

Consumer Engagement with Sustainability Messages on Social Media

Aditya Rastogi

BBA Student

Teerthanker Mahaveer Institute of Management & Technology

Teerthanker Mahaveer University

Moradabad Uttar Pradesh (244001)

Abstract

Sustainability has emerged as a central concern for governments, businesses, and consumers worldwide due to escalating environmental challenges, climate change, and social inequalities. As consumers become more environmentally and socially conscious, organizations increasingly use social media platforms to communicate sustainability messages and influence responsible consumption behaviour. Social media enables organizations to reach large audiences, encourage interaction, and foster dialogue, making it a powerful medium for promoting sustainability initiatives. This study examines consumer engagement with sustainability messages on social media and analyzes how such engagement influences awareness, attitudes, and behavioral intentions.

Consumer engagement on social media goes beyond passive information consumption and includes activities such as liking, sharing, commenting, and creating user-generated content. Engagement with sustainability messages reflects the extent to which consumers connect emotionally, cognitively, and behaviorally with sustainability-related content. This study investigates the factors influencing consumer engagement with sustainability messages, including message credibility, emotional appeal, relevance, and platform interactivity.

The study adopts a quantitative research approach using primary data collected through a structured questionnaire administered to social media users. A sample of 250 respondents was selected to capture diverse demographic characteristics and social media usage patterns. The questionnaire measured variables such as exposure to sustainability messages, level of engagement, trust in sustainability communication, and intention to support sustainable brands. Statistical tools such as descriptive analysis, correlation analysis, and regression analysis were employed to analyze the data and test the proposed hypotheses.

The findings reveal that sustainability messages on social media significantly influence consumer engagement. Informative and transparent content generates higher engagement compared to purely promotional messages. Emotional storytelling, visual content, and authenticity were found to positively affect consumer interaction with sustainability posts. Furthermore, the study indicates that higher engagement levels are associated with increased awareness of sustainability issues and stronger intentions to support sustainable brands and practices.

The study contributes to existing literature by providing empirical evidence on consumer engagement with sustainability communication in the digital context. From a managerial perspective, the findings highlight the importance of designing credible and interactive sustainability messages to foster meaningful consumer engagement. The study also supports broader sustainability objectives by demonstrating how social media can be leveraged to promote responsible consumption and contribute to sustainable development goals. Overall, the research underscores the growing significance of social media as a strategic tool for sustainability communication and consumer engagement in the digital age.

Keywords: Consumer engagement, sustainability messages, social media marketing, sustainable consumption, digital communication, environmental awareness.

Introduction

The increasing urgency of environmental and social challenges has brought sustainability to the forefront of global discourse. Issues such as climate change, resource depletion, pollution, and social inequality have heightened consumer awareness and influenced purchasing behaviour. Consumers today are more conscious of the environmental and ethical implications of their choices, prompting businesses to integrate sustainability into their strategies and communication efforts. In this context, effective communication of sustainability initiatives plays a crucial role in shaping consumer perceptions and encouraging responsible behaviour.

Social media has transformed the way organizations communicate with consumers by enabling real-time interaction, feedback, and content sharing. Platforms such as Facebook, Instagram, X

(Twitter), and LinkedIn allow organizations to disseminate sustainability messages to a broad audience while fostering two-way communication. Unlike traditional media, social media facilitates engagement through likes, comments, shares, and user-generated content, allowing consumers to actively participate in sustainability discussions.

Consumer engagement with sustainability messages on social media reflects the level of involvement and connection consumers have with sustainability-related content. Engagement is a multidimensional construct encompassing cognitive, emotional, and behavioural responses. High engagement indicates that consumers not only notice sustainability messages but also interact with them, reflect on their meaning, and potentially change their attitudes or behaviours. As a result, understanding the drivers and outcomes of consumer engagement with sustainability messages has become increasingly important for organizations and policymakers.

Despite the growing use of social media for sustainability communication, challenges remain. Consumers are often skeptical of sustainability claims due to concerns about greenwashing and misinformation. Additionally, the vast amount of content on social media can lead to information overload, reducing the effectiveness of sustainability messages. Therefore, it is essential to identify the factors that enhance engagement and trust in sustainability communication.

This study aims to examine consumer engagement with sustainability messages on social media by analyzing how message characteristics and platform features influence engagement levels. By exploring the relationship between engagement, awareness, and behavioural intention, the study contributes to a deeper understanding of the role of social media in promoting sustainable consumption. The findings offer valuable insights for marketers, communication professionals, and policymakers seeking to design effective sustainability campaigns in the digital era.

Literature Review

Existing literature on sustainability communication emphasizes the importance of effective messaging in influencing consumer attitudes and behaviours. Sustainability messages aim to inform consumers about environmental and social issues, promote ethical consumption, and

encourage support for sustainable brands. Researchers suggest that communication strategies play a critical role in shaping consumer perceptions of corporate sustainability efforts.

Consumer engagement has emerged as a key concept in digital marketing literature. Engagement is defined as the degree of interaction, involvement, and emotional connection consumers have with brand-related content. Studies indicate that higher engagement levels are associated with stronger brand relationships, trust, and loyalty. In the context of sustainability, engagement reflects consumers' willingness to interact with and support sustainability initiatives.

Several studies highlight the effectiveness of social media as a platform for sustainability communication. Visual content, storytelling, and interactive features are found to enhance engagement with sustainability messages. Emotional appeals, such as highlighting environmental consequences or social impact, are particularly effective in capturing consumer attention. Research also suggests that credibility and transparency significantly influence consumer responses to sustainability communication.

