Human Resource Management and The Electronic Human Resource (E-HRM): A Literature Review

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Abstract

This study provided review E-HRM (Electronic Human Resource Management) practices in the diversity aspect and overview the e-HRM practices which importance of e-HRM practices in workplace. The study explains E-HRM practices of human resource management in the organization and emphasises the importance of e-HRM practices in improving organization. The identifies the role of e-HRM that affect the e-HRM effectiveness in the organization and review approach which is analysis literature review used as the main instrument to conduct current study. Results show that the e-HRM importance In order to deal with the demands of today's knowledge-based economy, it is almost a must for organization to increase the human resource potential, a goal towards which e-HRM could be of help to enhance human resource skills and knowledge to emphasize of employee performance.

*Keywords***:** electronic human resource management), human resource management, a review of literature.

1. Introduction

The goal of this paper review and explain E-HRM practices of human resource management in the organization. Nowadays, globalised and knowledge-based environment, the integration of e-HRM generates a massive challenge to organisations and managements. The technical progress, which is an essential element of the communications revolution, drives the continuous development of information systems, and administrative activities have gradually but inexorably transformed the ordinary electronic activities into fully electronic administration by taking advantage of the advances in information and communication technology (ICT) to increase the work efficiency within organisation to better serve the customers and society at large.

The proliferation development has permeated most contemporary organisations, which have been called "twentieth-century organisations" and which are driven by information and knowledge to expedite growth of services to the, institutions and general public in line with the contemporary trend towards a paperless working environment (Al Mashrafi, 2018). E-HRM is the utilize of web-based technologies to provide HRM services within employing organisations. It embraces e-recruitment and e-learning as well. Additionally, e-HRM is a recent phenomenon which has evolved and is now widely used in various types of organisations worldwide (Lengnick-Hall and Moritz, 2003; Ruël, Bondarouk and Furtmueller, 2017; Ruël, Bondarouk, and Van der Velde, 2007).

2. Literature review

Organizations should increase spending on research and development in order to increase the organizational effectiveness (Isaac, Aldholay, Abdullah, & Ramayah, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2018; Isaac, Abdullah, Aldholay, & Ameen, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2017; Mutahar, Daud, Thurasamy, Isaac, & Abdulsalam, 2018).

Humans the most important resource of any organization and it has been observed by many management philosophers that organization who care for their employees are doing far better than those organizations which do not care for their human capital or which do not keep employees welfare at their top priority. In such a scenario E-HRM a key of new prospect which makes employee welfare easier and helps organizations to control this resource more efficiently. E-HRM helps in employee control as well as helps in better employee planning and more efficiently works in providing training and development to employees (Kushwah and Maheshwari, 2020).

Electronic human resource management (E-HRM) is by and large an Intentional creativity by HR practise to perform with the information and knowledge by unfettering it from every day repetitive necessities, operational and to make it more in accord with the decision making, understanding of the workers, change of workforce, information, brand and centre of excellence. Moreover, Technological changes and development are an effective force towards exemplar shift of transactional and traditional HRM practise towards digitisation simultaneously can achieve transformational level and aspire to be a strategic partner of all concern. Currently, Governments and organizations launched many procedures for the need of E-HRM practices in many sectors has

emerged. Paperless office can be a competitive advantage to the organization and its top-level management. Future research should be conducted to investigate the relationship between variables by conducting cross-cultural studies as recommended by previous studies (Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2017; Isaac, Abdullah, Ramayah, & Mutahar Ahmed, 2017; Isaac, Abdullah, Ramayah, & Mutahar, 2017a; Isaac, Masoud, Samad, & Abdullah, 2016; Osama Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2018; Isaac, Abdullah, Ramayah, & Mutahar, 2017b).

2.1 Electronc Human Resources Management (e-HRM):

Electronc Human resources management (e-HRM) have been discussed in the literature from different perspectives. The literature highlights the importance of technology in improving and increasing the effectiveness of human resources and their practices and the potential influence on the employees. Moreover, the literature on e-HRM has proliferation growing in several parts of organisations due to the rapid development of technology. This literature has revealed several empirical study demonstrating e-HRM IN workpleace. In this paper, the review of the literature will be explained to show various trends of research in different contexts.

