



## Research Trends in FMCG Supply Chain Management: A Bibliometric Analysis

\*<sup>1</sup>Linus Panmeih and <sup>2</sup>Dr. Gautam Patikar

\*<sup>1</sup>Research Scholar, Department of Commerce, Nagaland University, Nagaland, India.

<sup>2</sup>Professor, Department of Commerce, Nagaland University, Nagaland, India.

### Abstract

Fast-moving consumer goods (FMCG) companies rely heavily on supply chain management (SCM) to optimise product flow, which affects costs, inventory control, and customer happiness. This article conducts a bibliometric analysis of 'supply chain management' research in the FMCG sector to elucidate current trends, gaps, and future directions. 132 publications from the Scopus database covering the years up to 2026 were systematically reviewed in order to identify research gaps, important themes, and publication patterns. According to the analysis, efficiency, collaboration, technology adoption, sustainability, and risk management are becoming increasingly important within FMCG 'supply chain management'. Notable contributions include insights into regional distribution, institutional collaborations, and influential research. Additionally, significant works like research on RFID technology and closed-loop supply chains driven by the circular economy are highlighted via citation analysis. The top keywords reflect diverse focus areas, from supply chain management strategies to emerging technologies like RFID and IoT. By synthesising these findings, this study offers valuable insights for practitioners and scholars aiming to enhance 'Supply Chain Management' practices and address evolving challenges in the FMCG sector.

**Keywords:** Bibliometric, FMCG, Supply Chain Management, Trends, VOSViewer.

### Introduction

'Supply Chain Management' (SCM) constitutes coordinating and integrating all product sourcing, procurement, conversion, and logistics management processes. It guarantees an effective flow of products and services from origin to the point of use. Since the early 1980s, 'supply chain management' has been used to define the internal and external coordination of production and logistical activities, as well as the planning and control of material and information flows both inside and between enterprises (Gibson *et al.*, 2005; Stock and Boyer, 2009). Indeed, it is important to note that with effective supply chain management, the firms reduce costs, improve their customer service and gain an exceptional competitive advantage in their industries. It involves various activities, which include demand planning, inventory management, transportation, warehousing, and supplier relationship management.

'Supply chain management' is a critical function in the 'fast-moving consumer goods' sector, encompassing product planning, sourcing, manufacturing, and distribution. With the increasing globalisation of markets, rapid technological advancements, and growing consumer demands, FMCG companies are facing unprecedented challenges and opportunities in managing their supply chains efficiently and effectively (Wang, Wang & Che 2019:280). Therefore,

research on 'supply chain management' in the 'fast-moving consumer goods' sector is important for several reasons. Firstly, as the FMCG sector is highly competitive with rapidly changed consumer preferences and short product lifecycles, it is vital for companies to comprehend how to utilise supply chain management practices in an optimal way to ensure that firms remain flexible and responsive to market demands. Second, as the FMCG sector often involves high-volume businesses with a massive number of products passing through its supply chain, it is essential to study how to use 'supply chain management' so that a company would be able to satisfy customer demand and not increase costs. Third, sustainability is an emerging issue for the FMCG sector. Thus, conducting research on the alignment of 'supply chain management' practices with the broader issue of sustainability in the FMCG industry will be optimal. Overall, studying 'supply chain management' in the FMCG sector can offer valuable perspectives and practical recommendations for businesses seeking to improve their supply chain efficiency, mitigate risks, and attain sustainable growth in a competitive market landscape.

The objective of the present article is to present a systematic bibliometric review of the existing papers on the topic of 'supply chain management' in the FMCG sector, thus defining the most common trends, topics, and gaps frequent

for the previous research works. The in-depth overview of the academic works will help identify the recurring subjects, such as efficiency, collaboration, technology, sustainability, and risk, which are characteristics of ‘supply chain management’ studies. The following research will also serve to evaluate the recent patterns in the publication of articles about the FMCG sector, define the lacunas left by the scholars that require more investigation, and, finally, stay practical for professionals in retail and commerce. The current study will contribute to the academic side of understanding ‘supply chain management’ in the FMCG sector, and propose the practical implications for the industry.

**Methodology**

A comprehensive search was conducted in the Scopus database to identify all types of articles/documents related to ‘supply chain management’ in the FMCG sector. The search strategy and the keywords used for the electronic search in the database were: TITLE (“Supply Chain” OR “Supply Chain Management” OR ‘supply chain management’) AND (fmcg

OR fmcgs OR “Fast Moving Consumer Goods” OR “Consumer Packaged Goods”) AND PUBYEAR > 1995 AND PUBYEAR < 2026. The search was restricted to publication up to the year 2026 to ensure a completed year count of the most recent and relevant literature.

