

E-HRM Practices and its Impact on Employees' Performance in the Industrial Sector, An Applied Study on the Cement Company in Saida, Algeria.

Amar Moulai ^{*1}, Kada Yazid ²

¹ University of Saida Dr Moulay Tahar (Algeria), Laboratory: ITMAM,
amar.moulai@univ-saida.dz

² University of Saida Dr Moulay Tahar (Algeria), Laboratory: ITMAM,
kada.yazid@univ-saida.dz

Received: 22/05/2021

Accepted: 12/06/2021

Published :30/06/2021

Abstract:

This study aims to identify the contribution of E-HRM practices on employees' performance in the industrial sector. To achieve this objective, we conducted a practical study at the cement company in Saida by distributing a questionnaire to its employees.

The results of the study found that there is a statistically significant impact of E-HRM practices (as a whole) on employees' performance. Moreover, the stepwise regression results showed that the overall significance of the model attributed to only four dimensions.

Keywords: E-HRM; E-HRM Practices; Employees' Performance; E-Compensation.

Jel Classification Codes: M15, O33.

1. INTRODUCTION

Over the past two decades, there are noteworthy changes in various fields including business, due to rapid technological advances, globalization, and the introduction of a knowledge-based economy (Quaosar 2018, p133). That obligates organizations to review their functional practices, particularly in human resources (HR), as one of the main assets that determine the success or failure of the organization. Though the

* *Corresponding author.*

organization does not have absolute power over this asset, it can make use of certain techniques and tools to exert some vital influence that can positively affect an employees' behavior (Iliyas 2019, p245). Therefore, human resources activities are supported by e-management technology as a strategic tool to fulfill the organizations' human resources requirements, as electronic human resources management (E-HRM) represents a strong response to the challenges of the twenty-first century in a world characterized by digital space, knowledge and the internet revolution (Adli et al. 2014, p71).

Based on the above, the research problem can be formulated as:

What is the impact of E-HRM practices on employees' performance in the cement company in Saida?

1.1 Research Questions

The study will mainly try to answer the following questions:

- What is the extent of applying E-HRM in the cement company in Saida?
- Have the employees succeeded in achieving their performance in the cement company in Saida?
- Is there an impact of E-HRM practices on employees' performance in the cement company in Saida?

1.2 Research Hypotheses

1.2.1 First Hypothesis : The cement company in Saida applies E-HRM.

1.2.2 Second Hypothesis: The employees succeed in achieving their performance in the cement company in Saida.

1.2.3 Third Hypothesis: There is a statistically significant impact of E-HRM practices on employees' performance in the cement company in Saida.

1.3 Research Significance

The importance of this study lies in drawing attention to the necessity of digital transformation in human resource function, particularly in the industrial sector. This research also derives its significance from its results that can be used to achieve and develop employees' performance in Algerian companies.

1.4 Objectives of the Research

The key objectives of the research include:

- To identify the level of applying E-HMR in the cement company.
- To determine the level of employees' performance in the cement company.
- To explore the impact of E-HRM practices on employees' performance in the cement company.

1.5 Previous Studies

In a study done by Bataineh (2017), about "The Impact of Electronic Management on the Employees' Performance Field Study on the Public Organizations and Governance in Jerash Governorate". The study aimed to identify the impact of electronic management on employees' performance, The field study was applied on the public organization in Jerash Governorate. To collect data, the researcher distributed a questionnaire to a sample of 96 employees. The most prominent results were that there is a significant positive relationship between all dimensions of electronic management and employees' performance.

The study of Hosseini and Nematollahi (2013), was titled "Electronic Human Resources Management and the Effectiveness of HRM". The study aimed to examine the effects of E-HRM on the effectiveness of human resources management, by distributing a questionnaire to a sample of (102) professors working at Shiraz University. The most prominent results revealed that there is a significant relationship between E-HRM efficiency and HRM effectiveness.

The study by Abedi (2016), titled "E-HRM (electronic human resources management) and its impact on the effectiveness of human resources". The study aimed to know the impact of applying E-HRM on the effectiveness of human resources. The population of this research includes managers and human resources professionals of the Municipality of Tehran in Iran. The study sample consisted of (100) employees. After data collection using a questionnaire, structural equation modeling was used for data analysis. The findings showed that E-HRM has a significant positive

relationship with the effectiveness of Human Resource, technically and strategically.

