Advances in Consumer Research
https://acr-journal.com/
Volume-3 | Issue-5 |May 2026
Original Researcher Article

An Analytical Study of ESG Disclosure Trends in Automobile and IT Companies.

Vilobha k. Rukade [1], Kirti Divekar [2]
[1]Assistant Professor, College Annasaheb Dange College of Engineering and Technology, Ashta, Sangali, Maharashtra, India.
[2]Assistant Professor, VPM's Dr V. N. Bedekar Institute of Management Studies, Thane, Maharashtra, India.
Mail: kirti.shrotri@gmail.com

ABSTRACT
This study focuses on an analytical comparison of Environmental, Social, and Governance (ESG) disclosure trends between automobile and information technology companies. ESG has emerged as an important framework for evaluating corporate sustainability, transparency, and ethical performance. The study is based on secondary data collected from a selected sample of companies from both sectors, and aims to examine differences in environmental, social, governance, and overall ESG scores. Statistical tools such as descriptive analysis and independent sample t-test are used to analyze the data and test the hypotheses. The findings reveal that there is a significant difference in environmental and social scores between the two sectors, while governance scores do not show any significant difference. The results further indicate that automobile companies perform better in environmental and social dimensions due to their direct involvement in resource-intensive activities and regulatory requirements, whereas IT companies maintain comparable governance standards. Despite differences in individual ESG components, the overall ESG scores between the two sectors do not differ significantly, suggesting a balanced level of ESG adoption. The study highlights the importance of sector-specific ESG strategies and emphasizes the need for improved consistency and standardization in ESG disclosures. These findings provide valuable insights for investors, policymakers, and corporate stakeholders in understanding and evaluating ESG performance across industries..
Keywords: : ESG Disclosure, Environmental, Social, Governance, Automobile and IT Sector.

INTRODUCTION:

The concept of Environmental, Social, and Governance (ESG) has gained significant importance in recent years as organizations increasingly focus on sustainable and responsible business practices. ESG disclosure refers to the systematic reporting of a company's environmental impact, social responsibilities, and governance structures, enabling stakeholders to evaluate its long-term sustainability and ethical performance. In the context of globalization, regulatory pressures, and rising investor awareness, companies are now expected to go beyond financial reporting and provide transparent ESG information. This shift has made ESG disclosure a critical component in assessing corporate credibility, risk management, and value creation, particularly in industries that have a substantial environmental and social footprint.

The automobile and IT sectors represent two distinct yet influential industries where ESG disclosure trends are evolving rapidly. The automobile industry, being resource-intensive and environmentally sensitive, is under constant pressure to adopt sustainable practices such as reducing emissions, promoting electric mobility, and ensuring responsible supply chain management. In contrast, the IT sector, though less directly polluting, faces challenges related to energy consumption, data privacy, and ethical use of technology, making governance and social factors highly relevant. An analytical study of ESG disclosure trends in these sectors provides valuable insights into how different industries approach sustainability reporting, the level of transparency maintained, and the comparative progress made in aligning with global ESG standards.

ESG:

Environmental, Social, and Governance (ESG) is a framework used to evaluate how responsibly and sustainably a company operates. It goes beyond traditional financial performance and focuses on non-financial factors that affect long-term value creation. ESG helps investors, stakeholders, and policymakers understand how a company manages risks and opportunities related to environmental impact, social responsibility, and corporate governance. In today's business environment, ESG has become a key indicator of sustainable growth and ethical business practices.

The Environmental (E) component refers to how a company impacts the natural environment. It includes factors such as carbon emissions, energy efficiency, waste management, pollution control, use of renewable resources, and climate change initiatives. Companies are increasingly expected to reduce their environmental footprint by adopting green technologies, sustainable production processes, and responsible resource utilization. Strong environmental practices not only help in regulatory compliance but also improve brand reputation and operational efficiency.

