Decoding Algorithms for a Sustainable Future: A Bibliometric Analysis of Social Media Studies

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ABSTRACT:

This study examines the influence of social media algorithms on through a bibliometric and thematic analysis of recent scholarly literature. The investigation reveals a rapidly growing and highly interdisciplinary research domain that integrates sustainability with advanced digital technologies, particularly artificial intelligence, machine learning and big data analytics. Publication trend shows consistent annual growth, with a sharp rise in output from 2020 onwards and a peak in 2025, indicating that the field has transitioned from a nascent to an expansion phase. Keyword analysis highlights dominant themes such as "sustainability", and "sustainable development," "social media," "algorithms," and "sentiment analysis," underscoring a shift towards algorithmically mediated, data driven approaches to understanding sustainable behavior. The study further identifies that research is concentrated in a few key outlets, characterized by moderate international collaboration, and driven by institutions in Asis and the Middle East, with uneven citation impact across regions. Emerging trends point toward applied, problem solving research on climate change, big data, healthcare, supply chains, and urban system. The findings suggest that social media algorithms are increasingly shaping the visibility, framing and reinforcement of sustainable choices, but also raise concerns about greenwashing, echo chambers and the need for more transparent, ethically designed "sustainable algorithms." The paper concludes by calling for more theory driven, behaviorally grounded research and stronger policy oriented collaboration to harness algorithmic infrastructures for genuine sustainability outcomes rather than merely symbolic or consumerist green behaviors.

Keywords: Social Media Algorithms, sustainable choices, Machine Learning, sustainability, advanced digital technologies.

INTRODUCTION:

These days, social media is not a chat space that merely delivers the information but are something that curate and prioritize the content through algorithmic architectures which maximize user engagement, which shows how individual perceive discuss and enact sustainable choices (Sustainability directory, 2025; Ghermandi, 2023. Hence, understanding the Influence is important not only for organizations but for policymakers and scholars as well so to bridge the gap between environmental awareness and environmental behaviors. (White et al., 2019; Carrington, Neville, & Whitwell, 2014).

Rise of algorithmic content curation

The social media algo is nothing but a set of automated regulation that personalize the feed by amplifying the content which can generate a reach (sustainability Directory, 2025). It shows socially validated content which includes green consumerism images which are having high impact (Sustainability Directory, 2025; Chen et al., 2023).

Social media, awareness and sustainability

Digital Platforms facilitates the circulation of environmental information, developing communities for climate action and informing younger specifically Gen Z about sustainability discourses (Chen et al., 2023; Economic science, 2026). Systematic reviews also suggests that Targeted marketing along with social media marketing can enhance awareness regarding environmental issues, fosters perceived self-efficacy and strengthens sustainable brand engagements, with iteratively reinforced and customized content due to platform algorithms (Shahzalal, 2022; DISA, 2024). Although, such effects limits to intention and symbolic or low impact behaviors, while the underlying structure of such algorithmic feeds often reinforce consumerist norms and greenwashing narratives (Sustainability Directory, 2025; Economic Sciences , 2026).

The need for a focused inquiry

Though social media is affecting the algo, but then also very limited research has been done which shows that this domain is still untouched. The study seeks to address this gap only by showing how alog driven content alters the visibility and social reinforcement of civic decisions (Ghermandi, 2023; Economic Sciences, 2026).

Literature Review

Social media, sustainability and consumer behavior

The literature shows potential of social media to generate environmental awareness and to shape the attitude of people towards environment. ((Shetty, 2025; Ghermandi, 2023).) The review shows that awareness for the same through social media such as Instagram, Facebook & You Tube can deep dive the understanding of social media among the citizens. (Shetty, 2025; De, 2025). However, the scholars also noted that this effect is only upto cognitive levels and there is a very less change into consistent and sustainable actions. (Carrington, Neville & Whitwell, 2024)

Digital platform and sustainable consumption domains

The survey indicate that more frequent use of digital platforms improves the knowledge of consumer sustainable options and promotes positive emotional responses such as empathy for environmental issues ((Jamal et al.,2025; Rana & Paul, 2017).). Though the same studies find that where on one side, digital engagement strengthen intention and attitude, it do not translate into strong behavioral commitment which forms digital attitude behavior gap. (White, Habib & Hardisty, 2019; Jamal et al.,2025)

