the nation's annals, to streamline the tax structure, augmenting tax adherence, and fostering economic advancement. The present essay aims to offer a thorough overview of the Goods and Services Tax (GST) in India, encompassing its historical context, principal characteristics, benefits, and obstacles The concept of Goods and Services Tax (GST) was initially presented in the 2006-2007 Union Budget of India by the then Finance Minister, P. Chidamba. ram. The proposal aimed to establish a nationwide GST to supplant the indirect taxes imposed by the central and state governments. In 2016, the Parliament passed the 101st Constitution Amendment Act, which enabled the implementation of GST in India after prolonged discussions and negotiations. The establishment of the GST Council, which includes delegates from both the federal and state governments, was intended to determine tax rates, exemptions, and other associated matters.

India's Goods and Services Tax (GST) system follows a dual model, wherein the authority to impose and gather taxes is vested in both the central and state governments. The Goods and Services Tax (GST) system comprises four tax brackets, which are 5%, 12%, 18%, and 28%. The lower tax brackets are assigned to essential goods and services, while the higher tax brackets are assigned to luxury items and sin goods. Furthermore, it should be noted that there exists a separate tariff of 0.25% applicable to uncut precious and semi-precious stones, while a rate of 3% is levied on gold and other precious metals.

As per the GST regulations, enterprises must register and submit returns via the GST portal electronically. The GST network is facilitated by a technology-driven system that boasts a resilient IT infrastructure, which guarantees seamless information exchange between taxpayers and the network. The GST portal offers various digital services, including registration, tax payment, return filing, and refund claiming.

Implementing the Goods and Services Tax (GST) has been anticipated to yield several benefits to the Indian economy. The simplification of the taxation system is a significant advantage of GST, as it replaces indirect taxes such as central excise duty, service tax, and value-added tax. Consolidating tax returns results in decreased compliance expenses for enterprises, as they are only required to submit a solitary tax return instead of numerous returns. The implementation of GST is anticipated to enhance economic growth by promoting tax compliance and reducing the informal sector's magnitude. The Goods and Services Tax (GST) system has been developed to ensure transparency, supported by a resilient information technology (IT) framework that facilitates monitoring transactions and detecting instances of tax evasion. This phenomenon contributes to expanding the tax base and facilitates the generation of additional revenue for the government. The supplementary income may be allocated towards financing infrastructure advancement, social welfare initiatives, and other developmental undertakings.

Notwithstanding its numerous benefits, the execution of the Goods and Services Tax (GST) has encountered various obstacles in India. One of the primary obstacles pertains to the intricate tax framework, which encompasses four different tax brackets and a multitude of exemptions. The complexity of the GST system's requirements has resulted in perplexity among taxpayers, particularly SMEs, who encounter difficulties comprehending and adhering to them. An additional obstacle pertains to the technical malfunctions encountered in the Goods and Services Tax (GST) portal, resulting in tardiness in submitting returns, obtaining reimbursements, and other associated predicaments. The circumstance as mentioned earlier has resulted in an unfavourable situation for taxpayers, leading to public demonstrations and appeals for the simplification of the system.

Literature Review:

The present study undertakes a literature review on the Goods and Services Tax (GST), a value-added tax system implemented in India on July 1, 2017. The Goods and Services Tax (GST) is a tax system that operates on a destination-based principle and has replaced multiple indirect taxes, including but not limited to Central Excise Duty, Service Tax, Value Added Tax (VAT), Central Sales Tax (CST), and other similar taxes. The introduction of the Goods and Services Tax (GST) was perceived as a considerable measure towards streamlining the tax structure in India, which was recognised for its intricacy and numerous tiers of taxation. Implementing GST in India was anticipated to have a favourable effect on the economy by enhancing tax adherence, diminishing the tax load, and augmenting economic expansion.

Numerous research studies have been carried out to evaluate the effects of the Goods and Services Tax (GST) on the economy of India after its implementation. According to Rajput and Jha's (2018) research, implementing GST in India resulted in a favourable economic outcome. The study revealed that the tax reform reduced the compliance burden for businesses and increased tax revenue for the government. According to the research, implementing GST resulted in a favourable outcome towards the formalisation of the economy, as it facilitated the transition of multiple enterprises into the formal sector.

Pal and Ghosh (2018) conducted a study to examine the effects of GST on the manufacturing industry in India. According to the research, the implementation of GST has yielded favourable outcomes for the manufacturing industry, as it has alleviated the tax burden on enterprises and enhanced the efficiency of the supply chain. According to the research, implementing GST favoured the competitiveness of manufacturing companies in India. Pandey et al. (2019) conducted a study to examine the effects of the Goods and Services Tax (GST) on the agricultural industry in India. According to the research, the implementation of GST resulted in an adverse effect on the agricultural industry as it augmented the tax liability of farmers and diminished their earnings. According to the research, implementing GST adversely affected the informal segment of the agricultural

industry, which heavily depended on cash-based dealings.

Mathur and Srivastava (2018) conducted a study to examine the effects of the Goods and Services Tax (GST) on the real estate industry in India. According to the research, the implementation of GST had a varied effect on the real estate industry, as it lessened the tax liability for purchasers and enhanced transparency within the sector. Nonetheless, the research also revealed that the Goods and Services Tax (GST) harmed developers as it augmented the expenses associated with construction.

The Goods and Services Tax (GST) 's impact on India's tourism sector was analysed in a study conducted by Barman and Chakraborty (2019). According to the research, the implementation of GST resulted in an adverse effect on the tourism industry due to the heightened tax liability imposed on visitors, consequently leading to a decline in their inclination towards availing tourism-related amenities. According to the study, the Goods and Services Tax (GST) harmed the informal segment of the tourism industry, which heavily depended on cash-based transactions.

Reddy and Dash (2018) analysed the effects of the Goods and Services Tax (GST) on the retail industry in India. According to the research, the implementation of GST has yielded favourable outcomes for the retail industry as it has alleviated the tax liability on enterprises and enhanced the efficiency of the supply chain. According to the research, implementing GST favoured the competitive edge of retail enterprises in India.

