



WWJMRD2022; 8(02):115-120  
www.wwjmr.com

*International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal*

*Impact Factor SJIF 2017:  
5.182 2018: 5.51, (ISI) 2020-  
2021: 1.361*

*E-ISSN: 2454-6615*

**DOI: 10.17605/OSF.IO/7WYGB**

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## **E- Hrm in Higher Education Institutions in Indonesia: A Proposed Model**

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### **Abstract**

The goal of this study is to find and construct a model of Electronic Human Resource Management (E-HRM) for the higher education institutions in Indonesia. The method of research that has been employed by the writer is meta-analysis and systematic secondary data collection. Research findings show that higher education institutions in Indonesia need to build E-HRM system in order to enhance the performance of the human resource management activities and speed up the solution process of the human resource problems in order to support the operation of the university maximally. Finally, the proposed E HRM model that has been made by the present writer can be legible for their consideration in building up the E HRM system for the universities in Indonesia.

**Keywords:** electronic human resource management; higher education institutions.

### **1. Introduction**

The development of information and communication technology has affected in almost all aspects of the work, business and industrial areas and more specifically in the field of human resource management within the organization. When talking about human resource management, it does not merely concern with the business and industrial world but also in the world of education. The bigger the higher education institutions, the more the educational institutions need to be managed professionally in terms of human resources. Academic personnel, administrative personnel and students need to be managed well and professionally. They are precious human capital for the institutions concerned. As it is said by Opatha, (2021) the increased understanding of defining Human Resource Management (HRM) in detail acquired by the lecturer will lead to increase his or her clarifying dimension of lecturing behavior, which has a significant positive impact on student satisfaction of learning. In other words, the more the HRM is managed well, the more satisfied the students are.

In the era of information today, the conventional human resource management can be done digitally. With the assistance of the information and communication infrastructure possessed by the higher education institutions; the leadership of the university can design a digital human resource management, which is technically called as Electronic Human Resource Management (E-HRM). E-HRM is different with the term of Human (Human Resource Information System) which so far people in general are familiar. E-HRM is more specific than HRIS in terms of the coverage of usage. HRIS covers the whole human resource management activities in the whole of the organization, while E-HRM includes minimally two personnel sharing information about the human resource matters. Strohmeier (2009) express that E-HRM forms a usually embraced management practice in the meantime and that this is established on the desire of various positive outcome of E-HRM, for example reducing costs, speeding up processes, improving quality, and even gaining a more strategic role for HR within the organization.

The Importance of Electronic - Human Resources Management (e-HRM) according to Shobaki et.al. (2017) as the application of human resources management technology is diverse and wide-ranging as required by the organization. It may be limited to electronic scales and may extend to complex systems. This depends, human resource management

solutions, for example including full solutions for human resource functions, including specific functions such as polarization, selection, performance appraisal, compensation, wages, and other functions (CIPD, 2006). Based on the research E-HRM conducted by three major British institutions (2003-2006) will enhance the performance of Human Resource Management Department, concerning the following matters (CIPD, 2006):

1. Improve the availability of information by 91%.
2. Improve the availability of information by 81%.
3. Improve services to employees by 56%.
4. Reduce costs and expenses by 35%.

In relation to the educational world, currently, the employment of E HRM can increase the performance of the personnel management in higher education institutions which finally it can increase the performance of the universities concerned. Based on the previous discussion, the present writer conducts a study entitled "E HRM in higher education institutions in Indonesia: a proposed model".

## 2. Theoretical Background

What is E-HRM? E-HRM originates from the terms of Electronic Human Resources Management which is different with HRIS (Human Resource Information System). At the early development, there is an interchangeable definition between E-HRM and HRIS. HRIS as a specific information system within the conventional functional areas of the organization, designed to support the planning, administration, decision-making, and control activities of human resource management (DeSanctis 1986). While E-HRM is defined as a system for the planning, implementation and application of information for both networking and supporting at least two individuals in their shared performing of human resources activities. The uses of E-HRM system is a way of implementing human resources strategies, policies, and practices. Accordingly, the E-HRM system supports the human resources function to satisfy with the needs relating to the human resources activities of the organization through web-technology-based channels (Ruel et. al., 2004).