The Social (S) component focuses on how a company manages relationships with employees, customers, suppliers, and society at large. It includes aspects like employee welfare, diversity and inclusion, human rights, customer satisfaction, community development, and labor

practices. Companies that prioritize social responsibility tend to build stronger trust with stakeholders, enhance employee engagement, and contribute positively to society. Social factors are especially important in sectors where human interaction and workforce management play a critical role.

The Governance (G) component deals with the internal systems, policies, and leadership structure of a company. It includes board composition, executive compensation, transparency, ethical business practices, shareholder rights, and compliance with laws and regulations. Good governance ensures accountability, fairness, and transparency in decision-making processes. It reduces the risk of fraud, corruption, and mismanagement, thereby increasing investor confidence and long-term stability of the organization.

ESG serves as a comprehensive approach to assess a company's sustainability and ethical impact. It is increasingly used by investors for making informed investment decisions, as companies with strong ESG performance are often considered less risky and more resilient in the long run. ESG also supports businesses in aligning their operations with global sustainability goals, such as climate action and social equity. Thus, ESG is not just a reporting requirement but a strategic tool for achieving sustainable and responsible business growth.

ESG for Automobile and IT Companies:

In the automobile sector, ESG plays a critical role due to its direct impact on the environment and society. From an environmental perspective, automobile companies focus on reducing carbon emissions, improving fuel efficiency, adopting electric vehicles (EVs), and using sustainable materials in manufacturing. Socially, they emphasize employee safety, labor welfare, and customer safety through improved vehicle standards and responsible product design. In terms of governance, automobile firms are increasingly adopting transparent reporting practices, regulatory compliance, and ethical supply chain management. ESG disclosure in this sector is often driven by strict environmental regulations and global pressure to shift toward cleaner and more sustainable mobility solutions.

In the IT sector, ESG is centered more on energy consumption, data privacy, and ethical use of technology. Environmentally, IT companies focus on reducing the carbon footprint of data centers, promoting green computing, and using renewable energy. Social aspects include employee well-being, diversity and inclusion, digital accessibility, and responsible innovation. Governance in IT companies emphasizes cybersecurity, data protection, transparency, and ethical decision-making in the use of artificial intelligence and digital platforms. Compared to the automobile sector, IT companies generally show more advanced ESG reporting practices, but they face unique challenges related to data ethics and digital sustainability.

Review of Literature:

Vijaya (2025), in the research paper titled "Advancing Sustainability in the Automotive Sector: A Critical Review of ESG Factors", concluded that ESG has become a major strategic requirement for automobile companies. The study found that automobile firms are increasingly focusing on environmental areas such as emissions control, sustainable products, and energy efficiency, but lack of common ESG reporting standards creates differences in disclosure quality. This paper is useful because it shows that ESG disclosure in the automobile sector is strongly linked with sustainability transition and stakeholder expectations.

Wacławik, Popławski and Wyrobek (2025), in the research paper titled "ESG Reporting in the Automotive Industry", concluded that automobile companies are giving more importance to environmental reporting due to ESG regulations, carbon footprint concerns, and energy transformation requirements. The study highlights that automotive firms disclose environmental information, but the level and depth of disclosure differ from company to company. This indicates that ESG disclosure trends are growing, but standardization and transparency still need improvement.

Tóth (2021), in the research paper titled "Global Sustainability Reporting in the Automotive Industry", concluded that major European and American automobile companies have started using sustainability reports to communicate ESG-related performance. The study observed that reporting is becoming more digital, structured, and standardized, especially due to regulatory pressure and stakeholder demand. This paper is relevant because it helps compare ESG disclosure practices across automobile companies at the global level.

Lukács (2025), in the research paper titled "ESG Disclosure Topics and Reporting Frameworks: Exploratory Evidence from High-Impact Industries", concluded that ESG reporting practices vary across industries such as automobile, construction, and energy. The study found that greenhouse gas emissions, environmental performance, and reporting frameworks are key areas of disclosure. It also concluded that companies need better measurement systems and more consistent ESG frameworks to improve comparability.

