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Technology-Enabled HR Practices for Successful Implementation of SHRM

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Abstract

People are considered the most significant resource in any organisation. Identifying strategic ways to effectively organise and manage them is essential to achieving maximum profitability and efficiency, as it ensures that they have the right workspace and amenities. The information and communications technology (ICT) industry is constantly innovating, and as technology is the driving force behind businesses in the modern world, human resource management strategies need to take this into account. It has been essential to take the time to consider the various ethical and practical concerns that arise in the field of human resource management (HRM), as well as the elements that contribute to the effective integration of technology into HRM operations. The rapid improvements in technology, such as robotic services and artificial intelligence (AI), have presented human resource practitioners with new and critical difficulties. We conducted a survey with 216 members of the HRM department to find out more about the different aspects that affect the success of strategic human resource management (SHRM). The elements that define the successful integration of technology in efficient strategic human resource management (SHRM) include hiring and selection, onboarding of new hires, performance management, data analytics, and HR metrics. The study's findings suggest that how technological solutions are implemented in SHRM has a significant impact on their efficacy. Businesses must always invest in technology and adjust to changes in the SHRM industry.

Keywords: Data Analytics, Employee Onboarding, HR Practices, Performance Management, Recruitment and Selection, Strategic Human Resource Management (SHRM).

Introduction

To improve overall performance, productivity, and profitability, strategic HRM practices should be in line with any organisation's HR policy. Technology is essential for both arranging and managing a wide range of administrative chores and for enhancing workplace conditions in the modern world, where all businesses strive to produce the most possible. Modern ICT in the workplace fosters employee interactions and expedites and streamlines work processes; thus, it is clear that technology plays a role in redesigning the entire framework of HRM practices. Nevertheless, there are many obstacles to overcome when utilizing technology for strategic HRM, necessitating a careful examination of numerous factors. Companies need to ensure that their staff members have the necessary training and education in this area so they can profit from the rapidly advancing technology. Additionally, technology helps employees build interpersonal interactions, which raises their level of commitment to their work. For HR professionals to successfully integrate

technology into human resource management, they must improve their plans by comprehending the drivers. Through technical improvements over the past 60 years, HR practitioners have improved employee welfare by refining their approaches (1). However, people have also suffered from technology, even though it is a potential resource for businesses. Artificial intelligence and robots have had a significant impact on decision-making, job replacement, human collaboration, and other fields. In the present era, this has given rise to various moral and ethical dilemmas for HR practitioners. Technology might negatively impact human resources, jeopardising their chances, responsibilities, and skill sets (2). The horizon of Human Resources (HR) strategies is illuminated by technological breakthroughs, shifts in workforce dynamics, and evolving organizational goals. This paper delves into pivotal trends steering the future of HR, encompassing the integration of advanced technology, a deepened emphasis on enhancing employee experience, the ascendancy of hybrid

work models, a focus on skills enhancement, and the progression of leadership paradigms. As organizations gear up for the future of work, the convergence of technology with a human-centered approach emerges as paramount. Effective HR strategies will adeptly navigate challenges, prioritize employee well-being, cultivate ongoing learning opportunities, and harmonize organizational values with the aspirations of a purpose-driven workforce (3, 4). Strategic human resource management techniques need to adapt to new technological methodologies in today's technologically advanced world in order to ensure effective outcomes and higher productivity. Thus, it is imperative that HR professionals and businesses explore the interplay between technology and HRM in order to enhance future HRM strategies and tackle the associated difficulties. Globalization and Remote Work Trends where the globalization of businesses and the rise of remote work have compelled organizations to rethink traditional HR approaches. Innovative strategies, such as virtual on-boarding, global talent management, and cross-cultural training, are essential to navigating the challenges posed by a geographically dispersed workforce. These strategies foster collaboration and connectivity across borders, contributing to organizational success in a globalized environment (5).

The following research objectives are designed to analyze the impact of technology-enabled HR practices on the implementation of strategic human resource management.

- To identify the HR procedures that support the effective application of strategic HRM.
- To demonstrate the relationship between effective strategic human resource management (SHRM) and successful technology implementation.
- To compare the effects of technology use on male and female employees within SHRM.