The study by Halid, Yusoff, and Somu (2020), is one of the most important theoretical studies that dealt with the relationship between digital human resource management and organizational performance, it clarified the concept and objectives of Digital HRM. The researchers discussed the model of Digital HRM and how it provides the services electronically, they also highlighted the needed elements of Digital HRM. Then the study discussed the elements of the successful shifting toward Digital HRM. The researchers concluded with recommendations that would be able to help researchers by providing the basis to understand the impact of Digital HR on organizational performance.

From the above studies done, it was evident that they were conducted in service enterprises, whereas the present study was conducted in an industrial enterprise (the cement company). Furthermore, the employees' performance was considered a partial variable in some previous studies that examined the total organizational performance, it did not receive enough attention compared with other relevant variables. Therefore, this study considered employees' performance as a dependent variable.

2. THEORETICAL FRAMEWORK

2.1 Electronic Human Resource Management

To better understand what is E-HRM, it is first necessary to define the meaning of E. According to He and Chen (2007, p3557) the true connotation of E is: integrate electronic and information technique, knowledge and networking technique into every detail of the organization operation, to develop the core businesses of the organization. In this sense, E is a systematic process integrated with various knowledge and technologies.

2.1.1 Electronic Human Resource Management Definition

According to Dwitawati (2017, p37), the term e-HRM was inspired by the popular term of e-commerce and wrongfully adopted the “e-” prefix, signifying “electronic”, even if e-HR is very specific to the use of the internet, so that a more accurate term would be “online HRM”. In addition

to online HRM and e-HRM, other terms are used such as: HR intranet, virtual HRM, web-based HR, business-to-employee (B2E), computer-based human resource management systems (CHRIS), which are used for the same term (Fındıklı and Bayarçelik 2015, p425).

In its broadest sense, Shoeb (2015, p80) defined E-HRM as an implementation of HRM practices in organizations together with the use of internet or web-based technology. Nivlouei (2014, p149) perceived E-HRM as an umbrella term covering all possible integration mechanisms and contents between HRM and information technologies aiming at creating value inside and across organizations for targeted employees.

In a word, E-HRM is the administrative support of the HR function in organizations by using internet technology (Esen and Katip 2014, p233).

2.1.2 Electronic Human Resource Management Practices

Previous research shows that E-HRM is a comprehensive term that covers a range of activities, but the most widely used E-HRM activities are as follows: (Nurshabrina and Adrianti 2020, p212)

2.1.2.1 E-Recruitment: refers to the use of portals such as websites, both the official website of the company or the job search website, the website will post the position of available vacancies and also helps to review resumes that have been entered.

2.1.2.2 E-Selection: electronic selection systems are necessary because they are one of the tools used by companies to increase the likelihood of incumbents meeting role requirements, this is evaluated by different tests such as online, audio and video conferencing (Rahman, Mordi, and Nwagbara 2018, p04).

2.1.2.3 E-Performance Management System: A web-based appraisal system can be defined as the system which uses the web (intranet and internet) to effectively evaluate the skills, knowledge and performance of employees (Deshwal 2015, p608).

2.1.2.4 E-compensation: A company using compensation management online enables to collect, store, analyze and distribute the compensation data to anyone at any time. The individual can access electronically

distributed compensation software, analytic tools, from any place in the world (Saranya and Kumar 2019, p238).

2.1.2.5 E-Training: Most companies start thinking about making online training, because online is more efficient for distributing training within companies, making training available "anytime" and "anywhere", besides reducing direct costs and indirect costs (Wege, Ngige, and Dieli 2019, p57).

2.1.2.6 E-Communication: Communication can be defined as the regulatory intra-organizational contacts to coordinate various aspects of organizational functions and changes. In this significant function, E-HRM involves a vital role to deliver all the necessary information from the stakeholders and vice versa (Arefin and Hosain 2019, p41).

2.2 Employees Performance

2.2.1 Employees Performance Definition

According to Nabayinda and Matovu (2020, pp178-179), unit performance of individuals and groups is in general reflected to the total performance of the whole organization or institution. That is, each individual or group performance in an organization has a big role to play on the overall performance of the organization. This notion is supported by Koech (2016, p45), viewed that the performance of any organization depends on the performance of its employees. Therefore, every organization or company will always try to improve performance in the hope that what the company's objectives will be achieved (Zulfina, Matondang, and Sembiring 2020, p76), considering that the rational and objective work achievement covers at least two interests, namely the interests of the employees concerned and the interests of the organization (Simamora et al. 2019, p76).

