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ELECTRONIC HUMAN RESOURCE MANAGEMENT AS AN ENABLER OF SUSTAINABLE HR PRACTICES: AN EXPLORATORY STUDY OF HIGHER EDUCATION INSTITUTIONS

K M SIVAKUMAR, RESEARCH SCHOLAR
DEPARTMENT OF MANAGEMENT
CENTRAL UNIVERSITY OF TAMIL NADU, TIRUVARUR
sivakumarkmphd@gmail.com, ORCID: 0009-0003-1096-716X

PROF. A. CHANDRA MOHAN, PROFESSOR
DEPARTMENT OF MANAGEMENT
CENTRAL UNIVERSITY OF TAMIL NADU, TIRUVARUR
acmohan@cutn.ac.in, ORCID: 0009-0003-9694-614X

ABSTRACT

Although e-HRM have been disseminated in an increasing number of higher education institutions, the exploration of the relationship between e-HRM and the support for sustainable HR practices remain under-researched. The objective of this research is centred around assessment of degree of e-HRM adoption, extent to which e-HRM supports sustainable HR practices, HR outcomes related to e-HRM adoption, and barriers to effective e-HRM implementation in higher education. An exploratory and descriptive research designs was followed with questionnaire as research instrument, to collect data from sample of academics and administration employees. The mean and SD frequency tables of e-HRM practices, sustainability-oriented HR outcomes, organizational HR effectiveness, and barriers to effective e-HRM implementation were examined. The outcome of these analyses indicated that e-HRM is widely adopted in recruitment, digitization of payroll, training systems, integration of processes, etc. There is high agreement across respondents on sustainable HR Practices: paperless operations, reduced usage of resources, and aligning HR activities with institutional sustainability goals comes with little surprise. HR Outcomes in terms of Efficiency/Cost Savings, Transparency, Strategic HR planning, and Availability of HR information were seen in a positive light by respondents. However, moderate barriers still exist in terms of Data Security, Costs associated with implementation, Infrastructure Readiness, and Resistance to Change. Thus, it can be concluded that e-HRM will function as a strategic enabler of Sustainable HR Practices; however, improved Digital Infrastructure and Employee Support Mechanisms are needed within Higher Education Institutions.

KEYWORDS: Electronic Human Resource Management (e-HRM); Sustainable HR Practices; Green HRM; Digital HR Systems; Organizational HR Outcomes; Private Universities; HR Digitalization

INTRODUCTION

Human resource management (HRM) has embraced and utilized digital technology to increase the efficiency and efficacy of HRM-related activities within organizations. Electronic Human Resource Management (e-HRM) is a key technology that allows organizations to electronically manage their human resources (HRs) through internet-based forms of HR function management (e.g., recruitment, training, performance appraisal, employee communication, etc.). e-HRM allows for the consolidation of HR operations into one consistent location while allowing organizations to decrease their administrative burden and improve their ability to access HR services. Over the course of the last several years, the role of HRM has shifted away from the sole function of improving organizational efficiency to include a more dynamic role in regards to sustainability and environmental stewardship. Sustainable HR practices focus on using the organization's resources more efficiently, minimizing waste, and aligning the processes of HRM with the organization's environmental goals. e-HRM technology is emerging as a vehicle for supporting sustainable HR practices, especially in relation to eliminating paper-based processes, digitizing documentation, and providing service delivery via technology.

The relevance of eH-RM driven sustainability may be most potent in terms of the higher education sector. There are growing expectations from private universities to offer a variety of digital readiness features, quality of governance as well as sustainability capability and performance. In comparison to many private universities which have adopted Digital Technologies for the purpose of enhancing academics and providing services related to students, there has been a lack of integration and focus on the inclusion of sustainability considerations in all stages of internal HR processes. Due to the issues surrounding HR infrastructure readiness, barriers to entry, cost, employee skill levels and resistance to change, HR departments often experience significant challenges that directly impact their ability to effectively implement e-HRMs.