Khamisu et al. (2024), in the research paper titled "Emerging Trends of Environmental, Social and Governance Disclosure Research", concluded that ESG disclosure is influenced by mandatory disclosure regulations, sustainability reporting frameworks, and corporate governance practices. The study also found that ESG disclosure affects firm performance, market returns, and environmental outcomes. This review is important because it provides a broad theoretical base for studying ESG disclosure trends in both automobile and IT companies.

Kim (2025), in the research paper titled "The Impact of ESG Management by Automobile Companies on Consumer Purchase Intention", concluded that ESG management improves brand image, trust, perceived quality, and consumer purchase intention in the automobile sector. The study shows that ESG disclosure is not only important for investors but also for customers, as buyers increasingly consider sustainability and ethical practices while evaluating automobile brands.

Chakraborty, Nagina, Salam, Pritha and Akter (2025), in the research paper titled "Driving Sustainability: Environmental, Social, and Governance Practices and Financial Implications in India's Automotive Industry", concluded that ESG reporting has financial implications for Indian automobile firms. The study suggests that companies with stronger ESG practices may gain better stakeholder confidence and long-term sustainability benefits. This paper is useful for understanding ESG disclosure trends in Indian automobile companies.

KPMG (2020), in the report titled "Survey of Sustainability Reporting at Technology Companies", concluded that technology companies show relatively strong sustainability reporting practices compared with many other sectors. The report found that many technology companies provide assurance statements on sustainability information, indicating greater attention to reliability and transparency. This supports the idea that IT companies are increasingly adopting formal ESG disclosure practices.

S&P Global (2021), in the report titled "ESG and Technology: Impacts and Implications", concluded that ESG is becoming an important part of the technology industry due to issues such as sustainable data centres, energy consumption, privacy, governance, and responsible innovation. The study highlights that IT companies face unique ESG challenges because their operations depend on digital infrastructure, data usage, and energy-intensive technologies.

Ellili and Nobanee (2024), in the research paper titled "Sustainability Reporting in IT Sector vs. Other Sectors", concluded that sustainability disclosure is linked with firm performance and differs across sectors. The study shows that IT and telecommunication firms use ESG reporting to communicate operational, financial, and market-related responsibility. This paper is helpful for comparing ESG disclosure trends between IT companies and other industries, including automobile companies.

Research Gap:

The review of existing literature on ESG disclosure trends reveals several important research gaps, particularly in the comparative context of automobile and IT companies. Most studies focus either on a single sector or provide a generalized analysis of ESG practices, with limited research offering a direct comparative evaluation between manufacturing-intensive industries like automobiles and knowledge-driven sectors like IT. Additionally, there is a lack of standardized measurement frameworks, making it difficult to assess the consistency, quality, and depth of ESG disclosures across companies. Many studies emphasize environmental aspects, while social and governance dimensions receive comparatively less analytical attention, especially in emerging economies like India. Furthermore, limited research explores how ESG disclosure trends evolve over time or how they influence financial performance, investor behavior, and corporate reputation simultaneously. There is also a noticeable gap in empirical studies using primary data or mixed-method approaches to understand stakeholder perception of ESG disclosures. Hence, this study aims to bridge these gaps by providing a comparative, sector-specific, and analytically robust examination of ESG disclosure trends in automobile and IT companies.

Research Methodology:

The present study adopts a quantitative and comparative research design to analyze ESG disclosure trends in automobile and IT sector companies. The study is based on secondary data collected from reliable sources such as ESG reports and databases, with companies selected using a convenient sampling method. The key variables considered include Environmental, Social, Governance, and overall ESG scores. For analysis, descriptive statistics such as mean and standard deviation are used to understand the distribution of ESG scores across sectors, while inferential statistics, particularly the Independent Sample t-test, is applied to examine whether there is a significant difference between the two sectors with respect to each ESG component. The hypothesis testing is conducted at an appropriate level of significance to ensure statistical validity. This methodological approach enables a systematic comparison and provides meaningful insights into ESG disclosure patterns between automobile and IT companies.