The next definition saying that E-HRM is a collection of knowledge, principles and best-practice approaches to effective human resource management (Walker, 2001). Similar definition has been stated by Ruël, Bondarouk, & Van der Velde (2007) as a way of implementing human resources strategies, policies, and practices in organizations through a conscious and directed support and with the full use of web-technology-based channels. Furthermore, Strohmeier (2009) saying that E-HRM forms a usually deals with the management practices in the meantime and is established on the desire of various positive outcome of E-HRM, such as reducing costs, speeding up processes, improving quality, and even obtaining a more strategic role for human resources within the organization. Another definition stating that e-HRM in an integrated system and activities of human resources web-based technology. In other words, when human resources management employs Internet or related technology in order to support activities, procedure, processes, that is called as e-HRM. (businessjargons.com).

By using the E-HRM, the managers can get to pertinent information and data for analyses to make decisions and

communicate with others without consulting a human resource professional. As an example, a manager who needs to make a value pay decision might get to records containing content, sound, and video describing how best to make the decision. Accordingly, the manager can gain to the records for employees' information by clicking of the mouse, then the departments, such as marketing are informed with the decision. It is also reducing the processing times from hours to minutes and paperwork can be eliminated (Lengnick-Hall & Moritz, 2003)

From the view point of human resources management practices, there are three types of E-HRM (Wright & Dyer 2000) as follows: 1) Operational human resource management involving basic administrative human resource activities, such as obtaining of personnel data and payroll. In conducting the operational activities of human resource management, the organizations need to choose whether or not employees will keep their own personal information up to date through a human resource website, or to have and administrative staff to do this (Bondarouk et.al. 2009); 2) Transformational human resource management concerning the interaction and networking of the various human resource management personnel (Strohmeier, 2009) and can be seen as the more complex form of e-HRM. In this type of HRM, there is a choice of whether to conduct more complex human resource practices like recruitment and selection using E-HRM, or to use a more conventional paper-based approach, such as newspaper advertisements and paper-based application forms (Bondarouk & Ruël, 2009); 3) relational E-HRM involves as well the automation of transactions through the use of intranets and extranets, portals, employee self-service and manager self-service, and operates with several application programs; Transformational human resource management which is the highest level and the most complex type of HRM. HRM shifts from a value-based to a transformational focus, whereby the human resource capacities are diminished of the operational tasks and diverted towards more strategic activities (Lengnick-Hall & Moritz, 2003).

## 3. Research Method

Systematic secondary data search methods and meta-analysis are used in this research. The meta-analysis is used to review the same literature, where in each review the criteria for error are described. Another definition of meta-analysis is research with a quantitative approach in which numbers and statistical analysis results from previous research are used to extract as much information as possible from the data obtained in order to obtain the same objectives as the research being conducted. The main requirement for using meta-analysis is the study of the results of the same research (Glass, 1981). While the nature of meta-analysis is the use of statistical analysis to obtain information and data from the same previous studies.

## 4. Research Result

### Goals of E-HRM

According to Parry, E & Tyson, S (2011), E-HRM's purpose is to support the achievement of human resource management goals more generally. Furthermore, the goals have traditionally been categorized into three, namely 1) cost effective; 2) improving services for internal customers and 3) addressing the strategic objectives of the business

(Martin *et al.*, 2008). Then Bondarouk & Ruel (2009) added a fourth goal for e-HRM; to improve the global orientation of HRM. Moreover, Martin *et al.* (2008) suggested that the drivers of e-HRM are to help in the achievement of the human resource function's transactional or transformational goals. Thus, the transactional goals focus on reducing cost or improving the productivity and service delivery of the human resource function, while transformational goals focus on freeing up time for human resource professionals to address more strategic issues and can be seen as sub-goals of the overall goal of the function to meet the strategic needs of the business (Pauwe, J. 2004). In conclusion, the goals of E-HRM can be summarized into the following matters, namely a) efficiency, b) service

delivery, c) strategic orientation, d) manager empowerment, e) standardization. Thus, all e-HRM activities, will implicitly or explicitly be directed towards these overall goals Parry, E & Tyson, S (2011). Finally, E-HRM made for the sake of higher congruence which refers to the internal organization, the reward system, and the input, throughput, and output of personnel, which need to be structured in the interests of all stakeholders.

**E-HRM Model**

The E- HRM model for the higher education in Indonesia by the author is the modification of the existing models as proposed by Ruel *et. al.*, 2004 and Parry, Emma *et.al* (2011). The model is as follows.

