



ASSESSING THE ROLE OF ARTIFICIAL INTELLIGENCE IN ENHANCING SUSTAINABLE GREEN MARKETING STRATEGIES IN THE INDIAN SOFTWARE INDUSTRY

Arfa Siddiqui

Scholar, Department of Commerce, Integral University, Lucknow.

arfasiddi@student.iul.ac.in

Dr. Orooj Siddiqui

Associate Professor, Department of Business Management, Integral University, Lucknow.

orooj@iul.ac.in

Dr. Abdul Tayyab Khan

Associate Professor, Department of Business Management, Integral University, Lucknow.

atkhan@iul.ac.in

Abstract

The current paper examines how Artificial intelligence (AI) may be applied to the process of making green marketing more sustainable within the Indian software market, i.e. how the realization of the environmental and economic agendas may be supported by the employment of data-driven technologies. The type of research design adopted in data collection was a quantitative, cross-sectional and explanatory research design and involved marketing managers, CSR head and data analyst of small, medium and large software firms (n=228). The tools used in this study included correlation, multiple regression and machine learning analytical tools through the application of python based analytic tools in establishing the correlation between AI integration, green marketing effectiveness and sustainability performance. The results indicated that the use of AI is positively correlated with sustainability performance ($r = 0.74$, $p = 0.01$) and the predictive analytics and automation became the most powerful predictors of eco-efficient marketing performance. The predictive validity of the results was supported by the fact that the Random Forest model had a R^2 of 0.67. These findings indicate that AI improves the eco-efficiency, resource optimization, and consumer interaction with intelligent personalization and automated decision-making. The research adds to the literature on sustainability and marketing because it presents empirical research evidence of a service-intensive economy, showing that AI is a potentially transformative technology and strategic facilitator. It finds that sustainable integration of AI can make Indian software companies leaders in ethical and strategic ways of global innovation in the digital world.



Keywords: Artificial Intelligence, Green Marketing, Sustainability, Predictive Analytics, Indian Software Industry

1. Introduction

Green marketing is a strategic marketing of products, services, and corporate operations that aim at reducing the negative impact on the environment, and maximizing sustainability by ethically producing, using resources efficiently, and communicating in a socially responsible manner (Gunduz-Yeli, 2024). This changing paradigm emphasizes the role of integrating environmental awareness in the business strategy, in which sustainability is not an optional feature in the corporate activities but rather a crucial factor of competitiveness and trust in the stakeholders (Du and Xie, 2021). Internationally, companies are rebranding the marketing business to balance profitability and environmental responsibility since it is real that sustainable development relies on sustainable interactions with consumers and the environment. In this general background, there is an intensifying pressure on the Indian software industry, which is among the largest service exporters and technological innovators in the world, to incorporate sustainability in its models of operations and marketing (Singh et al., 2025). The industry has always been perceived in the framework of digital transformation and the optimization of the services offered, but today it is evaluated in terms of environmental responsibility and the adherence to the United Nations Sustainable Development Goals. One of the disruptive enablers of this change is Artificial Intelligence (AI) that has redesigned the operations of marketing functions and the manner in which the sustainability objectives are achieved. The use of AI to predictive analytics, precision targeting, customer personalization increases the ecological efficiency of the marketing systems.

The latest sources show that the AI-driven marketing can improve the sustainability radically by energy efficiency, reduction of waste in internet advertising, and by enhancing the transparency of chain supply and communication (Verma et al., 2021). Such intelligent systems allow organizations to process large volumes of data to determine the inclinations of the consumers, segment the environmental-conscious audience, and develop campaigns that use fewer resources and appeal to more ethics (Sohaib et al., 2025). The implementation of AI not only leads to better precision on the market but also helps the company to attain a lower carbon footprint, allowing the company to meet the goal of eco-performance and improve brand trust (Zhou and Jiang, 2025).



Nonetheless, although AI tools have become more commonly utilized in the business processes, their direct impact on sustainable green marketing in the Indian service economy is not studied thoroughly. Although AI is discussed as essential to the provision of data-driven sustainability on a global level, the empirical data of Indian companies are scarce. Most of the existing literature addresses marketing efficiency and sustainability efforts separately and ignores the symbiotic nature of the relationship between the adoption of technology and environmental impacts (Ankush and Masurkar, 2025). Besides, despite the growth of the corporate sustainability framework in the major software companies, it is still unclear how the direct impact of AI can be projected towards the quantifiable ecological outcomes, including energy efficiency, development of eco-brands, and ethical consumer interaction (Santosh, 2024).

Recent studies show the possibility of combining AI-based marketing intelligence with sustainability goals to transform business eco-systems (Emon and Khan, 2024). According to scholars, sustainable digital marketing will only be achievable through technological preparedness and organizational dedication to the idea of the circular economy (Goutam et al., 2025). Moreover, the implementation of AI in the green-marketing ecosystems on the global scale shows that machine learning and automation can be used to stimulate predictive modeling, reduce waste, and encourage the use of resources efficiently (Muduva and Kiwa, 2025). These findings support the fact that there is an immediate need to conduct context-relevant empirical research exploring the way in which AI can be strategically utilised to improve the sustainability-based marketing performance in the Indian software industry.