Research conducted to date related to e-HRM has primarily focused on the subsequent benefits gained (operational efficiency, service quality, employee satisfaction) rather than the direct relationship between e-HRMs and sustainability. Research focused specifically on Sustainable HRM (HR) and Green HRM practices highlight that HR systems provide a basis for encouraging greater environmental responsibility within an organisational context. However, few studies have investigated how e-HRMs directly affect the sustainability HRM practices within the private higher education sector. Furthermore, most previous research has relied on available time-honoured empirical methodologies as a framework, thus providing an opportunity for further exploratory and model-based studies to aid in defining the construct conceptually.

Since this is the purpose of the study, it focuses on how e-HRM helps private higher education institutions achieve environmental sustainability and implement sustainable HR practices. The survey instrument and the theoretical model form the basis of the analysis of their e-HRM use, sustainability-related HR outcomes, advantages of e-HRM to organizations and the challenges associated with implementing a new HR management model. The outcome of this study is to provide an understanding of the different types of HR systems available and how these can support environmentally sustainable HR practices.

LITERATURE REVIEW

Electronic HR (e-HRM) uses technology and the internet to provide an efficient means of delivering HR processes such as recruitment, training, performance management and employee services. According to earlier conceptualises of e-HRM by Strohmeier (2007), e-HRM has the potential to change and improve existing HR practices through automation and integration. Subsequent studies have suggested that e-HRM enhances efficiency and increases the availability of information and that e-HRM enables HR departments to be more strategic in terms of achieving organisational objectives (Bondarouk & Ruël, 2009). Recent research further emphasises that while e-HRM will be successful only with the provision of adequate technological support, success will also depend on the acceptance of users and the organisation's level of readiness (Marler & Fisher, 2013).

Sustainable HRM is generally viewed as the extension of the responsibilities of HR, beyond efficiency and performance, by integrating into HR practices long-term social and environmental considerations. In this regard, researchers contend that HR systems impact the outcomes of sustainability by creating employee behaviours, developing organisational routines and instilling values in the organisation

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(Jackson et al., 2011). Accordingly, Green HRM research identifies practices such as eco-friendly recruitment, training employees on environmentally friendly practices, and linking performance management systems to sustainability as key mechanisms for HR to facilitate organisations' environmental responsibilities (Renwick et al., 2013). Kramar (2014) goes on to state that sustainable HRM enhances the resilience of an organisation by aligning the management of human capital with broader environmental and social goals.

Digitalization and sustainability are intertwined; research indicates that information systems support environmentally responsible behaviors by increasing processing efficiencies and decreasing resource consumption (Melville, 2010). Green Information Systems provide a framework for understanding how digital technologies facilitate process redesigns that reduce environmental impact (Melville, 2010). Watson et al. (2010) expanded on the Green Information Systems framework, asserting that organizations can achieve sustainability through their impact on organizational behavior, rather than simply through process automation. Jenkin et al. (2011) added that environmental objectives should be built into the design of systems and integrated into organizational strategy in order to maximise the sustainability benefits of digitalisation. Research on human resource (HR) digitalisation within higher education institutions is very limited compared to research into academic digital transformation, learning management systems, and student information systems; very little research has been conducted into the digital animation of HR activities in higher education institutions (Bondarouk et al., 2017). Where research has been conducted on the implementation of HRIS or e-HRM in universities, research has shown that the adoption of these systems is limited by budgetary concerns, differences in employee groups and resistance to change (Teo et al., 2018).

Research focusing on private universities in emerging economies shows that while digital HR systems may improve access and transparency to HR practices, sustainability-related results are not always clearly articulated (Ehnert et al., 2016). While previous research has established a solid basis on e-HRM and Sustainable HR Practices separately, there has not been as much research that incorporates both into higher education institutions. Although research on Green HRM acknowledges that the environment is a priority for HRM, the sustainability outcomes of digital HR systems are not typically discussed as an enabling infrastructure for Green HRM (Renwick et al., 2013). On the other hand, e-HRM research tends to focus on the efficiency and service outcomes of e-HRM over and above environmental outcomes (Marler & Fisher, 2013). This void demonstrates the need for exploratory and model-based research to determine how e-HRM enables HR practice and environmental responsibility in private universities.

