

## ROLE OF ELECTRONIC HUMAN RESOURCE MANAGEMENT IN IMPROVING THE HR EFFECTIVENESS: AN EMPIRICAL STUDY

**DR.(CA) SUBRAHMANYA BHAT**

*Principal Swami Vivekanand Vidyaprasarak Mandal's, College Of Commerce, Bori Ponda- Goa, India*

### **Abstract**

Human Resource Management supported by IT mainly from the usage of net technology, Electronic Human Resource Management is quite a new term. E-HRM is a way of implementing new Human Resource Management plans, practices, and policies in organizations through direct support from technology and full utilization of web-based channels. Today, the majority of organizations have adopted new technology-based Human Resource Management and are ready to replace Human Resource Management activities that were conducted face-to-face and are now conducted digitally, also called E-HRM. Electronic Human Resource Management enables functions and activities of Human Resources in creating dynamic capabilities and makes a great contribution to improving the effectiveness of Human Resource Management. One of the biggest benefits of implementing E-HRM is it releases Human Resource practitioners from intermediate roles and lets them concentrate on other important work like strategic planning in an organization and focus on transforming the role of HR from paperwork to strategic planners. Using electronic systems and E-HRM has advanced Human Resource Management functions and practices, and this approach is upgrading the life of the system. The purpose of this study is to evaluate and examine the impact of E-HRM on the effectiveness of Human Resource Management in organizations.

**Keywords:** Information Technology, Human Resource Management, E-HRM, activities, effectiveness.

### **INTRODUCTION**

Many industries and organizations in the present time are exploring and getting exposure to digital information systems. Practicing E-HRM in an organization permits Human Resource Management to concentrate on providing more effective and efficient services. It is an advanced-level commercial outcome that delivers a complete online facility of the whole business process, activities, information, and data that is needed for the management of human assets in an organization. E-HRM is an inventive area of a technologically based system, which is widely spreading in the world. It is a vital essence of invention in the technological field. It also saves costs in the maintenance of data excellence and improves its accuracy along with biases of humans (Madan & Sharma, 2016). Human resources are known as the most important and expensive asset of an organization and must be managed carefully. The main goal of Human Resource Management is to ensure that the organization has an appropriate number of employees with the needed skills, competencies, knowledge, and abilities for the right job, at the right place, at right time, and affordable cost. They are motivated to achieve the goals of an organization and the strategic requirements of a company. Functions conducted through electronic Human Resource Management ensure providing an effective and strategic method of working to achieve goals. It assists HRM practices with the facility of creating new opportunities of constraining the success of an organization (Ma, & Ye, 2015). E-HRM is present business environment is universally implemented Information Technology, and is globally adopted. The modification of Human Resources as a strategic partner enables the shifting focus of HR to play as an employee champion. Online resources are utilized for functions of HR like learning and training, and electronic tools of HR are used mainly for recruitment and the process of performance review. Companies must focus highly on strategic issues related to

Human Resource Management and on the achievement of strategic objectives of HR through the usage of new technologies and learning administrative effectiveness. It is suggested that in an organization, senior management must ensure sufficient funds for training activities for an increased level of understanding of E-HRM and the importance of HR tools (De Alwis, Andric, & Sostar, 2022). The combination of information technology with HR has developed it as E-HRM that agreed to direct HRM exchange using information technology tools and the web. The basic justification behind several connotations to combine information technology with Human resources is the increasing weight of financial changes. Investing in initiatives related to electronic HR, technological tools, or administration must progressively participate with other demands for internal funding. Professionals of HR have to understand the association between the price, cost, and value of their suggestions. However, HR professionals are still unclear about the framework for defining and conveying its promise in terms of well-defined business results (Patil, 2019). In the field of Human Resource Management, electronic HRM is an innovation as, first of all, it provides many opportunities for employers along with employees to have proper control over the relationship between management and their staff. Similarly, it is due to the capabilities of Information Technology designing tools of HR, which is impossible through services that are provided by information technology. In the present time, developing knowledge and bringing transformation and invention in HR is conceivable through the development of employees in an organization. A significant role is played by information technology and electronic HRM in professional development, institutional transformation, and innovation, increased level of employee engagement, competencies, and capabilities, the effectiveness of cost, and increased level of unanimity and consistency (Hosseini & Nematollahi, 2013).