The role of visibility, peers, and influencers

This has put social media a neutral information channel and more as a platform where social validation ad peer norm structure how user interpret and act upon sustainability messages (Economic Sciences,2026, Jamal et al.,2025,De,2025)

Algorithmic curation and the sustainability information environment

Beyond the general usage of social media, many works has now started examining the integration of AI driven advertising (Sandira, 2025; Vijayakumar, 2025). AI based advertising, Green Marketing etc can influence conscious consumer behavior as users engage actively with them. (Sandira, 2025; Vijayakumar, 2025). Though, it as some challenges also, as algo may reinforce overconsumption, and greenwashing narrative by prioritizing emotionally silent, visually attractive and commercially aligned content over deeper systematic sustainability discourses (Sustainability Discovery, 2025 ; Jamal et al., 2025)

Gaps in the literature and positioning of this study

Although a lot has been done on the sustainability and a lot is still to be done, explicit attention to Algorithmic mediation is very limited (Shetty, 2025; Ghermandi, 2023). The work done till yet treats platforms as homogenous channels pr are focusing on influencer marketing, digital campaign or on green advertising (Jamal et al., 2025; De, 2025). The previously published literature lacks a conceptual framework which associates the algorithmdriven visibility, social reinforcement, and behavioural outcomes for the cognitive-affective-conative wide range of sustainable consumption (Jamal et al., 2025; White et al., 2019). The current study aims to bridge the gap by providing coherent social media algorithms as *behavioral infrastructure* that moulds the information ecology of sustainability, and investigates the infrastructure that mediates users' everyday sustainable choices.

Research Methodology

The study is using quantitative bibliometric research to analyse trends and development of research domain. The data is collected from a reliable database, upto 2000 to 2026. Total of 120 doument from 173 sources, were retrieved using predefined inclusion criteria such as English language publications and relevant subject areas. The data was more deeply refined through data cleaning procedures, which involves standardization of author names and keywords and merging of similar terms to ensure consistency and accuracy.

The analysis was to be taken place using Biblioshiny. Key indicators such as TC, AC, h Index, g Index and m Index were used to access research and productivity. It also examines the collaboration pattern through co authorship analysis and international metrics.

Thematic and structural analysis were also performed using Keyword Co-occurrence, Tree Map and word cloud visualization. The analysis carried out in stages including descriptive one, productivity assessment, collaboration research.

Though, the study is limited on its dependence on a single database and potential variation in citation count over time, for the recent publications

The methodology provides for a systematic, transparent and replicable framework for understanding evolution, contributions and emerging trend on the field.

Bibliometric Analysis

Table 1. Dataset Overview

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2000:2026
Sources (Journals, Books, etc)	173
Documents	220
Annual Growth Rate %	8.82
Document Average Age	3.85
Average citations per doc	10.94
References	25962
DOCUMENT CONTENTS	

Keywords Plus (ID)	1688
Author's Keywords (DE)	824
AUTHORS	
Authors	619
Authors of single-authored docs	16
AUTHORS COLLABORATION	
Single-authored docs	44
Co-Authors per Doc	3.08
International co-authorships %	28.18
DOCUMENT TYPES	
Article	124
Book	2
book chapter	11
conference paper	43
conference review	26
Retracted	1
Review	13

Source: Authors' own work

The Bibliometric Analysis shows the research on the said domain, and the conclusion is that some 220 documents were captured from 173 sources, which includes journal, books, and proceedings.
The data shows a annual growth that is of 8.82% which shows that the interest of scholars in increasing overtime. Average age of article is 3.85 years. The citations per document is around 10.94 which shows nothing but a moderate academic impact with a backing of around 25,062 references. When it comes to content, there are 1688 keywords and 824 author provided keywords. There is a contribution of around 619 authors, wherein 16 authors were single authored. Among all, around 28 percent publication shows International Publications which shows that there is a blend of global research distribution. In the total paper, 44 are only one authored, average of other author is 3.08 which is indicate that the research was conducted with strong collaborative, with 28.18% international co-author.

The dataset has around 124 journal articles, and 43 are conference papers and 26 review papers, which shows a balance between theoretical and emerging research discussions. Additionally, 13 review articles, 11 book chapters and 2 books are there in the dataset with 1 retracted document.
Hence, the dataset provides a very strong bibliometric analysis, which captures depth and breadth of research.