Theoretical Framework

Technology integration is now essential to the efficient implementation of strategic human resource management techniques due to the productive and successful operation of organisational procedures. Most companies place a high priority on integrating technology into their HR services to make sure that workers are maximising productivity and ensuring the seamless operation of the organisation. Considering the information technology industry's continuous advancements, a lot of studies examine various factors that support the successful integration of technology into strategic human resource management in order to better understand how to boost this field's efficacy. Researcher considered the different aspects of the Digital transformation (DT) of HRM in different organizations. Considering this notion, it has been identified that implementing DT can enhance the processes within an organization. Some constraints include a lack of infrastructure, IT funding and employee resistance. However, the research has identified that most employees look forward to implementing DT in HRM processes considering their concerns within the organization. Furthermore, organizations can benefit from implementing the same through recruitment, selection, training, and education process and maintaining employee performance and engagement within the organization. The performance tracking of the employees can further be enhanced through implementing the DT within the HRM processes due to minimized cost and time (6). Information technology plays a critical role in efficient operations and human resource management (7). By collecting data from roughly 130 respondents, it has been shown that these organizations are better able to confront and overcome a range of modern difficulties connected to operations and human resource management when they are prepared to adapt to technology and its advances.

Any organization's most important asset is its human resource base, so increasing productivity and profitability requires competent management. Employees increase productivity by using computerized methods and cutting-edge technology (8). The research effectively illustrates how modern technology supports HRM practices and creates an efficient work environment. As such, it becomes necessary to provide staff members with current technology expertise so that they are ready to accept new technologies. One of the most important factors in guaranteeing the efficient application of technology in human resource management is employee readiness. HRM strategies in organisations' digital transformation are key to the success of companies in facing the changes of the digital era. By focusing on

improving employees' digital competencies, cultural and leadership changes, proper organisational restructuring, talent management, performance measurement, effective communication, flexibility, and good risk management, organisations can optimally leverage digital technology to achieve competitive advantage, improve business performance, and provide added value to customers (9). Any business can enhance the potential of its human resources with the use of technology-enabled learning (10). Appropriate staff education and training is a crucial element of successful HR practice implementation. To get the finest and most anticipated results, it is crucial to provide employees with the necessary training on how to use the newest HR technologies effectively. Employees at a company must be ready for ongoing changes brought about by advances in technology (11). Additionally, it demonstrates how integrating technology into HRM provides higher-quality services and streamlines operations.

Scholars have predominantly examined the impact of technology on human resource management by focusing on the last sixty years of improvements in information and communications technology (1). The study illustrated the critical role that technology plays in the hiring, management, and operation of organisations through the examination of technology components from the three perspectives of tool, proxy, and ensemble. According to an empirical study on the function of technology in Belarus's ICT sector's human resource management model (12), HR practices are very adaptable to new developments in the field. For individuals to react to technical innovation and increase the likelihood of a positive outcome, effective leadership is necessary. It found that technological advancements have streamlined recruitment, performance management, and employee engagement, thereby enhancing the overall efficiency of SHRM practices. The emergence of remote work as a mainstream paradigm has prompted organizations to reassess traditional approaches to talent acquisition, development, and retention. Strategies for managing a dispersed workforce and fostering a cohesive organizational culture are explored, emphasizing the need for adaptability in SHRM frameworks (13).

The entire human resource management process is strategic in nature due to the emergence of internet-based technology and its advancement with a variety of capabilities (14). Additionally, the study investigates 5665 businesses spread across 32 nations to determine the direct and reciprocal relationship between improved electronic HRM practices and capabilities and human resource management. The study also demonstrates how integrating technology into HR procedures may help standardise the administrative structure, which can revolutionise an organisation's whole working system and make it more functionally and economically efficient at handling communication and transactions. HR managers use technology to address a range of issues that arise in the workplace (15). Furthermore, as the IT sector has grown, HR practices have embraced e-HRM elements like self-services that help workers maintain a competitive edge and increase productivity. In the realm of SHRM, alignment is paramount. It involves ensuring that HR strategies are not isolated but intricately connected to the goals and objectives of the organization (16, 17). The synergy between HR practices and organizational strategy forms the foundation for achieving a competitive edge and sustained success. HR analytics and data-driven decision making are essential components of modern HR practices. The process begins with collecting relevant data from various HR systems and sources, allowing organizations to gather comprehensive employee information, recruitment metrics, training records, and feedback. Advanced HR information systems streamline data collection and storage, enabling organizations to handle vast amounts of HR data more efficiently (18, 19).

