

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

Sustainability through Inclusion and Innovation: The Role of Diversity, Equity, Team Cohesion, and Creativity

Srivardhani.T 1 and Dr.Rajini.G*2

MBA Student, School of Management Studies, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu, India.¹

Professor and Director-MoUs, School of Management Studies, Vels Institute of Science,

Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu, India.²

*Corresponding Author

Abstract: This study investigates the implementation and consequences of Diversity, Equity, and Inclusion (DEI) in HR processes in an Indian manufacturing company. In the context of evolving corporate culture, DEI becomes pivotal in making workplaces inclusive, innovative, and sustainable. This study intends to analyse the contribution of DEI programs towards prominent organizational factors such as team cohesion, innovation and creativity and sustainability in the long term. A standardized survey questionnaire was developed and inputs were obtained from employees of different departments. The findings strive to fill the gap between DEI theory and practice in an Indian manufacturing industry.

Keywords: Diversity, Equity, Inclusion, Team Cohesiveness, Innovations, Sustainability, Organizational Culture, leadership.

I.INTRODUCTION

In the recent years, organizations have placed increasing emphasis on the role of Diversity, Equity, and Inclusion (DEI) in human resource management. DEI initiatives remain key drivers for innovation, employment satisfaction, and sustainable development. While DEI practices are considerably researched in multinational and service-led corporations, sparse research discusses how they apply within Indian manufacturing industry. This research provides an integrated view of DEI in HR practices of a South Indian-based regional manufacturing unit. The study inspects the impact of DEI on team cohesiveness, innovation, and organizational sustainability through the employees' perception gathered through structured surveys.

Statement of the Problem

In spite of the increased recognition of Diversity, Equity and Inclusion (DEI), the real-world execution and effectiveness of DEI initiatives within Indian manufacturing firms have not been thoroughly researched. As multinational companies emphasize inclusive practices, local relevance and effectiveness of such practices within traditionally hierarchical manufacturing setups have to be further researched. This study fills this gap by investigating employee attitudes and establishing what impact DEI initiatives have on team collaboration, innovation capacity, and long-term growth, thus providing actionable advice to inclusive and future-oriented work environments.

Need for the Study

This study is critical to assessing the efficacy of existing DEI practice in the Indian manufacturing industry. The aim is to determine areas where HR policies can be enhanced to create a more inclusive and equitable work environment. DEI efforts are important in increasing employee engagement, satisfaction, and productivity—particularly where gender disparities and hierarchical legacies exist. As businesses become more global, having inclusive practices in accordance with global standards is necessary for the recruitment and retention of the best talent, especially among younger generations.

Objectives

- To assess the impact of Diversity, Equity, and Inclusion (DEI) practices on employee engagement, team cohesion, and organizational innovation.
- To determine the impact of inclusive practices on organizational sustainability in the Indian manufacturing industry.



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

- To determine critical factors within DEI initiatives that help in developing a collaborative, innovative, and sustainable work culture.
- To investigate employee attitudes towards diversity, inclusion, leadership support, and their effects on workplace dynamics.

II.REVIEW OF LITERATURE

- Kundu and Mor (2017) analysed diversity management in Indian firms and concluded that though DEI practices are slowly becoming more popular, most organizations lack proper implementation, especially concerning gender diversity and unconscious bias. They highlighted the importance of diversity training and leadership engagement in enhancing inclusivity.
- Mitra (2018) aimed for inclusive employment in Indian businesses and concluded that unconscious bias continues to be an obstacle in hiring practices. Companies embracing structured hiring protocols and transparency of their processes found improving diversity performances coupled with successful employer branding.
- Deshpande and Shukla (2020) examined the contribution of inclusive leadership to driving innovation in Indian workplaces. They found that when leaders foster diverse views and collaboration among teams, innovation and employee engagement improve significantly, particularly in manufacturing and technology sectors.
- Saha (2022) stressed how DEI is crucial to develop sustainable organizations in India. His study listed that inclusion and sustainability walk hand in hand, particularly in maintaining Gen Z talent who value equity and purposeful working environments.
- Singh and Sinha (2016) compared DEI policies in Indian SMEs and concluded that small businesses tend to ignore structured DEI practices due to limited resources. But those that invested in even minimum DEI training exhibited better team working and staff retention.
- Agrawal and Vyas (2021) examined the relationship between inclusive HR practices and employee satisfaction in the Indian private sector. The research found that workers in organizations with robust DEI strategies reported greater job engagement and organizational loyalty. The authors suggested frequent sensitization programs and leadership accountability to maintain inclusive culture.
- Deshpande and Shukla (2020) examined inclusive leadership as a facilitator of innovation in Indian workplaces. They found that if leaders foster diverse inputs and team collaboration, employee morale and innovation improve substantially, particularly in manufacturing and technology sectors