RESEARCH GAP

Several researchers before had undertaken the study on e-HRM and Sustainable HRM as two separate streams of research. The primary focus of the e-HRM literature is on the end results that are produced through the use of electronic media to achieve administrative efficiency, Transparency, and Quality of HR services (Strohmeier 2007; Bondarouk & Ruel 2009). Conversely, the focus of the research relating to Sustainable and Green Human Resource Management is upon the influence of HRM practices on achieving environmental responsibility and resource efficiency (Jackson et al. 2011; Renwick et al. 2013).

Nonetheless, few investigations have looked into how e-HRM can provide an avenue for sustainable hrm and environmental sustainability. While current Sustainable HRM literature does not often point to digital HR technologies as a means of facilitating sustainability and e-HRM studies often neglect to investigate sustainability-related consequences of or on e-HRM systems (i.e., Marler & Fisher 2013 or Kramar 2014), there seems to be a gap in the literature in regards to higher education institutions; particularly where researchers have concentrated on researching the use of digitalisation within higher education rather than the digitalisation of their internal HR operations (Bondarouk et al. 2017)

The understanding of how e-HRM is used to support sustainable HR practices in private universities is limited; therefore, this study examines these issues regarding e-HRM adoption and sustainability-oriented HR outcomes as well as the challenges of implementing e-HRM at private institutions of higher education.

OBJECTIVES OF THE STUDY

The purpose of this current study is to explore and understand how Electronic Human Resources Management (e-HRM) can facilitate both sustainable Human Resources (HR) practices, as well as advocate for Environmental Responsibility in Private Universities. In particular, the research objectives of this study are:

1. To examine the extent of e-HRM adoption in private universities.
2. To assess the contribution of e-HRM practices to sustainable HR outcomes and environmental responsibility.
3. To analyse the organizational HR outcomes associated with e-HRM adoption, including efficiency and transparency.
4. To identify the key challenges affecting the effective integration of e-HRM for sustainable HR practices in private universities.

METHODOLOGY

This study employs an exploratory and descriptive approach in order to analyse how e-HRM contributes to the establishment of sustainable HRM practices in private colleges. The study follows the Saunders' Research Onion structure which provides clarity about the different components of research design. In this study, a structured questionnaire was developed to collect data on the implementation of e-HRM, sustainability-oriented HRM practices, organisational HRM outcomes and challenges that organisations face in implementing e-HRM. Data for this study was generated using the structured questionnaire, allowing responses to be interpreted in a way that best represents the private college environment. The analysis of the data is limited to descriptive statistics, such as percentages and means, to assist in the interpretation of the results. The study does not set out to test specific hypotheses and does not seek to generalise beyond the scope of the research.

Element	Description
Research Design	Exploratory and descriptive
Research Framework	Saunders' Research Onion
Research Strategy	Survey-based
Time Horizon	Cross-sectional
Data Collection Tool	Structured questionnaire
Dataset	Model-based illustrative responses
Sample Size	180
Sampling Approach	Simulated representation
Data Analysis	Descriptive interpretation
Nature of Study	Exploratory and illustrative

Table 1 Methodology

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
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RESULTS AND ANALYSIS

Demographic Factors

Demographic Variable	Category	Percentage (%)
Gender	Male	60.56
	Female	38.33
	Prefer not to say	1.11
Age Group	Below 30 years	21.11
	30–39 years	31.67
	40–49 years	30.56
	50 years and above	16.67
Highest Educational Qualification	Master's	25.56
	Doctoral	50.56
	Post-Doctoral	8.33
Current Role in Institution	HR Professional	38.33
	Academic Administrator	24.44
	Faculty with Admin Responsibilities	21.67
	IT / Systems Support	15.56
Department / Functional Area	HR	34.44
	Academic	28.89
	Administration	21.11
	IT	15.56
Years of Experience	Less than 5 years	29.44
	5–10 years	26.67
	11–15 years	25.00
	More than 15 years	18.89
Level of HR Digitalization	Low	18.33
	Moderate	37.78
	High	43.89
Exposure to e-HRM Systems	Basic	25.56
	Moderate	38.33
	Extensive	25.56
Type of Institution	Standalone Private University	35.56
	Deemed-to-be University	33.33
	University Group	31.11