Strategic human resource management needs to use technology in order to engage and retain employees. One of the most important components of successful technology integration into HR processes is employee engagement. Low levels of employee involvement are the consequence of most organisations' impersonal, one-way, passive contact with their workforce. On the other hand, as technology develops, it becomes possible to schedule employee meetings and include them in the company's decision-making. A component of technology that greatly streamlines and standardises administrative work helps to

promote inclusive HRM practices (20). Most businesses do not employ technological innovation in the HR sector with a strategic and mature approach, which therefore impacts the performance of the same (21). As a result, they urge the quick and efficient integration of numerous technological fields into HRM procedures.

The degree to which technology can be integrated into human resource management depends largely on the technical infrastructure of the company. Any type of organisation requires a location where HR technology facilities can be easily constructed and connected for use in HR management. Combining technology with HR presents a number of risks and hazards for people as potential resources. Artificial intelligence and robotics have displaced many human occupations and tasks (22). Because collaborative robots and artificial intelligence remove people from some businesses and services, people's perception of their own value as potential resources is severely damaged by these technologies. There are other ethical considerations as well, such as privacy and security issues, which necessitate an expeditious and thorough evaluation. The concept of strategic agility emphasised the need for human resources to participate in flexible activities in order to assist a company in becoming more responsive to market fluctuations, competitively advantaged over rivals, and more adaptive (23).

Since human relationships are ultimately focused on the creation and sharing of knowledge, human resources (HR) are crucial to the knowledge economy. Oversight from higher management is always necessary for human resources. HR is especially crucial to knowledge management since its fundamental objective is to foster and preserve a creative culture (24). HR may lead knowledge management (KM) with the right mindset and procedures in place, regardless of one's beliefs on what constitutes knowledge. Living together and viewing people as "bundles of potentiality" (25) rather than as resources to be managed or expenses to be minimised.

The performance of employees is negatively impacted by hiring discrimination since employees of different genders undertake a variety of tasks to meet the objectives of the company (26). Additionally, research has demonstrated that gender-neutral distribution of goods and services, discriminatory hiring, development, promotion, and retention policies, and other behaviours all affect employees' productivity. The organisation should foster a supportive and devoted culture if it hopes to improve worker performance.

Maintaining human resources is considered the most valuable resource for a startup. It is a part of an individual's innate aptitude, acquired skill, and competency, as demonstrated by their employment as supervisors, managers, and rank assessors (27). It is imperative to keep in mind that, in order to achieve overall objectives, revenue generation must be employed as much as is practical. Consequently, the worker's output establishes and ultimately achieves the objectives. An excellent neural network approach is recommended for developing an automated system to monitor employee engagement at work. HR professionals will discover that the platform is very beneficial for resolving issues pertaining to general job satisfaction.

Applying e-HRM components, including e-hiring, e-rewards and recognition, e-payroll processing, and e-performance management, was covered in insightful detail (28). Using E-HRM will boost productivity, organisational performance, and employee effectiveness. Employing E-HRM in employee management apps can help organisations.

In the relationship between gender-focused policies and practices and perceived market success, gender diversity plays a partially mediating role (29). Gender-focused HRM actively supports gender equality by fostering a more varied and inclusive workforce. Diversity can result in a greater range of viewpoints, concepts, and abilities, which can enhance decision-making and problem-solving abilities and eventually boost organisational performance. Research by (30) indicates that strategic HRM strategies have a favourable impact on employees' commitment to their organisations and the growth of human capital. Furthermore, a positive correlation was discovered between human capital development, strategic HRM, and "competitive advantages".

HR analytics allows organizations to measure the effectiveness of HR initiatives and interventions. By analyzing HR metrics such as time-to-fill, cost-per-hire, training effectiveness, and employee performance outcomes, organizations can assess the impact of HR programs and make data-driven

decisions to improve HR effectiveness. HR analytics empowers organizations to continuously evaluate and optimize their HR practices, ensuring they align with business objectives and drive positive outcomes (31).