Panwar and Goyal (2020) conducted a study to examine the effects of the Goods and Services Tax (GST) on the electronic commerce industry in India. According to the research, implementing GST has yielded favourable outcomes for the ecommerce industry, as it has alleviated the tax liability on enterprises and enhanced the efficacy of the supply chain. The research additionally revealed that the implementation of GST yielded a favourable outcome in terms of the formalisation of the electronic commerce industry, as it facilitated the transition of numerous enterprises into the formal sector.

To summarise, implementing GST in India has been a substantial tax reform, and numerous scholarly investigations have been carried out to evaluate its effects on the Indian economy. Although the results of various studies are inconclusive, it can be inferred that implementing GST has yielded favourable outcomes for the Indian economy. Specifically, it has contributed to enhancing tax compliance, alleviating tax liability, and stimulating economic expansion.

Uniqueness of the study:

The literature review indicates that there has been a significant amount of quantitative empirical research conducted on GST, while there is a limited amount of qualitative research in this area. This highlights the distinctiveness of the study. There is a scarcity of research that has been carried out using review-based research articles. Presently, scholarly investigations focus on bibliometric analysis facilitated by biblioshiny software. This study focuses on conducting a comprehensive review of the current literature and utilizing bibliometric analysis to perform a qualitative review. citation analysis of the selected research articles. It aims to comprehensively understand the scholarly landscape surrounding the chosen topic.

Keywords: GST, Tax ss item Bibliometric Analysis, R Studio, Factor Analysis, Science Mapping.

Research questions & Research Objectives:

- 1. What is the global perspective on GST?
- 2. What is the outlook for authors and their citations within this particular area of research?
- 3. What is the foremost nation engaged in GST research?
- 4. What is India's standing in the realm of research within the field as mentioned earlier?

The author has delineated the study objectives to address the research mentioned above inquiries precisely.

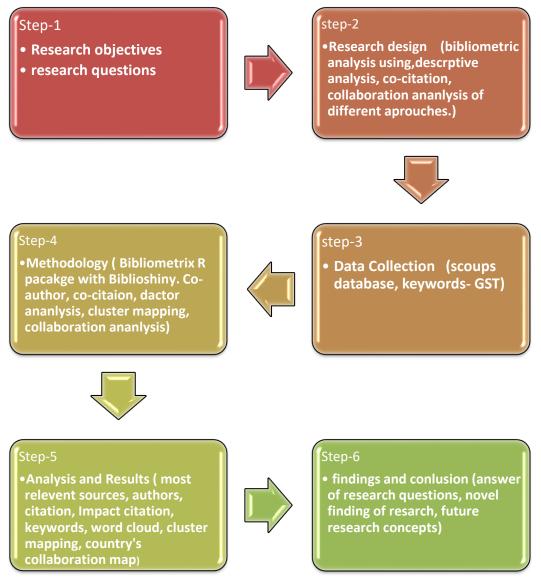
- 1. In order to gain a comprehensive understanding of GST, it is necessary to consider its historical, current, and future implications.
- 2. By employing bibliometric analysis, the objective is to analyze the database concerning authors, affiliations, countries, and collaborative efforts.
- 3. To evaluate the prospective scope of future research in the identical field.

5. Techniques of Research

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

Methodology in research refers to the steps taken to collect, organize, and evaluate data. The research process followed in this investigation is detailed in Figure 2.

Figure 2: Bibliometrics and Science Mapping Process



Source: Author's presentation of the bibliometric analysis process.

5.1 Research design:

The research design employed in this study is primarily descriptive and focuses on conducting bibliometric analyses of secondary data sources, specifically Scopus data.

5.2 Methods of Bibliographic Study:

Scopus, the largest abstract and citation database of scholarly literature, was used to compile the data for this study. After entering "Goods and Services Tax" into the Scopus database, the writers found the work of Lv et al. (2021). There was a total

Journal of Informatics Education and Research ISSN: 1526-4726

Vol 4 Issue 2 (2024)

of 426 articles found after entering the keywords. 180 articles were collected for further analysis after the filtering criteria described in Table 1 were applied. Table 1 displays the Scopus database's data reduction and addition elements.

Table 1: Data Filtration Process in Scopus Database

Basis	Insertion Criteria	Omission Criteria
Database	Scopus (n= 426)	Other Data Base

Publication Period	2017-2023 (n= 277)	Before 2000 (n= 149)
Subject Area	Social Science, Econom Econometrics, Finance, Accounts, Business Managem Multidisciplinary and Humanities (n= 197)	ics,Other subject areas (n= 80) ent,
Document Types	Articles, Book Chapters, Confere papers (n= 188)	nceGrey Literature (n= 9)
Publication Stage	Final stage (n= 185)	In process (n= 3)
Source Type	Journals, Books, Confere Proceedings (n= 181)	nceDoctoral Thesis,Dissertation. (n= 4)
Language	English (n=180)	Other languages (n=1)

5.3 Research Software

The study employed R software version 4.1.2 and utilized bibliometrix package version 3.1.4 for conducting a comprehensive science mapping analysis. Aria and Cuccurullo (2017) developed biblioshiny, a tool for bibliometric data analysis, which can be accessed by typing the command "biblioshiny ()" in the R console. According to Xie et al. (2020), both software packages can conduct extensive bibliometric analyses and are compatible with commonly used databases such as Web of Science, Scopus, PubMed in CSV, and BibTeX files. This report comprehensively reviews the author's analysis and examines various sources, including documents, cluster mapping, co-citations, co-authors, and collaborative efforts.