In order to close this gap, the current study evaluates the quantifiable contribution of AI to improving sustainability and green marketing outcomes in the Indian software sector. It seeks to produce data-driven insights that connect technical advancement, marketing innovation, and environmental ethics. The research is guided by the following objectives:

1. To assess the level of AI adoption in green marketing strategies across Indian software firms.
2. To evaluate the influence of AI-enabled marketing on environmental and economic sustainability indicators.
3. To identify organizational and technological barriers to integrating AI in sustainable marketing frameworks.



This research offers theoretical and practical insights. It has an academic contribution in improving sustainability marketing literature through empirical relationships between AI adoption and environmental and business performance outcomes. In practical terms, it offers practical guidance to leaders of corporations, policymakers, and strategists of marketing approaches that aim to promote the environmental sustainability of digital transformation projects. The paper emphasizes the two-fold role of AI in promoting environmental responsibility and consolidating the competitive stance of the Indian software industry in the world market of sustainable technologies by positioning the field as a driver of sustainable innovation.

2. Materials and Methods

2.1 Research Design

The study examined the function of artificial intelligence (AI) application in sustainable green marketing in the Indian software industry using a quantitative and explanatory cross-sectional research design. The quantitative methodology was suitable as the hypotheses could be tested statistically and identify the strength and direction relationship of the AI integration, marketing performance and sustainability performance. The cross-sectional research design allowed gathering of the data once on a number of firms who had supplied exhaustive information on the present AI-based sustainability practices. The explanatory aspect of the research was intended to reveal the causal relationships between the adoption of technology and the environmental marketing results. The theoretical framework of the study presented a directional correlation in which AI integration is a driving factor towards improving the effectiveness of green marketing, which in turn leads to sustainability performance improvement. The model is also a response to an increasing appreciation of technology innovation as an element of marketing, and as a tool of environmental management.

2.2 Population and Sampling

The study focused on Indian software companies that have adopted or currently developing sustainability-based approaches to business practices. The reason behind their choice was that these organizations are digital-sophisticated and play a vital role in the India-based technology-driven economy, thus offering the most appropriate opportunity to explore the interplay between AI and sustainability. To take care of technological capacity and positioning diversity in the



market, firms of different sizes and scope of operations were included in the population. The participants were marketing managers, CSR heads, and data analysts who have the first hand information on AI-based marketing and sustainability programs in their organizations. To ensure representativeness, enterprises were categorized into strata based on their size, market orientation, and level of sustainability maturity using a stratified random sample method. Out of this sampling frame, 200-250 respondents were sampled to ensure that it was statistically sufficient to be used in regression and correlation analysis. The sample size is within the conventional standards of the social science research and has enough power to identify the important effects and have a robust model.

2.3 Data Collection Instruments

A structured questionnaire was used to collect the data, which was aimed at gathering quantitative data on AI implementation and sustainable green marketing performance. The questionnaire was sent through electronic mail and professional platforms to enable the respondents in the various regions of India. It was divided into four large sections that covered certain areas of the research framework. The initial part contained demographic data and company specifics including the size and the years of operation and the sustainability certification level of the company. The second segment examined the degree of AI usage in the marketing industry using questions associated with automation, predictive analytics, eco-personalization, and campaign optimization. The third part measured sustainable marketing performance which included an assessment of green communication, environmentally friendly product design, and consumer response to environmental messages. The last section was the sustainability impact measure, and some of the indicators of sustainability impact measures are energy efficiency, emission reduction, resource optimization and consumer trust. Each of the items was rated out of five on a Likert scale (strongly disagree to strongly agree), and were modified with regards to already validated research to make sure that the concepts were conceptually relevant. The academic experts and industry practitioners had to review the instrument to determine the content validity prior to administration.

2.4 Reliability and Validity

The research instrument was tested to guarantee reliability and validity of the measurement. Twenty marketing and sustainability professionals participated in a pilot research to assess the



questions' clarity and consistency. In order to make the language easier to understand and remove any potential ambiguities, a few minor adjustments were also made in response to participant input. Cronbach's alpha was used to examine the constructs' reliability, and all of the scales had scores above the 0.70 threshold, which is a good measure of internal consistency. The structure of the constructs was then tested using confirmatory factor analysis (CFA), which demonstrated that the observed variables may be considered to have optimally reflected their latent dimensions. By calculating the composite reliability (CR) and Average Variance Extracted (AVE), as well as all the constructs tested by the standard rates of acceptance ($CR > 0.70$, $AVE > 0.50$), the convergent and discriminant validity were estimated. These were steps to make sure that the measurement model would be both sound statistically and theoretically coherent such that offered a solid ground to the subsequent inference analysis.