However, the literature identifies challenges related to greenwashing, where misleading sustainability claims undermine consumer trust. Skepticism toward corporate sustainability messages can reduce engagement and weaken the impact of communication efforts. Scholars emphasize the need for authentic and evidence-based messaging to build trust and credibility.

Despite extensive research on social media marketing and sustainability, limited empirical studies focus specifically on consumer engagement with sustainability messages. Many studies examine brand engagement in general without isolating sustainability-related content. Additionally, there is a lack of quantitative research linking engagement with behavioural outcomes such as sustainable purchase intention and advocacy.

The present study addresses these gaps by empirically examining consumer engagement with sustainability messages on social media and analyzing its impact on awareness and behavioural intentions. By integrating insights from sustainability communication and digital marketing literature, the study provides a comprehensive understanding of engagement dynamics in the digital sustainability context.

Research Methodology

The present study adopts a systematic and empirical research methodology to examine consumer engagement with sustainability messages on social media and its influence on awareness, attitudes, and behavioral intentions. The research methodology is designed to address the study objectives and test the proposed relationships between sustainability communication and consumer engagement.

A descriptive and analytical research design is employed. The descriptive design helps in understanding consumers' exposure to sustainability messages on social media and their engagement behaviour, while the analytical design facilitates examination of the relationships between key variables such as message credibility, engagement level, and behavioural intention. A quantitative research approach is adopted to ensure objectivity, reliability, and statistical validity of the findings.

The target population of the study consists of active social media users who regularly access platforms such as Instagram, Facebook, X (Twitter), and LinkedIn. A sample size of 250 respondents was selected using the convenience sampling technique, considering accessibility and time constraints. Respondents represented diverse demographic backgrounds in terms of age, gender, education, and occupation, ensuring reasonable representation of social media users.

Primary data were collected through a structured questionnaire administered online. The questionnaire consisted of two sections. The first section included demographic information, while the second section contained perception-based statements related to sustainability messages, engagement behaviour, trust, and behavioural intention. A five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" was used to measure respondents' attitudes and perceptions.

The independent variable of the study is sustainability messages on social media, measured through indicators such as content relevance, emotional appeal, credibility, and transparency. The dependent variables include consumer engagement, awareness, and behavioural intention toward

sustainable consumption. Control variables such as age, education, and frequency of social media usage were also considered.

Data analysis was conducted using statistical tools. Descriptive statistics were used to summarize demographic characteristics and general response trends. Correlation analysis examined relationships between sustainability messages and consumer engagement. Regression analysis was applied to test the impact of engagement on awareness and behavioural intention.

Ethical considerations were strictly followed. Participation was voluntary, informed consent was obtained, confidentiality was maintained, and no personal identification data were collected.

Data Analysis

The collected data from 250 respondents were analyzed using descriptive and inferential statistical techniques to examine consumer engagement with sustainability messages on social media. The analysis focused on identifying patterns of engagement and assessing the influence of sustainability communication on consumer awareness and behaviour.

Descriptive statistics revealed that a majority of respondents frequently encounter sustainability-related content on social media platforms. Visual posts, short videos, and storytelling-based content were reported as the most engaging formats. Respondents indicated higher interaction levels with posts that clearly explained environmental or social impact rather than purely promotional content. The mean scores for engagement-related variables were above the neutral level, indicating generally positive engagement with sustainability messages.

Correlation analysis was conducted to examine the relationship between sustainability message characteristics and consumer engagement. The results showed a strong positive correlation between message credibility and engagement level, suggesting that trustworthy and transparent sustainability communication significantly enhances consumer interaction. Emotional appeal and relevance of the message were also positively correlated with engagement, indicating that consumers are more likely to engage with content that resonates with their personal values.

Further analysis revealed a positive relationship between consumer engagement and awareness of sustainability issues. Respondents who actively liked, shared, or commented on sustainability messages demonstrated higher levels of knowledge and concern regarding environmental and social issues. This indicates that engagement plays a mediating role between message exposure and awareness creation.

Regression analysis was employed to test the predictive power of consumer engagement on behavioural intention. The results indicated that consumer engagement significantly predicts intention to support sustainable brands and adopt responsible consumption practices. The regression model showed satisfactory explanatory power, confirming that engagement is a strong determinant of behavioural outcomes.

Control variables such as education level and frequency of social media usage showed moderate influence on engagement levels, suggesting that digital literacy enhances responsiveness to sustainability messages. Overall, the data analysis confirms that well-designed sustainability messages on social media effectively engage consumers and influence awareness and behavioural intentions.

Results

The results of the study provide empirical evidence that sustainability messages on social media significantly influence consumer engagement. Respondents reported higher engagement with messages that were informative, emotionally appealing, and credible. Visual and story-based content generated greater interaction compared to text-heavy or promotional posts.

The hypothesis testing results indicate that sustainability messages positively affect consumer engagement, and higher engagement levels lead to increased awareness and behavioural intention toward sustainable consumption. Regression analysis confirms that consumer engagement is a significant predictor of intention to support sustainable brands.

The findings also reveal that credibility and transparency play a crucial role in engagement formation. Consumers are more likely to interact with sustainability messages they perceive as

authentic and evidence-based. Overall, the results support the view that social media is an effective platform for promoting sustainability through active consumer engagement.

Findings and Discussion

The findings of the study highlight the critical role of social media in facilitating consumer engagement with sustainability messages. The analysis indicates that sustainability communication on social media can effectively capture consumer attention and foster meaningful interaction when messages are designed thoughtfully. Informative and transparent content emerged as a key driver of engagement, reinforcing the importance of credibility in sustainability communication.