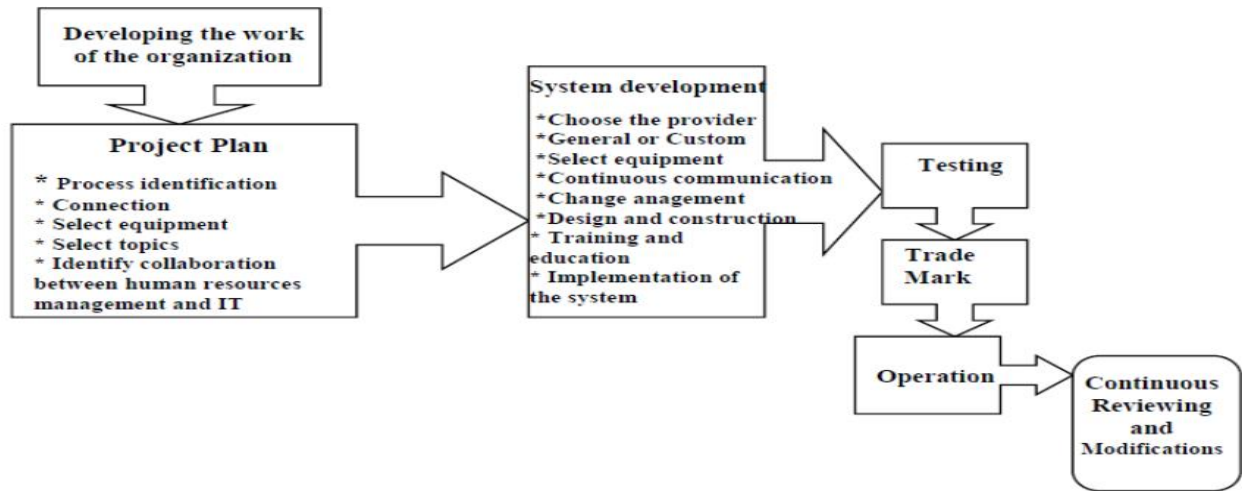


Fig. 4.1 Building E-HRM System (Source: CIPD, 2006).

The steps to build up the E-HRM system for the first model is as follows: a) developing the work of the organization, in this case higher education institutions; b) conducting a project plan consisting of process identification, connection, select equipment, select topics, identify collaboration between human resources management and information technology; c) system development consisting

of choosing the provider, selecting general or custom, continuous communication, change management, design and construction, training and education, implementation of the system; d) conducting a testing; e) conducting branding campaign; f) launching operations; and g) doing continuous reviewing and modifications in accordance to the growing needs.