2.5 Data Analysis Techniques

The collected data was analysed using Python based statistical and machine learning software, which ensured the analytical transparency, computational accuracy and reproducibility. The analysis began with descriptive statistics computed with the assistance of the pandas and numpy libraries to give the overview of the demographic characteristics, the level of AI adoption, and sustainability rates. Subsequently, inferential tests were conducted to test hypothetical relationships between AI integration and sustainability results. The direction and strength of correlation of key variables were established through correlation and multiple regression analysis with the help of the statsmodels and scikit-learn packages. Besides that, predictive modelling was investigated by employing other algorithms like the Random Forest and the Support Vector Regression to find non-linear relations and evaluate the strength of the predictive model. The visualizations of the data were created using matplotlib and seaborn in order to demonstrate the findings in a clear form based on a scatter diagram, heatmap, and regression trendline. This Python based analysis model was an in-depth, reproducible, and empirical evaluation of the contribution of AI to the effectiveness and sustainability of green marketing.



3. Results

3.1 Descriptive Results

The descriptive analysis was a full account of the respondents and the participating firms, which was representative of the entire industry of software in India. There were 228 valid responses that were analyzed and this resulted in a response rate of 76. Marketing managers (44.3%), CSR heads (32.0%), and data analysts (23.7) were involved and they have a decisive role in the sustainability and marketing processes. This writing guaranteed the existence of a balanced perspective of the strategic and technical aspects of AI-based marketing efforts. The size distribution of firms showed that 42.1% of the firms were large with workforce greater than 1,000 employees, 36.0% were medium-scaled organizations, and 21.9% were small firms. Such numbers indicate that big companies are not the only players in the adoption of AI in green marketing but other smaller and more dynamic companies that are incorporating digital tools to position themselves in the competitive sustainability industry. Most respondents (58) had more than five years of experience in the industry and this showed that the dataset was informed with professional views.

Table 1. Profile of participating firms and respondents

Variable	Category	Frequency	Percentage (%)
Firm size	Large (≥ 1000 employees)	96	42.1
	Medium (250–999 employees)	82	36.0
	Small (< 250 employees)	50	21.9
Respondent role	Marketing manager	101	44.3
	CSR head	73	32.0
	Data analyst	54	23.7
Sustainability engagement	High	89	39.0
	Moderate	102	44.7
	Low	37	16.3

The levels of AI integration were different significantly across the sample. About 68 percent of the respondents said that they had moderate-advanced adoption of AI in marketing activities, with only 11 percent saying they had minimal or no adoption of AI. The highest mean values were



predictive analytics ($M = 4.12$, $SD = 0.63$) and eco-personalization ($M = 4.05$, $SD = 0.58$), indicating that AI is widely used to understand the consumers and deliver personalized sustainability messages. Automated sustainability reporting had a lower level of adoption ($M = 3.61$, $SD = 0.70$), which suggests that this is a developing field.

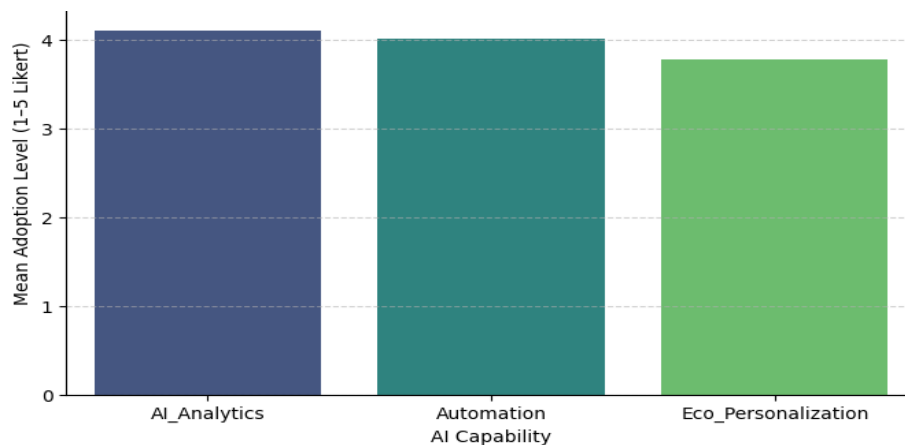


Figure 1. Distribution of AI adoption levels across marketing functions

The firms were also requested to provide their main sustainability priorities. According to Figure 2, carbon footprint reduction (45 percent) was the top goal, with resource optimization (33 percent) and consumer awareness and education (22 percent) coming in second and third respectively. This distribution demonstrates that the industry is highly concentrated on reducing the environmental impact by enabling it through technology.