According to Debi and Mengistu (2018, p23), performance refers to the accomplishment of something or mere working effectiveness. Semuel and Herlina (2017, p310) states that performance is the result of work that has been done.

Whereas, employees' performance is the result of the work achieved by an employee in carrying out their duties in accordance with the

responsibilities given to him. (Zulfina, Matondang, and Sembiring 2020, p76).

2.2.2 Factors Affecting Employee Performance

Employee performance can be influenced by various factors namely: (Donatus Adi, Guswandi, and Sodikin 2018, p52)

- **Individual factors:** namely ability and skill (mental and physical), background (experience, family) and demographics (age, origin).
- **Company factors:** are resources, leadership, rewards (compensation), corporate organizational structure, and description (job description).
- **Psychological factors:** are perception, attitude, personality, learning patterns and motivation.

2.3 E-HRM Practices and Employees Performance

E-HRM system has the potential to influence both efficiency and effectiveness in companies. Efficiency can be obtained by reducing the time duration for that previously consumed on paper work, increasing data precision, and reducing excess HR. Effectiveness can be enhanced by improving the competence of both managers and employees to make better, sound, authentic and quicker decisions regarding HR activities. The following are the key benefits of using E-HRM in improving employees' performance: (Menka 2015, p96-97)

- A decisive step towards a paperless office work system and performance of HR activities (E.g. as recruitment, selection, training, and development) electronically;
- Improved and easy access to HR data and ease in classifying and reclassifying data;
- Quick and sound insight into reporting and analysis;
- Improve accuracy and reduce human biases;
- Get a profile of the employees and current news of the concerned sector;
- E-HRM saves time and employees concentrate on the work efficiently;
- E-HRM provides more security and privacy for HR data;
- E-HRM can save costs while maintaining the quality of data.

3. RESEARCH METHODOLOGY

3.1 Research Population and Sample

The research population consisted of all the employees in the cement company with a sum of (256) employees, upon information taken from the human resources department. While the sample consisted of (160) employees who form a ratio of 62.5% of the total number, were chosen randomly to ensure an adequate representation.

3.2 Research Approach

The researchers adopted the descriptive analytical approach, since it is fit for this study.

3.3 Data Collection Instrument

Primary data for this research were collected from (160) respondents using a questionnaire out of (200) questionnaires distributed, which forms a ratio of 80% from the sum number. The questionnaire consists of two basic parts, as follows:

The first part includes (24) items distributed into six main dimensions (practices) of E-HRM, as follows:

- E-Recruitment dimension which includes (4) items;
- E-Selection dimension which includes (4) items;
- E-Communication dimension which includes (4) items;
- E-Performance Management System dimension which includes (4) items;
- E-Compensation dimension which includes (4) items;
- E-Training dimension which includes (4) items.

The second part includes (25) items related to the dependent variable (employees' performance).

The questionnaire was developed based on administrative literature related to the study. Where we used the Likert quintet scale, which consists of the following points: (1=totally agree, 2=agree, 3=neutral, 4=disagree, 5=totally disagree).

4. RESULTS AND DISCUSSION

4.1 Reliability of the Study Tool

The reliability of the tool was estimated by the coefficient of internal consistency (Cronbach Alpha), and its results are illustrated in Table (1):

Table 1. The validity and reliability of the measurement tool

Variable	Dimensions	Items Number	Cronbach's Alpha
E-HRM practices	E-Recruitment	04	0.844
	E-Selection	04	0.834
	E-Communication	04	0.827
	E-Performance Management System	04	0.834
	E-Compensation	04	0.761
	E-Training	04	0.792
Total		24	0.917
Employees' performance		25	0.951
The tool as a whole		49	0.962

Source: Prepared by researchers using IBM SPSS V26 outputs.

It is clear from Table (1) that the internal consistency estimate (Cronbach Alpha) of the study instrument is high, with value (0.917, 0.951) for the dependent and independent variable successively, while the tool as a whole (0.962). Thus, it is evidence that the study tool is suitable for research purposes.

