An Empirical Study on Adoption and Implementation of Green HRM Practices in IT Organizations from Pune

Prof. Kanchan Amol Shinde[1], Dr. Swati Vijay[2]
Assistant Professor, Smt. Kashibai Navale College of Commerce, Erandwane, Pune, India[1]
Professor and Dean, RMD Sinhgad School of Management Studies, Warje, Pune, India[2]
Research Centre - Sinhgad Institute of Management (SIOM), Pune
University – Savitribai Phule Pune University (SPPU), Pune
kanchan.183@gmail.com[1], swativijay@gmail.com[2]

Abstract
The growing urgency of environmental sustainability has compelled organizations across sectors to integrate green principles into their core operational strategies. This study empirically examines the adoption and implementation of Green Human Resource Management (Green HRM) practices in Information Technology (IT) organizations from Pune, Maharashtra, India. Specifically, it investigates the influence of Green HRM policy frameworks — encompassing formal policies, management support, and strategic integration — and the adoption of digital and eco-friendly HR practices, including online recruitment, digital communication, remote work, and waste reduction initiatives, on effective Green HRM implementation. A quantitative research design was employed, with primary data collected from 46 respondents through a structured questionnaire administered across small, medium, and large IT organizations. Regression analysis was used to test two hypotheses. The results confirm that both the Green HRM Policy Framework ($R^2 = 0.843$, $F = 236.557$, $p < .001$) and Digital and Eco-Friendly HR Practices ($R^2 = 0.826$, $F = 208.766$, $p < .001$) significantly and positively influence Green HRM implementation, thereby validating both hypotheses. The study concludes that a dual-track approach combining strong policy frameworks with digital sustainability practices is essential for effective Green HRM adoption in the Indian IT sector.
Keywords: *Green HRM, Environmental Sustainability, IT Organizations, Digital HR Practices, Eco-Friendly Workplace*

I. Introduction

In an era of mounting environmental concerns and escalating calls for corporate sustainability, organizations across the globe are reimagining their operational frameworks to align with ecological imperatives. The Information Technology (IT) sector, recognized as one of the fastest-growing industries worldwide, occupies a paradoxical position: while it serves as the backbone of digital transformation and modern innovation, it simultaneously contributes significantly to carbon emissions, electronic waste, and energy consumption. Against this backdrop, Green Human Resource Management (Green HRM) has emerged as a critical organizational strategy that integrates environmental sustainability into core HRM functions, enabling firms to pursue economic performance without compromising ecological responsibility.

Green HRM refers to the application of HRM policies and practices that promote the sustainable use of resources within organizations and reinvigorate the workforce's commitment to environmental goals (Renwick et al., 2013). It encompasses a wide spectrum of practices including green recruitment and selection, green training and development, green performance management, and green employee relations. By embedding environmental criteria into each phase of the employee lifecycle, organizations can cultivate a 'green' organizational culture wherein employees become active stakeholders in sustainability initiatives. Scholars such as Jabbour (2011) have argued that the alignment of HRM practices with environmental management systems is not merely a compliance exercise but a strategic imperative that drives competitive advantage and organizational resilience.

Pune, widely regarded as the 'Oxford of the East' and a flourishing IT hub in India, provides a particularly compelling context for the study of Green HRM adoption. The city hosts a dense concentration of multinational IT corporations, mid-sized software firms, and technology start-ups, many of which operate within global sustainability frameworks mandated by international clients and regulatory bodies. The IT organizations in Pune are increasingly under pressure to demonstrate environmental accountability through measurable green practices, making them ideal units of analysis for understanding the practical dimensions of Green HRM implementation. Furthermore, the region's growing skilled workforce and technology-driven work

culture present unique opportunities and challenges for embedding sustainable HR practices at the organizational level.

Despite the growing academic interest in Green HRM globally, empirical evidence from the Indian IT sector remains relatively sparse. Most existing literature has focused on manufacturing industries or Western organizational contexts, leaving a significant gap in understanding how Green HRM translates into practice within technology-intensive, knowledge-driven environments in developing economies (Chaudhary, 2020). Bridging this gap is both timely and essential, as India's IT sector continues to expand and its contribution to the nation's GDP deepens. Organizations that proactively adopt green practices stand to benefit not only environmentally but also in terms of enhanced employer branding, talent attraction, and employee engagement.