6: Analysis and Results Table **2:** Principal Statistics

Main Information



Source: Author's expansion using Biblioshiny R package

Figure 3: Annual Scientific Production



Source: Author's extension using Biblioshiny R package

The annual scientific production of articles about the study of GST is depicted in Figure 3. According to Figure 3, it can be observed that there was a minimal production of articles in implementation year in 2017, with only 23 articles being produced in the year 2017. After 2019-20, there was an increase in the yearly output of research papers, which exhibited a sustained upward trajectory until 2022. Although some variations were observed between years, the graph of scientific production indicates that research on GST is an emerging topic in the contemporary marketing research landscape.

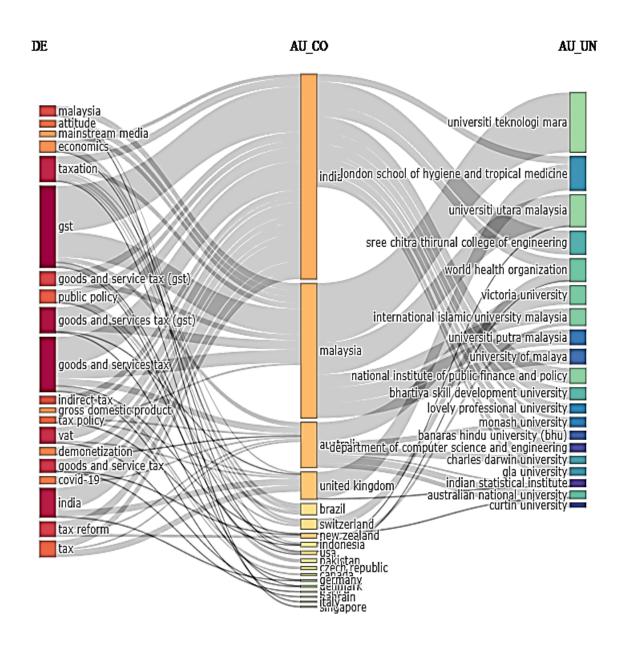
Figure 4: Average citation per year



Source: Author's expansion using Biblioshiny R package

The citation frequency of research articles about GST is depicted in Figure 4. It is observed that in the year 2017, 23 item was cited. Prior to 2018, the quantity of citations was notably limited. However, following 2019, there was a discernible increase in the yearly citation rate of the research paper, indicating an upward trend that persisted until 2022. The significance of GST has experienced a notable upsurge in the realm of research, with an annual citation count of 40 in the year 2019.

Figure 5: Three-Field Plot



Source: Author's expansion using Biblioshiny R package

The three field plots depicted in Figure 5 illustrate the constituent elements of 20, comprising the author's keywords on the left, countries in the middle, and affiliations' name on the right. As mentioned earlier, the interconnectivity of the three elements is demonstrated through the depiction of a grey line, which illustrates their correlation with other associated components (Rusydiana, 2021). The magnitude of the grey thread interconnecting the elements indicates the aggregate quantity of items. According to Shi et al. (2020), the middle column is interconnected with the left and right columns and displays the numerical values of incoming and outgoing items. The three field plots depicted the interrelationships between keywords, countries, and authors and their respective elements. The data presented in the three-field plot indicates that GST exhibits the highest outflow level to numerous countries. India is currently considered a global leader in research, boasting 10 highly distinguished affiliations.

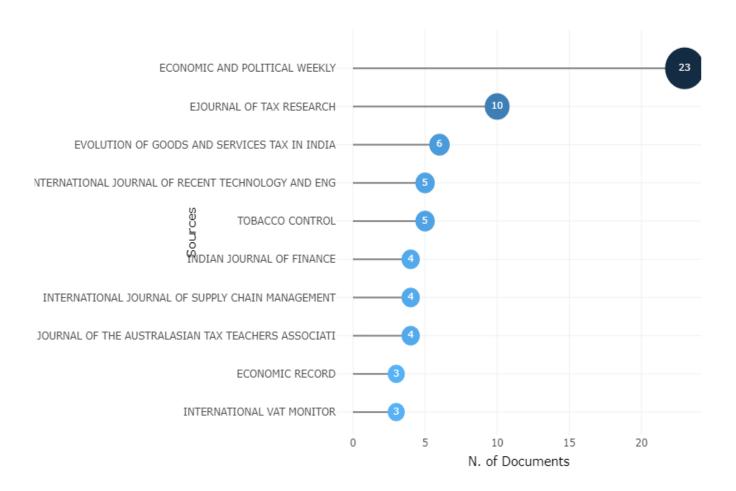


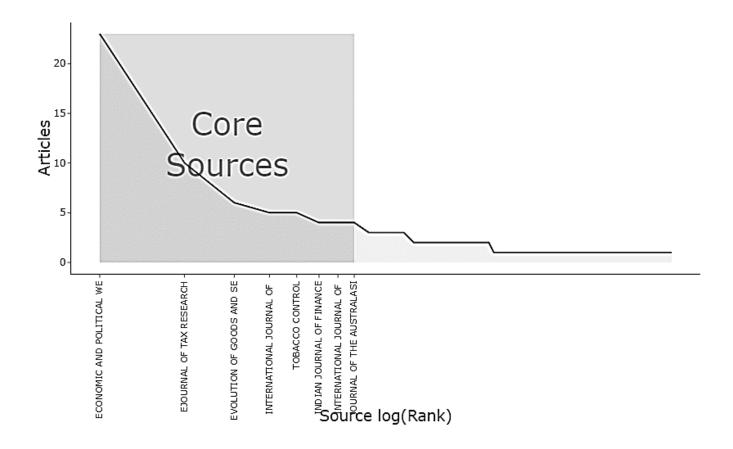
Figure 6: Most Relevant Sources:

Source: Author's expansion using Biblioshiny R package

Figure 6 presents data about the top 10 most significant sources. Based on the Scopus data, 227 sources have been identified. Among these sources, the journal with the most articles is economic and political weekly with 23 articles. This indicates that many research articles related to GST have been published in this journal. Figure 6 displays the top 10 journals that make the most outstanding contribution to the research domain of Digital Marketing.