Production Productivity Analysis

Table2. Production Producctivity Analysis

Year	MeanTCperArt	N
2000	4.00	2
2006	40.00	1
2011	15.33	3
2012	54.00	2
2013	1.00	3
2014	0.75	4
2015	21.33	3

2016	18.50	4
2017	24.50	2
2018	11.67	6
2019	70.00	4
2020	18.33	15
2021	34.60	15
2022	13.90	20
2023	14.96	24
2024	4.00	36
2025	1.48	58
2026	0.06	18

Source: Authors' own work

The analysis of the above table represents that upto 2006, there were only 2 publications in 2000 and 1 in 2006. It shows a citation impact which is moderate where the mean total citation is around 40, which shows the importance of these early studies.

In the period of 2011 to 2017, the research was though modest but it was stable where annual publication were 2 to 4 documents. Citation fluctuated from 40 to 54 which has maintained consistent citation rates which has shown some development.

Growth has also been there in 2018 where MeanTCperArt has peakd from 54 to 70, which is showing high publications, though the output was moderate. In the year of 202002025, there was a rapid growth that is 15 in 2020 to 58 in 2025 which reflects increased academic interest and maturity of research.

Country Productivity Analysis

Table 3 Country Productivity Analysis

Country	TC	Average Article Citations
CHINA	433	16.00
USA	229	19.10
SPAIN	220	27.50
IRAN	166	13.80
SAUDI ARABIA	160	26.70
GREECE	144	48.00
INDIA	94	5.20
NETHERLANDS	71	23.70
COLOMBIA	66	66.00

Source: Authors' own work

The above table shows insights into Total Citations country wise and quality of output. Total Citations shows overall influence while average citations indicate relative impact per publication.

As per the analysis, China is on top including highest TC. The next country, USA, is not even close to it with 229 TC and Spain 220 TC, which shows strong presence and global visibility.

If we talk about average article citations, Colombia is highest with an impressive 66 citation per article. Afterwards, Greece (48) and Spain (27.50) are showing strong citation performance. Saudi (27.60) and Netherlands (23.70) too demonstrate notable impact. USA is also in the tally (19.60) highlighting consistent research quality. On the contrary, Iran (1380) and India (5.20) have shown comparatively lower average citations values, which indicates that researchers focuses on publication volume instead of citations impact.

Source Productivity Analysis

Table 4 Source Productivity Analysis

Sources	Articles
LECTURE NOTES IN NETWORKS AND SYSTEMS	12
SUSTAINABILITY (SWITZERLAND)	9
JOURNAL OF CLEANER PRODUCTION	7
LECTURE NOTES IN COMPUTER SCIENCE (INCLUDING SUBSERIES LECTURE NOTES IN ARTIFICIAL INTELLIGENCE AND LECTURE NOTES IN BIOINFORMATICS)	4
ANNALS OF OPERATIONS RESEARCH	3
COMMUNICATIONS IN COMPUTER AND INFORMATION SCIENCE	3
SUSTAINABLE CITIES AND SOCIETY	3
APPLIED ENERGY	2
COMPUTERS AND INDUSTRIAL ENGINEERING	2
CSR, SUSTAINABILITY, ETHICS AND GOVERNANCE	2

Source: Authors' own work

The above table shows the journal and publication outlet in the research domain. It shows publication in few sources, reflecting the importance of research.

Among all the sources which are shown in the table, LECTURE NOTES IN NETWORKS AND SYSTEMS is the most productive one which is then followed by SUSTAINABILITY (SWITZERLAND) with some 9 articles, showcasing role in the studies.

On number three, there is Journal of Cleaner Production which as 7 publications. The other contributors are Lecture Notes in Computer Science (4). Other journals in the table shows 3 publications including annals of operations research, communications in computer and information science, sustainable cities and society.

Author Productivity Analysis

Table 5 Author Productivity Analysis

Author	h_index	g_index	m_index	TC	NP
MEHMOOD RASHID	4	4	0.667	133	4
SHOKOUHYAR SAJJAD	4	6	0.8	91	6
KATIB IYAD	3	3	0.5	128	3
SHOKOOHYAR SINA	3	3	0.6	44	3
ALBESHRI AIIAD	2	2	0.333	108	2
ALSWEDANI SARAH	2	2	0.4	65	2
EYDI ALIREZA	2	2	0.333	39	2
HIPEL KEITH W.	2	2	0.074	8	2
KILGOUR D. MARC	2	2	0.074	8	2
LEVY JASON K.	2	2	0.074	8	2

Source: Authors' own work

The above table shows the contribution of the most influential authors when it comes to the said domain It shows that Mehmood Rashid tops the tally with a stupendous H index, G Index, M Index, TC & Number of Publications (NP). The author is followed by one more author who is having an h Index of 4. 2 writers are under the bracket of h index as 3 and the same g index as well.