4.2 Descriptive Statistics

Table 2. The descriptive statistics of the study variables

Variables	Mean	Standard Deviation	Degree
E-Recruitment	3.0219	0.92883	Medium
E-Selection	3.2469	0.81937	Medium
E-Communication	3.3953	0.81769	Medium
E-Performance Management System	3.2609	0.86072	Medium
E-Compensation	3.3187	0.70150	Medium
E-Training	3.4641	0.84899	Medium
E-HRM practices	3.2846	0.70787	Medium
Employees performance	3.1548	0.63015	Medium

Source: Prepared by researchers using IBM SPSS V26 outputs.

Table (2) indicates the means and the standard deviations of the employees' answers about the level of E-HRM practices and employees' performance in the cement company. The averages of the E-HRM practices as the independent variable in all its dimension (E-Selection, E-Recruitment, E-Communication, E-Performance management system, E-Compensation and E-Training), reached the values of (3.0219, 3.2469, 3.3953, 3.2609, 3.3187, 3.4641) successively, which corresponds to the medium agreement degree in all dimensions. Whereas the E-HRM practices as a whole (independent variable) reached a medium degree, with a whole mean of (3.2846) and a standard deviation of (0,70787). This indicates that there are positive attitudes towards all items related to E-HRM practices in the cement company in Saida.

Followed by employees' performance (dependent variable) with a mean of (3.1548) and a standard deviation of (0.63015). This indicates that there are positive attitudes towards all items related to employees' performance in the cement company in Saida.

4.3 Testing the Study Hypotheses

4.3.1 The First Hypothesis

H0: The cement company in Saida does not apply E-HRM.

H1: The cement company in Saida applies E-HRM.

To test the first hypothesis, the researchers used the one sample T-Test, Table (3) present the results of this test.

Table 3. Results of One Sample T-Test for applying E-HRM

	Mean	Standard Deviation	df	Sig
Applying E-HRM	3.2846	0.70787	159	0.000

Source: Prepared by researchers using IBM SPSS V26 outputs.

The table above shows that the average responses about applying E-HRM is (3.2846), which is greater than the hypothesized mean (3), and the result is statistically significant at ($\alpha \leq 0.05$). This means that the cement company in Saida applies E-HRM with an average degree.

Based on the foregoing, we reject the null hypothesis and accept the alternative hypothesis that "The cement company in Saida applies E-HRM."

4.3.2 The Second Hypothesis

H0: The employees do not succeed in achieving their performance in the cement company in Saida.

H1: The employees succeed in achieving their performance in the cement company in Saida.

To test this hypothesis, the researchers used the one sample T-Test, Table (4) present the results of this test.

Table 4. Results of One Sample T-Test for achieving employees' performance

	Mean	Standard Deviation	df	Sig
Achieving employees' performance	3.1548	0.63015	159	0.002

Source: Prepared by researchers using IBM SPSS V26 outputs.

The results in the previous table show that the average responses about success in achieving the employees' performance is (3.1548), which is greater than the hypothesized mean (3), and the result is statistically significant at ($\alpha \leq 0.05$). This implies that the employees achieve their performance in the cement company with an average degree.

Based on the above, we reject the null hypothesis and accept the alternative hypothesis that "The employees succeed in achieving their performance in the cement company in Saida."

4.3.3 The Third Hypothesis

H0: There is no statistically significant impact of E-HRM practices on employees' performance in the cement company.

H1: There is a statistically significant impact of E-HRM practices on employees' performance in the cement company.

To identify the impact of E-HRM practices on employees' performance in the cement company, multiple linear regression and stepwise regression were used by including all the independent variables in the linear regression equation.

Table 5. Results of multiple regression analysis

Dependent variable	R	R ²	F value	Sig	Dimensions	β	T	Sig
Employees' performance	0.832	0.692	57.420	0.000	(Constant)	0.828	5.358	0.000
					E-Selection	0.240	4.373	0.000
					E-Recruitment	0.150	2.496	0.014
					E-Communication	0.066	0.948	0.335
					E-Performance Management System	0.231	3.501	0.001
					E-Compensation	0.178	2.478	0.014
					E-Training	0.007	1.135	0.893

Source: Prepared by researchers using IBM SPSS V26 outputs.