Due to the multifaceted nature of HRM research, understanding the cross-level linkages between relevant variables and outcomes is crucial (32). It comprises evaluating the impact of HRM practices on specific employees' attitudes, behaviours, and productivity. The study of multilevel HRM practices looks at how they affect various performance outcomes at various levels. Departmental productivity, team effectiveness, individual job satisfaction, and overall organisational performance are examples of performance outcomes. The difficulties and solutions involved in successfully expanding and implementing HRM techniques at many levels are taken into account in research on multilevel HRM. Workers who experience prejudice at work are less aware of their surroundings (33). A perceived gender-sensitive workplace with less discrimination against women can be created with the use of gender-aware and gender-sensitive HR policies. This helps the business succeed by giving women equal access to a range of opportunities.

Technology has the capacity to radically alter an organization's work environment and organisational structure, thereby increasing its productivity and profitability. A comprehensive examination of the literature on the elements that facilitate the smooth incorporation of technology into human resource management provides ample evidence for this. However, there hasn't been much research on the topic of how technology and HRM practices interact that looks at how to use technology in HRM practices while taking a number of pragmatic and moral issues into mind. For the same reason, additional study in this field is required to understand better ways to enhance the current state of technology and human resource management in any organisation.

Research Gap

Research on technology-enabled HR practices for successful implementation of Strategic Human Resource Management (SHRM) have been conducted where they discussed the benefits of incorporating technology into HR practices, there's still a need to explore the effectiveness of various technologies in different organizational contexts. It is found that Technology-driven HR practices have the potential to reshape the employee experience and well-being but they have not explored how features such as self-service portals, virtual communication tools, and AI-driven performance feedback impact employee satisfaction, stress levels, and work-life balance. Studies says that HR departments collect and analyze increasing amounts of employee data, concerns about data privacy and ethical use become more prominent but light is not thrown on best practices for ensuring data security, transparency, and compliance with regulations in the context of technology-enabled HR practices. Studies discuss the benefits of incorporating technology into HR practices, there's still a need to explore the effectiveness of various technologies in different organizational contexts.

Addressing these research gaps present study had tried to provide valuable insights for both academics and practitioners seeking to leverage technology effectively in the pursuit of strategic HR objectives. Impact of technology-enabled HR practices on the implementation of strategic human resource management has been analysed by identifying the HR procedures that support the effective application of strategic HRM. The study also demonstrates the relationship between effective strategic human resource management (SHRM) and successful technology implementation and compared the effects of technology use on male and female employees within SHRM.

Methodology

Hypotheses

Ha1- There is a significant impact of Recruitment and Selection on successful implementation of strategic human resource management (SHRM)

Ha2- There is a significant impact of Employee Onboarding on successful implementation of SHRM

Ha3- There is a significant impact of Performance Management on successful implementation of SHRM

Ha4- There is a significant impact of Data Analytics and HR Metrics on successful implementation of SHRM
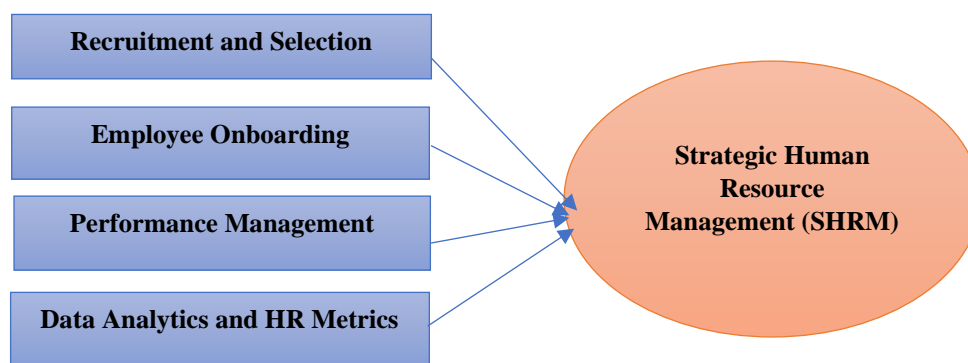
Conceptual Framework of the Study

Figure 1: Conceptual Framework of the Study

Research Design: The survey method has been used to collect the data. (34, 35). The nature of the research is quantitative. The inputs for measurement for the assessment of technology-enabled HR practices in the context of SHRM have been obtained from the extant literature on E-HRM in the smart world enhancing the HRM capabilities, smart HRM practices, technology and talent management as well as HR technology systems. (36-39).