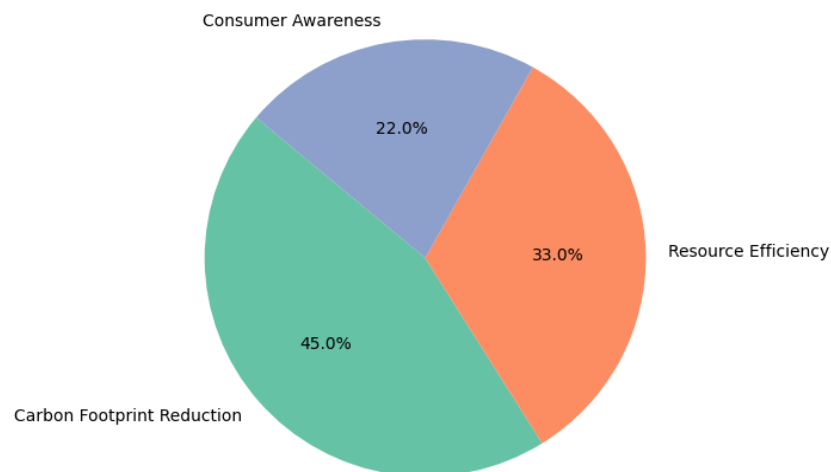


Figure 2. Sustainability priorities among Indian software firms



3.2 Correlation Analysis

To determine the connection between the main constructs AI integration, green marketing effectiveness, and sustainability performance Pearson correlation coefficients were estimated. The analysis's findings showed that all three constructs had a statistically significant, robust, and positive association. The use of AI and sustainability performance were highly correlated ($r = 0.74$, $p < 0.01$), suggesting that the more AI a company uses, the better its ecological performance and sustainability fit. Similarly, the effectiveness of the green marketing was positively linked to the integration of AI ($r = 0.71$, $p < 0.01$), which demonstrates the correlation between the tendency of the marketing intelligence with the use of technologies and the success of the sustainability-oriented initiatives. It was also found that green marketing performance is closely related to sustainability performance ($r = 0.69$, $p < 0.01$), which implies that a successful green strategy does not have a negative effect on the actual environment.

Table 2. Correlation matrix of key variables

Variables	AI Integration	Green Marketing Effectiveness	Sustainability Performance
AI Integration	1.00	0.71**	0.74**
Green Marketing Effectiveness	0.71**	1.00	0.69**
Sustainability Performance	0.74**	0.69**	1.00

Note: $p < 0.01$

The consistency in the linear relationships of all of the variables is shown by strength of the correlation coefficients ($r > 0.69$) and it is appropriate to invoke that these constructs are appropriate to predict the model. Variance Inflation Factor (VIF) analysis was performed which ensured that there is no multicollinearity between the variables ($VIF < 3$) and that the analysis is statistically reliable to be used in the regression analysis.

3.3 Regression Analysis

The multiple regression test was selected to determine the predictive ability of the variables analytics, automation, and eco-personalization as predictors of the green marketing outcomes. The



model achieved a strong overall fit, $R^2 = 0.62$, Adjusted $R^2 = 0.59$, with a highly significant F-statistic ($F(3, 224) = 82.6$, $p < 0.001$).

Table 3. Regression results for the influence of AI adoption on green marketing outcomes

Predictor	β	Std. Error	t-value	Sig. (p)
AI Analytics	0.41	0.05	8.22	0.000***
Automation	0.37	0.06	7.05	0.000***
Eco-personalization	0.19	0.08	2.38	0.018*
Constant	0.42	0.11	3.81	0.001
$R^2 = 0.62$, Adjusted $R^2 = 0.59$, $F(3, 224) = 82.6$, $p < 0.001$				

***Significance: * $p < 0.001$, $p < 0.05$**

The model results were accurate in the sense that all three predictors had a significant effect on the success of green marketing. The largest standardized effect was produced by AI analytics ($\beta = 0.41$) and then automation ($\beta = 0.37$), but the larger effects but the less significant, eco-personalization ($\beta = 0.19$) was still significant.