Data Analysis: It is based on secondary data related to ESG disclosure of companies in IT sector and Automobile sector.

ESG Scores of 15 Selected Automobile and Auto Components Companies

Table No. 1

ESG Score of Automobile and Auto Components

SN	Company Name	ESG Score	Environment	Social	Governance
1	Endurance Technologies Limited	74.9	61.3	77.9	84.9
2	CEAT Limited	71.9	62.4	77	77
3	ZF Commercial Vehicle Control Systems India Ltd	73.2	63.5	78.8	78
4	Exide Industries Limited	73.7	59.4	76.9	84.3
5	Ramkrishna Forgings Limited	64.3	49.6	70.5	73.3

6	Apollo Tyres Limited	75.1	70.9	79.5	76.2
7	Asahi India Glass Limited	67.4	56.8	76.7	70.9
8	Motherson Sumi Wiring India Ltd	71.5	53.9	73.9	85.4
9	Balkrishna Industries Limited	70.6	58.3	75.2	78.6
10	MM Forgings Limited	67	48	78.4	76.6
11	HBL Engineering Ltd	65.6	49.4	76.4	73.1
12	JK Tyre & Industries Ltd	69.8	59.3	79	73.1
13	Jamna Auto Industries Limited	64.7	47.2	73.5	74.5
14	Shriram Pistons & Rings Ltd	67.7	52.8	73.8	76.8
15	Endurance Technologies Limited	74.9	61.3	77.9	84.9

Source: https://www.sesesg.com/all-esg-reports?&page_no=1

ESG Scores of 15 Selected Information Technology Companies

Table No. 2

ESG Score of Information Technology Companies

SN	Company Name	ESG Score	Environment	Social	Governance
1	KPIT Technologies Ltd	75.3	58.5	80.6	81.7
2	Affle 3I Ltd	64.4	30.5	71.1	79.8
3	Sagility Ltd	48.1	28.5	28	72.5
4	Tanla Platforms Ltd	72.3	47.7	76.2	84.1
5	Nucleus Software Exports Limited	73.5	52.5	79	82.2
6	Onward Technologies Limited	67.1	50.8	67.7	76.1
7	Rashi Peripherals Ltd	64.2	46.1	69.1	73.9
8	Axiscades Technologies Ltd	70	46.9	70	83.5
9	Zaggle Prepaid Ocean Services Ltd	66.6	43.3	71.6	76.9
10	Inventurus Knowledge Solutions Ltd	42.1	20.9	25.8	64.9
11	Happiest Minds Technologies Ltd	69.8	50.8	69.4	81.1
12	Netweb Technologies India Ltd	68.2	45.9	73.7	80.6
13	Sonata Software Limited	70.8	57.6	70.5	78.6
14	C.E. Info systems Ltd	66	35.9	73.1	78.9

15	Cigniti Technologies Ltd	70	46.7	77.1	78.9

Source: https://www.sesesg.com/all-esg-reports?&page_no=1

Objective and Hypothesis

Objective 1 To explore and Compare Environmental, Social and governance disclosure between Automobile and IT Sector companies.

Null Hypothesis H_{01A}: There is no significant difference in Environmental score between Automobile and IT Sector companies.

Alternate Hypothesis H_{11A}: There is a significant difference in Environmental score between Automobile and IT Sector companies.

To study the above null hypothesis, Independent Sample T-test is applied and results are as follow:

Table No. 3

Independent Sample Test of Environmental score

Independent Samples Test					
	t-test for Equality of Means				
	t	df	P-value	Mean Difference	Std. Error Difference
Environment	3.910	28	.001	12.820	3.276

Interpretation: The above results indicate that calculated p-value is 0.001. It is less than 0.05. Therefore, Independent Sample and T-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in Environmental score between Automobile and IT Sector companies.