A total of 133 articles were initially identified through the database search. These articles were then screened based on their relevance to ‘supply chain management’ in the FMCG sector. Since this study is confined to the English language, an item authored in Spanish was eliminated, leaving 132 articles included in the bibliometric analysis. Data extraction followed the ‘Preferred Reporting Items for Systematic Reviews and Meta-Analyses’(PRISMA) framework to ensure the systematic and transparent analysis of the literature, providing a comprehensive overview of the state of research on ‘supply chain management’ in the FMCG sector up to 2026. The flow diagram for identification, screening, and assessing eligibility for inclusion in accordance with PRISMA framework 2020 is shown in Figure 1.

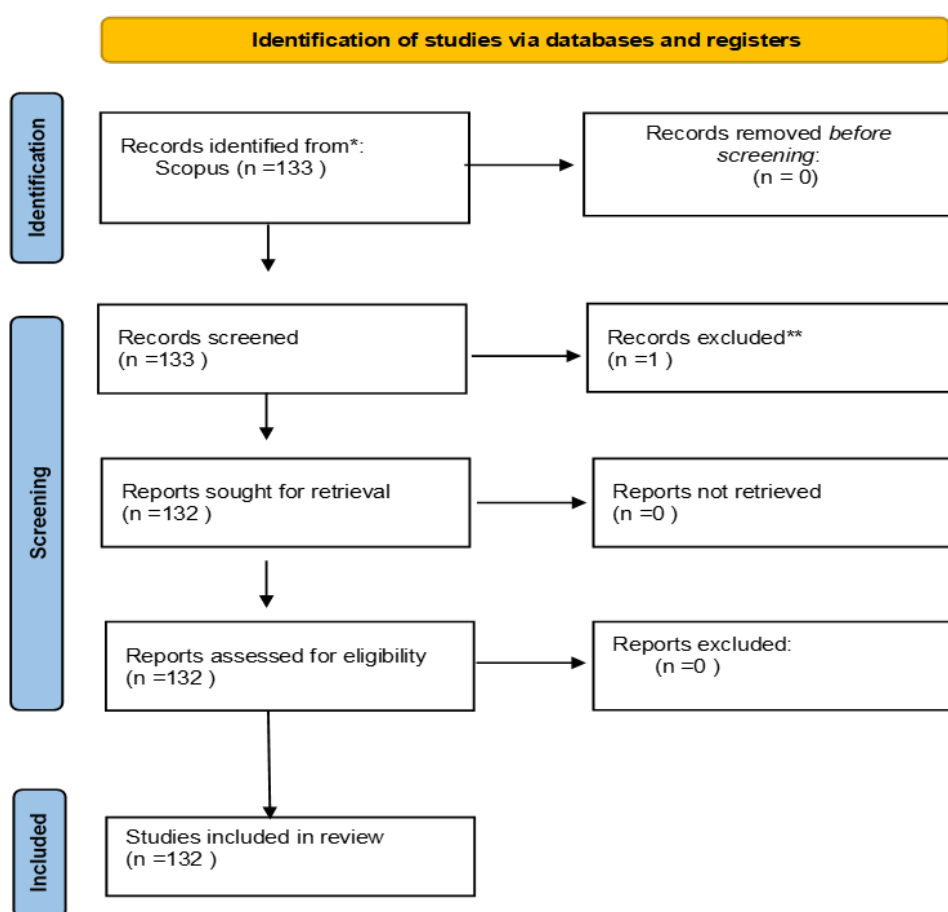


Fig 1: PRISMA Framework 2020

**Results**

Our study delved into a series of analyses to unravel the intricate landscape of ‘supply chain management’ research in ‘fast-moving consumer goods’ over time. The evolution of publications dating back to 1996 is meticulously documented in Table 1. This examination laid the groundwork for a more detailed exploration, unveiling these publications’ diverse origins and classifications in Tables 2. Further scrutiny led us to investigate the overarching subject areas (Table 3) and the top 10 highest number of publications by the author, institution and country (Table 4), providing invaluable insights into the prevailing trends and dissemination channels

within the realm of research on ‘supply chain management’ in the FMCG sector.

Subsequently, we embarked on a geographical exploration, discerning contribution patterns across different regions. Figure 2 delineates the distribution of contributors worldwide, while Figure 3 sheds light on the network visualisation of citations among the countries shaping the ‘Supply Chain Management’ discourse. Thus, we focus on the impact and relevance of published works, engaging in a thorough citation analysis showcased in Table 6. Additionally, figure 3 extracts and visualises the most prominent keywords, serving as beacons guiding future explorations in the research. By

unravelling citation patterns and identifying emergent keywords, we discern the pulse of current research and lay the groundwork for predicting future trends and delineating potential research niches within the dynamic landscape of ‘Supply Chain Management’.

**Discussions**

**Publication outputs**

Table 1 presents a comprehensive overview of publication outputs in the field from 1996 to 2026. The data reveals fluctuations in publication output and citation rates over time, offering insights into the evolving landscape of research activity and impact within the field. Notably, the first paper ever published on ‘supply chain management’ in ‘fast-moving consumer goods’ was in 1996. The table indicates a steady increase in publication output from 1996 to 2026, with peaks and troughs in different years. For example, the overall number of citations and publications increased noticeably in 2008, then decreased slightly in 2009 and 2010, and then increased again in 2013. This fluctuating pattern suggests dynamic shifts in research focus, productivity, and impact within the field. Despite variations in publication outputs, the average citations per publication generally range from 1 to 92.66, indicating varying levels of impact and influence of the research output in different years.