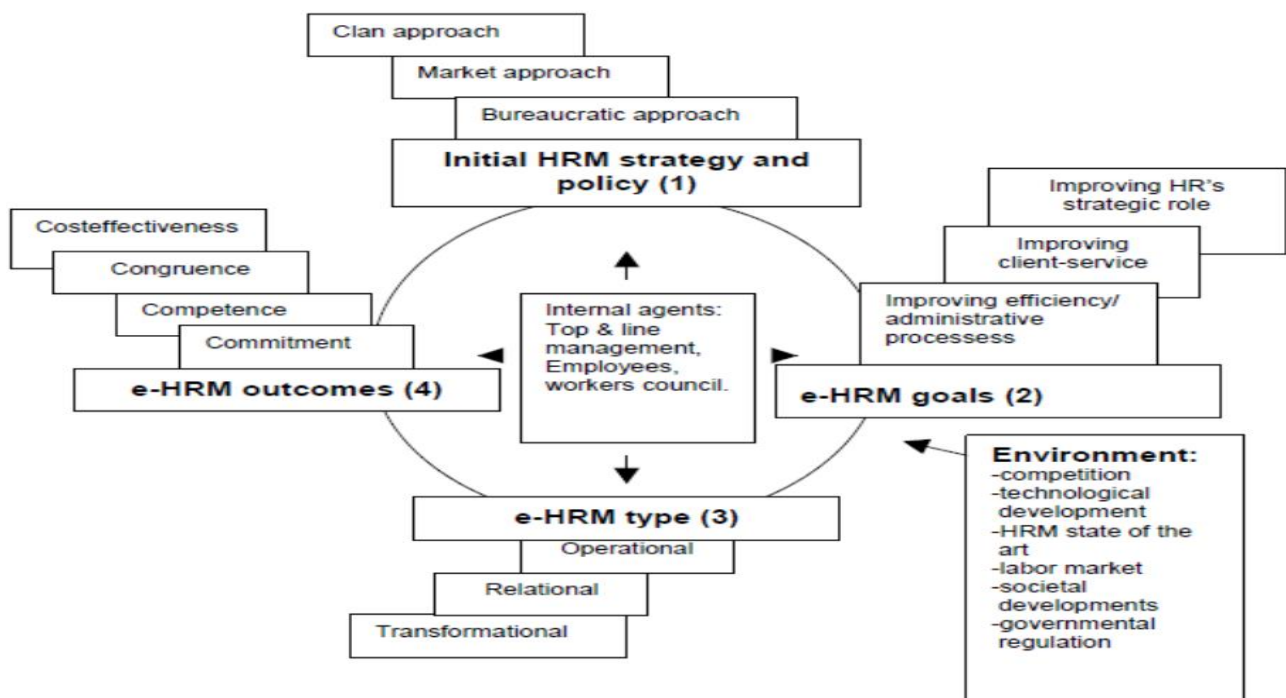
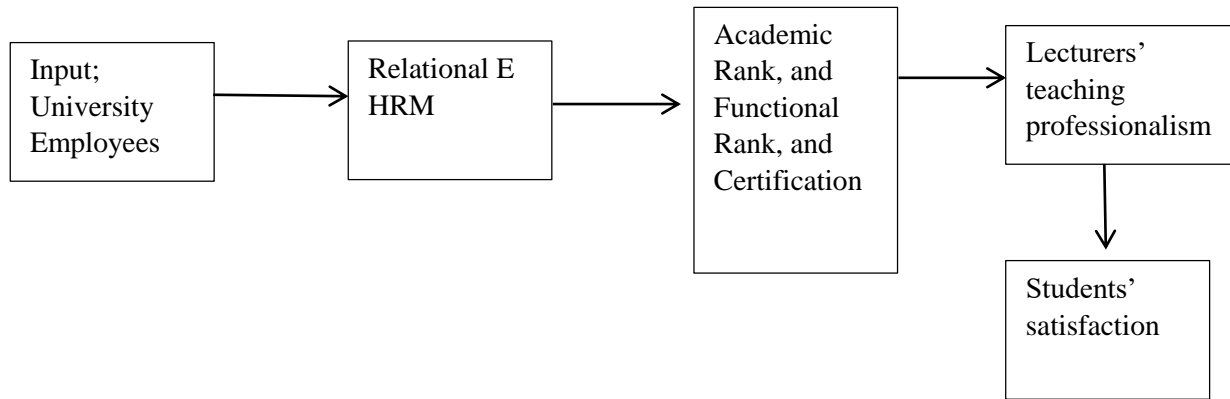


Fig. 4.2 Building E-HRM System (Source: Ruel *et.al.*, 2004).

In the second model, the E-HRM system building is commenced by: 1) the initial human resources strategy and policy based on clan, market and bureaucratic approaches; 2) Goals of E HRM, namely improving the human resources' strategic roles, improving client service, and improving efficiency in administrative processes; 3) types of EHRM, namely operational, relational and transformational; 4) E HRM outcomes, namely cost effectiveness, congruence, competence and commitment. In constructing the E HRM system, internal parties that should



The above model can explain as follows: Universities employ people as lecturers who are under the human resource management authority. All problems related to the lecturers' enhancing their professionalism are managed by the human resources management department. The HRM department build up relational E-HRM to speed up the process of the professionalism among the lecturers. The result is the lecturers obtain the academic rank, functional rank and certification that prove the lecturers' teaching professionalism. Finally, it will affect positively students' satisfaction. This is in line with the research conducted by Al Saidi & Alaa (2020) showing that EHRM contributes the significant and positive effects among the university lecturers in Iraq.

#### Future Direction

Heikkilla, J.K (2010) suggested the future direction of E-HRM according to his research that will assist the human resource management activities, namely 1) the importance of social media, 2) use of web technology, and 3) the information and communication technology. This technology will have major impact on HRM in the future and reshape the competencies the defined human resource professional's success. The present writer suggests that the development of the information and communication technology (ICT) as the antecedent of the existence of popular social media such as Facebook and Linked In as well as WhatsApp and Instagram can also be utilized in enhancing the E-HRM dealing with the human resource management activities.