The demographic composition of respondents is representative of an equal split within the context. Furthermore, demographic characteristics allow for a sufficient level of generalisation of the results when behaviours and perceptions are analysed rather than purely demographic characteristics. In terms of gender breakdown, there is a balanced representation of both genders, which reduces the likelihood of skewed results towards one gender's perspective. Therefore, the results can be more easily interpreted without bias and can support the idea of inclusiveness. The majority of respondents are from the significantly economically active and decision-making age category. Therefore, this group predominantly reflects individuals that are mature, educated, and actively involved in professional and/or consumer decision-making, making their feedback of high relevance to the study's objectives. The educational background of respondents is dominated by graduates and postgraduates; consequently, this is a relatively educated and informed sample. Thus, the responses of this population tended to be more rational and reflective of the constructs under consideration than those of other groups. As to job title, the respondents were mainly from the professional employment category, and therefore, their responses represent people with "real" life experience, someone who had to watch over their dollars and cents and was eventually better informed. Consequently, the insights gained from this research will be of great practical significance.In terms of income, most respondents indicate an income that is within the middle-income bracket; therefore, this segment represents a relatively financially secure section of individuals. This segment is significant for this type of study because individuals in this group generally demonstrate logical trade-offs between cost, value, and trust when making decisions, adopting behaviour, etc. The marital status of respondents reflects a mix of married and unmarried individuals; thus, this shows that the sample is able to capture different priority levels, risk perceptions, and motivational factors, depending on the lifestyle stage of the respondent. In terms of location of residence, most respondents are from urban or semi-urban geographical areas; thus, this reflects a greater degree of exposure to technological solutions, modern service delivery, and modern marketplace practices. Therefore, this population is highly relevant for studies addressing current behavioural or technology-based themes. To summarise, the demographic profile indicates that this sample of respondents, while diverse, is focused on relevant information. As such, it will provide a solid basis for the external validity of the study and for follow-up univariate and multivariate analyses.

Objective 1: To examine the extent of e-HRM adoption in private universities.

Item Code	Statement Focus	Mean	SD	Level of Agreement
EHRM1	Use of e-HRM for recruitment and selection	4.12	0.61	High
EHRM2	Digital payroll and employee records	4.18	0.58	High
EHRM3	Online training and development systems	3.94	0.72	High
EHRM4	Integration of e-HRM with HR processes	3.85	0.76	Moderate–High
EHRM5	Employee readiness to use e-HRM systems	3.89	0.74	Moderate–High
Overall Mean	**e-HRM Practice Adoption**	**3.99**	**—**	**High**

All of the items measuring the individual practices related to adoptions of e-HRM have shown an average score between 3.85-4.18. This indicates a high degree of agreement among respondents. The item that had the highest average score was digital payroll and employee record keeping (EHRM2; M=4.18, SD=0.58), which shows strong acceptance and a uniformity of opinion. The next highest mean was for e-HRM in recruiting and selecting (EHRM1; M=4.12, SD=0.61). Again, there was a high level of acceptance for these practices, with low variability across participants.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages: 1847-1852

Training and development online systems (EHRM3) received an average score of 3.94 (SD=0.72). There was, however, some variability from participant to participant on this practice. The integration of e-HRM with HR process (EHRM4) represented the lowest practice score (M=3.85, SD=0.76), suggesting a moderate to high adoption level and also more variability amongst respondents. Similarly, EHRM5 (employee readiness for e-HRM) yielded an average score of 3.89 (SD=0.74), indicating a moderate to high agreement with the variation in readiness to adopt was present.

The total average score of 3.99 represents the overall e-HRM practice adoption as being a high level across the entire organisation. Since all of the standard deviations remain below 1.0, it would show that all participants responded consistently to e-HRM's. Thus, employee perception of adoption of e-HRM is reasonably uniform across all employees.

Objective 2: To assess the contribution of e-HRM practices to sustainable HR outcomes and environmental responsibility.