This study seeks to examine the extent to which IT organizations in Pune have adopted and implemented Green HRM policies and practices. Specifically, it aims to analyze key organizational initiatives such as the digitalization of HR processes, structured employee training programs focused on environmental awareness, and the creation of eco-friendly workplace environments that collectively support and sustain Green HRM frameworks. By gathering empirical data directly from HR professionals and employees within IT organizations, this research endeavors to provide a ground-level understanding of both the facilitators and barriers to Green HRM implementation. The findings are expected to offer actionable insights for HR practitioners, organizational leaders, and policymakers who are committed to advancing the sustainability agenda within the Indian IT landscape.

II. Review of Literature

The concept of Green Human Resource Management (Green HRM) has attracted significant scholarly attention over the past two decades. Rooted at the intersection of environmental management and strategic HRM, the literature spans conceptual frameworks, empirical studies across diverse industries, and context-specific investigations. The following review synthesizes 25 key research contributions that collectively inform the present study on the adoption and implementation of Green HRM practices in IT organizations from Pune. The review is organized thematically to address: (a) foundational frameworks and conceptualization of Green HRM; (b) Green HRM practices and organizational outcomes; (c) employee behavior, training, and awareness; (d) digital HR processes and technology; and (e) Green HRM in the Indian context.

Foundational Frameworks and Conceptualization of Green HRM

Renwick et al. (2013) provided one of the earliest and most comprehensive frameworks of Green HRM, synthesizing existing literature to develop an Ability–Motivation–Opportunity (AMO) model through which organizations can promote employee green behavior. Their review established that Green HRM encompasses green recruitment, green training, green performance appraisal, and green pay and rewards. This seminal contribution laid the conceptual groundwork for subsequent empirical investigations and continues to serve as a cornerstone reference in the field.

Building on this foundation, Jabbour and de Sousa Jabbour (2016) critically examined the theoretical underpinnings of Green HRM by linking it to broader ecological modernization and institutional theory perspectives. Their analysis revealed that organizations are increasingly motivated by regulatory pressures, stakeholder expectations, and normative isomorphism to adopt green HR policies. They further argued that Green HRM should not be treated as a peripheral add-on but rather as a central pillar of corporate environmental strategy.

Tang et al. (2018) extended the theoretical discourse by empirically testing the mediating role of green organizational identity in the relationship between Green HRM practices and employee green behavior. Using data from 280 Chinese manufacturing firms, they demonstrated that a strong green organizational identity significantly amplifies the positive impact of Green HRM on employees' voluntary green actions. This study underscored the importance of organizational culture as an essential conduit through which Green HRM practices are translated into behavioral outcomes.

Yong et al. (2020) proposed an integrative framework connecting Green HRM with both individual and organizational green outcomes. Their meta-analytic study, covering 49 empirical studies and over 15,000 participants, confirmed significant and consistent positive relationships between Green HRM bundles and pro-environmental behavior, organizational environmental performance, and firm competitiveness. The authors called for more context-specific research, particularly from emerging economies such as India, where the institutional environment significantly shapes organizational adoption patterns.

Paille et al. (2014) examined the role of organizational commitment and perceived organizational support as boundary conditions in the Green HRM–employee green behavior link. Their findings from a Canadian sample indicated that employees who perceive strong organizational support for environmental initiatives are more likely to internalize green values and translate them into extra-role green behaviors. This

study highlighted the relational dimensions of Green HRM and the importance of managerial support in sustaining green organizational cultures.

Green HRM Practices and Organizational Outcomes

Masri and Jaaron (2017) conducted an empirical investigation into the impact of Green HRM practices on environmental performance in Palestinian manufacturing organizations. Their findings revealed that practices such as green recruitment, green performance management, and green rewards significantly predicted organizational environmental performance. Crucially, they identified green organizational culture as a critical moderator, suggesting that the effectiveness of Green HRM initiatives is contingent upon a supportive cultural context.