Figure 7: Source Clustering Through Bradford's Law

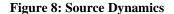
Vol 4 Issue 2 (2024)

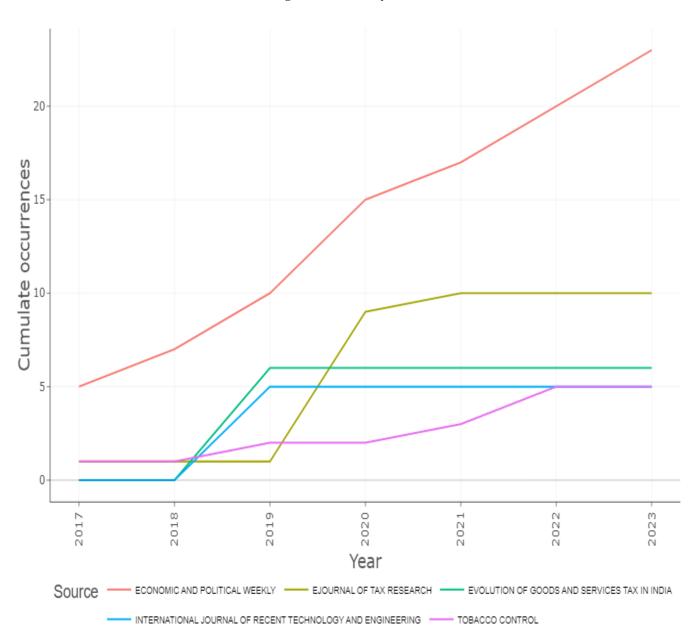


Source: Author's expansion using Biblioshiny R package

The implementation of source clustering of sources in Figure 7 is based on Bradford's Law. This law, initially introduced by Samuel C. Bradford in 1934, characterizes the diminishing returns of searching for references in science journals exponentially. According to a specific formulation, when the articles in a field are divided into three groups, each containing approximately one-third of all articles, the number of journals in each group will be proportional to 1: n: n². The authors L. and Jeeva (2021) have provided a scholarly reference. Figure 7 delineates three distinct clustering zones, with the initial zone featuring sources derived from the Managerial Finance source. The evidence indicates that weekly economic and political is the foremost authority in GST research. This implies that areas exhibiting high frequencies possess primary sources for investigating the research domain. The preeminent academic journal in the field is economic and political weekly, which holds the highest rank and is published six times yearly. The determination of the source zone is based on the analysis of frequencies, cumulative frequencies, and the allocation of rank to the sources based on varying frequencies.

¹ https://en.wikipedia.org/wiki/Bradford%27s_law

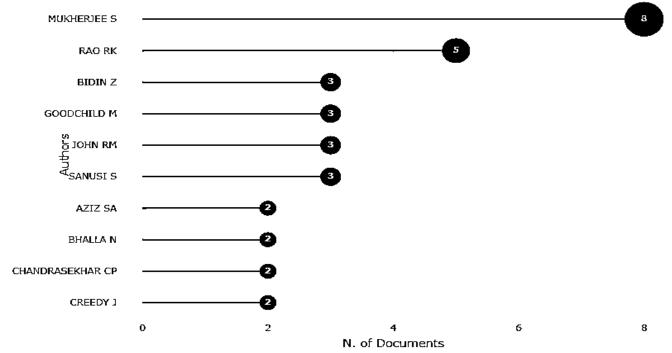




Source: Author's expansion using Biblioshiny R package

Figure 8 illustrates the growth of the primary sources based on their respective years and timely expansion. The journal is economic and political weekly, has been publishing scholarly articles since 2017. Recently, it has garnered significant attention for its contributions to GSTresearch. The graphical representation illustrates a noticeable increase in the growth of journals after the year 2019. Results The significant increase in journals in recent years is evident, with is economic and political weekly being the foremost publication.

Figure 9: Most Relevant Author



Source: Author's expansion using Biblioshiny R package

Figure 9 ranks the ten most influential authors in GSTresearch. Mukharjee S, Rao Rk and Bidin J have the most significant number of publications from all the writers listed in the reference section—the number of documents used to determine the author's significance. According to the findings of the investigation, the majority of the authors have somewhere between 3 to 8 documents.

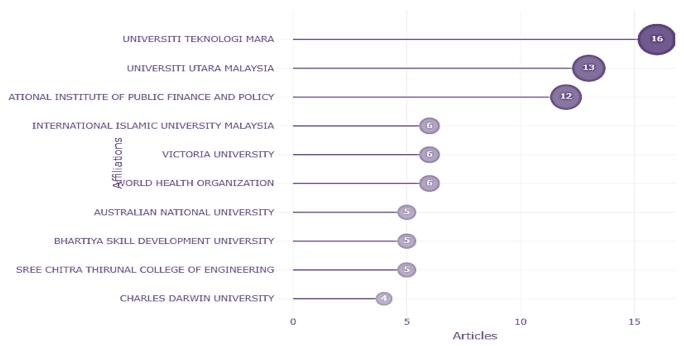
Table 3: Author's productivity through Lotka's Law

Documents written	N. of Authors
1	312
2	33
3	4
5	1
8	1

Source: Author's expansion using Biblioshiny R package

The author's productivity has been presented in Table 3, which has been measured using Lotka's Law. The statement suggests that Lotka's Law of Scientific Production provides a theoretical structure for examining disparities in the distribution of authors' productivity within a specific research domain and timeframe. Adigwe (2016) is cited. As per the data presented in Table 2, it can be inferred that 312 authors have authored only one document. The composition of 8 documents has been attributed to a collective of 1 authors. Based on the results of Lotka's Law, most authors limit their GSTexploration to a solitary document. Despite the existence of alternative documents, this remains true. The outcome is deemed unsatisfactory because most authors exhibit minimal inclination towards producing multiple documents. This citation refers to a publication by Lv and colleagues in 2021.