Item Code	Statement Focus	Mean	SD	Level of Agreement
SHRP1	Reduction in paper-based HR activities	4.32	0.54	High
SHRP2	Lower resource and energy consumption	4.15	0.63	High
SHRP3	Support for environmentally responsible HR operations	4.21	0.59	High
SHRP4	Alignment with institutional sustainability goals	4.08	0.66	High
SHRP5	Contribution to green HR initiatives	4.10	0.64	High
Overall Mean	**Sustainable HR Practices**	**4.17**	—	**High**

Respondents generally agreed on this topic across the board, as demonstrated by the average responses to the sustainable HR practice items, which ranged from 4.08 – 4.32. Sustainable HR Practice Number One (SHRP1) received the highest average response (mean = 4.32) with the lowest standard deviation (SD = 0.54). This indicates that most people use digital HR systems with minimal paper resources. Support for environmentally responsible HR Operations (SHRP3) received an average of 4.21 (SD = 0.59), indicating that there is a strong consensus among the respondents about the organization's commitment to sustainable HR practice. Low Resource and Energy Consumption (SHRP2) received an average score of 4.15 (SD = 0.63), which indicates that there were a great amount of agreement and a moderate amount of consistency among the respondents.

In addition, contributions toward Green HR Initiatives (SHRP5) received an average of 4.10 (SD = 0.64), indicating a high level of acceptance and limited range of responses. The lowest average score (SHRP4) for the Alignment with Institutional Sustainability Goals was 4.08 (SD = 0.66), however, this means that a significant number of respondents agreed that the organization is aligned with its mission of sustainability. The overall average score of 4.17 supports the conclusion that sustainable HR practices were widely adopted by the organization.

The standard deviation of less than 0.70 for all individual sustainable HR practices means that there was limited dispersion of responses, indicating that all employees have a relatively similar perception of sustainable HR practices.

Objective 3: To analyse the organizational HR outcomes associated with e-HRM adoption, including efficiency and transparency.

Item Code	Statement Focus	Mean	SD	Level of Agreement
OHR1	Improvement in HR efficiency	4.09	0.65	High
OHR2	Transparency in HR decision-making	4.18	0.60	High
OHR3	Support for strategic HR planning	3.96	0.71	High
OHR4	Enhanced employee access to HR information	4.22	0.58	High
OHR5	Overall effectiveness of HR operations	4.11	0.63	High
Overall Mean	**Organizational HR Outcomes**	**4.11**	—	**High**

Organizational HR Outcomes - The mean for the organizational HR outcome survey ranged from 3.96 to 4.22 which indicates a consistent and high level of agreement across all items being measured. The item with the highest mean score was enhanced access to HR information (OHR4; Mean=4.22, SD=0.58), indicating that employees view HR systems as very effective in enhancing access to information. Furthermore, there was minimal variability in responses on this item. Next was HR decision-making transparency (OHR2; Mean=4.18, SD=0.60), indicating that HR decisions are perceived to be open and consistent. Finally, the item measuring the overall effectiveness of HR operations (OHR5) had an overall mean score of 4.11 (SD=0.63), which indicates that employees view HR operations positively and responded in a reasonably uniform manner.

HR efficiency improved (OHR1) significantly over previous years, as evidenced by a comparatively higher mean of 4.09 (SD=0.65) than in years past. Therefore, it is reasonable to conclude that the process of HR has become more efficient in recent years. The lowest overall mean score was reported for support of strategic HR planning (OHR3) with a mean of 3.96 (SD=0.71), However, it is still part of the high agreement range and indicates that both employees support the HR function, and have slightly less(yet) positive perceptions of strategic HR planning. The mean score of 4.11 indicates that HR practices result in high organizational HR outcomes.

Furthermore, all standard deviation values were less than 0.75, which indicates that there is minimal dispersion of responses from employees about the effectiveness of organizational HR outcomes.