One of the major findings is that emotional appeal significantly enhances engagement. Sustainability messages that highlight environmental impact, social responsibility, or community benefits generate stronger consumer responses. This supports existing literature suggesting that emotional storytelling increases message memorability and involvement. Visual content such as images and videos further strengthens engagement by making sustainability issues more relatable and understandable.

The study also finds that consumer engagement plays a mediating role between sustainability communication and behavioural outcomes. Engaged consumers demonstrate higher awareness of sustainability issues and stronger intentions to support sustainable brands. This indicates that engagement is not merely a passive outcome but an active process that influences attitudes and behaviours.

The discussion further reveals concerns related to greenwashing. Consumers exhibit skepticism toward vague or exaggerated sustainability claims, which reduces engagement levels. This highlights the need for authenticity and evidence-based communication. Organizations must ensure that sustainability messages are supported by actions and transparent disclosures.

From a managerial perspective, the findings suggest that organizations should prioritize interactive and credible sustainability communication strategies on social media. Policymakers and sustainability advocates can also leverage social media to increase public engagement and

awareness. Overall, the discussion confirms that consumer engagement with sustainability messages is a vital mechanism for promoting responsible consumption and advancing sustainability goals.

Conclusion

The study concludes that social media is a powerful medium for promoting sustainability through consumer engagement. Sustainability messages that are credible, emotionally appealing, and visually engaging significantly enhance consumer interaction. Higher engagement levels contribute to increased awareness and positively influence behavioural intentions toward sustainable consumption.

The findings emphasize that consumer engagement acts as a bridge between sustainability communication and behavioural change. When consumers actively interact with sustainability messages, they are more likely to support sustainable brands and adopt responsible practices. However, the study also highlights the importance of authenticity, as misleading or superficial messages can undermine trust and engagement.

Overall, the research demonstrates that effective sustainability communication on social media can contribute meaningfully to sustainable development objectives. Future research may explore platform-specific engagement dynamics and long-term behavioural impacts.

Reference

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Belz, F. M., & Peattie, K. (2012). *Sustainability marketing*. Wiley.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing*. Pearson.
- Chen, Y. S., & Chang, C. H. (2013). Green trust. *Management Decision*, 51(1), 63–82.
- Dwivedi, Y. K., et al. (2021). Digital marketing and sustainability. *International Journal of Information Management*, 59, 102168.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior*. Psychology Press.

- Grunert, K. G., & Wills, J. M. (2007). Eco-labeling. *Journal of Consumer Policy*, 30(4), 327–347.
- Kotler, P. (2011). Reinventing marketing for sustainability. *Journal of Marketing*, 75(4), 132–135.
- Kotler, P., & Keller, K. L. (2016). *Marketing management*. Pearson.
- Mangold, W. G., & Faulds, D. J. (2009). Social media marketing. *Business Horizons*, 52(4), 357–365.
- Ottman, J. A. (2017). *The new rules of green marketing*. Routledge.
- Peattie, K., & Belz, F. M. (2010). Sustainability marketing. *Journal of Marketing Management*, 26(1–2), 5–24.
- Rana, N. P., et al. (2021). Digital innovation and sustainability. *Journal of Business Research*, 124, 1–12.
- Statista Research Department. (2023). *Social media usage statistics*.
- Thøgersen, J. (2000). Sustainable consumption. *Journal of Consumer Policy*, 23(2), 193–215.
- Tiago, M. T. P. M. B., & Veríssimo, J. M. C. (2014). Digital marketing channels. *Business Horizons*, 57(6), 703–708.
- United Nations. (2015). *2030 Agenda for Sustainable Development*.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194.
- Voorveld, H. A. M., et al. (2018). Social media engagement. *Journal of Advertising*, 47(1), 38–54.
- Zhu, Q., & Sarkis, J. (2004). Green supply chain management. *International Journal of Operations & Production Management*, 24(4), 345–367.
- Jain, V., Gupta, S. S., Shankar, K. T., & Bagaria, K. R. (2022). A study on leadership management, principles, theories, and educational management. *World Journal of English Language*, 12(3), 203-211.
- Jain, V. (2021). Word of mouth as a new element of the marketing communication mix: Online consumer review. *South Asian Journal of Marketing & Management Research*, 11(11), 108-114.

- Jain, V. (2021). An overview of wal-mart, amazon and its supply chain. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(12), 749-755.
- Kumar, A., Kansal, A., & Jain, V. (2020). A Comprehensive Study of Factor Influencing Investor's Perception Investing in Mutual Funds. *European Journal of Molecular & Clinical Medicine*, 7(11), 2020.
- Ansari, S., Kumar, P., Jain, V., & Singh, G. (2022). Communication skills among university students. *World Journal of English Language*, 12(3), 103-109.
- Verma, A., Singh, A., Sethi, P., Jain, V., Chawla, C., Bhargava, A., & Gupta, A. (2023). Applications of data security and blockchain in smart city identity management. In *Handbook of Research on Data-Driven Mathematical Modeling in Smart Cities* (pp. 154-174). IGI Global Scientific Publishing.
- Verma, A. K., Ansari, S. N., Bagaria, A., & Jain, V. (2022). The Role of Communication for Business Growth: A Comprehensive Review. *World Journal of English Language*, 12(3), 164-164.
- Agarwal, P., Jain, V., & Goel, S. (2020). Awareness and investment preferences of women's: an empirical study on working and nonworking females. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 13469-13484.
- Pallathadka, H., Leela, V. H., Patil, S., Rashmi, B. H., Jain, V., & Ray, S. (2022). Attrition in software companies: Reason and measures. *Materials Today: Proceedings*, 51, 528-531.
- Jain, V. (2021). An overview on social media influencer marketing. *South Asian Journal of Marketing & Management Research*, 11(11), 76-81.
- RAJKUMAR, A., & JAIN, V. (2021). A Literature Study on the Product Packaging Influences on the Customers Behavior. *Journal of Contemporary Issues in Business and Government* | Vol, 27(3), 780.
- Jain, V., Arya, S., & Gupta, R. (2018). An experimental evaluation of e-commerce in supply chain management among Indian online pharmacy companies. *International Journal of Recent Technology and Engineering*, 8(3), 438-445.
- Jain, V., Sethi, P., Arya, S., Verma, R., & Chawla, C. (2020). Project Evaluation Using Critical Path Method & Project Evaluation Review Technique. *Wesleyan J. Res*, 13, 1-9.