**Table 1:** Publication outputs

Year	Total Publication	Total Citation	Average Citation Per Publication
1996	1	0	0
2000	1	47	47
2004	1	0	0
2006	2	2	1
2008	3	298	99.3
2009	3	89	29.6
2010	3	125	41.6
2011	4	51	12.7
2012	2	10	5
2013	6	119	19.8
2014	6	135	22.5
2015	7	18	2.5
2016	5	104	20.8
2017	4	121	30.2
2018	6	291	48.5
2019	7	137	19.5
2020	5	94	18.8
2021	9	150	16.6
2022	15	231	15.4
2023	13	77	5.9
2024	12	69	5.7
2025	11	51	4.6
2026	6	6	1
Total	132		

Table 2 illustrates the varied types of publications contributing to the discourse on ‘supply chain management’ in FMCGs. Articles are the dominant form, representing 60.60% of the total, emphasising the role of in-depth, peer-reviewed research in advancing knowledge. Conference papers follow closely, comprising 28.03% of the total,

highlighting the importance of conferences for sharing new insights in ‘supply chain management’ within the FMCG sector. Book chapters also play a significant role, comprising 10.61% of the total, showing scholarly engagement in expanding on key concepts and findings. The inclusion of a single note publication (0.76%) reflects a diverse landscape of publication types in this field.

**Table 2:** Types of Publication of ‘Supply Chain Management’ in FMCGs

Type	Total	Percentage
Article	80	60.60
Conference Paper	37	28.03
Book Chapter	14	10.61
Note	1	0.76
Total	132	100

Table 3 presents the distribution of publication subject areas within the context of ‘Supply Chain Management’ in FMCGs, showcasing the interdisciplinary nature of research in this field. The table reveals that Business, Management, and Accounting emerge as the most prominent subject area, with 62.12% of the total publications, underscoring the focus on managerial and organisational aspects of ‘Supply Chain Management’ in FMCGs. Engineering and computer science are also prominent, highlighting the importance of technological advancements and computational methods in enhancing supply chain efficiency. Additionally, subjects such as ‘Decision Sciences,’ ‘Social Sciences,’ and ‘Economics’ demonstrate the diverse perspectives and methodologies applied in studying ‘Supply Chain Management’ in FMCGs, showcasing the multidisciplinary nature of this research domain.

**Table 3:** Subject area of publication

Subject Area	Total	Percentage
Business, Management and Accounting	82	62.12
Engineering	56	42.42
Computer Science	44	33.33
Decision Sciences	40	30.30
Social Sciences	22	16.67
Economics, Econometrics and Finance	16	12.12
Mathematics	15	11.36
Environmental Science	7	5.30
Energy	6	4.45
Physics and Astronomy	5	3.79
Chemical Engineering	3	2.27
Materials Science	3	2.27
Biochemistry, Genetics and Molecular Biology	2	1.51
Arts and Humanities	1	.75
Chemistry	1	.75
Earth and Planetary Sciences	1	.75
Medicine	1	.75
Psychology	1	.75

**Contributor**

Table 4 presents the leading authors, institutions, and countries contributing to research in ‘Supply Chain Management’ within the FMCG sector based on the number