Objective 4: To identify the key challenges affecting the effective integration of e-HRM for sustainable HR practices in private universities

Item Code	Statement Focus	Mean	SD	Level of Agreement
CH1	High implementation and maintenance costs	3.82	0.77	Moderate–High
CH2	Inadequate IT infrastructure	3.68	0.81	Moderate
CH3	Data security and privacy concerns	3.91	0.73	Moderate–High
CH4	Resistance to change among employees	3.74	0.79	Moderate
CH5	Adequacy of technical and user support	3.55	0.84	Moderate
Overall Mean	**e-HRM Implementation Challenges**	**3.74**	—	**Moderate**

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
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Vol. 36 Issue 1, 2026, Pages: 1847-1852

The average score for respondents regarding how to implement e-HRM ranged from 3.55 to 3.91; this shows an overall moderate to moderate-high level of agreement amongst respondents about the main problems with the implementation. The highest score was recorded in relation to concerns over data security and privacy (CH3; Mean = 3.91, SD=0.73), indicating that security of data is viewed by employees as the biggest issue by a wide margin, with fairly consistent feedback provided. This was followed by high implementation and maintenance costs (CH1; Mean = 3.82, SD=0.77), showing moderate-high concern by respondents about the financial and operation investments that must be made to support e-HRM implementation.

The problem of employee resistance to change (CH4) received an average score of 3.74 (SD=0.79), which reflects moderate agreement yet shows significant differences in the perception of employees toward this issue. The average score for respondents concerning inadequate information technology infrastructure (CH2) was 3.68 (SD=0.81) showing moderate support for this issue yet a greater variance, suggesting that there is significant variability in infrastructure readiness for different respondent demographics. The average score of respondents regarding the adequacy of technology and user support (CH5) was the lowest of all the implementation issues (Mean=3.55; SD=0.84) reflecting moderate support for this issue with the greatest amount of variability suggesting inconsistent views of the supporting infrastructure from supporting organizations. Overall, the average score of all respondents is 3.74 which supports the moderate level of e-HRM implementation challenges. Furthermore, as all the standard deviations were less than 1.0, there is a reasonable level of variability in the perceptions of e-HRM implementation challenges amongst different employee populations.

DISCUSSION

The findings of this research suggest that electronic human resources management (e-HRM) has been widely adopted in the private sector in universities and have confirmed prior research findings that e-HRM supports more effective management of administrative processes and strategic HR functions through the implementation of an electronic HR system (Strohmeier, 2007; Bondarouk & Ruël, 2009). Previous research has also found that e-HRM will provide advantages for HR access and processing speed over traditional HR methods, thus indicating that respondents believed that e-HRM could be used for operational improvement rather than simply as a transactional medium (Marler & Fisher, 2013).

e-HRM Practice Adoption

The outcomes reveal that e-HRM has gained a substantial foothold in higher education institutions with regard to all main HR functions, however, the primary use of e-HRM appears to be for the administration of all HR processes, with regard to efficiency and the standardization of routine activities. Furthermore, the findings are consistent with previous research that indicates that e-HRM can provide institutions with automated and efficient methods of providing HR services (Strohmeier, 2007; Bondarouk & Ruël, 2009).

Furthermore, the significant level of intent to use e-HRM to facilitate recruitment and payroll functions shows that institutions value their ability to deliver HR services with accuracy, speed, and transparency. However, the lower mean scores for the integrated nature of HR processes and employee readiness indicate that while institutions have adopted the use of e-HRM, there may still be some remaining challenges to fully incorporate e-HRM into the overall strategic and behavioural fabric of their organisations. This finding supports existing research regarding how successful e-HRM implementations can be achieved through the availability of technology, as well as the need for both employee competency and organisational readiness (Marler & Fisher, 2013). In summary, the findings demonstrate that e-HRM is an operationally focused, but increasingly strategical concept in higher education institutions.

e-HRM and Sustainable HR Practices

Our findings indicate that there overall is a high level of agreement that e-HRM promotes sustainable HR practices through paperless HR processes; by minimising resource use; and by facilitating "green" HR. Digital HR systems have been shown to help promote sustainability by minimizing material consumption and streamlining HR business processes. Green HRM literature describes how HR Systems embed sustainability into an organisation's ongoing processes (Renwick et al., 2013; Jackson et al., 2011). The relationship between e-HRM practices and an organisation's institutional goal to become sustainable shows that as e-HRM continues to evolve, organisations may view their digital HR systems as playing an increasingly important role in their sustainability strategy as opposed to solely an administrative function. A significant percentage of the greatest returns of digitalisation-induced sustainability benefits are derived from the design of e-HRM systems and the inclusion of sustainability-based HR policies as part of their overall organisational behaviour guidance (Melville, 2010; Watson et al., 2010). Some of the earliest empirical evidence indicating a relationship between e-HRM and the attainment of sustainability outcomes is provided through this study on higher education.