III.RESEARCH METHODOLOGY

Research Methodology is the scientific procedure and process that researchers use to carry out a study, which includes systematic data collection, analysis of outcome, and interpretation of results. It includes the general research design, research process planning, data collection method of choice, sampling techniques, analytical methods, and study validity, reliability, and ethical requirements procedures.

In effect, research methodology prescribes the exact plan of action for undertaking a study, offering researchers a defined framework with which to navigate the intricacies of the research process. It serves as a roadmap to plan for systematically resolving research questions or aims, enabling well-informed decision-making at each level of the study.

Research Design: Descriptive Research Sample Design: Stratified Sampling

Sample Size: 100

Data Source: Primary and Secondary Data

Instrument: Questionnaire

STATISTICAL TOOL

- Reliability
- Correlation
- Regression
- Factor Analysis.



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

IV.ANALYSIS AND INTERPRETATION

Reliability Analysis

Reliability Statistics					
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items			
0.954	0.955	21			

An analysis for reliability by Cronbach's Alpha was undertaken in order to establish the internal consistency of the 21-item. The resultant value of the **Cronbach's Alpha was found to be 0.954** and the **standardised alpha being 0.955**, which confirms excellent internal consistency.

This high reliability score confirms that the items in the questionnaire are measuring a cohesive underlying construct and are suitable for further analysis.

Correlation Analysis

a1y 515					
Correlations					
		DEI	TC	IC	Sustainability
DEI	Pearson Correlation	1			
	Sig. (2-tailed)	.000			
	N	88			
TC	Pearson Correlation	.652**	1		
	Sig. (2-tailed)	.000			
	N	86	87		
IC	Pearson Correlation	.727**	.671**	1	
	Sig. (2-tailed)	.000	.000		
	N	86	85	87	
Sustainability	Pearson Correlation	.644**	.754**	.757**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	87	86	86	88

Pearson correlation analysis was performed to explore the relationships among the key variables: Diversity, Equity and Inclusion (DEI), Team Cohesiveness (TC), Innovation and Creativity (IC), and Sustainability. All variables showed strong positive correlations, with coefficients ranging from 0.644 to 0.757, and all were statistically significant at the 0.01 level. Where DEI showed significant positive correlations with TC (r = .652), IC (r = .727), and Sustainability (r = .644). These findings suggest that improvements in DEI, TC, and IC are associated with enhanced sustainability of DEI initiatives within the organization.

Regression Analysis

Model Summary ^b										
				Std.	Change S	Change Statistics				
			Adjusted	Error of	R					
		R	R	the	Square	F			Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.829a	.687	.675	1.82069	.687	57.695	3	79	.000	1.842
a. Predictors: (Constant), Innovation and Creativity, Team Cohesiveness, Diversity Equity Innovation										
b. Dependent Variable: Sustainability										



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

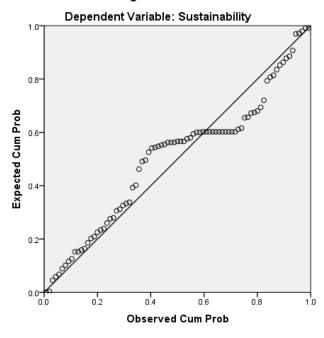
Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

Coefficients ^a								
		Unstandardized		Standardized Coefficients				
Mod	del	В	Std. Error	Beta	t	Sig.		
1	(Constant)	.366	1.228		.298	.767		
	DEI	010	.073	014	139	.890		
	TC	.357	.072	.436	4.932	.000		
	IC	.422	.090	.483	4.675	.000		
a. D	a. Dependent Variable: Sustainability							