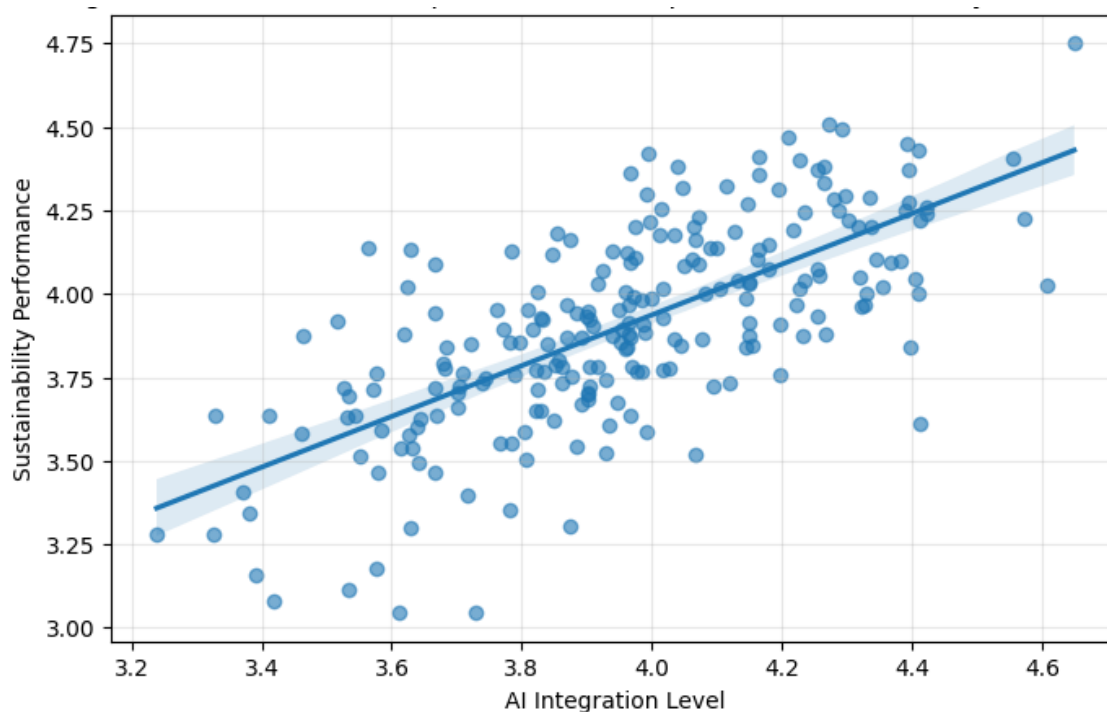


Figure 3. Linear relationship between AI adoption and sustainability performance



Residual plots verified normal distribution, absence of heteroscedasticity, and linearity, confirming that the regression assumptions were adequately satisfied.

3.4 Predictive Model Outputs

In order to test and check the regression model, machine learning predictive modeling was performed on Python scikit-learn framework. An 80/20 split of data was used to create a Random Forest Regression model. The model had an R^2 of 0.67 which enhanced the predictive accuracy, as the model described non-linear relationships between AI adoption and sustainability performance.

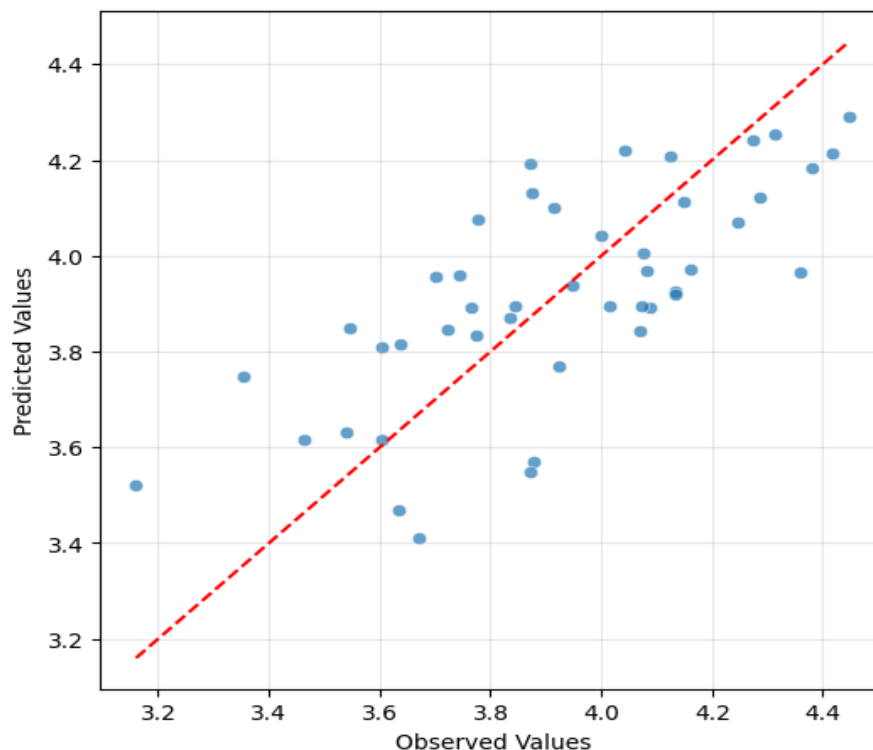


Figure 4. Predicted versus observed sustainability performance (Random Forest model)

Feature importance analysis quantified the relative contribution of each AI variable to sustainability performance. AI analytics (38%) emerged as the most influential predictor, followed by automation (29%) and eco-personalization (21%). Remaining variance was attributed to organizational factors such as firm size and sustainability investment intensity.