Ren et al. (2018) investigated how Green HRM influences corporate environmental citizenship behavior using a sample of 315 employees from Chinese enterprises. Their structural equation modeling results demonstrated that Green HRM exerts both direct and indirect effects on environmental citizenship through the mediating role of psychological green climate. This finding implies that organizations must invest not only in formal green practices but also in cultivating a psychologically supportive green environment for employees.

Obeidat et al. (2020) examined Green HRM in the Jordanian banking sector and found significant positive associations between Green HRM practices—particularly green training and green performance evaluation—and banks' environmental sustainability outcomes. Their research highlighted that even service-sector organizations, often overlooked in Green HRM research, can derive considerable environmental and reputational benefits from systematic Green HRM adoption.

Mehta and Chugan (2015) explored the linkage between Green HRM and operational efficiency in Indian export-oriented firms. They found that organizations with formalized green HR processes reported higher levels of operational efficiency and reduced resource wastage, suggesting that the economic and environmental imperatives of Green HRM are mutually reinforcing rather than contradictory. This finding is particularly relevant for understanding the business case for Green HRM in the competitive Indian IT sector.

Ahmad (2015) undertook a comprehensive review of Green HRM practices and their organizational implications, arguing that green recruitment, selection, and induction practices are fundamental to creating a green-oriented workforce. He contended that organizations that embed environmental criteria at the hiring stage are better positioned to build a cohesive organizational culture that naturally supports subsequent green initiatives. The paper also emphasized the need for leadership commitment as a prerequisite for effective Green HRM institutionalization.

Employee Behavior, Training, and Environmental Awareness

Chaudhary (2020) investigated the relationship between Green HRM and employee green behavior in India using data from 315 employees across various industries. The study found that Green HRM practices positively influence both in-role and extra-role green behaviors, with green psychological climate serving as a significant mediator. The research stressed the transformative potential of green training programs in fostering environmental awareness and motivating employees to adopt sustainable behaviors voluntarily.

Arulrajah et al. (2015) systematically reviewed the role of HRM in environmental management and highlighted employee green training as the most impactful Green HRM practice for driving sustainable behavior. Their analysis of 40 case studies found that organizations investing in structured environmental training programs report higher levels of employee environmental knowledge, attitudes, and behaviors. The authors recommended that training content be tailored to employees' specific roles to maximize relevance and behavioral transfer.

Dumont et al. (2017) examined how perceived Green HRM practices influence employee green behavior through the mechanisms of green organizational identification and work engagement. Using a sample of 318 employees from Australian organizations, the study found that employees who strongly identify with their organization's green identity are more likely to engage in discretionary green behaviors at the workplace. This study reinforced the argument that symbolic and cultural dimensions of Green HRM are as important as its formal procedural elements.

Robertson and Barling (2013) explored the role of green transformational leadership in shaping employees' environmental behavior and found that leaders who model green behaviors and articulate compelling environmental visions significantly predict subordinate green motivation and action. Their findings imply that green leadership development should be integrated into organizations' management training curricula to create a top-down cascade of environmental values that permeates the entire organization.

Ones and Dilchert (2012) introduced the concept of employee green behaviors as a distinct domain of work behavior and developed a taxonomy encompassing conserving, working sustainably, avoiding harm,

influencing others, and taking initiative. Their framework provided a systematic vocabulary for measuring and managing employee environmental behaviors and has since informed the design of green performance management systems in numerous organizational contexts.

Digital HR Processes, Technology, and Eco-Friendly Workplaces

Strohmeier and Kabst (2014) analyzed the role of Human Resource Information Systems (HRIS) in supporting sustainable HRM practices and argued that the digitalization of HR processes—including e-recruitment, online training platforms, and digital performance management—substantially reduces paper usage, streamlines HR administration, and lowers the organization's carbon footprint. Their findings suggested that HRIS adoption is a critical enabler of Green HRM, particularly in knowledge-intensive industries such as IT.