Sample Size and Source of Data: In this study "Exploratory Factor Analysis", "Multiple Regression Analysis" and "Independent sample t-test" were applied. The general assumption for sample size in factor analysis suggests that it should not be less than 10 respondents per item or statement (40). For Multiple Regression, the minimum sample size should be $N \geq 104 + m$, where m represents the number of predictors (41). With four predictors identified after factor analysis, the minimum sample size required is 108 (42). Thus, according to statement (17), a sample size of 170 respondents and/or 108 respondents would meet the requirement. The data collected from 216 individuals fulfills the minimum

requirements for Exploratory Factor Analysis (EFA). Only respondents who perceived that HR practices contribute to the successful implementation of strategic HRM were included in filling out the complete and final questionnaire. Regarding data analysis techniques, EFA was initially employed for data reduction. Subsequently, multiple regression was conducted to assess the impact of HR practices on the successful implementation of SHRM. The independent variables, represented by factors, were expressed through "Factor Scores" derived from the EFA process. The set of variables, along with their respective codes has been presented in Table 1.

Multiple Regression Equation proposed

$Y =$ "α (Constant) + $\beta_1 * (X_1) + \beta_2 * (X_2) + \beta_3 * (X_3) + \beta_4 * (X_4) + \beta_5 * + \epsilon$"

Y = Dependent Variable
α = Constant or Intercept
β_1 to β_4 = Parameters to be estimated
ϵ = Error Term or Residual

Table 1: Details of the Dependent and Independent Variables

Variables	Type of the Variable	Denotation
Recruitment and Selection	IDV	β_1
Employee Onboarding	IDV	β_2
Performance Management	IDV	β_3
Data Analytics and HR Metrics	IDV	β_4
Successful implementation of SHRM (DV)	DV	Y
Constant		α

Note: IDV- Independent Variable, DV – Dependent Variable

Data Analysis and Interpretation

The basic details of the respondents are represented in table 1, in which it is found that of the total 216 respondents, 58.8% are male and 41.2% are female. Among them, 38.0% are below 40 years of age, 44.9% are from the age group 40–45 years, and the rest, 17.1%, are above 45 years of age. 31.5% of the respondents are working as HR managers, 23.6% are employment managers, 30.5% are recruitment managers, and the rest, 14.2%, are working as HR analysts in the HR department of their organization.

KMO measure of "sampling adequacy" is found to be .860 and the value in the significant column is below 0.05 (Table 3).

Table 2: Basic details of the respondents

Variable	Respondent	Total Percentage
Gender		
Male	127	58.8
Female	89	41.2
Total	**216**	**100**
Age profile		
Below 40 yrs	82	38.0
40-45 yrs	97	44.9
Above 45 yrs	37	17.1
Total	**216**	**100**
Designation		
HR manager	68	31.5
Employment manager	51	23.6
Recruitment manager	66	30.5
HR analyst	31	14.3
Total	**216**	**100**

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.860
Bartlett's Test of Sphericity	Approx. Chi-Square	2631.097
	"df"	105
	"Sig."	.000

Table 4: Total variance explained

Component	Initial eigenvalues			Rotation sums of squared loadings		
	Total	% Of Variance	Cumulative %	Total	% Of Variance	Cumulative %
1	6.587	43.912	43.912	3.422	**22.811**	22.811
2	2.027	13.511	57.423	3.128	**20.853**	43.664
3	1.886	12.572	69.995	2.958	**19.721**	63.385
4	1.219	8.125	78.121	2.210	**14.736**	**78.121**
5	.696	4.641	82.761			
6	.588	3.920	86.682			
7	.419	2.795	89.477			
8	.378	2.519	91.996			
9	.296	1.973	93.969			
10	.240	1.601	95.570			
11	.214	1.428	96.998			
12	.180	1.198	98.196			
13	.128	.851	99.047			
14	.084	.558	99.605			
15	.059	.395	100.000			

Total 4 Variance Explained is demonstrated in table 3 where % of variance from factor 1-4 is shown as 22.811, 20.853, 19.721 and 14.736 percent respectively and all the four factors explain total 78.121 percent of the variance.

The graphical representation of the Eigen value obtained from "Total Variance Explained" is shown in Figure2. A scree plot with an elbow at 4 components indicates that a total of 4 factors have been retrieved.