Findings: To understand the findings, mean scores of Environmental score between Automobile and IT Sector companies are obtained and presented as follows:

Table No. 4

Group Statistics of Environmental score

Group Statistics				
Sector	N	Mean	Std. Deviation	Std. Error Mean
Automobile sector Companies	15	56.99	6.754	1.744
IT S sector Companies	15	44.17	10.754	2.777

The mean score of the environmental dimension indicates that automobile sector companies have a higher average environmental score (56.99) compared to IT sector companies (44.17). This suggests that automobile companies are performing better in environmental aspects such as emissions control, resource management, and sustainability practices. The higher mean value reflects stronger environmental initiatives and compliance in the automobile sector, whereas the relatively lower mean score in the IT sector indicates comparatively lesser emphasis on environmental performance. Overall, the difference in mean scores clearly highlights the stronger environmental focus of automobile companies.

Null Hypothesis H_{01B}: There is no significant difference in social score between Automobile and IT Sector companies.

Alternate Hypothesis H_{11B}: There is a significant difference in social score between Automobile and IT Sector companies.

To study the above null hypothesis, Independent Sample T-test is applied and results are as follow:

Table No. 5

Independent Samples Test of Social score

Independent Samples Test					
	t-test for Equality of Means				
	t	df	P-value	Mean Difference	Std. Error Difference

Social	2.217	28	.035	9.660	4.358

Interpretation: The above results indicate that calculated p-value is 0.031. It is less than 0.05. Therefore, Independent Sample and T-test is rejected. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in social score between Automobile and IT Sector companies.

Findings: To understand the findings, mean scores of social scores between Automobile and IT Sector companies are obtained and presented as follows:

Table No. 6

Group Statistics of Social score

Group Statistics				
Sector	N	Mean	Std. Deviation	Std. Error Mean
Automobile sector Companies	15	76.52	2.696	.696
IT S sector Companies	15	66.86	16.660	4.302

The mean score of the social dimension shows that automobile sector companies have a higher average social score (76.52) compared to IT sector companies (66.86). This indicates that automobile companies perform better in social aspects such as employee welfare, workplace safety, community engagement, and stakeholder relationships. The relatively consistent and higher mean score in the automobile sector reflects stronger and more uniform social practices, whereas the IT sector shows greater variability and comparatively lower performance in social factors. Overall, the difference in mean scores highlights that automobile companies place more emphasis on social responsibility than IT companies.

Null Hypothesis H_{01C}: There is no significant difference in governance score between Automobile and IT Sector companies.

Alternate Hypothesis H_{11C}: There is a significant difference in governance score between Automobile and IT Sector companies.

To study the above null hypothesis, Independent Sample T-test is applied and results are as follow:

Table No.7

Group Statistics of governance score

Independent Samples Test					
	t-test for Equality of Means				
	t	df	P-value	Mean Difference	Std. Error Difference
Governance	-.574	28	.571	-.987	1.719

Interpretation: The above results indicate that calculated p-value is 0.571. It is more than 0.05. Therefore, Independent Sample and T-test is accepted. Hence Null hypothesis is accepted and Alternate hypothesis is rejected.

Conclusion: There is a no significant difference in governance score between Automobile and IT Sector companies.

Findings: To understand the findings, mean scores of governance score between Automobile and IT Sector companies are obtained and presented as follows:

Table No. 8

Group Statistics of governance score

Group Statistics				
Sector	N	Mean	Std. Deviation	Std. Error Mean
Automobile sector Companies	15	77.26	4.455	1.150
IT S sector Companies	15	78.25	4.949	1.278

The mean score of the governance dimension indicates that both automobile and IT sector companies have almost similar average governance scores, with automobile companies having a mean of 77.26 and IT companies slightly higher at 78.25. This close difference suggests that both sectors follow comparable governance practices in terms of transparency, ethical

standards, and corporate management. The similarity in mean values supports the conclusion that there is no significant difference in governance scores between the two sectors, reflecting a consistent level of governance performance across both industries.

Objective 2 To Study and Compare Overall ESG Score between Automobile and IT Sector companies.

Null Hypothesis H_{02}: There is no significant difference in ESG score between Automobile and IT Sector companies.