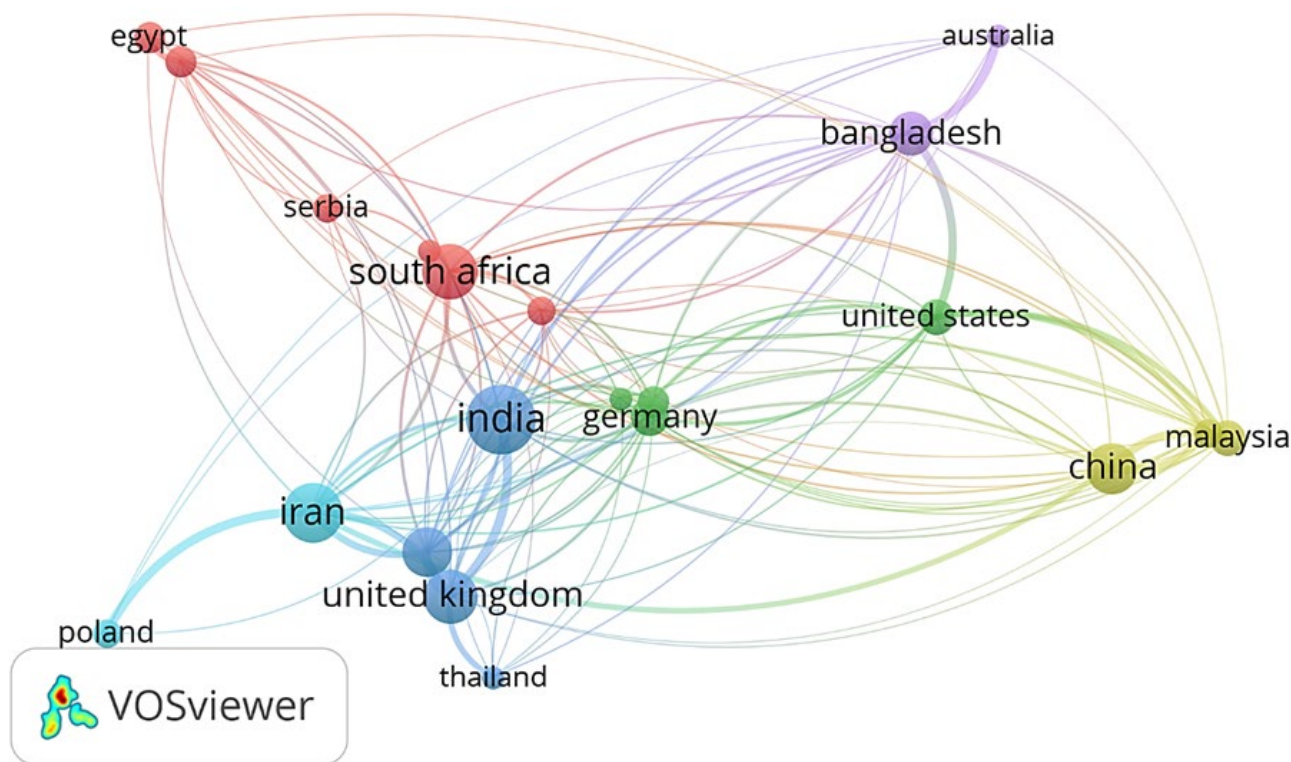
of documents (P). H. Nozari leads the list with five documents, followed by M. Fallah, S.W. Ji, T.P. Mbhele, and W. Niemann, each with three documents. Authors like K.S. Abdallah, E. Bottani, R. Dekker, D. Gallear, and S. Golrizgashti are also featured on the list, highlighting the diverse range of researchers contributing to this study area.

The table also lists the top institutions and countries contributing to research in supply chain management within the FMCG sector. Islamic Azad University is the leading contributor, with eight documents indicating a strong research focus on ‘Supply Chain Management’ in FMCGs. Iran leads the list of countries with fourteen documents, followed by South Africa and the United Kingdom with eleven documents each. India closely follows with ten documents showcasing a significant research output in ‘Supply Chain Management’ in FMCGs. China and Italy both have nine documents highlighting their substantial contributions to the field. Germany, Netherlands, Egypt, and Poland are also featured on the list, albeit with fewer documents, indicating a diverse geographical spread of research efforts in ‘Supply Chain Management’ within the FMCG industry. This visual representation is shown in Figure 2.

**Table 4:** Top 10 number of documents: Country, institution and Author

R	Country	P	Institution	P	Author	P
1	India	21	Islamic Azad University	8	Nozari, H.	5
2	Iran	15	University of Pretoria	5	Niemann, W.	3
3	South Africa	13	Beijing Jiaotong University	5	Ji, S. W.	3
4	United Kingdom	12	University of KwaZulu-Natal	4	Mbhele, T. P.	3
5	China	11	Thapar Institute of Engineering & Technology	3	Fallah, M.	3
6	Italy	10	Università di Parma	3	Abdallah, K. S.	2
7	Bangladesh	8	Islamic Azad University, South Tehran Branch	3	Bottani, E.	2
8	Germany	6	Politecnico di Milano	3	Dekker, R.	2
9	Malaysia	5	Islamic Azad University Central Tehran	3	Gallear, D.	2
10	United States	5	Branch Islamic Azad University, Science and Research Branch	3	Golrizgashti, S.	2