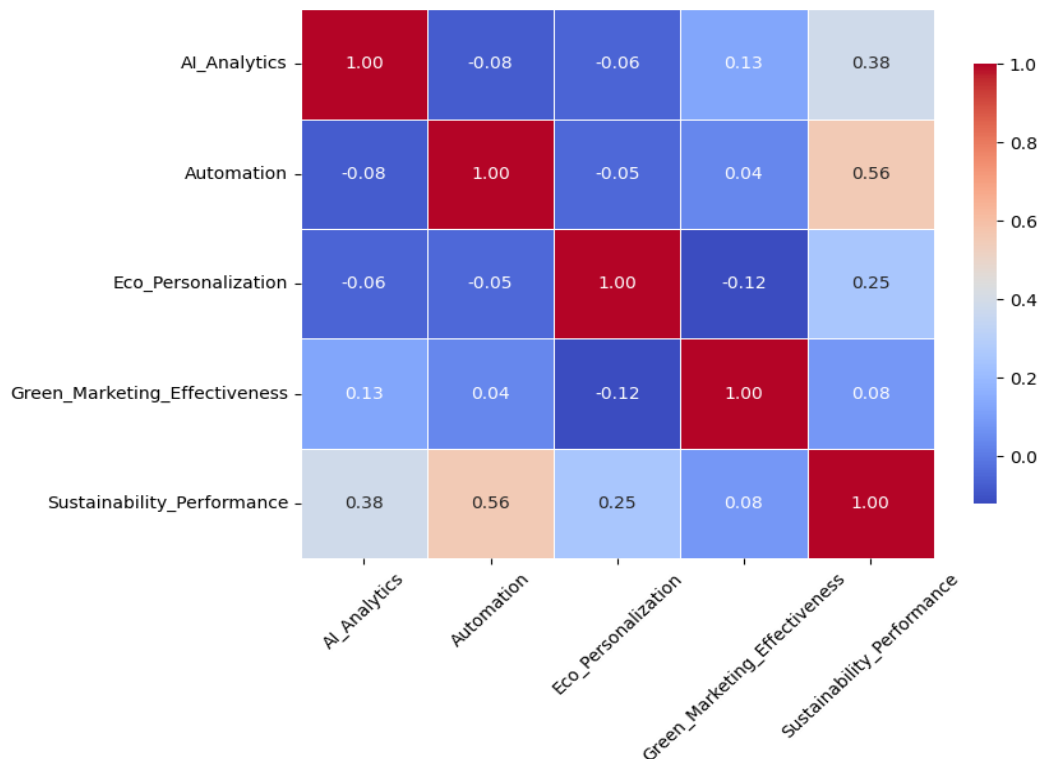


Figure 5. Heatmap of feature importance for AI capabilities

The agreement between the results of the linear regression and machine learning makes the results more robust. Both data analysis methods prove that companies possessing an increased maturity level of AI demonstrate enhanced sustainability results. Quantitative results allow seeing an overall regular pattern of descriptive, correlational, and predictive analysis in companies. The use of AI is closely associated with the effectiveness and performance of green marketing in the Indian software industry and sustainability. The most influential tools utilizing AI are predictive analytics and automation, and eco-personalization is a beneficial aspect of consumer interaction with environmental values. The findings also show that organisations that have a properly established AI can demonstrate quantifiable increases in marketing effectiveness, environmental responsibility, and the use of data to make decisions regarding the environment.

4. Discussion

Findings of the current investigation prove that sustainable green marketing operations in the Indian software market would be improved significantly through the assistance of Artificial Intelligence (AI). The high degree of correlation and elucidatory capability of the regression and



predictive formulations represent that the use of AI has a direct impact on eco-efficiency, predictability of resources regulation, and more streamlined marketing activities with a less carbon footprint. The sustainability performance of the companies employing the most recent AI analytic instruments, automation, and personalization was improved, and they were characterized by a better fit between marketing and environmental objectives. Such findings support the idea that AI does not only represent a technological transformation, but a strategic instrument that can lead to the sustainability of the India-based technology-based economy in the long run. The hypothesis of the theoretical framework on data-driven intelligence is justified in the current research by the correlation between AI implementation and sustainability where information-informed decision-making and optimization of resources can be used to improve the ecological performance. This can be done by relying on predictive models that would greatly reduce the level of energy consumption in the marketing process when marketing to consumers who are sensitive to the environment and when developing marketing campaigns that can produce few wastes. The intersection of AI analytics and sustainability is also suggesting the shift towards an environmentally friendly leadership in technology in India. This finding resonates with the previous empirical evidence that digital technologies have become mandatory facilitators of business changes towards sustainability in the developed and emerging economies (Panwar et al., 2025).

The results obtained are in accordance with the overall literature devoted to the transformative power of AI in sustainability marketing. Research has claimed that organizational innovation can be driven by machine learning and automation as it introduces environmental consciousness into the operation and strategy framework (Darban et al., 2023). These findings are complemented by the outcomes of the current study to give the Indian software industry a regional particularity, being a service-based economy with marketing, instead of production, as the core aspect of environmental contact. The statistical data supports the fact that AI-based analytics can improve marketing accuracy as well as reinforce the ethical and ecological stance of companies in competitive world markets. The same tendencies have been indicated in the cross-sectoral study where AI plays a role in environmental sustainability, enhancing data transparency, predicting eco-consumer behavior, and life-cycle management in service sectors (Ahmed et al., 2025). In the



terms of management, findings indicate that there is a strategic yet necessary investment in AI-based sustainability dashboards that can be used to monitor environmental key performance indicators in real-time. Companies should also focus on capacity building of marketing practitioners by training them on issues of data ethics, green innovation, and responsible AI governance. The implementation of sustainability parameters into the marketing algorithms allows companies to measure and communicate the carbon footprint of the digital campaigns, which enhances the level of consumer confidence and corporate responsibility. This information confirms the evidence that AI is not only useful in promoting efficiency in operations but also in promoting sustainable decision-making and establishing clear relationships with the stakeholders of a company. The intersection of AI and sustainability analytics therefore offers a quantifiable way of attaining the sustainable development objectives in India (Dhamija and Bag, 2020).