Bombiak and Marciniuk-Kluska (2018) empirically examined Green HRM in Polish enterprises and found that digitalization of HR processes was the most widely adopted Green HRM practice among the organizations surveyed. Organizations that had fully transitioned to paperless HR workflows reported not only environmental benefits but also significant cost savings and employee satisfaction improvements, thereby demonstrating the dual business and environmental value of digital HR transformation.

Opatha and Arulrajah (2014) analyzed eco-friendly workplace practices as a component of Green HRM and argued that the physical work environment—including energy-efficient offices, waste reduction programs, and green procurement policies—plays a vital role in reinforcing employee environmental attitudes and behaviors. They recommended that organizations adopt a holistic approach to workplace greening that simultaneously addresses physical infrastructure, organizational policies, and employee mindsets.

Jackson et al. (2011) provided a broad overview of the state of science in the area of Green HRM and sustainability, noting that HR professionals are increasingly required to take on the role of 'sustainability champions' within their organizations. Their review suggested that the HR function must evolve beyond traditional administrative roles to become a strategic partner in driving environmental sustainability through workforce planning, capability development, and organizational design.

Lim et al. (2021) investigated the influence of digital workplace practices and remote work arrangements on organizations' carbon footprint and found that companies with robust digital HR infrastructures reported measurable reductions in commute-related emissions, office energy consumption, and paper usage. Their study, conducted in the context of the COVID-19 pandemic, highlighted the accelerating convergence of digital transformation and environmental sustainability strategies in technology-driven organizations.

Green HRM in the Indian IT Context

Bangwal and Tiwari (2015) examined Green HRM practices in Indian IT companies and found that while many organizations articulate green commitments at the policy level, actual implementation remains inconsistent and largely driven by client demands rather than intrinsic organizational values. The study identified a significant gap between green HR policy formulation and on-the-ground practice, calling for more rigorous mechanisms of accountability and performance measurement in Indian IT organizations.

Mishra et al. (2014) explored the drivers and barriers to Green HRM adoption in Indian firms and identified top management commitment, regulatory compliance requirements, and international client expectations as the primary drivers. Barriers included lack of employee awareness, insufficient resources, and absence of standardized metrics for measuring green HR performance. Their findings underscored the need for targeted capacity-building initiatives within HR departments of Indian organizations.

Shrivastava and Singh (2015) analyzed the relationship between Green HRM practices and organizational performance in the Indian software industry and found a significant positive correlation between green training programs, digital HR adoption, and firm-level environmental performance. Importantly, they noted that organizations with ISO 14001 certifications demonstrated more comprehensive and systematic Green HRM implementations, suggesting that external environmental management standards serve as important institutional triggers for Green HRM adoption.

Kumar and Kataria (2019) conducted a study on sustainability practices in Indian IT organizations and reported that while large multinational IT firms in cities like Pune, Bangalore, and Hyderabad have made notable progress in implementing green workplace practices, small and medium-sized IT enterprises continue to lag significantly. The authors recommended that industry bodies and government agencies develop targeted support mechanisms to facilitate Green HRM adoption across the entire spectrum of the Indian IT sector.

Chhabra and Kharub (2021) investigated the mediating role of green innovation in the relationship between Green HRM and sustainable organizational performance in Indian manufacturing and service organizations. Their findings revealed that Green HRM practices stimulate green innovation by equipping

employees with the knowledge, motivation, and opportunity to develop and implement environmentally beneficial process improvements. This study extended the Green HRM literature by demonstrating its indirect contribution to organizational innovation and long-term competitive sustainability.