6 writers are there with an h index and g index of 2, though the TC & NP are varying highly, ranging from some 100 to a meagre of 8.

Most Relevant Affiliations

Table 6 Most Relevant Affiliations

Affiliation	Articles
KING ABDULAZIZ UNIVERSITY	8
ISLAMIC AZAD UNIVERSITY	7
SHAHID BEHESHTI UNIVERSITY	6
AMERICAN UNIVERSITY OF BEIRUT	5
WUHAN UNIVERSITY	4
ZHEJIANG SCI-TECH UNIVERSITY	4
CALIFORNIA POLYTECHNIC STATE UNIVERSITY	3
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT)	3
CHUNGBUK NATIONAL UNIVERSITY	3
INHA UNIVERSITY	3

Source: Authors' own work

The above table shows the names of the universities which are having most affiliation. The tally is topped by King Abdulaziz University with 8 articles, followed by Islamic Azad University with that of 7. Some universities are showing balance research while having publication as 5 & 4, while 4 universities are such which are under the bracket of 3 publications.

Three – Field Plot Analysis (CR-AU-KW)

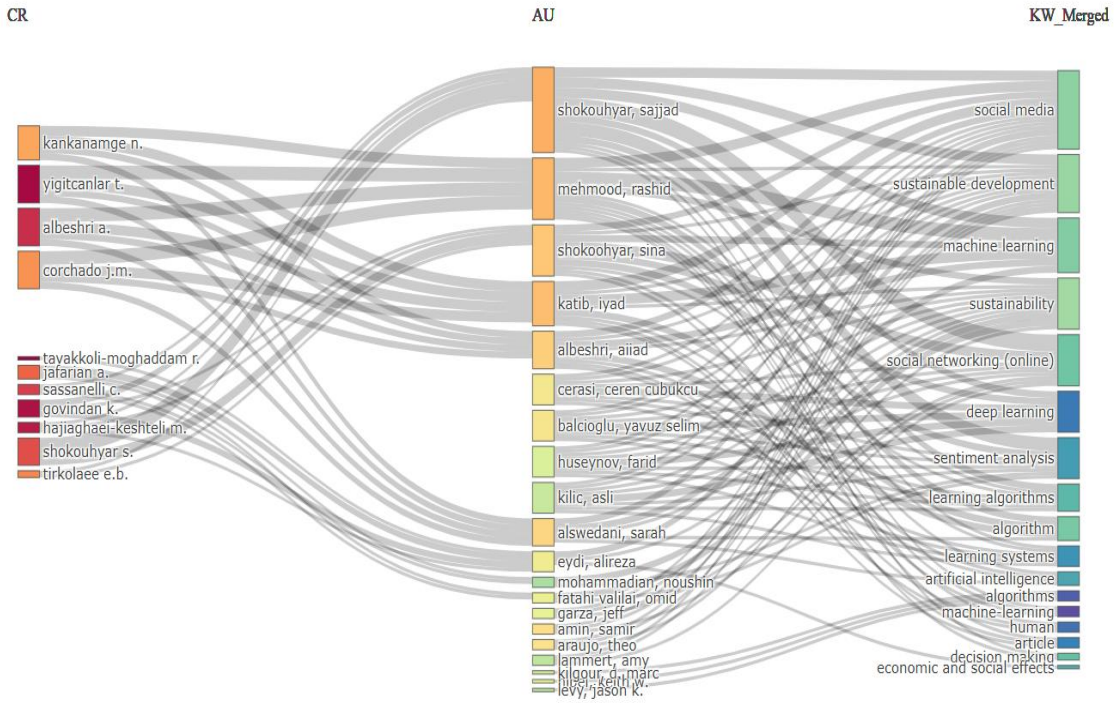

Figure 1. Three Field Plot(Source: Authors' own work in Biblioshiny)

The above stated three field plot provides an overall structure of relationships among cited references (CR), Keywords (KW) and authors (AU).