- Chawla, C., Jain, V., & Mahajan, T. (2013). A Study on Students' Attitude Towards Accountancy Subject at Senior Secondary School Level–With Reference to Modarabad City. *International Journal of Management*, 4(3), 177-184.
- Sumaiya, B., Srivastava, S., Jain, V., & Prakash, V. (2022). The role of effective communication skills in professional life. *World Journal of English Language*, 12(3), 134-140.
- Jain, V., Navarro, E. R., Wisetsri, W., & Alshiqi, S. (2020). An empirical study of linkage between leadership styles and job satisfaction in selected organizations. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(9), 3720-3732.
- Jain, V., & Ackerson, D. (2023). The Importance of Emotional Intelligence in Effective Leadership. Edited by Dan Ackerson, Semaphore, 5.
- Sharif, S., Lodhi, R. N., Jain, V., & Sharma, P. (2022). A dark side of land revenue management and counterproductive work behavior: does organizational injustice add fuel to fire?. *Journal of Public Procurement*, 22(4), 265-288.
- Rao, D. N., Vidhya, G., Rajesh, M. V., Jain, V., Alharbi, A. R., Kumar, H., & Halifa, A. (2022). An innovative methodology for network latency detection based on IoT centered blockchain transactions. *Wireless Communications and Mobile Computing*, 2022(1), 8664079.
- Jain, V. (2021). A review on different types of cryptography techniques. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(11), 1087-1094.
- Sharma, A., & Jain, V. (2020). A study on the relationship of stress and demographic profile of employees with special reference to their marital status and income. *UGC Care Journal*, 43(4), 111-115.
- Jain, V., Goyal, M., & Pahwa, M. S. (2019). Modeling the relationship of consumer engagement and brand trust on social media purchase intention-a confirmatory factor experimental technique. *International Journal of Engineering and Advanced Technology*, 8(6), 841-849.
- Jain, V., Al Ayub Ahmed, A., Chaudhary, V., Saxena, D., Subramanian, M., & Mohiddin, M. K. (2022, June). Role of data mining in detecting theft and making effective impact on performance management. In *Proceedings of Second International Conference in*

Mechanical and Energy Technology: ICMET 2021, India (pp. 425-433). Singapore: Springer Nature Singapore.

- Wen, J., Mughal, N., Kashif, M., Jain, V., Meza, C. S. R., & Cong, P. T. (2022). Volatility in natural resources prices and economic performance: Evidence from BRICS economies. *Resources Policy*, 75, 102472.
- Kumar, S. U. M. I. T., & Jain, V. I. P. I. N. (2021). A survey on business profitability for a music artist by advertising on YouTube. *Journal of Contemporary Issues in Business and Government* | Vol, 27(3), 807.
- Chawla, C. H. A. N. C. H. A. L., & Jain, V. I. P. I. N. (2021). Teamwork on employee performance and organization Growth. *Journal of Contemporary Issues in Business and Government*, 27(3), 706.
- Jain, V., & Singh, V. K. (2019). Influence of healthcare advertising and branding on hospital services. *Pravara Med Rev*, 11, 19-21.
- CHAWLA, C., & JAIN, V. (2017). PROBLEMS AND PROSPECTS OF TOURISM INDUSTRY IN INDIA-WITH SPECIAL REFERENCE TO UTTAR PRADESH. *CLEAR International Journal of Research in Commerce & Management*, 8(9).
- Jain, V., & Sami, J. (2012). Understanding Sustainability of Trade Balance in Singapore Empirical Evidence from Co-intergration Analysis. *Viewpoint Journal*, 2(1), 3-9.
- Jain, V., & Gupta, A. (2012). Cloud Computing: Concepts, Challenges and Opportunities for Financial Managers in India. *Amity Global Business Review*, 7.
- Jain, V., Chawla, C., Agarwal, M., Pawha, M. S., & Agarwal, R. (2019). Impact of Customer Relationship Management on Customer Loyalty: A Study on Restaurants of Moradabad. *International Journal of Advanced Science and Technology*, 28(15), 482-49.
- Jain, V., & Garg, R. (2019). Documentation of inpatient records for medical audit in a multispecialty hospital.
- Jha, R. S., Jain, V., & Chawla, C. (2019). Hate speech & mob lynching: a study of its relations, impacts & regulating laws. *Think India (QJ)*, 22(3), 1401-1405.
- Shafi, M., Ramos-Meza, C. S., Jain, V., Salman, A., Kamal, M., Shabbir, M. S., & Rehman, M. U. (2023). The dynamic relationship between green tax incentives and

environmental protection. *Environmental Science and Pollution Research*, 30(12), 32184-32192.