## Literature Review

**Deshwal (2015)** studied that E-HRM is a tool based on web technology, and it supports the process of HR. Its implementation provides an opportunity of delegating data entry to employees. It enables usage of the human resource marketplace and proposes self-service to employees. E-HRM tools are easy to use, reliable, and efficient. It is accessible to a wide group of people. It is known as a high-tech method of performing functions and numerous practices of HRM. Today, almost every organization is acknowledging and recognizes the importance and sustainability that it provides in terms of competition in the market. It also helps in the selection and recruitment of job seekers. E-HRM is effective in retaining talented employees of a company. E-HRM covers almost every aspect of Human Resource Management, such as administration, training, and development of employees, recruitment process, performance management, appraisal, etc. E-HRM is considered the new and developed way of doing HRM.

**Manchanda, Jyotsna, & Arora (2018)** revealed that though practices and functions of HR adopted computer technology quite early, it spent the last decade catching up with other functions of the business with regards to the integration of Information Technology in its process. Productivity and efficiency of business organizations are highly influenced by E-HRM as it assists in improving the service quality that is offered by the company and, at the same time, reduces the cost of operation, service, and delivery. The technology of electronic Human Resource Management reduced the time that is spent on the development of policies, administrative activities, and supporting employers and employees. Organizations are making efforts to provide training to their Human Resource professionals along with employees for the effective implementation of E-HRM and to enjoy its benefits.

**Omran & Anan (2018)** stated that for any organization, technology works as a strategic weapon that improves the process of business and enhances its position in a competitive market. A vital role is played by Human Resource Management in improving an organization's performance. A strong impact is made by electronic HRM and its usage. Electronic HRM is a web-based technology, which is used to conduct Human Resource Management functions, and it is growing in organizations. To improve Human Resource Management practices, E-HRM can be proved as a driving force. It is a multilevel portent of

performing HRM functions. E-HRM assists organizations in renovating Human Resource Management functions to a web technology based whose implementation would speed up their workflow and help in developing business strategies and processes.

**Nurlina et. al. (2020)** found that E-HRM can be considered as an alternate method of implementing HRM strategies. Two factors are involved in the mutual integration of policies and practices in a company so that E-HRM can be implemented. The two factors are full support and readiness of organizational resources, and it can be internal organization as well. Other than that, electronic Human Resource Management is a kind of facility for managing employees to be more effective and productive and measuring the performance of the organization along with a reduction in operation cost. Implementation of E-HRM is not just recognized for measurement of performance, it also a perception of employees at the time of its application as a part of Human Resource Management strategy.

**Al-Harazneh (2021)** revealed that the role of E-HRM in an organization has changed completely from using basic HRM functions, daily routine work, and old Human Resource Management practices to handling advanced technological tools. Support of top management and the role of Human Resource Management line managers has positively impacted behavioral intention of using E-HRM as well as the actual use of E-HRM. On the contrary, the impact of Human Resource professionals on using E-HRM was found to be negative. It is also found that using E-HRM has had a substantial effect on the effectiveness of the Human Resource Management system. The findings of the study suggest that expectancy of performance made a significant impact on the behavioral intention of using the system of E-HRM. On the other hand, the expectancy of efforts did not.

**Al Mashrafi (2020)** stated that Human Resource Management ensures that a company has the right number of people with appropriate knowledge of work, talent, skills, and experience to do the right job at the right place and that too at a reasonable cost. People should be motivated enough to achieve the goals and strategic requirements of a company. Implementation of E-HRM provides a strategic approach towards work and achieving the goals of the organization. It enables functions of Human Resource Management the opportunity to develop new paths and goals to achieve business success. Carrying out business processes and transactions through the Internet in E-HRM also involves various tools and machines. On the other hand, a system of E-HRM puts into operation schemes, guidelines, and practices of Human Resource Management in an organization through concentrated assistance of pathways based on the web and the internet.