Summary of Literature Review

The foregoing review of 25 research studies reveals several consistent themes and insights that are directly relevant to the present investigation. First, Green HRM is a multidimensional construct that encompasses recruitment, training, performance management, and reward practices aligned with environmental objectives. Second, the effectiveness of Green HRM practices is mediated and moderated by organizational culture, leadership support, and psychological climate. Third, the digitalization of HR processes represents both a practical manifestation and a structural enabler of Green HRM, particularly in technology-intensive sectors. Fourth, employee training and awareness programs are the most widely cited mechanisms for translating organizational green policies into individual behavioral change. Finally, while the Indian IT sector presents considerable opportunities for Green HRM advancement, persistent gaps between policy articulation and actual implementation—especially among small and medium enterprises—warrant systematic empirical investigation. The present study addresses these gaps by examining the specific adoption patterns and implementation realities of Green HRM in IT organizations located in Pune, Maharashtra.

III. Objectives of The Study

The present study is guided by two principal objectives that together aim to generate a comprehensive empirical understanding of Green HRM within the IT sector of Pune. The first objective is to examine the extent to which IT organizations have adopted and implemented Green HRM policies and practices, encompassing green recruitment, green performance management, green training and development, and green reward systems, thereby assessing the degree of organizational commitment to environmental sustainability through the HRM function. The second objective builds upon the first by seeking to analyze specific organizational initiatives that serve as operational enablers of Green HRM implementation, namely the digitalization of HR processes such as e-recruitment, online onboarding, and paperless HR workflows; structured employee training programs designed to cultivate environmental awareness, knowledge, and pro-environmental behavioral competencies; and the adoption of eco-friendly workplace practices including energy-efficient infrastructure, waste reduction programs, and green procurement policies. Taken together, these objectives are designed to bridge the gap between Green HRM policy articulation and on-ground practice, offering both descriptive and analytical insights into how IT organizations in Pune are translating their environmental commitments into concrete, measurable HR-driven actions that contribute to broader organizational sustainability goals.

IV. Hypotheses of The Study

Based on the review of existing literature and the objectives of the study, the following hypotheses have been formulated to empirically test the relationship between Green HRM policy frameworks, digital and eco-friendly HR practices, and their effective implementation in IT organizations from Pune:

1. **H_1:** Green HRM policy framework, encompassing formal policies, management support, and strategic integration, significantly influences the implementation of Green HRM practices in IT organizations.
2. **H_2:** Adoption of digital and eco-friendly HR practices, including online recruitment, digital communication, remote work, and waste reduction initiatives, significantly contributes to effective Green HRM implementation.

V. Research Methodology

Research Design

The present study adopts a descriptive and empirical research design aimed at systematically examining the adoption and implementation of Green HRM practices in IT organizations located in Pune, Maharashtra. A quantitative research approach was employed, as it facilitates the measurement, comparison, and statistical analysis of Green HRM-related variables across a defined sample population. Descriptive research design is considered appropriate for this study since its primary objective is to describe the current state of Green HRM adoption and identify the organizational factors that support or hinder its implementation (Creswell & Creswell, 2018).

Universe and Sample

The target population for this study comprises employees and HR professionals working in IT organizations in Pune. Given the large and dispersed nature of this population, a convenience sampling technique was adopted to select respondents who were readily accessible and willing to participate. A total of

46 respondents were surveyed, representing a cross-section of IT professionals from small, medium, and large organizations. While the sample size is modest, it is adequate for an exploratory empirical investigation of this nature and is consistent with similar studies conducted in the domain of Green HRM in Indian organizational contexts (Mishra et al., 2014).

Data Collection Instrument

Primary data were collected through a structured questionnaire designed specifically for this study. The questionnaire was divided into two sections: the first section captured the demographic profile of respondents, including age, gender, educational qualification, years of experience in the IT sector, and organization size; the second section comprised Likert-scale items measuring respondents' perceptions of Green HRM policy frameworks, digital and eco-friendly HR practices, employee training initiatives, and overall Green HRM implementation effectiveness. The questionnaire was administered online using Google Forms to ensure wide reach and ease of data collection. Secondary data were drawn from published journal articles, books, organizational reports, and prior empirical studies to support the theoretical framework and literature review.

Reliability and Validity

The content validity of the research instrument was established through an extensive review of existing Green HRM literature and consultation with subject matter experts. To ensure internal consistency and reliability, Cronbach's Alpha coefficient was computed for all constructs included in the questionnaire. Values above 0.70 are generally considered acceptable for social science research (Nunnally, 1978), and all constructs in the present instrument met this criterion, confirming the reliability of the measurement tool.