In the section of CR, contributors such as Kankanammge, Yigitcanlar & Albeshri appears to be have a foundational source, and these all references are connected to multiple authors, serving as a theoretical & methodological bases for further research

For AU field, some important authors are shokouhyar sajjad, Mehmood Rashid, Katib Iyed and Aiiad which act as central nodes in network, which provides a synthesis of foundational literature with emerging research themes.

It has been noticed that KW is showing dominant research themes,, where chunk of the keywords which are coming repeatedly are social media, social networking, machine learning etc. Keywords such as deep learning, sentiment analysis, AI etc indicates some technical keywords.

Tree map Analysis of Keywords

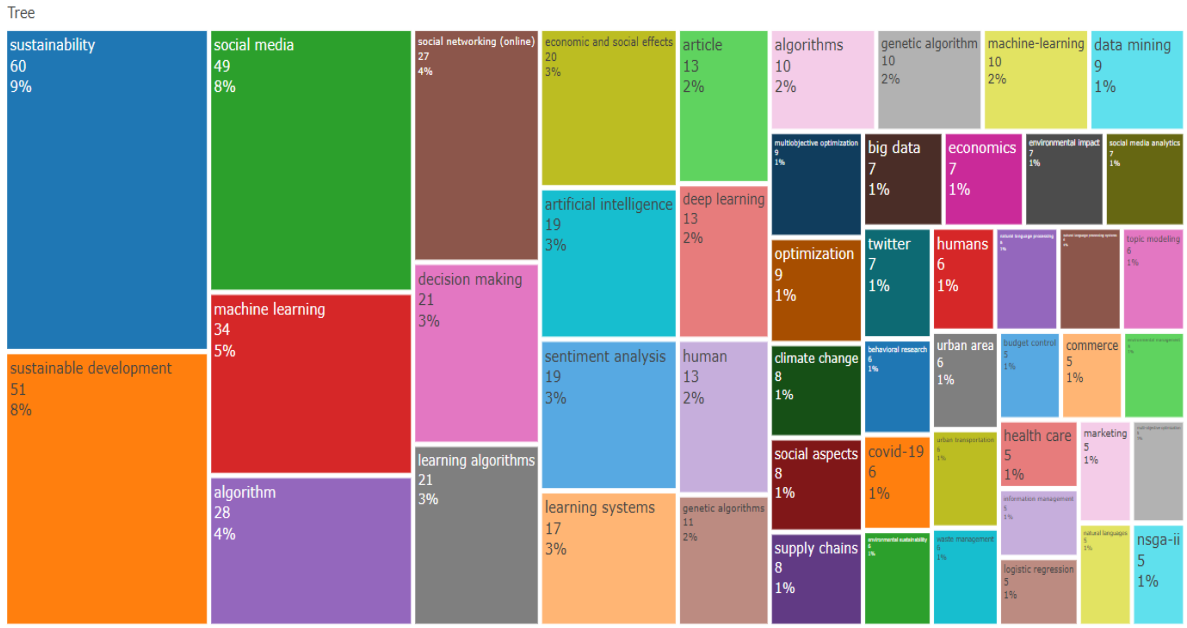

Figure 2. Tree Map (Source: Authors' own work in Biblioshiny)

The Tree Map tool shows us the importance of Keywords we have used in our domain. The size of the block shows times of repetition of keywords in the domain while their percentage sows the proportionate share in the overall dataset. The purpose of it is to identify the dominant theme and the research areas which are emerging.

Table: Analysis of words occurring in the Map

Keywords	Occurrences	Share in the Dataset
Sustainability	60	9%
Sustainable Development	51	8%
Social media	49	8%
Machine Learning	34	5%
algorithm	28	4%
Social networking (Online)	27	4%
Decision Making	21	3%
Learning Algorithm	21	3%

Artificial Intelligence	19	3%
Sentiment Analysis	19	3%
Deep Learning	13	2%

Source: Authors' own work

Word Map (Keyword Co-occurrence) Analysis

Figure3. Word Cloud (Source: Authors' own work in Biblioshiny)

The above stated Word Map shows the frequency and domination of certain words in the dataset, in which size of words indicates its occurrence and importance in the field. This simply means that, large term signifies dominant theme while smaller ones indicate niche areas.

As it is known and visible also, sustainability and sustainable development are the most dominant keywords, it suggests that most studies have been done on themes related to them.