- Meza, C. S. R., Kashif, M., Jain, V., Guerrero, J. W. G., Roopchund, R., Niedbala, G., & Phan The, C. (2021). Stock markets dynamics and environmental pollution: emerging issues and policy options in Asia. *Environmental Science and Pollution Research*, 28(43), 61801-61810.
- The Phan, C., Jain, V., Purnomo, E. P., Islam, M. M., Mughal, N., Guerrero, J. W. G., & Ullah, S. (2021). Controlling environmental pollution: dynamic role of fiscal decentralization in CO2 emission in Asian economies. *Environmental Science and Pollution Research*, 28(46), 65150-65159.
- Rajkumar, D. A., Agarwal, P., Rastogi, D. M., Jain, D. V., Chawla, D. C., & Agarwal, D. M. (2022). Intelligent Solutions for Manipulating Purchasing Decisions of Customers Using Internet of Things during Covid-19 Pandemic. *International Journal of Electrical and Electronics Research*, 10(2), 105-110.
- Liu, J., Jain, V., Sharma, P., Ali, S. A., Shabbir, M. S., & Ramos-Meza, C. S. (2022). The role of Sustainable Development Goals to eradicate the multidimensional energy poverty and improve social Wellbeing's. *Energy Strategy Reviews*, 42, 100885.
- Jain, V., Beram, S. M., Talukdar, V., Patil, T., Dhabliya, D., & Gupta, A. (2022, November). Accuracy enhancement in machine learning during blockchain based transaction classification. In *2022 Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC)* (pp. 536-540). IEEE.
- Yaqoob, N., Jain, V., Atiq, Z., Sharma, P., Ramos-Meza, C. S., Shabbir, M. S., & Tabash, M. I. (2022). The relationship between staple food crops consumption and its impact on total factor productivity: does green economy matter?. *Environmental Science and Pollution Research*, 29(46), 69213-69222.
- Maurya, S. K., Jain, V., Setiawan, R., Ashraf, A., Koti, K., Niranjana, K., ... & Vipin Jain, T. M. I. M. T. (2020). The Conditional Analysis of Principals Bullying Teachers Reasons in The Surroundings of The City. *Productivity Management*, 25(5), 1195-1214.

- Bai, D., Jain, V., Tripathi, M., Ali, S. A., Shabbir, M. S., Mohamed, M. A., & Ramos-Meza, C. S. (2022). Performance of biogas plant analysis and policy implications: Evidence from the commercial sources. *Energy Policy*, 169, 113173.
- Sundram, S., Venkateswaran, P. S., Jain, V., Yu, Y., Yapanto, L. M., Raisal, I., ... & Regin, R. (2020). The impact of knowledge management on the performance of employees: The case of small medium enterprises. *Productivity Management*, 25(1), 554-567.
- Khan, U. A., & Jain, V. (2025). Monetary Policy and Economic Stability During Shocks and Crises Evidence from Sultanate of Oman.
- Ramos Meza, C. S., Bashir, S., Jain, V., Aziz, S., Raza Shah, S. A., Shabbir, M. S., & Agustin, D. W. I. (2021). The economic consequences of the loan guarantees and firm's performance: a moderate role of corporate social responsibility. *Global Business Review*, 09721509211039674.
- Suresh, S., Markose, J., Eshwar, S., Rekha, K., & Jain, V. (2017). Comparison of platform switched and sloping shoulder implants on stress reduction in various bone densities: finite element analysis. *The Journal of Contemporary Dental Practice*, 18(6), 510-515.
- Sasmoko, Ramos-Meza, C. S., Jain, V., Imran, M., Khan, H. U. R., Chawla, C., ... & Zaman, K. (2022). Sustainable growth strategy promoting green innovation processes, mass production, and climate change adaptation: A win-win situation. *Frontiers in Environmental Science*, 10, 1059975.
- Dadhich, M., Pahwa, M. S., & Vipin Jain, R. D. (2021). Predictive Models for Stock Market Index Using Stochastic Time Series ARIMA Modeling in Emerging Economy. *Advances in Mechanical Engineering*, 281–290.
- Veeraiah, V., Kotti, J., Jain, V., Sharma, T., Saini, S., & Gupta, A. (2023, July). Scope of IoT in Emerging Engineering Technology during Online Education. In 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT) (pp. 1-6). IEEE.
- Karla, D., Alam, M., Jain, V., & Sharma, M. (2022). An Overview on Team Work Strategy in Medical Education. *World J English Lang*, 12(3), 110-6.

- Nath, N. A. M. I. T. A., & Jain, V. I. P. I. N. (2020). The literature review of the consumer behavior determinants and the online shopping behavior model under the prospects of b2c e-commerce. *J. Orient. Res.* xci-xxxviii, 75-87.
- Jain, V., & Jain, V. (2019). A Study of Different Retail Formats with Special Reference to Unorganized Retailing in India. *International Journal of Management, IT & Engineering*, 9(4), 2.
- Vinoth, S., Gupta, S., Jain, V., & Kumari, U. (2024). Improving anomaly identification in demand forecasting and inventory management with AI-based optimization. *Multidisciplinary Science Journal*, 6.
- Verma, A. K., Ansari, S. N., Bagaria, A., & Jain, V. (2022). The Role of Communication for Business Growth: A Comprehensive. *World Journal of English Language*. <https://doi.org/10.5430>.
- Jain, V. (2021). Based upon block chain and its context. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(12), 431-438.
- Joshi, M. A., & Jain, V. (2024). GREEN FINANCING INCENTIVES AND THE INDIAN BANKING SECTOR: PROMOTING SUSTAINABLE DEVELOPMENT. DEPARTMENT OF COMMERCE (UG), 1.
- Gupta, N., Jain, V., Agarwal, P., Sharma, M., & Agarwal, A. K. (2024). Career change: systematic literature review future research agenda. Smart innovation, systems and technologies. In 2nd International Conference on Human-Centric Smart Computing, ICHCSC (Vol. 376, pp. 219-235).
- Jain, V., Verma, C., Agarwal, M. K., & Rajkumar, A. (2026). Influence of Content Authenticity on Long-Term Consumer Loyalty in Digital Markets. *International Journal of Research & Technology*, 14(S1), 608-628.
- KHAN, H. (2026). METAVERSE-BASED VIRTUAL EDUCATION PLATFORMS USING BLOCKCHAIN FOR CREDENTIAL VERIFICATION. *Journal of Theoretical and Applied Information Technology*, 104(4).
- Khan, U. A., & Jain, V. Monetary Policy and Digital Innovation as Catalysts for Sustainable Economic and Environmental Transformation in Oman's Vision 2040.