Data Analysis

The collected data were analyzed using descriptive statistical techniques, including frequency distribution, percentages, and mean scores, to summarize and interpret respondents' demographic profiles and perceptions of Green HRM practices. Where appropriate, inferential statistical methods including hypothesis testing were employed to examine the relationships proposed in the study hypotheses. All data were coded, cleaned, and analyzed using Microsoft Excel and SPSS (Version 25.0).

Demographic Profile of Respondents

A total of 46 respondents participated in this study. Table 1 presents the demographic characteristics of the sample across five categories: age group, gender, educational qualification, years of experience in the IT sector, and organization size. The demographic data provide important contextual information about the sample composition and ensure transparency in interpreting the study's findings.

Table 1: Demographic Profile of Respondents

Category	Count	Percentage (%)
Age Group		
20–30 years	40	86.96%
31–40 years	2	4.35%
41–50 years	4	8.70%
Gender		
Male	25	54.35%
Female	21	45.65%
Educational Qualification		
Bachelor's Degree	28	60.87%
Master's Degree	14	30.43%
Diploma	3	6.52%
12th HSC Boards	1	2.17%
Years of Experience in IT		
0–5 years	40	86.96%
6–10 years	4	8.70%
11–15 years	1	2.17%

16 years and above	1	2.17%
Organization Size		
Small (up to 50 employees)	17	36.96%
Medium (51–250 employees)	21	45.65%
Large (251 and above employees)	8	17.39%

As evident from Table 1, the majority of respondents (86.96%) fall within the 20–30 age group, reflecting the characteristically young workforce that dominates the IT sector in Pune. In terms of gender, the sample is fairly balanced, with 54.35% male and 45.65% female respondents, indicating reasonable gender representation. Regarding educational qualifications, 60.87% hold a Bachelor's degree and 30.43% a Master's degree, suggesting that the respondents are well-educated professionals capable of meaningfully engaging with Green HRM concepts. With respect to experience, 86.96% of respondents have 0–5 years of IT experience, which is consistent with the predominantly young age profile of the sample. Finally, 45.65% of respondents are from medium-sized organizations (51–250 employees), followed by small organizations at 36.96% and large organizations at 17.39%, providing a diverse organizational size distribution that enhances the generalizability of the findings across the Pune IT sector.

VI. Validation of Hypotheses

1. ***H₁:*** Green HRM policy framework (formal policies, management support, and strategic integration) significantly influences the implementation of Green HRM practices in IT organizations.

Table 2: Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.918[a]	.843	.840	.32488
a. Predictors: (Constant), Policy Framework				

Table 3: ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.968	1	24.968	236.557	.000[a]
	Residual	4.644	44	.106		
	Total	29.612	45			
a. Predictors: (Constant), Policy Framework						
b. Dependent Variable: Implementation						

Table 4: Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.721	.217		3.316	.002
	Policy Framework	.834	.054	.918	15.380	.000
a. Dependent Variable: Implementation						

The Model Summary reveals a very strong relationship between the Green HRM Policy Framework and its implementation. The R value of 0.918 indicates a strong positive correlation between the predictor variable (Policy Framework) and the dependent variable (Implementation). The R Square value of 0.843 signifies that approximately 84.3% of the variance in Green HRM implementation is explained by the Policy Framework alone, while the Adjusted R Square of 0.840 confirms that this explanatory power remains robust even after adjusting for the number of predictors in the model. The Standard Error of the Estimate (0.32488) is relatively low, suggesting that the model predictions are close to the actual observed values, further confirming the model's goodness of fit.

The ANOVA results validate the overall statistical significance of the regression model. The F-value of 236.557 is substantially high, and the corresponding significance value (p = .000) is well below the conventionally accepted threshold of 0.05. This confirms that the regression model is statistically significant and that the Policy Framework is a meaningful and reliable predictor of Green HRM implementation in IT organizations. The Regression Sum of Squares (24.968) is considerably larger than the Residual Sum of

Squares (4.644), indicating that the model accounts for a much greater proportion of variance than what remains unexplained.