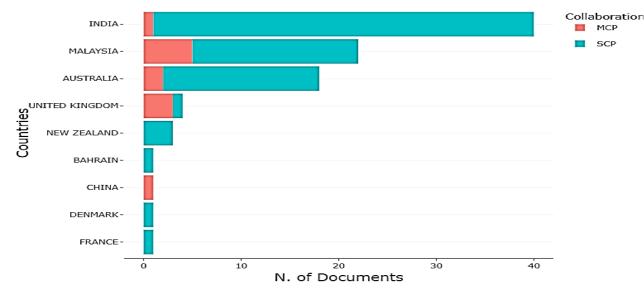
Figure 10: Most Relevant Affiliation:



Source: Author's expansion using Biblioshiny R package

The top ten university establishments that have made significant contributions to the study of GST are shown in Table 5. The major university, Universiti Technologi Mara, is responsible for publishing 16 publications on GST research. According to the findings of the affiliation analysis Many Universities are actively researching the subject of digital marketing.

Figure 11: Corresponding Authors' Country



Source: Author's expansion using Biblioshiny R package

Figure 11 presents the top 10 countries out of a total of 14, representing the nation associated with the author. The rectangles in the visual representation denote the collaboration of the author with researchers from foreign countries, with a distinct color scheme of red. On the other hand, the collaboration of the parent country with resident researchers is depicted by rectangles

with a green color scheme. According to the data presented in Figure 11, Malaysia exhibit the highest levels of collaboration with other authors, while New Zealand, denmark and France demonstrate comparatively lower levels of collaboration. According to Figure 11, the India exhibits the highest level of production with own authors.

Figure 12: Country's Scientific Production

Source: Author's expansion using Biblioshiny R package

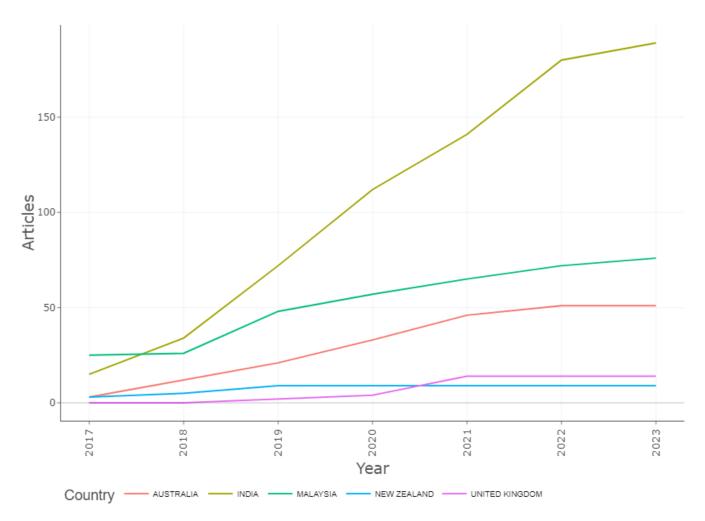
Table 4: Country's Scientific Production

Tuble it country a percentille 11 outdetion				
region		Freq		
INDIA	189			
MALAYSIA	76			
AUSTRALIA	51			
UK	14			
NEW ZEALAND	9			
USA	8			
SWITZERLAND	5			
BRAZIL	4			
INDONESIA	4			
PAKISTAN	4			
1111101111	•			

Source: Author's expansion using Biblioshiny R package

The diagram presented in Figure 12 illustrates nations' respective scientific contributions in digital marketing. A darker shade of blue in the visual representation denotes a higher frequency of occurrences, whereas the lighter shade indicates the countries' contributions that hold lesser scientific significance. Lovakov and Agadullina (2017) conducted a study on a particular topic. According to the results, India is positioned as a leading nation in scientific output, with a projected total of 189 publications slated for release by 2022.

Figure 13: Country's production Overtime



Source: Author's expansion using Biblioshiny R package

Figure 13 illustrates the evolution of the production of the countries throughout time. It compares the commencement year of research work done by the countries with the years they were concerned. According to these findings, the India was the first to work on GST between 2017 and 2022. Malaysia is a new competitor that has recently emerged in GSTresearch.

Table 5: Most Global Cited Documents

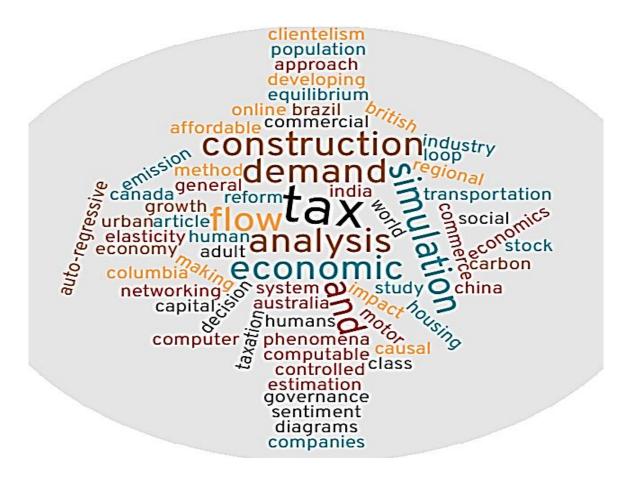
Paper	DOI	Total
		Citations
MISHRA AK, 2020, EMERG MARK FINANC	10.1080/1540496X.2020.1785425	132
TRADE		
OTHMAN Z, 2020, J ASIAN BUS ECON STUD	10.1108/JABES-11-2019-0113	58
YADAV S, 2020, INT J LOGIST SYST MANAGE	10.1504/IJLSM.2020.104780	33
FERNANDO Y, 2018, RES TRANSPORT BUS	10.1016/j.rtbm.2018.10.001	26
MANAGE		
NAYYAR A, 2018, INDIAN J FINANC	10.17010/ijf/2018/v12i2/121377	21
JOHN RM, 2019, TOB CONTROL	10.1136/tobaccocontrol-2018-054479	14
JOHN RM, 2019, TOB CONTROL	10.1136/tobaccocontrol-2018-054479	14