Factors Identified

The result of the factor analysis is provided in Table 5. We find 4 factors in perception extracted together account for 78.121% of the cumulative variance.

The first factor is "Recruitment and Selection" (Variance explained = 22.8111, Cronbach's alpha = 0.952), which contains the claims that technology

can automate and optimise various stages of the recruitment process and helps with job posting, resume screening, candidate assessment, and interview scheduling. Additionally, applicant tracking systems and AI-powered tools help HR professionals manage large volumes of
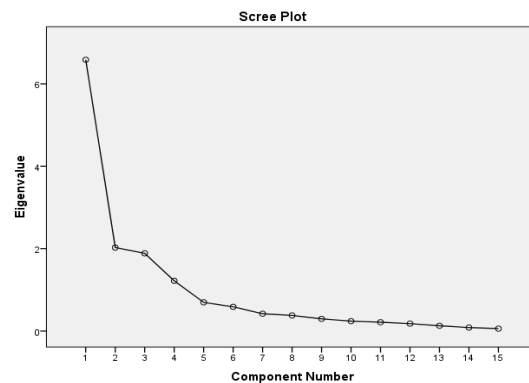

Figure 2: Scree Plot

Table 5: Factor Analysis

S. No.	Statements	Factor Loading	Factor Reliability
	Recruitment and Selection		**.952**
1.	Technology can automate and optimize various stages of the recruitment process	.862	
2.	Helps in job posting, resume screening, candidate assessment, and interview scheduling	.861	
3.	Applicant Tracking Systems and AI-powered tools help HR professionals manage large volumes of applications	.850	
4.	Helps to identify top candidates efficiently and effectively	.820	
	Employee Onboarding		**.900**
5.	Digital onboarding platforms provide new hires with an interactive and efficient process	.904	
6.	Help to complete paperwork, access training materials, and familiarize themselves with the company culture	.903	
7.	Technology ensures a smoother transition for new employees	.766	
8.	Help to reduce administrative burdens on HR teams.	.719	
	Performance Management		**.871**
9.	Performance management software enables continuous feedback, goal setting, and performance evaluation	.875	
10.	Technology allows for real-time monitoring of employee progress	.869	
11.	Aligns individual goals with organizational objectives	.842	
12.	Facilitate meaningful conversations between employees and managers	.636	
	Data Analytics and HR Metrics		**.748**
13.	Technology enables HR professionals to gather and analyse vast amounts of data	.847	
14.	Advanced analytics tools uncover trends, patterns, and insights that inform strategic decision-making	.804	
15.	Help in predictive workforce planning.	.736	

applications and identify top candidates efficiently and effectively. "Employee Onboarding" is the second factor (variance explained = 20.853, Cronbach's alpha = 0.900), and the variables it relates to are Technology ensures a smoother transition for new employees and helps to lower administrative burdens on HR teams. Digital onboarding platforms offer new hires an interactive and efficient process, assist in completing paperwork, access training materials, and familiarize themselves with the company culture. "Performance Management" is the third factor (variance explained = 19.721, Cronbach's alpha = 0.871), and the variables it relates to are Technology provides for real-time monitoring of employee development, connects individual goals with organizational objectives, and facilitates meaningful dialogues between employees and managers. Performance management software facilitates constant feedback, goal planning, and performance evaluation. "Data Analytics and HR Metrics" is the fourth variable (variance explained

= 14.736, Cronbach's alpha = 0.748), and it comprises variables such as Large volumes of data can be collected and analysed by HR professionals thanks to technology. Advanced analytics tools reveal trends, patterns, and insights that guide strategic decision-making and aid in predictive workforce planning.

Table 6: Reliability Statistics

"Cronbach's Alpha"	"N of Items"
.897	15

Factor wise (1-4) reliability is shown in table above as .952, .900, .871 and .748 respectively and total reliability statistics (table 5) is shown above which says that total reliability of all the 15 items is .897.