Note: R = Rank; P = Total Publication



**Fig 2:** Bibliographic coupling of countries

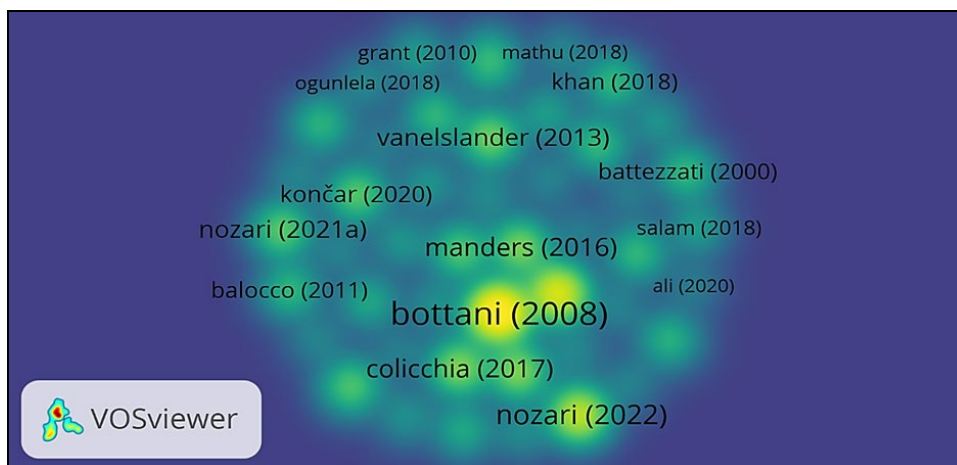
**Citations**

Table 5 presents the top 10 most cited articles in ‘Supply Chain Management’ within the FMCG sector, offering insights into influential works and impactful research within this domain. Each entry includes the authors, article title, citation count, average citations per year, and the journal where it was published. Notably, Bottani and Rizzi’s (2008) article on the economic assessment of RFID technology and its impact on the FMCG supply chain emerges as the most cited, with 283 citations and an average of 16.65 citations per year, published in the ‘International Journal of Production Economics’. Other notable works include Mishra *et al.*’s (2018) study on value creation from circular economy-led

closed-loop supply chains and Colicchia *et al.*’s (2017) research on lean and green supply chain management through intermodal transport. These articles reflect the breadth of topics and methodologies employed in advancing knowledge and understanding of ‘Supply Chain Management’ in FMCGs, underscoring the diverse scholarly contributions shaping this field. Figure 3 depicts a density visualisation of citation analysis, focusing on countries with at least two documents and two citations each. The clusters highlighted in deep yellow indicate that articles authored by scholars from the United Kingdom, Iran, India and South Africa have garnered the highest number of citations.

**Table 5:** Top 10 most cited Articles of ‘Supply Chain Management’ in FMCGs

No.	Authors	Title	Citation	Average Citation /Year	Journal
1	Bottani and Rizzi (2008)	‘Economical assessment of the impact of RFID technology and EPC system on the fast-moving consumer goods supply chain’	283	16.65	‘International Journal of Production Economics’
2	Mishra <i>et al.</i> (2018)	‘Value creation from circular economy-led closed loop supply chains: a case study of fast-moving consumer goods’	173	24.71	‘Production Planning and Control’
3	Nozari <i>et al.</i> (2022)	Analysis of the Challenges of Artificial Intelligence of Things (AIoT) for the Smart Supply Chain (Case Study: FMCG Industries)	140	46.66	Sensors
4	Colicchia <i>et al.</i> (2017)	‘Lean and green supply chain management through intermodal transport: insights from the fast moving consumer goods industry’	92	11.50	‘Production Planning and Control’
5	Bottani <i>et al.</i> (2010)	‘The impact of RFID and EPC network on the bullwhip effect in the Italian FMCG supply chain’	91	6.07	‘International Journal of Production Economics’
6	Manders <i>et al.</i> (2016)	‘Exploring supply chain flexibility in a FMCG food supply chain’	86	9.56	‘Journal of Purchasing and Supply Management’
7	Vanelslander <i>et al.</i> (2013)	‘Commonly used e-commerce supply chains for fast moving consumer goods: comparison and suggestions for improvement’	80	6.67	‘International Journal of Logistics Research and Applications’
8	Theißen <i>et al.</i> (2014)	‘Reducing the Carbon Footprint within Fast-Moving Consumer Goods Supply Chains through Collaboration: The Manufacturers’ Perspective’	55	5.00	‘Journal of Supply Chain Management’
9	Končar <i>et al.</i> (2020)	‘Setbacks to IoT implementation in the function of FMCG supply chain sustainability during COVID-19 pandemic’	54	10.80	‘Sustainability (Switzerland)’
10	Miragliotta <i>et al.</i> (2009)	‘A quantitative model for the introduction of RFID in the fast moving consumer goods supply chain Are there any profits?’	48	3.00	‘International Journal of Operations and Production Management’



**Fig 3:** Network Visualisation of Citations

**Keywords Analysis**

Table 6 provides an overview of the top keywords found in publications related to ‘Supply Chain Management’ in the FMCG sector. Each keyword is accompanied by two pieces of information: the total number of occurrences and the percentage of total occurrences among all keywords listed.

To visualise this data and explore the relationships between these keywords, we use VOSviewer, a tool commonly employed for bibliometric analysis. Figure 4 displays the 17 keywords commonly appearing in ‘Supply Chain Management’ in FMCG research, with a minimum of 5 occurrences. Various colours represent different themes or topics, sizes indicate the frequency of occurrence, and lengths denote the strength of connections between keywords. The red cluster represents the fast-moving consumer goods and supply chain, and the green cluster represents supply chain management. Furthermore, to provide a more thorough understanding of the outcomes displayed in Figure 4, Figure 5 presents a temporal visualisation of the co-occurrence of terms in the assessed papers. That shows how the use of keywords has changed over time till 2026. Regarding this evolution, it can be stated that approaches to ‘Supply chain management’ in the FMCG correspond to ‘profitability’, ‘supply chain management’, ‘fast moving consumer goods’, and ‘decision making’.