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

LEGACY C, 2019, TRANSP RES PART A POLICY	10.1016/j.tra.2018.12.014	10
PRACT		
RAHMAN S, 2018, ROUND TABLE	10.1080/00358533.2018.1545941	10
MALLICK H, 2021, ECON CHANGE RESTRUCT	10.1007/s10644-020-09282-9	8
JOHN RM, 2021, TOB CONTROL	10.1136/tobaccocontrol-2019-055525	8

Source: Author's expansion using Biblioshiny R package

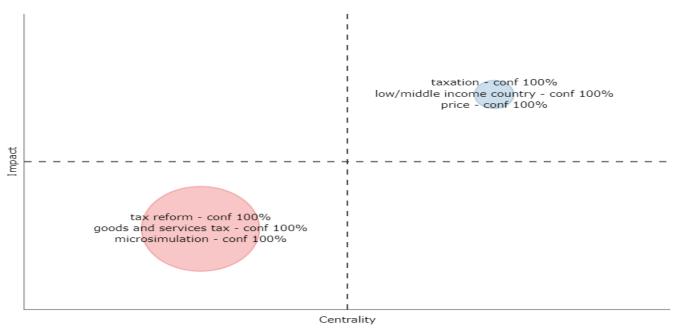
Figure 14: Word Cloud



Source: Author's expansion using wordcloud.com

Figure 14 depicts a word cloud, demonstrating that the more general and central a term is, the greater the frequency with which it appears (Rusydiana, 2021). In this case, the phrases "TAX," "ANALYSIS," and "ECONOMY" appear to exhibit the highest frequency in the papers. Words are gathered from several sources for use in word clouds generated by digital marketing. The word cloud illustrates the significance of particular terms in the underlying papers that support the reserch.

Figure 15: Clustering by Author's Keywords



Source: Author's expansion using Biblioshiny R package

Figure 15 shows the author coupling shown, which shows how the two groups of keywords plus operate together with their keywords. Cluster 1 is pink, indicating significant study in digital marketing. Additionally, this cluster contains the phrases Taxation, low/middle income country and price. Cluster 2 is a critically significant cluster demonstrating the study area's quality and the research's overall significance. The color blue represents cluster 2, and its keyword list includes terms such as Tax reforms, Goods and Services tax and micro simulation.

natural language processing

natural language processing

low/middle income coursery

price

publicitation

avareness

goods and service tax

green tax reform

goods and service tax

green tax reform

ground service tax (gst)

federater media

ground service tax india

ground service tax

Figure 16: Co-Occurrence Network

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

Source: Author's expansion using Biblioshiny R package

Figure 16 depicts the co-occurrence analysis, which shows that three significant clusters are emerging based on keywords: marketing, social media, GST and commerce. They are all linked to one another. The word's width indicates the relevance of a word's meaning in the context of the clusters. The appearance of the red cluster demonstrates that GST is the highest-ranking cluster. The cluster also contains some words relevant to GST research research.

Motor Them he Themes india tobacco human tax system australia Development degree tax reform sentiment analysis social networking (online) taxation governance approach urban population motor transportation merging or Basic Theme ining Themes Relevance degree

Figure 17: Thematic Map

Source: Author's expansion using Biblioshiny R package

(Centrality)

The thematic map depicted in Figure 17 illustrates the frequency of cluster occurrences, explicitly highlighting that one cluster has attained a significant degree of relevance. This suggests that many individuals are employed in this quadrant and possess a conglomeration of clusters about the keywords "Tax system, taxation and tax refoems". The cluster located within the motor themes exhibits the highest degree of relevance in current research, as evidenced by the appearance of said cluster within this particular grouping.

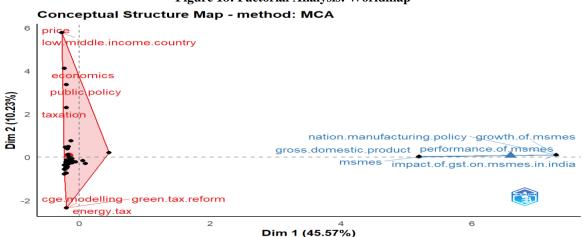


Figure 18: Factorial Analysis: Worldmap

331

Source: Author's expansion using Biblioshiny R package

The factor analysis of the multi-correspondence analysis is depicted in Figure 18, which displays two clusters, one of which is highlighted. This citation refers to a publication by Lv et al. in 2021. A conceptual structure map is a tool utilized in academic research papers on GSTthat visually represents the contextual structure of words. This map illustrates the relationship between words through regional mapping. The positioning of each word is determined by the values of Dim 1 and Dim 2. It is worth noting that Dim is a particle of small size and a technical term in bibliometric science. This process creates a map that links words with similar values (Rusydiana, 2021). In Figure 18, two factors were extracted from the analysis and regression analysis. The results indicate that the primary factor encompasses all themes related to Taxation , public policies and economics and other cluster shows the relevance of GDP and MSMEs. This highlights the significant relevance of GST in the research domain.

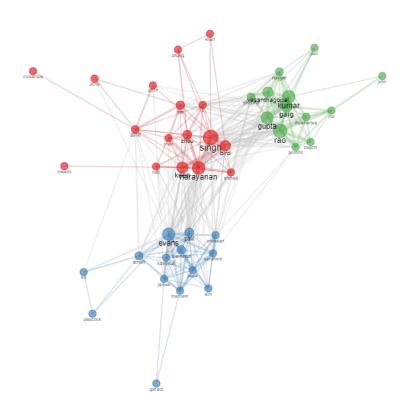
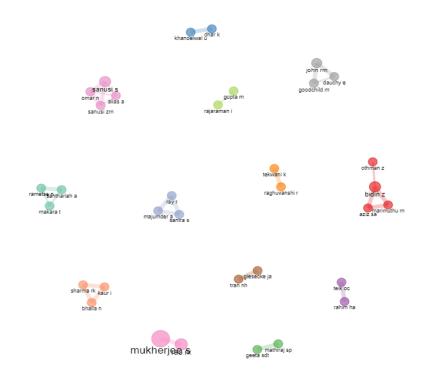


Figure 19: Co-Citation Network

Source: Author's expansion using Biblioshiny R package

Figure 19, containing the compilation of cited works, is accessible at this location. Zupic and Ater (2015) conducted a study. A total of eight distinct co-citation clusters have emerged, each of which is interlinked. There exist more than 50 citations that have been co-cited in conjunction and published across a span of years ranging from 2000 to 2023.