Another term which is very close is social media which indicates strong focus on research to study sustainability. Social Networking highlights the role of online community in shaping sustainable practices.

The other chunk of word which pivots across technological advancements are AI, Alogrith & Learning Algo. These term shows increasing interaction of AI Driven and data driven approaches in research.

Keywords like Decision making and Economic and Social effects shows that research is not limited to technical areas but also touches on areas which focus on policy implementation and societal impact. Terms such as Sentiment Analysis suggest that Research have also touched the Behavioral aspects as well.

Some key words which are small but are relevant may be Climate Change, Supply Chain, healthcare and urban area, which shows the areas where these technologies are perhaps been implemented.

Keyword Co-occurrences

Table No. 1 Cluster Analysis

Keyword	Occurrences	Total Link Strength
Cluster 1 Theme: Governance, planning, & operations		
Sustainable development	51	247
Sustainability	60	214
Decision making	21	137
Environmental impact	7	38
Optimization	9	38
Urban transportation	6	41
Supply chains	8	44
Genetic algorithms	11	48
Genetic algorithm	10	45
Economic and social effects	20	79
Economics	7	39
Environmental management	5	39
Environmental sustainability	6	34
Multi-objective optimization	5	17
Multiobjective optimization	9	37
Nsga-ii	5	15
Urban area	6	40
Urban planning	5	36
Budget control	5	24
Sustainable supply chains	5	23
Prediction	5	28
Cluster 2 Theme: Social analysis & technical systems		
Social networking (online)	27	141
Learning systems	17	124
Sentiment analysis	19	103
Behavioral research	6	36
Natural language processing	6	43
Social media analytics	7	31
Social aspects	8	46
Natural languages	5	37
Machine-learning	10	47

Learning algorithms	21	146
Logistic regression	5	34
Natural language processing systems	6	26
Data mining	9	65
Waste management	6	35
Information management	5	28
Support vector machines	5	33
Cluster 3, Theme: Core Technology, Data, & Society		
Social media	49	199
Machine learning	34	174
Algorithm	28	122
Article	13	85
Artificial intelligence	19	79
Human	13	67
Algorithms	10	34
Big data	7	42
Smart cities	5	44
Urban area	6	40
Smart city	5	39
Covid-19	6	28
Topic modeling	6	25
Twitter	7	36
Health care	5	41
Humans	6	40
Cluster 4 Theme: Business		
Marketing	5	18
Commerce	5	16
Cluster 5 Theme: Global challenges & advanced AI		
Deep learning	13	73
Climate change	8	50