Multiple Regression Analysis

Recruitment and Selection, Employee Onboarding, Performance Management and Data Analytics and HR Metrics explain about 69% (R^2 value is 0.698) of the variance.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.835[a]	.698	.692	.50733

[a]Predictors: (Constant), Recruitment and Selection, Employee Onboarding, Performance Management and Data Analytics and HR Metrics

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	125.526	4	31.382	121.928	.000[b]
1	Residual	54.307	211	.257		
	Total	179.833	215			

DV: Impact of HR practices on successful implementation of SHRM

[b]Predictors: (Constant), Recruitment and Selection, Employee Onboarding, Performance Management and Data Analytics and HR Metrics

Table 9: Coefficients

"Model"	"Unstandardized Coefficients"		"Standardized Coefficients"	"t"	"Sig."
	"B"	"Std. Error"	"Beta"		
(Constant)	3.861	.035		111.854	.000
Recruitment and Selection	.722	.035	.789	20.868	.000
Employee Onboarding	.121	.035	.133	3.505	.001
Performance Management	.204	.035	.223	5.898	.000
Data Analytics and HR Metrics	.079	.035	.086	2.272	.024

DV: Impact of HR practices on successful implementation of SHRM

Significance value .000 shows "significance of relationship" between Recruitment and Selection, Employee Onboarding, Performance Management and Data Analytics and HR Metrics with strategic human resource management (SHRM, Table 8).

Table 9 is sharing that all the factors namely Recruitment and Selection, Employee Onboarding, Performance Management and Data Analytics and HR Metrics are showing significant Impact of HR practices on successful implementation of SHRM. Highest impact is shown of Recruitment and Selection with beta value .789, Performance Management (.223), Employee Onboarding (.133)

and Data Analytics and HR Metrics with beta value .086.

The consequences of technology adoption across male and female employees of the organization are compared in Table 10. The table reveals that male respondents had higher mean values for the following factors—recruitment and selection (4.09), employee onboarding (3.61), performance management (3.98), data analytics, and HR metrics (3.81) than did female respondents. These factors determine the successful implementation of technology in effective strategic human resource management.

Table 10: Impact of technology implementation in SHRM among male and female

SHRM	Gender		
	Male	Female	Total
Recruitment and Selection	4.09	3.74	3.94
Employee Onboarding	3.61	3.38	3.52
Performance Management	3.98	3.78	3.90
Data Analytics and HR Metrics	3.81	3.50	3.68

Table 11: Independent Samples Test

SHRM		"Levene's test for equality of variances"		"t-test for equality of means"		
		F	Sig.	t	df	Sig. (2-tailed)
Recruitment and Selection	EVA	2.149	.144	**3.467**	**214**	**.001**
	EVNA			3.496	194.910	.001
Employee Onboarding	EVA	.083	.774	**2.092**	**214**	**.038**
	EVNA			2.092	189.423	.038
Performance Management	EVA	1.471	.227	**2.096**	**214**	**.037**
	EVNA			2.072	181.615	.040
Data Analytics and HR Metrics	EVA	1.660	.199	**3.045**	**214**	**.003**
	EVNA			3.015	182.637	.003

EVA= "Equal Variances Assumed", EVNA = "Equal Variances Not Assumed"

The Independent Samples Test results, which were used to look into how the organization's technology deployment in SHRM affected male and female employees, are shown in Table 11. For every item in the table—performance management, employee onboarding, recruiting and selection, data analytics, and HR metrics—a significant difference between men and women is present if the value in the Sig. (2-tailed) column is less than 0.05.

Results

Strategic human resource management is now crucial, despite the fact that numerous factors affect it. One of the biggest factors that alters and

influences SHRM is technology. The IT-enabled HR processes that impact SHRM were determined using EFA. The research suggests that four SHRM-related functions—Performance Management, Data Analytics, Employee Onboarding, Recruiting and Selection, and HR Metrics—should be equipped with technology. Additionally, the "Independent Sample Test" was employed to show that male employees give considerably more weight than female employees to HR-related tasks that are made easier by IT.

The study's findings suggest that the application of technology interventions in SHRM has a significant impact on their efficacy. Businesses must adapt to changes in the SHRM industry and make constant

technology investments. Technological advancements will eventually help companies and their operations in addition to modernizing HRM tasks. The result that men are better at adjusting to technological change than women should surprise managers. Since there are typically more women than men employed in HRM, it's critical to address their unique adoption difficulties with new technologies.

Discussion

In today's technologically evolved environment, many firms investigate ways to incorporate technology into an efficient HRM system. Several studies in the field demonstrate how much technological innovation may enhance HR practices and better satisfy employee wants. Technology not only increases efficiency and productivity inside a company, but it also has a significant impact on staff engagement and personal connections, which enhances knowledge and communication abilities. A few essential components for effectively integrating technology into HR processes are IT infrastructure, organisational readiness, and attitude. These factors lead to increased production and profitability for the company.