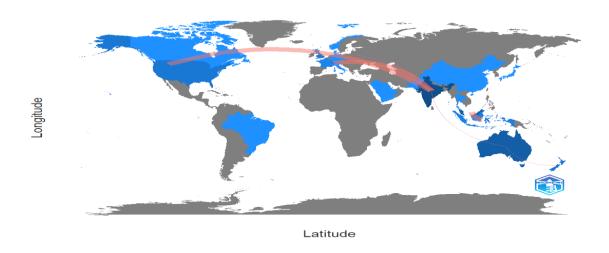
Figure 20: Collaboration Network



Source: Author's expansion using Biblioshiny R package

The visual representation depicted in Figure 20 showcases the collaborative efforts of multiple authors across the globe, about the scope of the GSTgraph. The graph comprises 13 distinct clusters, each corresponding to a unique instance of author collaboration. As per the cooperation clusters, it has been observed that six of the clusters solely comprise the collaboration of three authors, while seven cluster entails the collaboration of two authors, and another cluster involves the collaboration of four authors. Despite a sufficient number of clusters, the level of active participation among writers engaged in cluster collaboration remains relatively low.

Figure 21: Collaboration World Map



Source: Author's expansion using Biblioshiny R package

Figure 21 illustrates the country's level of involvement in GSTresearch. The thickness of the connecting line indicates the magnitude of a country's participation in the collaboration. The nations primarily involved in this project include India, and the United States of America. The act of collaborating across international borders within the GSTresearch domain leads to the incorporation of novel ideologies. This phenomenon is attributed to various marketing principles and concepts across different nations. Thus, the improved collaboration will address the ethical quandary by employing state-of-the-art marketing strategies.

Conclusion:

The implementation of GST in India is a comprehensive tax reform that aims to simplify the taxation system, improve tax compliance, and promote economic growth. In summary, GST is a significant step towards achieving these objectives. Although the implementation of GST has encountered several challenges, it is anticipated that the Indian economy will reap several benefits. The government must tackle the obstacles and streamline the Goods and Services Tax (GST) framework to facilitate efficient operation and achievement.

The bibliometric data obtained from the Scopus database indicate highly favourable outcomes. Based on the available data, it can be observed that the Goods and Services Tax (GST) is experiencing a rise in prominence. Despite the current annual citation growth rate of 12.8%, it is expected to further increase in the forthcoming years. Based on the Scopus database, scholarly inquiry on GST commenced in 2017, however, there was a noticeable escalation in citations and contributions after 2019. Based on the growth chart provided, there has been a significant surge in the number of articles published from 2019 to the current period. The triad of field plots presented in the study reveals a noteworthy contribution of Indian and Indian authors to contemporary research. As per the Bradford's Law, several commendable sources have made a significant contribution to the field of GST research, with Economic and Political Weekly securing the topmost position in terms of citation and relevance. The longitudinal analysis of the authors' output indicates a restricted contribution level, yet the trajectory implies a potential for growth in the future.

As per Lotka's Law, the author's productivity is not deemed productive. According to the findings of author collaboration, Malaysia exhibits the highest degree of collaboration with other nations, whereas India demonstrates the lowest level of collaboration. India holds the distinction of being the top producer of scientific articles globally. Taxation is a frequently employed term. The collaboration between the author and the country is satisfactory regarding digital marketing.

The article demonstrates the significant potential of bibliometric tools in analysing the research landscape and establishing categories. Additionally, these tools can be used to quantitatively validate categories subjectively formed in published reviews. Zupic and Sater's (2015) study is a notable academic work. The researchers concluded that GST is a crucial matter organisations cannot overlook. Additionally, they found that responsible implementation of GST can substantially enhance an organization's success.

On the contrary, the incorrect utilization of GST may result in the downfall of a corporation. The study's results indicate that India performs commendably in GST research. Nonetheless, the authors from India could potentially augment their international collaboration by engaging in more substantial interactions with authors from other countries. Furthermore, despite not being ranked among the top 10 nations in scientific knowledge production, India's research output is not receiving adequate citations.

The study's implications and suggestions are as follows:

According to Jandhyala et al. (2018), the successful execution of the Goods and Services Tax (GST) necessitates the government to streamline the GST framework by decreasing the quantity of tax rates and exemptions. According to Biswas and Mukherjee (2018), enhancing the IT infrastructure of the GSTN is imperative for enhancing the efficiency and efficacy of the GST framework. According to Gupta and Pandey (2018), enhancing the comprehensibility of GST policies and protocols can alleviate the regulatory obligations imposed on enterprises and enhance their adherence to tax regulations. According to Rathi and Dhingra (2018), enhancing knowledge and understanding of GST can potentially enhance adherence and alleviate the regulatory load for enterprises. Enhancing the coordination between the central and state governments is a crucial factor for the efficient execution of GST, as stated by Tuteja (2018).

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

Bhattacharya and Gangopadhyay (2018) suggest that anti-evasion measures, such as electronic invoices and real-time reporting, can reduce tax evasion and enhance compliance. Hence, the government must prioritise implementing the abovementioned recommendations to enhance the efficacy and efficiency of the Goods and Services Tax (GST) framework in India, alleviate the regulatory burden on commercial entities, and augment tax conformity. It is imperative to acknowledge that the successful execution of GST necessitates a cooperative endeavour among the government, enterprises, and customers.