**Table 5:** Top Keywords in Publication

Keywords	Total
Supply Chain Management	48
Fast Moving Consumer Goods	43
Supply Chains	38
Supply Chain	19
FMCG	18
Fast-Moving Consumer Goods	16
Decision Making	10
Sales	9
Good Supply	9
FMCG Supply Chains	8
FMCG Supply Chain	7
Radio Frequency Identification (RFID)	6
Profitability	6
Bullwhip Effect	6
Sustainable Development	6
Manufacture	5
Internet of Things	5

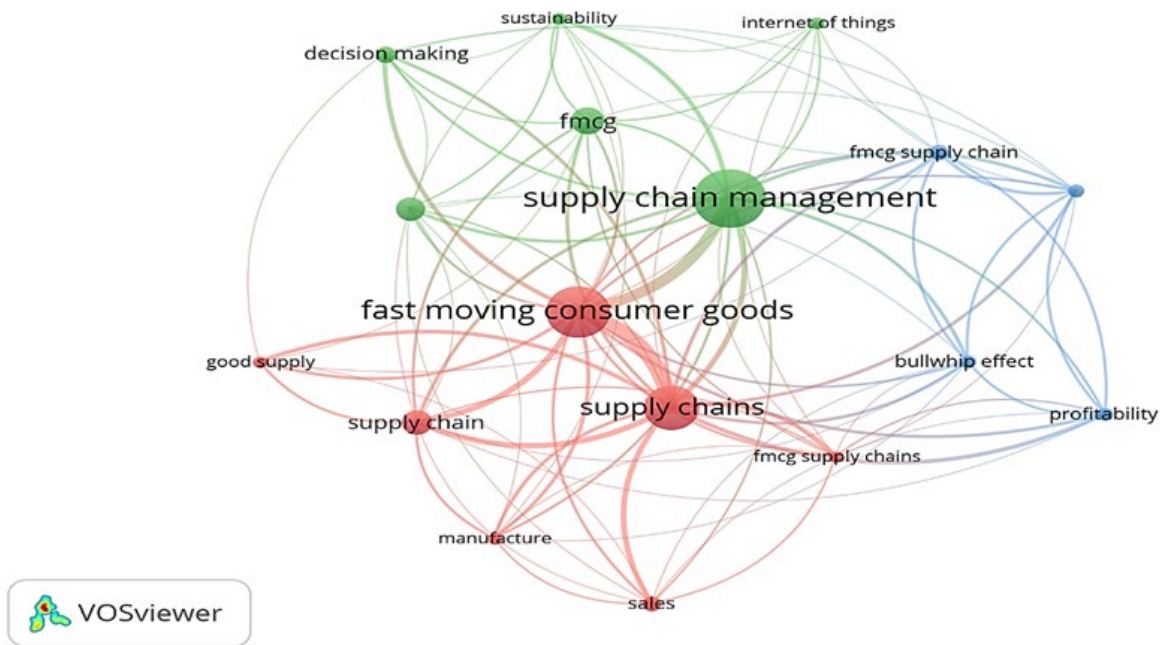


Fig 4: Co-occurrence of keywords of evaluated documents

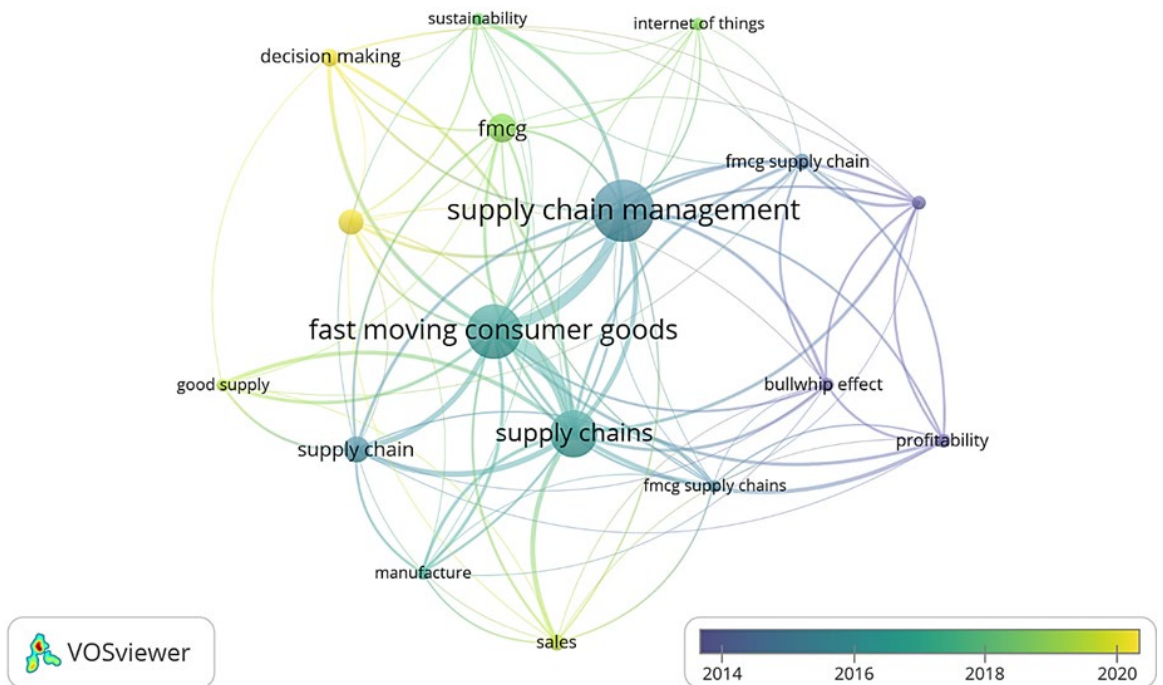


Fig 5: Timeline visualisation of co-occurrence of keywords of evaluated documents

**Conclusion**

To conclude, the present comprehensive bibliometric analysis demonstrates the changing trends and patterns of research in the ‘supply chain management’ topic in the ‘fast-moving consumer goods’ sector. The current study notes a consistent rise in publication patterns, implying an ever-increasing interest and focus on ‘Supply Chain Management’ in FMCGs. Moreover, the analysis also revealed the variety of sources and publication types that contributed to the field, which showed the multidisciplinary aspect of ‘Supply Chain Management’ research in FMCG. The key takeaway is the background on the interdisciplinary characteristic of the field within ‘Supply Chain Management’ in FMCG. The analysed publications are derived from the disciplines of business, management, engineering, computer science, and social sciences, reflecting the multifaceted and complex nature of the ‘Supply Chain Management’ in FMCGs. The analysis also

indicates that various sources and forms of publication have contributed to the development of this trend, with journals being the predominant source and articles being the dominant form of publication.

Key topics and trends in the literature are also identified by the study, including risk management, productivity, sustainability, collaboration, and technology adoption. A primary area of emphasis involves the growing integration of technology and data analytics to enhance supply chain management procedures, encompassing social media involvement and contact with customers. Emerging