Additionally, E-HRM nteresting is not new. Researchers and experts since the introduction of the concept have continued their efforts to present a appropriate definition of the term e-HRM. Aryee et al. (2016) provided that the transfer of knowledge by overcoming different barriers that are in existence within an organisation is the primary objective of e-HRM(Ameen et al., 2020, 2019a, 2019b, 2019c, 2018; Ameen and Ahmad, 2013, 2012, 2011). The study focused on the relationship between e-HRM practices and knowledge transfer in multinational companies (MNCs).

Minbaeva and Michailova (2004) supported the idea of transfer of knowledge so as to overcome different barriers within an organisation to allow effective policies and practices to be used an organisation. The scope for the use of information technology in human resource management and all the activities and functions related to HRM are endless. Thus, it is only a natural progression for the conventional HRM to be converted into e-HRM for the better management of human resources within an organisation. Rees and Smith (2017) stated that the use of information technology had increased multiple folds in all aspects of running and managing an organisation; the fundamental business operations which earlier used to be completed manually changing with the use of different technologies.

HRM has also evolved into e-HRM to be more effective and efficient. Though e-HRM is not a new concept as it has been in use for a number of years now, yet there are many incorrect conceptions about the subject. This paper aims to provide substantial information about e-HRM to shed light on the concept for the readers (Al Mashrafi, 2018).

In study by (Rees and Smith, 2017) implement extensive research on the subject, the organisations that have implemented e-HRM have been identified. The study of these organisations emphasises the following observations. One of the significant findings of the study on these organisations was the gap during the study that exists between the practical e-HRM and technical e-HRM. The introduction of e-HRM has clearly helped these companies to improve the competencies of the employees along with achieving cost reduction in managing human resources and reducing the burden in administrative activities

Bell et al. (2006) explained the role of information technology in transforming the administration characteristics of HR to more of a strategic partner to the business as a whole. This has improved the performance of the business organisation along with the strategic partner to the business e-HRM and has added a new dimension to business organisations. An interview was conducted with HR representatives from 19 firms across the country to substantiate the important role that e-HRM has played in enhancing the professional competencies of HR professionals and employees in general.

Lucas et al. (2016) collected data from 178 organisations operating in Greece to measure the influence of e-HRM on the overall of the organisations performance. The data were collected from 178 organisations using questionnaire, and the observations were made using structural equation method (SEM). The results of the above survey proved clear evedence that e-HRM strategy has seqnifcent inflonce on organisation performances. The outcomes of e-HRM made it clear that the whole purpose behind the introduction of e-HRM is to improve the overall performance of these organisations which in many cases has been achieved In most contemporary organizations, the use of technology not only relies on information and communication technologies to fill out some forms and records but is also a tool that performs the process of identifying, accumulating, analyzing, measuring, preparing, preparing, interpreting and communicating information that management uses for planning (Al-Obthani and Ameen, 2019a; Albreiki et al., 2019; Albreki et al., 2019; Alfalasi et al., 2020; Alghawi et al., 2019a; Alshamsi, Rashed Ameen and Isaa, 2020; Ameen et al., 2019a). It is used for evaluation and control within the organization and to ensure appropriate use and accountability for its resources (Al-Obthani and Ameen, 2019b; Alghawi et al., 2019b; Alshamsi et al., 2019a, 2019b; AlShamsi et al., 2020; Ameen et al., 2020).

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Bondarouk and Ruël (2009) clarified that there was an increasing trend which showed that organisations across the globe are moving towards aligning their activities with e-HRM to perform better. It can be said that the outcomes of e-HRM so far are encouraging. Their qualitative results show how public-sector organisations have benefitted from the use of e-HRM. Interviews were conducted with line managers and employees of different organisations to find the linkage between e-HRM applications and enhance the effectiveness of HRM. The interviews highlighted the importance of e-HRM on improving the overall performance of these organisations. According to Collins and Malcolm (2012), there is a relationship between economic reforms and people management. They studied the behaviour of different organisations in three Asian Socialist Economies, namely China, Vietnam and North Korea. Whereas China and Vietnam were in transitional stages as far as their economies were concerned at the time when the study was conducted, North Korea was yet to welcome the forces of globalisation. The experiences of these economies were in contrast as well as comparable.

The HRM practise has relationship with employment and was more than apparent. E-HRM supports improving effectiveness, decreases the workers in organization, and saves money and lowers the administrative burden for people. It has ability to human resource management to become more strategic by providing the human resource managers the authority to have more impact on business decision-making and giving more opportunity to make decisions instead of performing transactional actions. It supports the human resource managers with accuracy, reliable information about their organization which support business decision makers (Al Mashrafi, 2018).