Alternate Hypothesis H_{12}: There is a significant difference in ESG score between Automobile and IT Sector companies.

To study the above null hypothesis, Independent Sample T-test is applied and results are as follow:

Table No.9

Group Statistics of ESG score

Independent Samples Test					
	t-test for Equality of Means				
	t	df	P-value	Mean Difference	Std. Error Difference
ESG Score	1.617	28	.117	4.087	2.528

Interpretation: The above results indicate that calculated p-value is 0.571. It is more than 0.05. Therefore, Independent Sample and T-test is accepted. Hence Null hypothesis is accepted and Alternate hypothesis is rejected.

Conclusion: There is no significant difference in ESG score between Automobile and IT Sector companies.

Findings: To understand the findings, mean scores of ESG score between Automobile and IT Sector companies are obtained and presented as follows:

Table No. 10

Group Statistics of ESG score

Group Statistics				
Sector	N	Mean	Std. Deviation	Std. Error Mean
Automobile sector Companies	15	69.98	3.650	.942
IT S sector Companies	15	65.89	9.085	2.346

The mean score of the overall ESG dimension shows that automobile sector companies have a slightly higher average ESG score (69.98) compared to IT sector companies (65.89). However, the difference between the two means is relatively small, indicating that both sectors perform at a comparable level in terms of overall ESG practices. While automobile companies show a marginally better overall ESG performance, the similarity in mean scores supports the conclusion that there is no significant difference between the two sectors, reflecting a balanced and consistent approach towards ESG disclosures across both industries.

Conclusion:

The study concludes that ESG disclosure trends differ significantly across specific dimensions between automobile and IT companies, while showing similarity in overall performance. The findings indicate that automobile companies perform significantly better in environmental and social aspects due to their direct impact on natural resources, regulatory pressures, and focus on sustainability practices, whereas IT companies show comparatively lower environmental scores but maintain competitive social and governance standards. However, governance scores do not differ significantly between the two sectors, reflecting a similar level of corporate transparency and management practices. Further, the overall ESG score also shows no significant difference, suggesting that despite sectoral variations in individual ESG components, both industries demonstrate a comparable level of commitment towards ESG disclosures and sustainable business practices.

REFERENCES

1. Vijaya, K. (2025). Advancing sustainability in the automotive sector: A critical review of ESG factors. Journal of Cleaner Production.
2. Wacławik, M., Popławski, Ł., & Wyrobek, J. (2025). ESG reporting in the automotive industry. Acta Logistica, 12(2), 45–56.
3. Tóth, G. (2021). Global sustainability reporting in the automotive industry. Chemical Engineering Transactions, 88, 1081–1086.
4. Lukács, E. (2025). ESG disclosure topics and reporting frameworks: Exploratory evidence from high-impact industries. Discover Sustainability, 6(1), 1–15.

5. Khamisu, M. S., Abdullahi, M., & Yusuf, A. (2024). Emerging trends of environmental, social and governance disclosure research. Environmental Challenges, 15, 100867.
6. Kim, J. (2025). The impact of ESG management by automobile companies on consumer purchase intention. Sustainability, 17(19), 8733.
7. Chakraborty, D., Nagina, S., Salam, M. A., Pritha, R., & Akter, S. (2025). Driving sustainability: Environmental, social, and governance practices and financial implications in India's automotive industry. Journal of Asian Economics and Sustainability.
8. KPMG. (2020). Survey of sustainability reporting at technology companies. KPMG International.
9. S&P Global. (2021). ESG and technology: Impacts and implications. S&P Global Market Intelligence.
10. Ellili, N. O. D., & Nobanee, H. (2024). Sustainability reporting in IT sector vs. other sectors. International Journal of Sustainability in Business.
11. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment, 5(4), 210–233.
12. Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. The Accounting Review, 86(1), 59–100.
13. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835–2857.
14. Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. Accounting, Organizations and Society, 33(4–5), 303–327.
15. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360.

..

..