technologies like blockchain, AI, and machine learning are being studied for their potential to reduce costs and increase supply chain visibility, demand forecasting, inventory management, and efficiency. The focus on sustainability is another noteworthy trend. Building flexible and robust supply chains is also becoming more popular as a reaction to possible

disruptions such as natural disasters and global pandemics. These trends underscore a shift towards more tech-driven, sustainable, and resilient 'Supply Chain Management' practices in the FMCG sector, driving innovation and transformation in the industry.

Additionally, the analysis highlights the geographical distribution of research efforts, with contributions from countries like Iran, the United Kingdom, India, South Africa, China, and Italy, among others. Furthermore, the study identifies key authors like Nozari, H., institutions like Islamic Azad University, and leading countries like Iran, etc., contributing to research in 'Supply Chain Management' in FMCGs and understanding the global research landscape. Analysing citation patterns and keyword trends offers valuable information for practitioners and researchers seeking to explore new avenues for research and innovation in 'Supply Chain Management' in FMCGs. Overall, this study contributes to the development of research in 'Supply Chain Management' by providing a comprehensive overview of existing literature and identifying areas for future research.

### Limitations and Future Directions

Despite the significance of this systematic review for market practitioners and future researchers, the paper also has some limitations. The study was conducted on Scopus, which is widely considered the most comprehensive database. In contrast, additional sources of databases could have relevant material on the topic, such as Web of Science, Taylor and Francis, Google Scholar, etc. For the future direction of the study, future researchers can include various databases and use a few other keywords to select the articles for analysis, which might offer an in-depth comprehension of 'supply chain management' in the FMCG sector.