2.2 Function of Electronc Human Resources Management:

With the aim of run HR functions faster to get the optimum outcomes, e-HRM is one of the most current subjects in HRMS that helps the researchers to implement the strategic roles by reducing costs and administrative problems (Kariznoee, Afshani and Moghadam, 2012). Furthermore, in e-HRM, there are four core requirements to be considered. First, the emphasis the strategic inquiries. Second, the adaptability in making new policy and SOPs. Third, the work adequacy along with the awareness of the cost and lastly the workers and managers administration accessibility. E-HRM is a built-in communication technology for human resource functions which are dependent on the Internet to connect with the world (Schramm, 2006b).

According to a Hungarian member of the Club of Rome, Ervin Laszlo, human society has always faced crisis, and it is a natural phenomenon which has existed in the past and existed in the present and will continue to exist even in the future (Laszlo, 2014). Moreover, Fodor and Poor (2009) have advanced the above discussion and discussed the crisis of human society. They stressed that the current crisis of human society is different from the ones experienced in the past. In fact, the criticality of the current crisis can be measured from the fact that it has spread to almost all the countries across the globe and has almost brought a global collapse. HRM and knowledge management will help to overcome such a crisis, and Hungarian companies are expected to move towards this direction. A brief look at the history will tell us that how the period of depression was overcome. The roles of HRM and knowledge management played a positive role to help recover from the global depression.

The concept of e-HRM at different management levels, the administrative support for changing to e-Management, the infrastructure of IT centres, HR system, and e-Learning system have been mentioned by Yousef (2009) who expressed the importance of e-HRM in Palestinian universities in the Gaza Strip. It is essential to have necessary technology and processes in place to properly implement e-HRM within an organisation. Thus, the availability of resources is one of the most crucial aspects for the successful implementation of e-HRM. However, due to financial constraints of universities, the implementation of HR systems is negatively affected especially the conversion of management systems to the e-management system.

There has been a sudden emergence of evidence-based movements. Various disciplines are using the evidence-based movements as identified by Olivas-Lujan and Denise Rousseau (2010) to improve practices after making decisions based on information gathered after necessary research. There are many misconceptions about the concept and gaps between practitioners and academics persist. In order to assess the impact of e-HRM on electronic management on human resource practices and operations within an organisation, Daini (2010) investigated Al-Rafedan Bank. A questionnaire was prepared by the researcher with 31 paragraphs which was administered to 214 individuals from different departments of the bank. The researcher came to the following conclusion after the investigation:

Al-Otaibi (2010) tried to establish the importance of the use of information technology on the performance of Australian International Academy in Melbourne. This study provided crucial information about the present human resource management systems in use in education institutions in Australia at the time of the study. Similarly, the use of different systems, services, and e-learning in educational institutions have a huge impact on the use of technology in managing the human resources in different organisations.

Bloom and Reenen (2011) explained the relationship between human resource management and productivity of an organisation. HRM is responsible for identifying the hard work of the workers and employees to provide the necessary incentives and rewards to motivate them to continue working hard for the organisation. HRM is also used to identify non-performers and penalise them by imposing cuts in their payrolls. Lin et al. (2016) stated that risk, competition, ownership and regulation are a few of the factors which determine the HRM strategy in an organisation. These are to be given due importance in order to frame an effective HRM strategy for an organisation as they are important determinant factors in conventional HRM as well as e-HRM.

Moreover, a questionnaire was designed by Nura et al. (2011) to identify and assess the perception of owners about the use of human resource management and specifically e-HRM in Sokoto State. The questionnaire was prepared in such a way to find out the perceived usefulness of e-HRM, the impact on earlier using difficulties, impact on the attitude of workers, the impact on the behaviours of individuals within these organisations and the overall changes in human resource management system within these organisations.

In order to test the relationship between different variables, Structural Equation Modelling (SEM) was used to analyse the data that were collected from the stud y(Alkatheeri et al., 2020; Haddad et al., 2020; Yazeed Alkatheeri, Ali Ameen, Osama Isaac, Ahmed Hamoud Al-Shibami, 2020). The findings of the study based on the answers of the respondents to the questionnaire suggested that the TAM theory is correct and other hypotheses were proved to be as an alternative hypothesis. In Sokoto state, Nigeria, the organisational performance was certainly influenced by the e-HRM policies and practices as was clear from the findings of the study.