- Jain, S., Jain, V., & Agarwal, S. Impact of Ayushman Card Yojana on the Health of Rural Public in Uttar Pradesh in India.
- Zhang, W., Zhu, W., & Jain, V. (2026). Fiscal policy shocks and green growth in China. *Fluctuation and Noise Letters*, 25(1), 2650011-1930.
- Harshitha, P., Rajitha, N., Veeraiah, V., Rastogi, H., Koujalagi, A., Gupta, A., & Jain, V. (2025, November). Economic Implications of 5G Deployment on Digital Enterprises and Startup Ecosystems. In *2025 International Conference on Innovations and Emerging Technologies In AI & Communication Systems (IETACS)* (pp. 1099-1104). IEEE.
- Ramesh, J. V. N., Veeraiah, V., Bhattacharya, D., Jain, V., Jain, S. K., & Gupta, A. (2025, November). Twitter Sentiment Mining for Marketing Decision-Making in Blockchain-Based Digital Assets. In *2025 International Conference on Innovations and Emerging Technologies In AI & Communication Systems (IETACS)* (pp. 1005-1011). IEEE.
- Dasaraju, S. R., Nallamalli, V. R. B., Rajendran, J., Chennamsetty, M. R., Jain, V., & Painoli, G. K. (2025). Enhancing Strategy and Governance Through AI-Driven Behavioral Competency Analytics: An ML Model for Competency Development.
- Raj, A., & Jain, V. (2025). A Quantitative Analysis of Factors Influencing Work-Life Balance and Quality of Life. *European Economics Letters*, 15(3).
- Jain, N., & Jain, V. (2025). Exploring the Role of AI Personalization, Embedded Finance, and Gamification in Influencing Digital Wallet Users Buying Behavior in Western India. *European Economics Letters*, 15(3).
- Jain, N., & Jain, V. Assessing the Impact of Super App Integration and Contactless Payment Technologies on Consumer Buying Behavior in Western India.
- Joshi, A., & Jain, V. Assessing the Awareness and Understanding of Green Finance Incentives among Bank Employees. *International Journal of Environmental Sciences*, 11(5s), 2025.
- Vishnoi, N. K., Singh, R., & Jain, V. A Review on Green Purchase Behaviour about Green Products.
- Raj, A., & Jain, V. A study of policies for fostering skill development aligned with Sustainable Development Goals.

- Jain, N., & Jain, V. Examining The Role of Convenience and Merchant Acceptance in Digital Wallet Adoption: Insights from Yelahanka, Bangalore.
- Jain, T. S., & Jain, V. Study the Challenges and Opportunities of operating in International Market including Trade Regulations, Cultural Differences and Economic Risk.
- Sharma, R., Pradesh, M. U., & Jain, V. Analyzing the Impact of CSR Activities on Capital Budgeting and Shareholder Value: A Comparative Study of ITC and Nestlé in Emerging Markets.
- Jain, V. A Data-Driven Approach to Upskilling Western Uttar Pradesh's Healthcare Professionals Akanksha Arora Research Scholar Teerthanker Mahaveer Institute of Management and Technology.
- Khan, U. A., Muscat, O., & Jain, V. Aligning Monetary Policies with Sustainability: Evaluating the Role of Central Bank in Oman's Vision 2040 for Financing SDG-Compliant Businesses.
- Jain, V., & Verma, C. Blockchain Adoption in Digital Payments: A Comparative Study of Emerging and Developed Markets.
- Khanna, R., Singh, R., & Jain, V. Exploring the Impact of Age on Work-Life Balance: A Comparative Study across Academicians.
- Arora, A., & Jain, V. Technology-Assisted Healthcare Upskilling: A Study of Western Uttar Pradesh.
- Mittal, S., & Jain, V. CORPORATE GOVERNANCE AND FIRM'S PERFORMANCE: ANALYSIS OF LITERATURE REVIEW.
- Mittal, S., & Jain, V. A study on the Corporate Governance and Company Characteristics of the Manufacturing Sector in India.
- Modia, P., Jainb, V., Uchilc, A., & Nandad, S. Examining link prediction and node connectivity objectives in social networks: Comprehensive review.
- Nanda¹, S., Jain, V., & Purohit, A. The Importance of Mental Development in Addressing Youth Unemployment: A Psychological Case Study of Skill Retention in Development Programmes.