**Disclosure Statement:** No conflicts of interest have been disclosed by the authors.

### References

- Chinna P. Issues and challenges of Supply Chain Management in FMCG sector. *An International Journal of Interdisciplinary Studies*. 2016;1(3):1-7.
- Elfawal A, Ragheb MA, Adel R. Supply chain management practices, innovation capabilities and operational performance: An empirical evidence from the FMCG sector. *The Business and Management Review*. 2021;12(1):70-81.
- Feng Y, Qin L. Research on location model of FMCG supply chain network under the mode of cross-level service. In: *2nd International Conference on Internet of Things and Smart City (IoTSC 2022)*. SPIE; 2022. p. 682-688. (Vol. 12249).
- Gibson BJ, Mentzer JT, Cook RL. Supply chain management: the pursuit of a consensus definition. *Journal of Business Logistics*. 2005;26(2):17-25.
- Haddaway NR, Page MJ, Pritchard CC, McGuinness LA. PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. *Campbell Systematic Reviews*. 2022;18:e1230.
- Hasan SS, Dowla HU, Ahmmmed MS. Improving supply chain resilience in the context of pandemic: A perspective of FMCG industries. *Sustainable Futures*. 2026;11:101569.
- Jackson I, Saenz MJ, Li Y, Moreno MSR. Synchronodal supply chains for fast-moving consumer goods. *Applied Sciences*. 2023;13(5):3119.
- Jamil MA, Bakar NAA, Hussein SS, Salehuddin H, Yahya F. A Digital Enterprise Architecture Framework for Supply Chain Transformation: Integrating Knowledge Management and the TOE Framework in the FMCG Industry. In: *International Conference on Knowledge Management in Organizations*. Cham: Springer Nature Switzerland; 2025. p. 47-61.
- Jharkharia S, Shankar R. Supply chain management: some sectoral dissimilarities in the Indian manufacturing industry. *Supply Chain Management: An International Journal*. 2006;11(4):345-352.
- Lin JJ. Post-Coronavirus Supply Chain Management in FMCG Industry. *World Scientific Book Chapters*. 2022:82-98.
- Lysa S, Galkin A, Yemchenko I. Exploring the relationships between demand attitudes and the supply amount in consumer-driven supply chain for FMCG. 2022.
- Muñoz-Villamizar A, Solano E, Quintero-Araujo C, Santos J. Sustainability and digitalisation in supply chains: A bibliometric analysis. *Uncertain Supply Chain Management*. 2019;7(4):703-712.
- Najafi SE, Nozari H, Edalatpanah SA. Artificial intelligence of things (AIoT) and industry 4.0-based supply chain (FMCG industry). *A roadmap for enabling industry 4.0 by artificial intelligence*. 2022:31-41.
- Nasiri GR, Moradi M, Khodayari N. Supply Chain Integration and Coordination Applying SAP-ERP: A Case Study in the Fast-moving Consumer Goods Industry. *Engineering Management Journal*. 2025;37(3):324-340.
- Nithin OVS, Shashwath SH, Gothe SS, Singh AK, Chandra A, VijayKumar MN. Predictive Disruption Management in CPG (Consumer Packaged Goods) Supply Chains Using AI and IoT Integration. In: *2025 9th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS)*. IEEE; 2025. p. 1-6.
- Nozari H, Szmelter-Jarosz A, Ghahremani-Nahr J. Analysis of the challenges of artificial intelligence of things (AIoT) for the smart supply chain (case study: FMCG industries). *Sensors*. 2022;22(8):2931.
- Nwachukwu EE, Ighravwe DE, Ajayi ST, Amole AO, Etangetuk EA, Aikhuele DO, et al. Analysis of supply chain management internal process criteria for fast moving consumer goods. In: *2024 International Conference on Science, Engineering and Business for Driving Sustainable Development Goals (SEB4SDG)*. IEEE; 2024. p. 1-6.
- Poddar S, Priya M, Ghosh M, Singh AK, Pandey S. Circular economy integration in the Indian FMCG supply chain: unveiling strategic hurdles and pathways to sustainable transformation. *Circular Economy and Sustainability*. 2024;4(3):2147-2167.
- Sharma A, Gupta N. Opinion of distributors on the smart supply chain of FMCG industry. In: *AIP Conference Proceedings*. AIP Publishing LLC; 2023. p. 020023. (Vol. 2954, No. 1).
- Shwetha SV, Chaitra R, Shanbhag DG, Niyathi V, Jadhav RL. Supply Chain Management in FMCG using Blockchain. *Grenze International Journal of Engineering & Technology (GIJET)*. 2024;10.
- Stock JR, Boyer SL. Developing a consensus definition of supply chain management: a qualitative study. *International Journal of Physical Distribution and*

- Logistics Management*. 2009;39(8):690–711.
22. Sukati I, Hamid ABA, Baharun R, Tat HH, Said F. A study of supply chain management practices: An empirical investigation on consumer goods industry in Malaysia. *International Journal of Business and Social Science*. 2011;2(17):166-176.
  23. Thakur KS, Ahuja R. Empowering Fast-Moving Consumer Goods Supply Chain Leveraging Blockchain. In: *International Conference on Recent Trends in Machine Learning, IOT, Smart Cities & Applications*. Singapore: Springer Nature Singapore; 2023. p. 729-740.
  24. Thanh HN, Le TQ. Distribution planning model with multi-products in a supply chain: a case study in FMCG company. In: *2024 International Conference on Logistics and Industrial Engineering (ICLIE)*. IEEE; 2024. p. 1-8.
  25. Tungande F, Meyer A, Niemann W. Opportunities and challenges of social media in supply chain management: A study in the South African FMCG retail industry. 2020.
  26. Ul Islam MM, Majumder M. An Investigation due to the Impact of COVID-19 pandemic on the FMCG Supply Chain of Bangladesh. In: *2022 The 3rd International Conference on Industrial Engineering and Industrial Management*. 2022. p. 9-14.
  27. Wang W, Sedera D. A framework for understanding the benefits of supply chain management systems. 2011.