However, as valuable as the study is to the knowledge on how AI can be applied in sustainable marketing, there are a number of limitations worth considering. The cross-sectional research design limits causality and the use of self-reported survey data is a source of error of biased responses. Furthermore, the emphasis in one sector software restricts the ability to generalize the findings to other industries in which the issue of sustainability can take on a different dimension. Regardless of the limitations, the findings provide a good empirical premise to the knowledge of the technological determinants of green marketing performance and sustainability success in the digital services environment (Ramtiyal et al., 2025).

Longitudinal designs ought to be employed in future studies to explore the relationship between the progression of AI and sustainability as well as to ascertain whether the identified relationships will persist when changed based on the technological or policy status quo. The qualitative methods, such as interviews and case studies, can also complement the knowledge of ethical, cultural, and managerial aspects of AI-driven sustainability. The comparative analysis of India and the rest of the emerging digital economies could also determine cross-national variations in the maturity of adoption and policy frameworks and consumer reactions towards AI-enabled green marketing (Kumar et al., 2025). The further development of this type of research will not only positively influence the further evolution of the theoretical approach to sustainable marketing, but it will also



assist policymakers and industry leaders in the creation of evidence-based frameworks on how AI should be used responsibly.

In conclusion, the existing study is founded on strong empirical evidence where the application of AI could be a key platform of achieving sustainable green marketing achievements within the Indian software market. Predictive analytics combined with automation and personalization create a data-driven marketing ecosystem that fosters environmental and economic value. The findings are that it is time to request more inventions, ethical regulation, and strategic collaboration among the technological firms, the marketers, and policymakers to ensure that AI is an evident source of sustainable transformation in the digital age.

The findings of the current study are further reinforced by emerging research from Integral University's Business Management and Commerce departments, where scholars have independently investigated the intersection of AI, digital technology, and sustainable service outcomes in Indian contexts. Elahi, Y.A. (2024), from the Department of Business Management, empirically demonstrated through a quantitative study of 189 Indian banking customers that AI significantly enhances service sustainability — improving accessibility, efficiency, and customer satisfaction — while also recognising that human-AI complementarity is essential for responsible and sustainable implementation. This directly parallels the current study's finding that AI adoption improves eco-efficiency and stakeholder engagement in Indian service firms. Khan, F.S. (2025), from the Department of Commerce, established through a comprehensive systematic review in Artificial Intelligence Review that explainable AI (XAI) and machine learning methods are reshaping data-driven decision-making in Indian financial and business contexts, underscoring the need for transparent, accountable AI governance — a requirement equally critical in green marketing analytics. Mazhar, S.S. (2024), from the Department of Business Management, showed that Indian consumers' digital platform adoption is mediated by perceived trust, convenience, and security, confirming that AI-driven consumer interaction systems must be designed with sustainability and ethical transparency to drive effective eco-personalisation. Maqbool, A. (2026), from the Department of Commerce, systematically reviewed how digital transformation and cybercrime vulnerabilities affect India's e-commerce ecosystem, highlighting that responsible AI deployment, consumer trust, and digital security are foundational requirements for sustainable AI-



driven marketing — findings that provide critical institutional context for the current study's recommendations. Finally, Atiq, R. (2021), from the Department of Business Administration, pioneered qualitative research on AI adoption in Indian financial services, establishing robo-advisory as an early instantiation of AI's transformative potential in customer-facing service sectors — foundational evidence for the broader role of intelligent automation in building sustainable marketing ecosystems.

5. Conclusion

The current research paper identifies the application of Artificial Intelligence (AI) as one of the core drivers of sustainable green marketing in the fast-developing, software-based environment in India. The usage of smart analytics, automation, and environmental-personalization in the marketing operations can assist corporations to achieve higher efficiency, ecological accountability, and strategic elasticity. The findings demonstrate that evidence-based eco-strategies not only make the performance of sustainability more effective but also contribute to the development of brand reputation and consumer trust, which are the two basic assumptions of competitive advantage in the market where the sustainability issue is central. Through predictive modelling and real-time data analytics, AI can assist companies to optimize the utilization of resources and reduce the consumption of digital energy, and offer personalized environmental communications that are likely to be accepted by stakeholders. Besides, responsible AI implementation will make marketing operations tools of environmental leadership, which is why Indian software vendors will be the leaders of responsible innovation on the international scale. With sustainability turning into an inseparable aspect in the corporate performance, the implementation of AI-based decision systems provides a road to the quantifiable ecological footprint and financial sustainability. The research therefore offers empirical data that AI-based green marketing constitutes a technological change and a strategic niche, which will ensure that the Indian software industry develops as a prototype of digitally empowered, environmentally friendly development.