**Girisha & Nagendrababu (2019)** found that companies in India are quick in acceptance and adoption of automation and are taking the introduction of E-HRM seriously. Adopting new technology is in Indian culture. However, India is lagging in applying automation to strategic decisions. Many Indian companies purchased E-HRM software and implemented it in their system but do not have any knowledge about how to use it. Adoption and implementation of E-HRM software technology are around 15% more as compared to other companies around the globe. Around 80%-90% of Indian companies purchased software for the reduction of staff in their office. It is the tendency of HR that if they are not managed properly, the employees and many other people in the company will help employees in doing their work. A lot of technology has been developed to automate things and reduce people at work. Implementation of E-HRM would reduce the high number of employees and become consultant-based work. A shift will be seen in service delivery towards strategic consulting.

**Heikal et al. (2019)** stated that the implementation of E-HRM would play an important role for web-based businesses, as online management of the system will reduce time spent as well as resources. Huge transformations in society, culture, and economy can be seen with the constant development of technology and science, particularly in the usage of computers and the internet. In the past few years contribution of such approaches in the field of Human Resource Management, a new technology was

developed known as E-HRM. It offers the probability of improving administration to Human Resource division customers, bringing improvement in productivity and efficiency, and reducing cost. E-HRM facilitates Human Resources to turn into vital assistants in achieving commanding goals.

**Umar, Yammama, &Shaibu (2020)** studied that acceptance and implementation of E-HRM function like e-performance appraisal, e-compensation, e-communication, and e-training influence performance at work. A positive relation is between e-training and task, and adaptive performance. In the same way, the outcome of the study shows that electronic performance appraisal is only associated with contextual performance and behavior of counterproductive work. On the other hand, practices of an e-training show no considerable impact on contextual performance and behavior of counterproductive work. No substantial impact was observed between e-performance appraisal and task and adaptive performance.

**Alsakarneh & Hong (2014)** revealed that two necessities are considered in the development of E-HRM to achieve the goals of the company and improve the company's performance. It also helps in raising the performance level of the organization and constantly improves its operations along with HR performance in a company. A study suggests more research be conducted that would help in identifying and solving issues that occur in improving the performance of the company and other administrative hindrances.

**Objectives of the Study:** This study aims to analyze the relationship of e-HRM implementation to employee performance both directly and indirectly through the intervening of the Human Resource service Quality variable, both practically and theoretically.

1. To ascertain the role played by E-HRM in improving the effectiveness of Human Resource Management.
2. To identify how effective is Electronic Human Resource Management in simplifying Human Resource Management.

**Methodology:**

This study relates direct relationship of E-HRM and the performance and relationship moderated by Human Resources service quality tested on 189 participants under the coordination of management of different sections Goa. A structured questionnaire was used to collect data. To identify the outcome, the Mean and t-tests were applied. The sampling method was convenience sampling.

**Outcome:**

Table 1 displays the Respondent's gender, male respondents are 59.26 percent, and females are 40.74 percent. Looking at the Age, 25 to 28 years are 36.51 percent, 28 to 32 years are 30.16 percent, and more than 32 years is 33.33 percent. Regarding the type of Industry using E-HRM, Banking/Finance is 16.40 percent, Manufacturing is 22.75 percent, Information Technology is 15.34 percent, Service Industry is 25.92 percent, and other is 19.59 percent. Regarding work experience, less than 2 years are 33.33 percent, 2 to 5 years are 26.98 percent, and more than 5 years is 39.69 percent.