Organizational HR Outcomes Associated with e-HRM Adoption

The findings indicate that there are several positive organizational HR outcomes resulting from using eHRM. Specifically, eHRM improves: 1) HR efficiency, 2) Transparency in HR decision-making, 3) HR information availability by utilizing more efficient communication methods, which improves HR function overall. In addition to increasing HR efficiency, these results indicate that integrating eHRM solutions can improve the quality of HR services and increase the role of the strategic function of HR departments (Strohmeier & Kabst, 2009; Bondarouk et al., 2017).

The improvement in access to information for employees is another strong positive from eHRM. eHRM facilitates transparency and puts the employee in control of their career. While eHRM supports HR's operational effectiveness the lower perceptions of strategic HR planning would suggest that in many organizations eHRM has not been used to exploit its full strategic potential. Marler and Parry (2016) indicate that the extent to which organizations obtain strategic impact from eHRM is strongly linked to their maturity in the use of technology and their integration of their technology activity with the other HR strategies.

Challenges in Implementing e-HRM for Sustainable HR Practices

It has been shown that despite the favourable results and a wider acceptance of e-HRM, there are also barriers that inhibit the successful deployment of e-HRM. One such barrier is security and privacy issues which (like e-HRM itself) are becoming a more prevalent risk to organizations using digital HR. Previous research has indicated that security and trust are major barriers when organizations are implementing HRIS and e-HRM (Strohmeier, 2009; Parry & Tyson, 2011).

The cost of implementation and maintenance, inadequate infrastructure, and resistance to change are further barriers preventing reaping of e-HRM systems merits. These barriers present an indication of the disparity in digital readiness across different organisations as well as further evidence that this readiness is tied to the provision of support systems to ease e-HRM uptake. The noted resistance to change signifies that technology uptake must also involve training, component communication and general change management. Therefore success in e-HRM is a function of the techno-human-organisational synergy of working together rather than the technology alone.

Integrative Perspective

Overall, the findings indicate that e-HRM has the potential to be an important facilitator of sustainable HR practices and HR positive outcomes in organisations in higher education. To take full advantage of the benefits of e-HRM however organisations must overcome many of the challenges associated with its implementation, including implementation of information systems (infrastructure), employee

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
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Vol. 36 Issue 1, 2026, Pages: 1847-1852

readiness and supervision of information security. The analysis of the different constructs look at how clearly operational and sustainability aspects of e-HRM are presented, while exposing strategic integration as a concern to pay attention to.

CONCLUSION

This study explored the effects of e-HRM systems on employee perceptions, work engagement, and overall workplace effectiveness through empirical data. Employee perception of e-HRM systems were generally positive. Strong relationships were noted between the employee's perception of the usability of the e-HRM system, the level of trust in the e-HRM system, and the overall perceptions of the engagement outcomes. Age and experience, among other demographics, impacted employee perception, reinforcing the idea that organisations build e-HRM systems aimed at diverse segments of the workforce. Overall, this research supports existing HRM theories around how digital HR tools provide transparency, communicate clarity of information and ultimately meet a form of employee satisfaction. From a practical point of view, organisations may take away from this study details that inform organisational design, development, and implementation of e-HRM systems and how they may affect trust in the digital HR scene and overall productivity and efficiency in the workplace. The limiting factors were in the areas of sample size, geographic limits, and self-reported data, but this study is rich material for future studies on longitudinal effect, cross-industry use, and how they interact with other new and exciting digital HR tools. Overall, the findings of this study indicate that e-HRM indeed adds strategic value to modern organisations and also informs academia and practitioners in their efforts to streamline the HR processes for their organizations in this digital banking thing they call work.

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