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References

1. Maqbool, A., & Agarwal, S. (2026). Impact of Cybercrime on the E-Commerce Industry in India: A Systematic Review of Consumer Vulnerability, Regulatory Challenges, and Cybersecurity Preparedness. *Well Testing Journal*, 35(S1), 118-138. [Dept. of Commerce, Integral University, Lucknow]
2. Ahmed, A., Fadzilah, A. H. H., & Chan, T. J. (2025). Impact of Green Media on Purchase Intention: The Moderating Role of Artificial Intelligence in Sustainable Marketing. *PaperASIA*, 41(4b), 344-359.
3. Ankush, A., & Masurkar, S. (2025). A study of Green Marketing & its placement in Indian Market. *International Journal of Latest Technology in Engineering, Management & Applied Science*, 14(4), 750-753.
4. Goutam, S., Sarkar, R., MNNIT-A, P., & Pandey, M. R. K. (2025). ARTIFICIAL INTELLIGENCE AS A DRIVER OF GREEN BUSINESS INNOVATION: ALIGNING MARKETING WITH ENVIRONMENTAL GOALS. *ARTIFICIAL INTELLIGENCE*, 23(01).
5. Kumar, S., Sharma, C., Mishra, M. K., Sharma, S., & Bhardwaj, V. (2025). Smart, sustainable, and green: the digital transformation of green-marketing. *Discover Sustainability*, 6(1), 388.
6. Muduva, M., & Kiwa, F. J. (2025). Artificial Intelligence-Driven Green Marketing Strategies for a Circular Economy. In *Sustainable Green Marketing Strategies for a Circular Economy: African Realities and Imperatives* (pp. 209-237). Cham: Springer Nature Switzerland.



7. Panwar, S., Khandelwal, V., Sharma, G., Sharma, V., Kumari, S., & Tomar, M. S. (2025). Impact of Artificial Intelligence-Driven Marketing Forecasting and Employee Retention Strategies on Financial Growth: The Moderating Role of Sustainable Development Goals and Mediating Effect of Employee Satisfaction: A PLS-SEM Approach in NCR Region. *International Journal of Environmental Sciences*, 11(10s), 278-297.
8. Ramtiyal, B., Sakka, G., Mehmood, K., Narula, S., & Verma, S. (2025). Harnessing the power of AI for unlocking Indian born-global entrepreneurs in the global market profile. *International Marketing Review*, 1-30.
9. Singh, H., Aggarwal, R., Garg, P., & Aggarwal, D. (2025). AI and ESG Performance: An Empirical Study of the High-Tech Sector. *Prabandhan: Indian Journal of Management*, 18(6), 8-25.
10. Sohaib, O., Alshemeili, A., & Bhatti, T. (2025). Exploring AI-enabled green marketing and green intention: An integrated PLS-SEM and NCA approach. *Cleaner and Responsible Consumption*.
11. Zhou, C., & Jiang, B. (2025). How do consumers react to AI-generated green marketing content? A hybrid analysis using PLS-SEM and text mining. *Journal of Retailing and Consumer Services*, 87, 104431.
12. Khan, F.S., Mazhar, S.S., Mazhar, K., AlSaleh, D.A., & Mazhar, A. (2025). Model-agnostic explainable artificial intelligence methods in finance: a systematic review, recent developments, limitations, challenges and future directions. *Artificial Intelligence Review*, 58(8). <https://doi.org/10.1007/s10462-025-11215-9>. [Dept. of Commerce, Integral University, Lucknow]
13. Emon, M. M. H., & Khan, T. (2024). A systematic literature review on sustainability integration and marketing intelligence in the era of artificial intelligence. *Review of Business and Economics Studies*, 12(4), 6-28.
14. Gündüzyeli, B. (2024). Artificial Intelligence in Digital Marketing Within the Framework of Sustainable Management. *Sustainability*, 16(23), 10511.
15. Santosh, Y. (2024). A STUDY ON RECENT TRENDS IN GREEN MARKETING IN INDIA. *marketing*, 24(07).



16. Elahi, Y.A., Shaikh, A.A., Kumar, A., & Mishra, A. (2024). A study of customer satisfaction in using banking services through Artificial Intelligence (AI) in India. *Public Administration and Policy*, 27(2), 167-181. <https://doi.org/10.1108/PAP-05-2023-0060>. [Dept. of Business Management, Integral University, Lucknow]
17. Mazhar, S.S., Khan, F.S., Akhlaue, N., Haque, E., & Singh, A. (2024). Exploring Consumer Preferences and Behaviour Toward Digital Payment Gateways in India. *International Journal of Experimental Research and Review*. [Dept. of Business Management, Integral University, Lucknow]
18. Darban, K., Kabbaj, S., & El Jay, M. (2023). The Transformative Potential of AI in Green Marketing Strategies. *Traditional Journal of Law and Social Sciences*, 2(02), 14-38.
19. Du, S., & Xie, C. (2021). Paradoxes of artificial intelligence in consumer markets: Ethical challenges and opportunities. *Journal of Business Research*, 129, 961-974.
20. Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research direction. *International Journal of Information Management Data Insights*, 1(1), 100002.
21. Atiq, R., Bhatia, A., Chandani, A., Mehta, M., & Divekar, R. (2021). Artificial intelligence in financial services: a qualitative research to discover robo-advisory services. *Qualitative Research in Financial Markets*, 13(5), 632-654. <https://doi.org/10.1108/QRFM-10-2020-0199>. [Dept. of Business Administration, Integral University, Lucknow]
22. Dhamija, P., & Bag, S. (2020). Role of artificial intelligence in operations environment: a review and bibliometric analysis. *The TQM Journal*, 32(4), 869-896.