Sustainability 0.3661=-0.010 DEI+0.356 TC+0.422 IC

Normal P-P Plot of Regression Standardized Residual



The regression analysis shows a strong model fit between the independent variables (Diversity, Equity, and Inclusion, Team Cohesiveness, and Innovation and Creativity) and the dependent variable (Sustainability), as indicated by an R value of 0.829. The model explains approximately 68.7% of the variance in Sustainability (R Square = 0.687). The Adjusted R Square of 0.675 indicates the model is still quite strong after removing the effect of the number of predictors. And the Durbin-Watson statistic is 1.842, which approaches 2 and indicates no prominent autocorrelation of the residuals. Looking at the coefficients, Diversity, Equity, and Inclusion (DEI) has a trivial, negative, and statistically insignificant association (B = -0.010, p = 0.890), which implies DEI on its own does not significantly affect Sustainability here. On the other hand, Team Cohesiveness (TC) is positively significant (B = 0.357, p = 0.000), implying greater cohesiveness between teams translates into improved Sustainability. Likewise, Innovation and Creativity (IC) also exhibit a strong and significant positive impact (B = 0.422, p = 0.000), indicating that the development of innovation and creativity has a strong positive impact on Sustainability.

Additionally, the Normal P-P Plot of Regression Standardized Residuals shows that the residuals about follow the expected normal distribution. Points are generally close to the line along the diagonal, indicating that the normality of residuals assumption is fairly met. While there are small deviations at the middle range, they are not large enough to compromise the validity of regression analysis.



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

Factor Analysis

KMO and Bartlett's Test					
Kaiser-Meyer-O Sampling Adequ	.876				
Bartlett's Test of Sphericity	Approx. Chi- Square	1315.565			
df		210			
	Sig.	.000			

A Principal Component Analysis (PCA) with Varimax rotation was conducted to explore the underlying structure of items related to organizational practices in Diversity, Equity, Inclusion (DEI), and Sustainability. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was .876, which indicates a high level of sampling adequacy. Bartlett's Test of Sphericity was significant ($\chi^2 = 1315.565$, df = 210, p < .001) confirming that the data was suitable for factor analysis.

Rotated Component Matrix

Description	Component			
	1	2	3	
The organization promotes a diverse and inclusive work environment.	.637	.109	.134	
Employees from diverse backgrounds are provided with equal growth opportunities	.692	.141	.309	
The organization recognizes and celebrates diverse cultural events	.740	.348	.180	
The organization ensures representation of different communities in leadership roles	.765	.269	.253	
The organization implements anti-discrimination measures effectively	.734	.168	.324	
Clear policies addressing discrimination and bias are implemented	.561	.293	.487	
Teams in the organization collaborate effectively across diverse backgrounds	.342	.157	.758	
Employees feel a sense of belonging and teamwork within their teams	.352	.101	.825	
The organization encourages cross-functional collaboration	.192	.331	.751	
Leadership actively promotes a culture of teamwork and mutual respect	.134	.433	.691	
Employees trust and support each other within their teams	.130	.681	.432	
The organization encourages diverse perspectives to foster innovation	.522	.478	.338	



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering
Impact Factor 8.021

Peer-reviewed & Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

The work environment supports experimentation and new approaches	.521	.568	.225
Leadership values and implements employee suggestions for innovation	.445	.500	.174
There is an organizational culture that promotes continuous learning and creativity	.625	.555	.046
Employees are given opportunities to share creative ideas	.265	.813	.170
The organization integrates sustainability principles into its Diversity, Equity and Inclusion initiatives	.231	.582	.433
Diversity, Equity and Inclusion practices contribute to long-term employee retention and workforce stability	.154	.748	.445
Employees are encouraged to participate in sustainable business initiatives	.352	.750	.218
Sustainable hiring and training practices are implemented in the organization	.211	.442	.616
The organization partners with external communities to promote social sustainability	.438	.435	.560

The rotated component matrix revealed three factor structure.

Component 1 primarily captured items related to **DEI policies and representation**, such as promotion of diversity, equal growth opportunities, cultural celebration, leadership representation, and anti-discrimination measures.

Component 2 was associated with sustainable practices and innovation, including employee creativity, sustainability integration in DEI, and long-term workforce stability.

Component 3 reflected team collaboration and interpersonal trust, including cross-functional teamwork, sense of belonging, and mutual support within teams.

Therefore, the factor analysis supports a multidimensional structure of organizational DEI and sustainability practices, highlighting three coherent and interpretable themes that align with strategic goals in inclusive, collaborative, and sustainable development.

Findings

The research found that there is strong correlation seen between DEI practices and other organizational factors like teamwork, creativity, and sustainable results. This means that when organizations focus on inclusion and equity, it has a positive impact on how team works, how innovative the employees become, and how sustainable long-term growth is attained. In addition, the study proved that DEI, coupled with cohesive team functioning and a culture that fosters innovation, has a significant role in fostering an environment at work that is conducive to long term growth and retention. The factor analysis also indicated that DEI practices in the organisations can be grouped into three broad themes: whether they had structured diversity and representation policies, whether they incorporated sustainability and innovation into those policies, and how much they had trust and collaboration in teams.