Antony and Bramanian (2011) investigated the increased amount of use of technology in e-HRM. In order to find how the use of technology has helped the e-HRM to improve the management of human resources, different operations and processes in different organisations. The impact of technology on HRM is huge and has continued to increase. The processes and techniques used by an organisation at present are much more effectively and efficiently compared to the times when conventional HRM was in use.

2.3 Impact of Electronc Human Resources Management (e-HRM):

The perception of HR activities and the impact of e-HRM on HR activities in different companies and organisations in Ghana was explained by Ofori et al. (2011). The research used qualitative and quantitative methods to analyse data collected for analysing the impact of e-HRM and HR activities on performances of organisations operating in the country. The data were collected from more than 300 respondents from different organisations in different parts of the country such as Ghana. The survey had a unique aspect to it; the surveyors created a perception index to measure the perception of the respondents of different HR activities and strategies and policies of e-HRM. According to the responses from the respondents, recruitment of qualified personnel, training and development and the retention of qualified staff are the most important part of effective HRM. These were ranked at the top as far as an effective HRM strategy is concerned.

According to Parry (2011), increasing the value of HR functions and activities is a major purpose of e-HRM and in fact is one of the main reasons for the introducing (e-HRM). The findings of major surveys and findings from different research have made it quite clear that e-HRM truly provide supporting to HR functions and activities . Widely survey counted in 12 different countries appeared that e-HRM has improved the value of HR performance organisations by becoming a strategic partner in addition to managing the human resources. Parry and Tyson (2011) discussing that though scholars have been quite vocal about the potential goals of e-HRM, hardly, have they provided any evidences to measure whether these goals can be achieved by e-HRM and the factors that have to be given due importance to achieve these goals of using e-HRM. This study focuses on whether implementing e-HRM supports achievement of an organisation goals.

In the study of Parry and Tyson (2011), UK organisations were chosen as the respondents for the completion of the survey. The main goals behind the introduction of e-HRM were to improve efficiency and effectiveness of different operations within the organisation, achieve better image for the organisations, empowering managers and officials to aid them in running the organisations properly. As per Cavanagh et al. (2017), the results of the survey showed that the operational efficiency and effectiveness along with service delivery and improving organisational image were achieved. Evidence was also available to show that the overall business strategy of different organisations was achieved due to the implementation of e-HRM though the increasing involvement of HR in the business decision-making process could not be substantiated from the outcome of the survey.

Despite all the positivity, it was also found out that for small and medium-sized enterprises in Malaysia, there were certain difficulties in recruiting employees by using the Internet (Poorangi et al., 2011). The main reason for this issue, however, is the attitude of the management of SMEs in the country as they considered e-

recruitment as a sub-function of e-HRM. The benefit of e-HRM has expanded to the multilingual organisations as they have ranked this as a huge benefit for using web-based HRM, i.e. e-HRM and e-recruitment process.

E-recruitment has improved the communication between job seekers, companies and other stakeholders. Technology has played the role of a bridge to shrink the gap between the employers and employees as the virtual world brought them closer. The study showed us that the e-recruitment system in Malaysia is in its infancy and there needs to be many works to allow even the big firms in the country to make the best use of e-recruitment system. It is obvious that as the big firms are yet to make the best use of the technology to recruit personnel using the Internet and the web, the SMEs are struggling to benefit from the use of the e-recruitment system (Cavanagh et al., 2017).

Tanveer et al. (2011) investigated the employees' performances in textile industries in Pakistan. In order to assess the impact of human resource practices on the performances of the employees in the textile industry in the country, the authors developed a model. The emphasis of the survey was on recruitment and selection processes used by the organisations, training and performance appraisal systems that were used by these organisations and their combined impact on employee performance. A set of questions were asked of the mill owners in the textile industry. The answers indicated that there is a relationship between human resource management practices and consequent performances of the employees. Studay by Yusoff and Ramayah (2011), A preliminary investigation was conducted on 51 HR professionals in Malaysia to understand the importance of technological factors and attitudes of employees with e-HRM practices in place, found that e-HRM provides the opportunities to contribute to the success of different organisations. Thus, the organisational success will be easier to achieve with an effective e-HRM.