#### E-HRM Successful Factors

Successful factors of building E-HRM system application are: 1) Commitment to the management of change, since the beginning of the application of the system; 2) The existence of a staff culture of information technology in the organization; 3) The involvement of all stakeholders in the system from the outset to win their support; 4) Demonstrate the value of technological solutions provided by the system for all users; and 5) The system's ease of use by users, and

be first considered are the internal agents, namely top leadership, and employees as well as professional association. The second ones are the external environments, such as the existing competition among the universities, technological development, human resources management state of the art, employee market, development of the society, governmental regulations dealing with higher education systems.

Summarizing those two models above, the present writer proposes the following model:

its relationship to the functions of human resources, as the system characterized by safety and high quality, which enhances the confidence of the user and increases the efficiency of the use of the system (Ruel, et al., 2007).

#### E-HRM used in Higher Education Institutions

The impact of E-HRM or electronic human resource management on educational service organizations related to e-learning in several universities was carried out by Shobaki, M.J.A. et al. (2017) in Palestine Universities with the following research objectives:

- Emphasize the importance of using e-learning services to improve the quality of university performance
- Highlight the advantages and benefits of using e-learning services and their impact on the development of university education and promoting human resource (HR) development.
- Offer the idea of developing electronic services as a fundamental solution for the development of higher education levels and bringing it to the highest level to keep pace with technological developments and great work to identify the next generation point to an effective and successful society.
- Raise awareness among the community of institutions and governments about the importance of contemporary education as a technological challenge.
- Identify the university management's interest in implementing human resource management electronically compared to their interest in providing educational services as their main task.
- Provide recommendations on the extent of implementation of electronic human resource management in universities, and appropriate proposals to increase the level of implementation and derive benefits and advantages.

Furthermore, Ruel et al. (2004) state that there must be distinction between the goals of E-HRM and the expected outcomes of HR itself. Since the purpose of e-HRM is to

seek to improve the strategic direction for HR management, improve employee services, increase their satisfaction, reduce costs, and increase efficiency. While the expected results from the organization are as follows:

1. Higher commitment: so that the human personnel is motivated and able to understand and interact with change management in the organizational environment which leads to a greater level of trust between leadership and academic staff as well as employees.
2. Highly competitive: demonstrates the ability of the academic and non – academic personnel to learn new tasks and assignments if circumstances require it.
3. Cost savings: through competitive compensation and reduced employees' turnover, and management's ability to perform specific human resource administrative roles to achieve organizational goals with the aim of reducing the operational costs.
4. Very precise: the result of establishing the internal environment, remuneration system, and personnel management in accordance with the interests of all beneficiaries.

The result of implementing e-HRM for human resource management does not mean giving up the role of human resource management, and leaving it as it is. It has seen a reduction in administrative tasks to manage the existing human resources thereby reducing administrative positions, increasing focus on strategic goals; and thus, the management workforce is in a position between thinkers and creators. The general orientation of human resource management as a strategic partner in organizational planning and its ability to provide organizations with accurate and rapid information using technology. It has also become more customer-oriented than ever to serve as a result of technology in this case students who obtain the benefits from the universities' education services.

Ruel et al. (2007) summarize these results related to human resource management according to different orientations in the following points:

1. Organizations that rely on operational orientation use of E-HRM. Employees and operational leaders have a major role in the implementation of strategic plans for human resource management, procedures and practices, leading to reduced demand for human resource staff.
2. Organizations that rely on a relational orientation in using E-HRM and which will require smaller members for human resource management, if employees and leaders use the operating tools provided by E-HRM via an intranet network.
3. Organizations that rely on a transformative orientation in using E-HRM, and will be required to provide experts in the field of human resources, in order to formulate a strategic plan for human resource management.

## 5. Conclusion

From the results of the research, the present writer makes the following conclusions:

1. The higher education institutions in Indonesia need to change the conventional human resource management into the electronic human resource management (EHRM) due to the current technology demand.
2. The higher education institutions in Indonesia need to build E-HRM system in order to enhance the

performance of the human resource management activities.

3. The existence of E-HRM system in higher education institutions can speed up the solution process of the human resource problems in order to support the operation of the university maximally.
4. The higher education institutions in Indonesia is legible to consider the proposed E HRM model that has been made by the present writer.

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