Suggestions

According to the findings, it is suggested that the organization should further develop inclusive leadership by equipping managers to

- Foster inclusive leadership through fairness, transparency, and sensitivity training.
- Encourage cross-functional collaboration to enhance team trust and diversity of thought.
- Make DEI consistent with sustainability by integrating environmental and social objectives into HR practices.
- Enhance representation of underrepresented groups in leadership.
- Regularly audit DEI strategies and review through employee feedback.
- Provide sensitization and anti-bias training to enhance inclusive culture.



International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021

Refereed journal

Vol. 13, Issue 5, May 2025

DOI: 10.17148/IJIREEICE.2025.13501

V.CONCLUSION

This study provided a detailed examination of Diversity, Equity, and Inclusion (DEI) practices in a manufacturing business in India that highlighted the pivotal role DEI plays in driving key organizational performance. The research consistently showed that DEI initiatives are not just moral or symbolic acts, but strategic facilitators that build team cohesiveness, drive innovation, and meaningfully contribute to long-term organizational sustainability.

The regression and correlation tests ensured that inclusive HR practices significantly impact innovation and sustainability when supported by a culture of trust and team collaboration. Staff members who feel valued, heard, and empowered irrespective of their backgrounds are more likely to be able to make meaningful contributions towards the growth and creative output of the organization. In addition, the factor analysis identified a multi-dimensional structure of DEI implementation, stressing the interrelatedness of diversity policies, sustainable practices, and interpersonal team dynamics.

These findings imply that for manufacturing organizations to be competitive and future-ready, DEI should be incorporated at both the policy and organizational culture levels. Leaders should be actively engaged in demonstrating inclusive behaviours, and systems should be periodically assessed to provide inclusive access to opportunities, most notably in industrial settings where traditional hierarchical practices tend to dominate.

The findings emphasize the need for proactive DEI initiatives and strategic inclusion in all aspects of human resources. With Indian manufacturing companies becoming more aligned with global best practices and inclusive workforces, integrating DEI into the heart of business operations will become crucial for developing robust, participative, and innovative teams.

REFERENCES

- [1]. Agrawal, R., & Vyas, A. (2021). *Inclusive HR practices and employee satisfaction: An analysis of Indian private sector firms*. International Journal of Human Resource Studies, 11(3), 45–58.
- [2]. Kundu, S. C., & Mor, A. (2017). Workforce diversity and organizational performance: A study of IT industry in India. International Journal of Human Resource Development and Management, 17(2), 122–137.
- [3]. Bhawalkar, A., & Lanjewar, U. (2019). *Diversity practices in Indian manufacturing firms: A qualitative perspective*. Journal of Management Research and Analysis, 6(2), 102–107.
- [4]. Deshpande, R., & Shukla, M. (2020). *Inclusive leadership and innovation in Indian industries*. South Asian Journal of Human Resources, 4(1), 62–70.
- [5]. Gupta, S., & Sharma, V. (2020). *The role of DEI initiatives in innovation: Evidence from Indian tech companies*. Journal of Strategic Human Resource Management, 9(2), 77–85.
- [6]. Mitra, A. (2018). Biases in hiring practices in India: An HR perspective. HRM Review, 18(6), 33–37.
- [7]. Saha, D. (2022). Sustainability through diversity and inclusion: Perspectives from Indian corporates. Indian Journal of Industrial Relations, 58(1), 15–27.
- [8]. Chakraborty, R., & Bansal, N. (2019). Workplace inclusion programs and their effectiveness in Indian MNCs. Indian Journal of Organizational Behaviour, 5(1), 29–36.
- [9]. Cox, T., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. The Executive, 5(3), 45–56.
- [10]. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44(2), 350–383.
- [11]. Rao, M. S., & Bagali, M. M. (2014). Women and leadership in Indian organizations: A critical evaluation of barriers and facilitators. The IUP Journal of Organizational Behavior, 13(1), 27–38.
- [12]. Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. Group & Organization Management, 31(2), 212–236.
- [13]. Singh, V., & Sinha, R. (2016). Diversity and inclusion practices in Indian SMEs: A strategic HR approach. Journal of Human Resource Management, 4(3), 40–49.