Source: Authors' own work

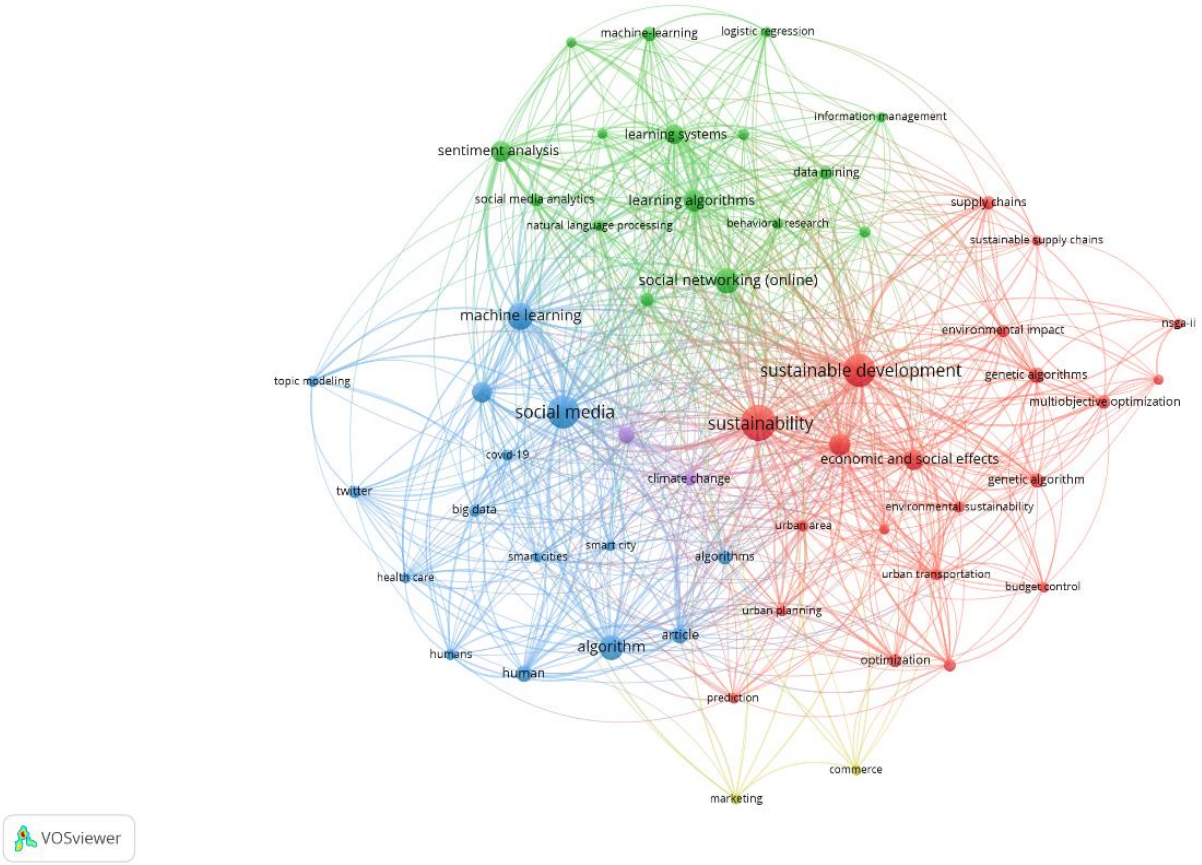

Figure no. 3 (Source: Authors' own work in VOSviewer)

The cluster 1 which is titled as Governance, Planning & Operations shows the integration of Strategic sustainability with Computational decision support system. (Jain et al., 2026; Merigó & Yang, 2017). These keywords suggest a transition from sustainability to practical, data driven implementations in area like urban planning and SCM (Carrapico et al., 2020; AI-Sayed et al., 2024).

Cluster 2 which is titled as Social Analysis & Technical System, shows the blend of computational intelligence and study of human interaction in digital environment. (Mostashari, 2011). The integration of Machine Learning algo with natural language processing, the scholars can effectively parse large scale social data to extract actionable behavioral insights (Kumar et al., 2024; Gupta et al., 2023). This cluster shows a shift towards applying advanced data mining and MIS to understand complex social dynamics (Ge et al., 2025).

The cluster 3 which is titled as Core technology, Data & Society shows the role of digital platforms in shaping the contemporary societal functions (Goncalves & Neves)> Linking of Machine learning , AI & Big Data with health highlights hoe algo are increasingly becoming a part and parcel of our daily lives, (Rasoulzadeh Aghdam et al., 2025; Goncalves & Neves, 2024).. Existence of terms such as Social Media, twitter and Covid 19 suggest focus on extracting socially important events. Cluster 3 advocates a interdisciplinary landscape where technical tools are essential for analyzing the human activity with modern & data driven urban ecosystem. (Rasoulzadeh Aghdam et al., 2025; Cui et al., 2025)

The cluster 4 titled Business acts as a foundational component by anchoring the study of organizational value exchange and market interaction (Laila et al., 2024). With the blend of Marketing and Commerce, it emphasizes the

relationship between promotion and transactional processes that drive economic activity. (Kotler et al., 2013)

The keywords acted as connectors where they have bridged traditional business theory with modern digital transformation to sustain the growth in evolving market landscapes (Laila et al., 2024; Thakur & Kushwaha, 2023)

The cluster 5 which is titled as Global Challenges and advanced AI, sows the intersection of computational techniques and environmental action (Barre & Elmi, 2023; Lisso et al., 2026). With a combination if Deep learning with Climate Change, the cluster shows how advanced data processing is for addressing the complex issues (Zhang et al., 2025; OMICS, 2025). The researches took place recently also shows a rapid increase in architectures to improve climate modelling (Cai & Jin, 2025; Camps-Valls et al., 2025; KDP, 2025).