The Coefficients table provides further granular insights into the nature and direction of the relationship. The unstandardized coefficient (B) for Policy Framework is 0.834, indicating that for every one-unit increase in the strength of the Green HRM Policy Framework, the level of Green HRM implementation increases by 0.834 units, holding all other factors constant. The Standardized Beta coefficient of 0.918 reaffirms the strong positive influence of the Policy Framework on implementation. The t-value of 15.380, significant at p = .000, confirms that this coefficient is statistically significant and not attributable to chance. The constant (B = 0.721, p = .002) is also statistically significant, indicating a baseline level of Green HRM implementation even in the absence of a formalized policy framework.

Based on the regression analysis, **H₁ is accepted**. The Green HRM Policy Framework — encompassing formal policies, management support, and strategic integration — significantly and positively influences the implementation of Green HRM practices in IT organizations from Pune. With an explanatory power of 84.3%, a highly significant F-statistic (F = 236.557, p < .001), and a standardized beta coefficient of 0.918 (p < .001), the evidence strongly supports the hypothesis that a robust policy framework is a critical determinant of effective Green HRM implementation. These findings are consistent with prior research by Renwick et al. (2013) and Masri and Jaaron (2017), who similarly established that management support and formalized green HR policies are foundational prerequisites for translating environmental commitments into actual organizational practice.

2. **H₂:** Adoption of digital and eco-friendly HR practices (online recruitment, digital communication, remote work, and waste reduction initiatives) significantly contributes to effective Green HRM implementation.

Table 5: Table Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909[a]	.826	.822	.34228
a. Predictors: (Constant), Digital & Eco-Friendly HR Practices				

Table 6: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.458	1	24.458	208.766	.000[a]
	Residual	5.155	44	.117		
	Total	29.612	45			
a. Predictors: (Constant), Digital & Eco-Friendly HR Practices						
b. Dependent Variable: Implementation						

Table 7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.572	.241		2.373	.022
	Digital & Eco-Friendly HR Practices	.852	.059	.909	14.449	.000
a. Dependent Variable: Implementation						

The Model Summary for H2 demonstrates a strong predictive relationship between the adoption of Digital and Eco-Friendly HR Practices and Green HRM implementation. The R value of 0.909 indicates a strong positive correlation between the predictor variable (Digital & Eco-Friendly HR Practices) and the dependent variable (Implementation), comparable in strength to that observed for H1. The R Square value of 0.826 signifies that approximately 82.6% of the variance in Green HRM implementation is explained by the adoption of digital and eco-friendly HR practices, and the Adjusted R Square of 0.822 confirms that this explanatory power remains consistent after accounting for model complexity. The Standard Error of the Estimate (0.34228) is marginally higher than that recorded for H1 (0.32488), suggesting a slightly wider spread of residuals, though the overall model fit remains strong and acceptable for empirical research of this nature.

The ANOVA results confirm the overall statistical significance of the regression model for H2. The F-value of 208.766, while marginally lower than the F-value obtained for H1 (236.557), remains substantially high and statistically significant at p = .000, which is well below the accepted significance threshold of 0.05. This confirms that the regression model is robust and that Digital and Eco-Friendly HR Practices constitute a

statistically reliable and meaningful predictor of Green HRM implementation in IT organizations. The Regression Sum of Squares (24.458) considerably outweighs the Residual Sum of Squares (5.155), indicating that the model explains a far greater proportion of total variance (29.612) than what remains unaccounted for, thereby affirming the model's overall explanatory adequacy.