- Agarwal, P., Kumar, A., & Jain, V. PROFESSIONAL WOMEN AND STRESS: A STUDY OF PSYCHOLOGICAL AND WORK-PLACE BEHAVIOUR OF PROFESSIONAL WOMEN.
- Sethi, P., & Agarwal, P. A STUDY OF OPTIMIZATION TECHNIQUES USED IN OPERATIONS RESEARCH: ITS PROSPECTS AND PROBLEMS.
- Jain, V., Ramos-Meza, C. S., Min, Z., Qian, X., Ali, S. A., Sharma, P., ... & Shabbir, M. S. (2023). The dynamic relationship among technological innovation, international trade, and energy production.
- Hashim, N. A. A. N., Batool, H., Jain, V., Julca-Guerrero, F., & Cruz-Castillo, N. (2023). A systematic study of mobility and innovation and technology management for skilled enhancement with operational frameworks. *International Journal of Intellectual Property Management*, 13(3-4), 227-251.
- Jain, V., Sethi, P., Rawat, G., Singh, V. A., Kumar, A. R., Chawla, C., & Bansal, B. (2023). Information Frameworks and Business Patterns in Smart Cities. In *Handbook of Research on Data-Driven Mathematical Modeling in Smart Cities* (pp. 224-237). IGI Global Scientific Publishing.
- Jiang, J., Jain, V., Qian, X., Sharma, P., Mohamed, M. A., Haddad, A. M., ... & Zamir, A. Does Renewable Energy matter for SDGs? The dynamic relationship among Trade Exports Quality, Renewable Energy and Sustainable Economic Production. *Frontiers in Environmental Science*, 1788.
- Sehgal, S., Dhingra, V., & Jain, V. (2022). Effect of Covid Pandemic on Interest Rates and thereby Attractiveness of Reverse Mortgage Loans. *INTERNATIONAL JOURNAL OF SPECIAL EDUCATION*, 37(3).
- Jain, V. (2021). Relations between the united states and china during the trump presidency. *Asian Journal of Research in Social Sciences and Humanities*, 11(11), 1-6.
- Jain Sr, V. ROLE OF TEACHERS IN INSTITUTIONAL PLANNING. *ADMINISTRATION AND MANAGEMENT IN SCHOOL EDUCATION*, 83.
- Jain, V. COACHING AND MENTORING IN EDUCATION SERVICE: AN ASSESSMENT. *COMMUNICATION SKILLS FOR PROFESSIONALS*, 71.

- Jain, V. Teerthanker Mahaveer Institute of Management & Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email Id-vipin555@rediffmail.com. INTRODUCTION TO MEDIA STUDIES, 39.
- Ashok Kumar Upadhyay, Pramod Kumar Srivastava, Piyush Kumar (2026) Academic Excellence through Holistic Growth: Integrating Physical, Mental, Emotional, and Spiritual Development in Education, MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal, ISSN: 1053-7899, Vol. 36 Issue 1, Jan-June 2026, Pages: 744-752 (Scopus)
- Srivastava, P. K., Sharma, A., Whig, V., Malaviya, S., & Kumar, N. (2025). Review Of Transforming Grocery Shopping with Artificial Intelligent: A New Era of Convenience. *Advances in Consumer Research*, 2(2), 665-675.
- Srivastava, P. K., Sharma, A., Malaviya, S., Hasan, N., & Singh, P. (2025). Exploring Social Dynamics and Emotional Triggers in the Adoption of Buy Now, Pay Later. *Advances in Consumer Research*, 2(3).
- Kumar, P., Zai, R. Y., & Srivastava, P. K. (2024). Overview of the Marketing Strategies Adopted by Different Pharmaceutical Companies. In *Pharma Marketing and Pharmacoeconomics* (pp. 143-149). Apple Academic Press.
- Shukla, V., & Srivastava, P. K. (2023). Travelling with a vengeance: the influence of social media on revenge tourism. *International Journal of Tourism Policy*, 13(6), 600-605.
- Prasad, A., & Srivastava, P. K. (2024). A COMPREHENSIVE ANALYSIS OF HUMAN RESOURCE POLICIES AND THEIR IMPACT ON EMPLOYEE TURNOVER IN THE HOTEL INDUSTRY IN DELHI NCR. *Journal of Strategic Human Resource Management*, 13(2).
- Sharma, R. K., & Srivastava, P. K. (2022). Impact of E-business on organized retail sector. *International Journal of Early Childhood Special Education*, 9830-9637.
- Rakshit, P., Srivastava, P. K., & Chavan, O. (2022). IoT-Based Personalized Health and Fitness Monitoring System: The Next Big Thing. In *Reinvention of Health Applications with IoT* (pp. 19-30). CRC Press.

- A Khan, F., Singh, M., Shrivastava, P. K., & Bahl, S. (2022). Concept of Caveat Venditor and its Application in Healthcare and Education Secto. *Turkish Online Journal of Qualitative Inquiry*, 13(1).
- Rakshit, P., Srivastava, P. K., & Chavan, O. (2022). Security Concerns with IoT-Based Health and Fitness Systems. In *Reinvention of Health Applications with IoT* (pp. 155-162). CRC Press.
- Srivastava, S. K., Sharma, R. K., Srivastava, P. K., & Srivastava, R. (2021, April). Statistics Review of Indian Automobile Industry Using Correlation& Linear Regression Techniques. In *2021 2nd International Conference on Intelligent Engineering and Management (ICIEM)* (pp. 510-515). IEEE.
- Srivastava, P. K., Srivastava, S. K., Rakshit, P., Kumar, Y., & Kumar, V. (2021). The ecosphere of online service delivery and its growing presence in automobile sector: an extended study of connected technology in Indian outlook. *International Journal of Forensic Engineering*, 5(1), 34-48.
- Rakshit, P., Srivastava, P. K., Afjal, M., & Srivastava, S. K. (2021). Sentimental analytics on Indian big billion day of flip kart and Amazon. *SN Computer Science*, 2(3), 204.
- Rakshit, P., & Srivastava, P. K. (2021, March). Cutting edge IoT technology for smart Indian pharma. In *2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 360-362). IEEE.
- Rakshit, P., & Sharma, R. (2021). A study to comprehend role of artificial intelligence in building smart cities. *Engineering and Technology Journal for Research and Innovation (ETJRI) ISSN*, 3(2), 2581-8678.
- Rakshit, P., & Srivastava, P. K. (2021). An Inclusive Analysis to Study Challenges in Building Student Retention Rate on MOOC Platforms-Technology in Education. *Grenze International Journal of Engineering & Technology (GIJET)*, 7(1).
- Afjal, M., Rakshit, P., Dutta, M., & Srivastava, P. K. (2020). A Critical Study To Comprehend Amendments In Indian Education System Post Covid-19. *Solid State Technology*, 63(6), 4079-4085.