**Table1: Respondent's Demographic Details**

Variable	Number of respondents	Percentage (%)
<b>Gender</b>		
Male	112	59.26
Female	77	40.74

<b>Total</b>	<b>189</b>	<b>100 .00</b>
<b>Age</b>		
25 to 28 years	69	36.51
28 to 32 years	57	30.16
More than 32 years	63	33.33
<b>Total</b>	<b>189</b>	<b>100 .00</b>
<b>Industry Type</b>		
Banking/Finance	31	16.40
Manufacturing	43	22.75
Information Technology	29	15.34
Service Industry	49	25.92
Others	37	19.59
<b>Total</b>	<b>189</b>	<b>100 .00</b>
<b>Work Experience</b>		
Less than 2 years	63	33.33
2 to 5 years	51	26.98
More than 5 years	75	39.69
<b>Total</b>	<b>189</b>	<b>100 .00</b>

Source: Primary Data

**Table 2: The role played by E-HRM in improving the effectiveness of Human Resource Management**

Sr. No.	Survey Statement	Mean Value	T-Value	Sig.

1.	E-HRM eliminates paperwork and speedup execution of many tasks	4.29	18.046	0.000
2.	E-HRM releases HR practitioners from intermediary roles	4.23	17.316	0.000
3.	It improves HR activities like selection, recruitment, payroll, training, etc.	4.33	19.022	0.000
4.	E-HRM leads to achieving competitive advantage leading to overall organizational efficiency	4.00	14.014	0.000
5.	E-HRM improves administrative efficiency and achieves cost reduction	4.19	16.950	0.000
6.	Implementation of E-HRM provides a strategic approach toward work to achieve organizational goals	3.17	2.381	0.009
7.	E-HRM leads to professional development and increases employee engagement	4.02	14.419	0.000
8.	It helps HRM functions with the facility of creating new opportunities of constraining success of an organization	4.10	15.619	0.000
9.	E-HRM helps in effective and accurate performance appraisal	4.13	15.852	0.000
10.	E-HRM facilitates automation and standardization of the system benefitting employers and employees	3.12	1.713	0.044

**Source: Primary Data**

Table 2 shows the mean values of the "Role played by E-HRM in improving the effectiveness of Human Resource Management" The first statement of the T-test is about speeding up the work "E-Human Resource Management eliminates paperwork, and speedup execution of many tasks" with the mean score of 4.29, next statement is "E-HRM releases HR practitioners from intermediary roles" has earned mean value of 4.23. The third statement is about different HR functions "It improves Human Resource activities like selection, recruitment, payroll, training, etc." with a mean value of 4.33, next statement is related to the achievement of competitive advantage" mean score is 4.00, another statement is "E-HRM improves administrative efficiency and achieve cost reduction" having the mean value of 4.19, a sixth statement is about the achievement of organizational goals "Implementation of E-HRM provides a strategic approach towards work to achieve organizational goals" earned the mean value of 3.17. The next statement talks about professional development through E-HRM "E-HRM leads to professional development and increases employee engagement" mean value is 4.02. An eighth statement "It helps Human Resource Management functions with the facility of creating new opportunities of constraining success of the organization" has a mean score of 4.10, another statement talks about the accuracy of performance appraisal "E-HRM helps in effective and accurate performance appraisal" earned the mean score of 4.13. The last and tenth statement is "E-HRM facilitates automation and standardization of system benefitting

employers and employees” the mean value is 3.12. The t-value of each statement of the survey in the context of the Role played by E-HRM in improving the effectiveness of Human Resource Management is significant because the t-value of statements is positively significant as the value is less than 0.05.