However, individuals may also be harmed by technology as a resource. Concerns regarding security, privacy, and the challenges of replacing people in their current roles are brought up by innovative collaborative robots and artificial intelligence (AI). In-depth research and analysis are required in the area where technology and HR practices cross so that academics and HR practitioners may evaluate strategies for integrating technology and HRM in a way that supports the future development of the workforce and organisation.

Limitations of Study

While exploring technology-enabled HR practices for the successful implementation of Strategic Human Resource Management (SHRM) shows several limitations that affect the interpretation and generalizability of the study. While focusing on specific technology-enabled HR practices or a particular industry or organizational context, the findings may not be applicable to all types of technology or sectors, limiting the generalizability of the results. The study's sample size and composition are limited that potentially affect the

representativeness of the findings. Small sample sizes or samples drawn from a single organization or sector is not able to capture the full range of perspectives and experiences relevant to technology-enabled HR practices and SHRM implementation. Data collected through surveys or interviews is subject to self-reporting bias, where participants provide responses that align with social desirability or organizational norms. This bias can affect the accuracy and reliability of the findings, particularly regarding sensitive topics such as employee attitudes toward technology or HR practices. Operationalizing constructs such as SHRM effectiveness or the impact of technology-enabled HR practices is challenging. The findings of the study are context-specific and not generalize to other organizational settings, industries, or cultural contexts. Technology evolves rapidly, and it is possible that the findings of the study may become outdated as new technologies emerge and existing ones become obsolete. Methodologically, the study produces results only based on the quantitative data, hence a mixed-method research would have been more authentic. Addressing these limitations through robust research designs, careful measurement, and thoughtful interpretation of findings can enhance the credibility and relevance of studies examining the role of technology in SHRM implementation.

Conclusion

The existing research on technology and its role in SHRM is scattered, however, the present study gives a holistic perspective of how technology-driven HR practices. The practices chosen are recruitment and selection, employee onboarding performance management data analytics, and HR metrics. The study reveals that the integration of technology into HR practices is crucial for the successful implementation of Strategic Human Resource Management (SHRM). By leveraging technology, organizations can streamline processes, enhance communication, gather and analyze data effectively, and ultimately align HR strategies with overall business objectives. From recruitment and onboarding to performance management and employee engagement, technology offers a range of tools and solutions that empower HR professionals to make data-driven decisions and drive organizational success. Embracing technology in HR practices is not just a trend but a strategic imperative in today's fast-

paced and competitive business landscape. By embracing technology in HR practices, organizations can not only enhance operational efficiency and cost-effectiveness but also strengthen their competitive advantage by attracting, developing, and retaining top talent in alignment with their strategic objectives.

Implications of the Study

The study highlights how technology-enabled HR practices can facilitate the alignment of HR strategies with organizational goals and objectives. By leveraging technology effectively, HR departments can better support strategic initiatives such as talent management, organizational development, and change management. Understanding the implications of technology in HR can lead to the adoption of tools and systems that streamline HR processes, reduce administrative burdens, and enhance operational efficiency. Insights from the study can inform HR leaders and practitioners about how technology-driven data analytics and predictive modeling can support evidence-based decision-making in areas such as "recruitment, performance management, and employee development." Technology-enabled HR practices can influence organizational culture and employee perceptions of fairness, transparency, and trust. By considering these implications, organizations can harness the power of technology to drive strategic HR initiatives, foster employee engagement and productivity, and achieve sustainable competitive advantage in the marketplace.

Abbreviation

SHRM – Strategic Human Resource management
ICT - Information and Communications Technology
HRM - Human Resource management
AI - Artificial Intelligence

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Author Contributions

All the authors contributed to the article.

Conflict of Interest

The authors declare no conflicts of interest.

Ethics Approval

Ethical considerations include:

- All respondents in our study were over 18 years of age and consented before participation. We provided a clear explanation of the purpose and methods of the study and the right to withdraw at any time.
- Data were collected by research professionals trained in ethical research methods
- We are confident that the respondents understood the purpose of the study and willingly provided accurate information. We believe that our research was conducted ethically.

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