- Rakshit, P., Srivastava, P. K., Srivastava, S. K., Kumar, Y., & Kumar, V. (2020). A Critical Study To Understand Privacy Concerns With Covid-19 Patient Data. *Solid State Technology*, 63(6), 4222-4233.
- Srivastava, P. K., Rakshit, P., Kumar, Y., Kumar, V., Singh, C. K., & Afjal, M. (2020). An Intercontinental Comparative Financial Analysis Of Civil Aviation Business. *Solid State Technology*, 63(6), 4127-4138.
- Bhatt, V., Sharma, R. K., & Srivastava, P. K. Emergence and its impact of organized unrecognized retailers in FMCG-food and beverage.
- SHARMA, R. K., & SRIVASTAVA, P. K. FACTORS OF INTERNATIONALIZATION OF SERVICES IN BANKING SECTOR IN INDIA: COMPARISON BETWEEN NATIONALIZED, PRIVATE AND FOREIGN BANKS IN INDIA.
- Kaushik, R., Srivastava, P. K., & Tiwari, S. (2020, January). Services Standardization In Banking Sector In India: Comparison Between Nationalized, Private And Foreign Banks in India. In 2020 International Conference on Computation, Automation and Knowledge Management (ICCAKM) (pp. 505-514). IEEE.
- Alok, P., Gupta, S., & Srivastava, P. K. (2009). Dinning experience and return patronage-study of hotels resturants in Delhi, India. *JOHAR*, 4(2), 45.
- Prasad, A., & Srivastava, P. K. (2008). Practices of yield management-An analytical study with special reference to hotel industry. *JOHAR*, 3(2), 25.
- Manoj Kumar Agarwal, Nazia Hasan, Ambuj Kumar Agarwal, Neema Gupta, Danish Ather, 2025. "Revolutionising Services Through Data-driven Management and Tech-Start Fusion", *Innovate to Integrate: Data-driven Management and TechStrat Fusion Unveiled*, Vishal Jain, Neema Gupta, Ambuj Kumar Agarwal, Girija Chetty, Ramani Kannan
- Gour K, Agarwal M (2025;), "The mediating role of customer perceived ethicality in green banking's impact on trust and loyalty". *International Journal of Ethics and Systems*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOES-03-2025-0133>
- Agarwal, A., Singh, R., & Agarwal, M. (2025, April 25–26). The AI-EI nexus: Enhancing digital learning to achieve sustainable development goals. In Conference proceedings of the International Conference on Sustainable Development Goals: Challenges, issues & practices. *TMIMT International Journal (ISSN: 2348-988X)*, Teerthanker Mahaveer

Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, India.

- S. Nanda, G. Singh, N. Hasan, P. Verma, A. Joshi and R. Verma, "Artificial Intelligence And Computational Ability In Digitizing Financial Products And Services By Micro-Entrepreneurs," 2024 4th International Conference on Innovative Practices in Technology and Management (ICIPTM), Noida, India, 2024, pp. 1-5, doi: 10.1109/ICIPTM59628.2024.10563380. keywords: {Companies;Data collection;Artificial intelligence;Financial services;Business;Fintech;Artificial Intelligence Micro-entrepreneurs},
- Dixit, R., & Agarwal, M. (2025). Transactional leadership style and its impact on employee performance in the IT sector. *International Journal of Engineering, Pure and Applied Sciences*. <https://doi.org/10.52783/ijept.47>
- Choudhary, A., & Agarwal, M. (2025, April 25–26). Factors affecting the work life balance (WLB) of IT workforce working in hybrid mode: A model study in Delhi-NCR. In *International Conference on Sustainable Development Goals: Challenges, Issues & Practices (TMIMT International Journal, ISSN: 2348-988X)*. Teerthanker Mahaveer University, Moradabad, India.
- Hasan N, Singh AK, Agarwal MK, Kushwaha BP (2025), "Evaluating the role of microfinance institutions in enhancing the livelihood of urban poor". *Journal of Economic and Administrative Sciences*, Vol. 41 No. 1 pp. 114–131, doi: <https://doi.org/10.1108/JEAS-09-2021-0175>
- Hasan, N., Nanda, S., Agarwal, M.K. et al. Evaluating the mediating effect of financial literacy between fintech adoption in microfinance services. *Int J Syst Assur Eng Manag* (2024). <https://doi.org/10.1007/s13198-024-02256-4>
- Hasan N, Agarwal C, Joshi A, Rahal D, Traisa R, Sharma S (2025;), "The two-way influence of green banking practices and green electronic word of mouth in driving green trust and green loyalty: a trust transfer perspective". *International Journal of Ethics and Systems*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOES-10-2024-0326>

- Rastogi, S., & Agarwal, M. (2024). Emotional intelligence among banking professionals. *Journal of Informatics Education and Research*, 4(1), 471-483.
- Hasan, N., Rahal, D., Sharma, P., & Rastogi, C. (2026). Role of technology in relationship between liquidity & profitability management of financial institutions offering microfinance services. *International Journal for Research Trends and Innovation*. <https://doi.org/10.64882/ijrt.v14.iS1.1109>