Finding and Discussion

The analysis done in the above pages, whether thematic or bibliometric reveals that social media influence on sustainable choices has grown rapidly, which is shaped by AI Methods. The findings also suggest that domain is not just a niche, but a core point in the larger AI literature, where algo design and social media infra are treated as key levers for influencing sustainable behavior. The consistent annual growth rate of 8.82% and the sharp rise in publications from 2020 onward mirror the broader acceleration of AI enabled sustainability research, which has surged since 2019 and shows no signs of plateauing (Gohr et al., 2025; Ruiz et al., 2025). The decline in average citations per article in recent years reflects the recency effect, but also indicates that much of current work is still foundational or exploratory, with limited long term empirical validation. Recent reviews on AI in sustainable development similarly cautions that while AI sustainability output is increasing, many studies remain highly technical or data focused with loose theoretical grounding and limited behavioral validation (Gohr et al., 2025; Chen et al., 2023).

The blend of words like sustainability, sustainable development with words like Machine Learning, AI, and algo also suggest that field is now shifting from content level to infra level analysis (Ghermandi, 2023; Aalijah, 2025). The dominance of sentiment analysis along with algo curation shows that system can amplify emotionally (Gohr et al., 2025; Malque Journal 2024). AI tools that enhance visibility of sustainability discourse can remove green washing, echo chambers and performativity green consumption (Sustainability Directory, 2025; Fashion Sustainability, 2025).

Also, the fragmented dispersal shows unified conceptual framework across Computer Science, Social Science and social media studies (Gohr et al., 2025; Ruiz et al., 2025).

The emerging trends— climate change and environmental sustainability, big data and data mining, healthcare, supply chains, urban systems, and COVID 19 related research integration— reflect a clear shift towards applied, policy relevant, and problem-solving research (Aalijah, 2025; Gohr et al., 2025). For the specific domain of social media algorithms and sustainable choices, this suggests that future work should move beyond descriptive bibliometrics and platform level correlations toward more theory driven, behaviourally grounded studies (Gohr et a., 2025; Ruiz et al., 2025):

- Investigating how different algorithmic architectures (ranking, recommendation, personalization) shape exposure to sustainable versus unsustainable options (Aalijah, 2025; Gohr et al., 2025).

- Examining the role of algorithmic echo chambers, filter bubbles, and greenwashing in distorting consumer perceptions of sustainability (Sustainability Directory, 2025; Fashion Sustainability, 2025).

- Designing and testing "sustainable algorithms" that nudge users toward lower impact choices while preserving transparency, autonomy, and fairness (behavioural economics and nudging perspectives; sustainability directory, 2025).

- Exploring cross cultural and policy dimensions, including platform regulation, digital literacy, and

algorithmic accountability in different national contexts (De, 2025; Malque Journal, 2024).

Though India's low citation suggests that scholars from India need to strengthen the work on it, that calls for more context specific and local research

The emerging trends are also reflecting a clear paradigm shift towards problem solving research. It suggests that future work should move beyond descriptive bibliometrics and platform level correlations toward more theory driven, behaviorally grounded studies (Gohr et al., 2025; Ruiz et al., 2025; White et al., 2019).

Conclusion

After doing the bibliometric and thematic analysis, it is noted that Media Algorithms affecting Sustainable choices is taking up the speed and is getting solid in its ideas. Initially it was a small, scattered area which is now bigger pulling science with the social science and computer science with a focus on AI

The findings highlight several critical challenges. First, the recency effect and relatively modest citation impact of recent algorithm focused studies suggest that much of the current work remains exploratory and lacks long term empirical validation l. Second, the field is characterized by dispersed authorship and moderate international collaboration, indicating that global knowledge networks are still forming and that regional disparities— such as lower citation impact in some emerging market countries— persist. Third, the same algorithmic mechanisms that amplify sustainability messages can also reinforce greenwashing, echo chambers, and performative green consumption, raising normative questions about transparency, accountability and the design of "sustainable algorithms."

It could be said that social media is not only as a place to chat but a system which is pushing people toward sustainable choices, or if not, are at least influencing in the direction. It is bridging the gaps between different areas.

On the empirical and methodological level, future research should move beyond descriptive bibliometrics and platform level correlations to more theory driven, behaviourally grounded studies that explicitly model how different algorithmic architectures influence exposure, evaluation, and adoption of sustainable options. On the policy and design level, scholars, platforms, and regulators must collaborate to develop algorithmic systems that prioritize genuine sustainability impacts— such as reduced environmental footprints, fairer supply chains, and stronger civic engagement— over transient engagement metrics. In doing so, research on the influence of social media algorithms on sustainable choices can contribute not only to academic knowledge but also to the design of digital infrastructures that genuinely support sustainable development agendas.

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