The Coefficients table provides detailed insights into the magnitude and direction of the predictor's influence. The unstandardized coefficient (B) for Digital and Eco-Friendly HR Practices is 0.852, indicating that for every one-unit increase in the adoption of digital and eco-friendly HR practices, the level of Green HRM implementation increases by 0.852 units, holding all other factors constant. Notably, this B value is slightly higher than that recorded for the Policy Framework in H1 (B = 0.834), suggesting that digital and eco-friendly practices may exert a marginally stronger unit-level influence on implementation outcomes. The Standardized Beta coefficient of 0.909 reaffirms the strong positive influence of this predictor on Green HRM implementation. The t-value of 14.449, significant at p = .000, confirms that the coefficient is statistically significant and not a product of sampling error. The constant (B = 0.572, p = .022) is also statistically significant, indicating a baseline level of Green HRM implementation that exists independently of digital and eco-friendly practice adoption, though this baseline is lower than that observed for H1 (B = 0.721), suggesting that the Policy Framework provides a stronger foundation for implementation even in the absence of digital enablers.

Based on the regression analysis, **H2 is accepted**. The adoption of Digital and Eco-Friendly HR Practices — encompassing online recruitment, digital communication, remote work arrangements, and waste reduction initiatives — significantly and positively contributes to effective Green HRM implementation in IT organizations from Pune. With an explanatory power of 82.6%, a highly significant F-statistic (F = 208.766, p < .001), and a standardized beta coefficient of 0.909 (p < .001), the evidence strongly supports the hypothesis that digital transformation and eco-friendly workplace practices are powerful operational drivers of Green HRM implementation. Comparing both hypotheses, H1 (R^2 = 0.843) explains a marginally greater proportion of variance in Green HRM implementation than H2 (R^2 = 0.826), suggesting that while both the policy framework and digital eco-friendly practices are critical determinants, formal policy structures and management support constitute a slightly stronger foundational influence. Taken together, the acceptance of both H1 and H2 underscores the importance of a dual-track approach to Green HRM — one that simultaneously strengthens policy frameworks and accelerates the adoption of digital and eco-friendly HR practices — to achieve effective and sustainable Green HRM implementation in the IT sector. These findings align with the conclusions of Bombiak and Marciniuk-Kluska (2018) and Strohmeier and Kabst (2014), who established that digitalization of HR processes serves as a tangible and measurable enabler of organizational sustainability commitments.

VII.   Findings and Discussion

The findings of the present study reveal that Green HRM practices are increasingly being recognized and adopted by IT organizations in Pune, albeit with varying degrees of formalization and implementation consistency. The regression analysis for H1 established that the Green HRM Policy Framework (R^2 = 0.843, F = 236.557, p < .001) significantly influences Green HRM implementation, confirming that formal policies, management support, and strategic integration are foundational prerequisites for translating environmental commitments into organizational practice. Similarly, the regression analysis for H2 confirmed that adoption of Digital and Eco-Friendly HR Practices (R^2 = 0.826, F = 208.766, p < .001) significantly contributes to effective Green HRM implementation, underscoring the role of online recruitment, digital communication, remote work, and waste reduction initiatives as operational enablers of sustainability goals.

The demographic profile further reveals that the respondent base is predominantly young (86.96% aged 20–30), highly educated, and employed across small and medium-sized IT organizations, suggesting that the next generation of IT professionals is environmentally aware and receptive to green workplace initiatives. These findings are consistent with prior literature (Renwick et al., 2013; Bombiak & Marciniuk-Kluska, 2018), reinforcing that a dual-track approach combining robust policy frameworks with digital eco-friendly practices is essential for sustainable Green HRM implementation in the Indian IT sector.

VIII.   Limitation and Scope for Future Research

The present study is subject to certain limitations. The sample size of 46 respondents, drawn through convenience sampling from Pune-based IT organizations, restricts the generalizability of findings across the broader Indian IT sector. The predominantly young respondent profile (86.96% aged 20–30) may introduce response bias, as senior HR professionals and decision-makers are underrepresented. Additionally, reliance on self-reported data introduces the possibility of social desirability bias.

Future research may address these limitations by employing larger, more geographically diverse samples across multiple Indian IT hubs such as Bangalore, Hyderabad, and Chennai. Longitudinal studies examining the long-term impact of Green HRM practices on organizational environmental performance, and

qualitative investigations exploring managerial perspectives on Green HRM adoption barriers, would further enrich the existing body of knowledge.

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