2.4 Acceptance (e-HRM)

Furthermore, Chapman et al. (2016) stated that the importance of training and education to improve the performances of the employees of an organisation is paramount and should be given due importance in the overall management of human resources of the organisations. Formal education is a stepping-stone for the employees to enter the activity showcase. However, to keep the movement, it is necessary to keep learning. Employees and workers will only be able to learn and enhance their skills if the management takes necessary initiatives in this regard. In this way, e-HRM should have appropriate arrangements for providing fundamental training training appraising the performances of the representatives. Nura and Osman (2012) concurred with the statement since they focused on the significance of education and training in the overall the board of HR in an organisation.

Dosajh and Sujlana (2012) agreed that e-HRM provides a strategic edge to HR functions to increase organisational effectiveness and efficiency. Furthermore, academic involvement in e-HRM requires to increase further as the relevance of e-HRM has increased over the years. In addition, the Technology Acceptance Model (TAM) has been in full operation in India to examine the outcomes of organisational performances that have given less attention to examining the relationship between HR roles and e-HRM.

According to Rawash (2012), who explored the influence of e-HRM (Electronic Human Resource management) on institution's share of the market, there has been a pragmatic examination of the housing bank for finance and trade in the Jordan. An analysis of the literature reveals the lack of a theoretical model that expresses the electronic management in detail. An assessment of the literature that is normative elucidates that there is no hypothetical model that explains the HRM in detail. The scrutiny reveals a deficiency of practical research concerning the integration of HRM in the development of the performance of the organisation. Hence, researchers are trying to solve the lack of literature by suggesting the amalgamation of human resource management and electronic management.

Moreover, Ashkezari et al. (2012) indirectly expressed that many institutions have identified that the skill of their labour force is a solution to achieve a competitive lead and proficiency studies has benefitted to a greater extent in attention and interest. The capability is a category of explicit and tacit knowledge, skills and deeds that bestow someone the latent power for efficiency in performing the job. There is even the proficiency model which is based on the storyline description of the capabilities required for a besieged task classification, work-related group, department, division or another unit of testing. The intention of this research is the introduction of proficiency models to encourage the management of human resource practices.

Also, Dhamija (2012) identified that the critical worth of a project is the skills, know-how, insights and innovations of those conc(Al-Gamrh, B., Ku Ismail, K. N. , Ahsan, T. and Alquhaif, 2020; B. A. Al-Gamrh & Al-Dhamari, 2016; B. Al-Gamrh, Ku Ismail, & Al-Dhamari, 2018; Merle, Al-Gamrh, & Ahsan, 2019; Safipour Afshar, Pourheidari, Al-Gamrh, & Afshar Jahanshahi, 2019)erned. Whereas resources like human beings are important constituents in all organisations. This can be the knowledge, attitude and talent, aptitude, innovative capacity and conviction of a person mixed up in the matters of an institution . The recruitment of effective and proficient staff is a key activity as this can spawn the human capital for the business entity. HRM has gone through various scientific advancements. The operation of human resource division is greatly affected by the Internet.

Moreover, Armstrong et al. (2016) stated that this has developed with the numerous creations and innovations through virtual human resources, electronic human resource management and human resource

information system. E-HRM refers to carrying out of the transaction of business by utilising the Internet along with the involvement of several types of machinery. Alternatively, the e-HRM system puts into operation the HRM schemes, practices and guidelines in an institution through focused assistance of web-based pathways.

3. Conclusions

Human resource management employs the e-HRM to confirm the sustainability of the availability of staff while increasing productivity and reducing costs (Nasar,et al, 2020; Rouhoma, 2010 ; Rouhoma et al., 2017). Human resources are considered as an extremely expensive resource in any organization; therefore, they require highly careful management. The goal of human resources management is to ensure that an organization has the accurate number of employees with the required knowledge, skills, abilities, and competencies, in the right place, at the right time, at an affordable cost and who are motivated and determined to achieve the current and strategic need of a firm. E-HRM practice provides a more efficient and strategic approach to working to achieve the organization's goals. E-HRM facilitates human resource functions with the chance to establish new avenues for committing to organizational success. currently, many technological applications have emerged, claiming to cover nearly every human resource management activity; not only complementing it, but often even substituting it (Dhar et al., 2017). In order to meet the demands of today's knowledge-based economy, it is almost a must for companies to increase the human resource potential, a goal towards which e-HRM could be of help.

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