## CONCLUSIONS

The application of E-HRM makes a substantially positive impact on the effectiveness of Human Resource Management functions and practices. It is apparent that E-HRM helps in improving the effectiveness and efficiency of the system and is considered an underlying advantage that results from digitalization and system automation. The goal of the digitalization of HRM is to enhance the performance of an organization. Human Resource professionals, to achieve excellence, have to become more strategic and preemptive and must gain knowledge and proficiency in forthcoming technical trends. With the usage of digital technology tools efficiency, effectiveness, and productivity of HR functions have got enhanced in organizations. E-HRM redesigns old HR functions based on new technological tools focusing on people and their work efficiency that benefits an organization and its employees. However, to incorporate digitalization in Human Resource Management needs investment and necessary skills for its development and implementation, which means that organizations have to invest in the embracement of digital technologies and prepare their managers and employers to develop needed skills, and awareness for full utilization of technological tools and enjoy its benefits. Furthermore, the implementation of E-HRM also poses some challenges in terms of keeping secrecy and retaining human resources. The majority of organizations in the present time have already adopted and implemented E-HRM in their system for their sustainable survival in competitive markets. Mean, and T-test was applied in the study to find out the result.

## REFERENCES

1. Madan, P., & Sharma, I. (2016). E-HRM: A Tool to Enhance the Effectiveness of the HR functions in Present Context, *Research Reinforcement*, 3(2), 67-70.
2. Ma, L., & Ye, M. (2015). The Role of Electronic Human Resource Management in Contemporary Human Resource Management, *Open Journal of Social Sciences*, 3, 71-78.
3. De Alwis, A.C., Andric, B., & Sostar, M. (2022). The Influence of E-HRM on Modernizing the Role of HRM Context, *Economies*, 10(181), 1-13.
4. Patil, B.R. (2019). Effectiveness and Role of Electronic Human Resource Management (E-Hrm) Applications, *Cikitusi Journal for Multidisciplinary Research*, 6(3), 426-431.
5. Hosseini, S.A., & Nematollahi, K. (2013). Electronic Human Resources Management and the Effectiveness of Human Resources Management, *European Online Journal of Natural and Social Sciences*, 2(3S), 1812-1819.
6. Deshwal, P. (2015). Role of E- HRM in Organizational Effectiveness and Sustainability, *International Journal of Applied Research*, 1(12), 605-609.
7. Manchanda, M., Jyotsna, & Arora, S. (2018). Measuring the effectiveness of e-HRM in Selected Service Organization, *Pramana Research Journal*, 8(11), 297-309.
8. Omran, K., & Anan, N. (2018). Studying the impact of using E-HRM on the effectiveness of HRM practices: An exploratory study for the internet service providers (ISP) in Egypt, *International Journal of Academic Research in Business and Social Sciences*, 8(4), 454-486.
9. Nurlina, N., Situmorang, J., Akob, M., Quilim, C.A., & Arfah, A. (2020). Influence of e-HRM and Human Resources Service Quality on Employee Performance, *Journal of Asian Finance, Economics, and Business*, 7(10), 391-399.

10. Al-Harazneh, Y. (2021). The Impact of E-HRM Usage on HRM Effectiveness: Highlighting the Roles of Top Management Support, HR Professionals, and Line Managers, *Journal of Global Information Management*, 29(2), 118–147.
11. Al Mashrafi, K.A.S. (2020). Human Resource Management and the Electronic Human Resource (E-HRM): A Literature Review, *International Journal of Management and Human Science*, 4(2), 44-53.
12. Girisha, M.C., & Nagendrababu, K. (2019). E- Human Resource Management (E-HRM): A Growing Role in Organizations, *Emperor International Journal of Finance and Management Research*, 5(11), 1-8.
13. Heikal, M., Ciptaningsih, E.M.S.S., Nguyen, P.T., Lydia, E.L., & Shankar, K. (2019). Role of Electronic Human Resources Management Systems in the Growth of Web Based Business, *International Journal of Recent Technology and Engineering*, 8(2S11), 3814-3817.
14. Umar, T.R., Yammama, B.A., & Shaibu, R.O. (2020). The Implications of Adopting and Implementing Electronic Human Resource Management Practices on Job Performance, *Journal of Human Resource Management*, 8(2), 96-108.
15. Alsakarneh, A.A.A, & Hong, S.C. (2014). The Impact of Electronic Management on Human Resource Development, *International Journal of Science and Research*, 4(11), 185-190.