References:

- 1. Adigwe, I. (2016). Lotka's Law and productivity patterns of authors in biomedical science in Nigeria on HIV/AIDS: A bibliometric approach. *The Electronic Library*, *34*, 789–807. https://doi.org/10.1108/EL-02-2014-002
- 2. Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics, 11(4), 959-975. doi: 10.1016/j.joi.2017.08.007
- 3. Bhattacharya, R. & Gangopadhyay, S. (2018). Goods and services tax in India: Problems and prospects. South Asian Journal of Business and Management Cases, 7(1), 14-26.
- 4. Bhattacharya, R., & Gangopadhyay, A. (2018). Anti-evasion measures in India's Goods and Services Tax (GST) regime: An overview. International Journal of Scientific Research and Management, 6(8), 6747-6752. https://doi.org/10.18535/ijsrm/v6i8.05
- 5. Barman, T. K., & Chakraborty, K. (2019). Impact of GST on the Indian tourism sector. Journal of Tourism and Hospitality Management, 7(1), 1-8. https://doi.org/10.15640/jthm.v7n1a1
- 6. Biswas, A. & Mukherjee, D. (2018). GST in India: Challenges and prospects. Journal of Commerce and Accounting Research, 7(1), 1-11.
- 7. Biswas, S., & Mukherjee, A. (2018). GST in India: An analysis of challenges and opportunities. International Journal of Research and Analytical Reviews, 5(2), 72-77. https://doi.org/10.13140/RG.2.2.16350.47687
- 8. Gupta, R. & Pandey, A. (2018). GST in India: Challenges and opportunities. International Journal of Research in Management and Business Studies, 5(3), 15-24.
- 9. Gupta, A., & Pandey, N. (2018). GST: Challenges and opportunities for Indian economy. International Journal of Commerce and Management Research, 4(5), 9-14. https://doi.org/10.5281/zenodo.1434741
- 10. Hinge, R., & Bhatt, R. (2017). Goods and services tax (GST) in India: An overview. International Journal of Research in Finance and Marketing, 7(7), 19-28. https://doi.org/10.20276/ijrfm.2017.7.7.2
- 11. Jandhyala, S., Raj, M., & Banerjee, S. (2018). Goods and services tax in India: An overview and lessons from international experience. Journal of Asian Finance, Economics and Business, 5(2), 5-12.
- 12. Katiyar, R., & Dubey, V. (2019). Goods and services tax (GST) in India: Challenges and prospects. International Journal of Research in Humanities, Arts and Literature, 7(3), 90-101. https://doi.org/10.20431/2349-0381.0703009
- 13. Lv, X., Zhang, Y., & Ren, Y. (2021). Research on the evaluation of the effectiveness of the implementation of the goods and services tax policy in China. Journal of Cleaner Production, 314, 128194. doi: 10.1016/j.jclepro.2021.128194
- 14. Lovakov, A., & Agadullina, E. (2017). Bibliometric analysis of research on digital marketing. Journal of Applied Economic Sciences, 12(5), 1215-1222. doi: 10.19030/jaess.v12i5.10131
- 15. Mathur, M., & Srivastava, N. (2018). GST and its impact on real estate sector in India. International Journal of

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

Engineering Technology Science and Research, 5(2), 165-170.

- 16. Ministry of Finance. (2017). Goods and Services Tax in India. Government of India. https://www.gst.gov.in/
- 17. Pal, P., & Ghosh, S. (2018). Impact of GST on Indian manufacturing sector. Journal of Advances in Management Research, 15(1), 7-14. https://doi.org/10.1108/JAMR-09-2017-0071
- 18. Pandey, M., Mishra, M., & Mishra, U. S. (2019). Goods and Services Tax (GST) in India: Impact on Agriculture Sector. Journal of Commerce and Accounting Research, 8(2), 54-66.
- 19. Rajput, A., & Jha, S. K. (2018). Impact of goods and services tax (GST) on Indian economy. International Journal of Research and Analytical Reviews, 5(2), 22-28. https://doi.org/10.20431/2348-7675.0502004
- 20. Rajput, N. S., & Jha, R. (2018). Impact of GST on the Indian economy: An empirical study. Indian Journal of Commerce and Management Studies, 9(2), 11-17. https://doi.org/10.18843/ijcms/v9i2/02
- 21. Rathi, N., & Dhingra, A. (2018). Goods and Services Tax (GST): Impact on Indian economy. Journal of Accounting, Finance and Economics, 8(1), 22-31. https://doi.org/10.21659/AFE.8.1.3
- 22. Rusydiana, A. S. (2021). Visualizing research trends and mainstream topics in library and information science research: A bibliometric analysis. Library Philosophy and Practice, e4374. Retrieved from https://digitalcommons.unl.edu/libphilprac/4374/
- 23. Shi, H., Tian, F., & Zhang, Y. (2020). Analysis of scientific output in intelligent logistics from 2010 to 2019: A bibliometric perspective. Journal of Cleaner Production, 262, 121336. doi: 10.1016/j.jclepro.2020.121336
- 24. Singh, A. (2020). Goods and Services Tax in India: An Overview. In P. S. S. Kumar (Ed.), Taxation in India (pp. 1-14). Springer. https://doi.org/10.1007/978-981-15-6112-2_1
- 25. Singh, V. (2018). Goods and services tax (GST) in India: Challenges and opportunities. International Journal of Management, Technology, and Social Sciences, 3(2), 63-73. https://doi.org/10.20448/journal.510.2018.32.63.73
- 26. Tuteja, A. (2018). Goods and Services Tax (GST) in India: A review. Asian Journal of Research in Business Economics and Management, 8(2), 69-79. https://doi.org/10.5958/2249-7307.2018.00020.2
- 27. Xie, P., Shi, H., & Zhang, Y. (2020). The global research status and hotspots on the industry 4.0: A bibliometric analysis. Journal of Cleaner Production, 267, 122086. doi: 10.1016/j.jclepro.2020.122086
- 28. Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. Organizational Research Methods, 18(3), 429-472. doi: 10.1177/1094428114562629