Table (5) reveals that the impact of the independent variable (E-HRM practices as a whole) on the dependent variable (employees' performance) is statistically significant, where the calculated F value was (57.420) with Sig=0.000, which is less than the significance level ($\alpha \leq 0.05$). Besides, the correlation coefficient was (R=0.832) indicates a positive relationship between employees' performance and E-HRM practices, and the determination coefficient was (R²=0.692), this suggests that 69.2% of the variance in employees' performance can be explained by the variance in E-HRM practices as a whole, and the rest 30.8% was attributed to other factors. Furthermore, the results showed that the overall significance of the model is attributed to only four dimensions (E-Selection, E-Recruitment, E-Performance Management System, and E-Compensation), with P-values (0.000, 0.014, 0.001, 0.014) respectively, which are less than the significance level ($\alpha \leq 0.05$).

These results provide enough evidence to reject the null hypothesis and to accept the alternative that "There is a statistically significant impact of E-HRM practices on employees' performance in the cement company".

Based on the above mentioned, the multiple linear regression equation can be deduced as follows:

E-HRM Practices and its Impact on Employees' Performance in the Industrial Sector, An Applied Study on the Cement Company in Saida, Algeria.

Employees performance in the cement company = 0,828 + (0,240*E-Selection) + (0,150*E-Recruitment) + (0,231*E-Performance Management System) + (0,178*E-Compensation).

To detect a meaningful subset of independent variables that efficiently explains the dependent variable, we resort to the stepwise regression which mainly used to identify and include the fewest number of independent variables that can adequately predict the value of the dependent variable (Field 2009, p213)

Table 6. Results of stepwise regression analysis

Model		R	R ²	Adjusted R ²	Beta	Sig
1	Constant	0.731	0.534	0.531	0.977	.000
	E-Compensation				0.656	.000
2	Constant	0.801	0.641	0.636	0.773	.000
	E-Compensation				0.411	.000
3	E-Performance Management System	0.825	0.680	0.674	0.311	.000
	Constant				0.731	.000
4	E-Compensation	0.831	0.690	0.682	0.220	.002
	E-Performance Management System				0.279	.000
	E-Selection				0.241	.000
	E-Recruitment				0.122	.023
	Constant				0.779	.000
	E-Compensation				0.173	.016
	E-Performance Management System				0.202	.000
	E-Selection				0.239	.000

Source: Prepared by researchers using IBM SPSS V26 outputs.

According to the table above, the stepwise regression resulted in four models to predict the relationship between the dimensions of E-HRM and employees' performance in the cement company, where we find that the first model relied on one dimension (E-Compensation), which alone explained 53.4% of the variance in employees' performance. Additionally, the second model relied on both (E-Compensation and E-Performance management system), which together explained 64.1% of the variance in employees' performance. Besides, the third model relied on three dimensions (E-Compensation, E-Performance management system, and E-Selection), which

together explained 68% of the variance in employees' performance. While, the fourth model relied on four dimensions (E-Compensation, E-Performance management system, E-Selection, and E-Recruitment), which together explained 69% of the variance in employees' performance in the cement company, with P-values (0.016, 0.000, 0.000, 0.023) respectively, which are less than the significance level ($\alpha \leq 0.05$).

Otherwise, the rest independent variables (i.e., E-Communication and E-Training) were excluded from the model due to their weak influences. Also, these influences are not statistically significant (as shown in the multiple regression test). This indicates that any increases in those variables have no corresponding increases in employees' performance.

These results reveal that the cement company in Saida is primarily interested in integrating electronic applications in human resource management to accumulate, store, dissect and circulate the payment information, in addition to relying on E-HRM in performance management to a large extent (e.g., employee time clock system to track employees' attendance) and, to a lesser extent, E-Selection, and E-Recruitment compared to the other dimensions of E-HRM.

According to the Beta value, we can formulate four prediction models using the MLR equation as follows:

Model 1:

Employees performance in the cement company = $0,977 + (0,656 * \text{E-Compensation})$.

Model 2:

Employees performance in the cement company = $0,773 + (0,411 * \text{E-Compensation}) + (0,311 * \text{E-Performance Management System})$.

Model 3:

Employees performance in the cement company = $0,731 + (0,220 * \text{E-Compensation}) + (0,279 * \text{E-Performance Management System}) + (0,241 * \text{E-Selection})$.

Model 4:

Employees performance in the cement company = $0,779 + (0,173 * E\text{-Compensation}) + (0,202 * E\text{-Performance Management System}) + (0,239 * E\text{-Selection}) + (0,122 * E\text{-Recruitment})$.

5. CONCLUSION

To identify the reality of applying E-HRM and its impact on employees' performance in the industrial sector, we conducted a practical study at the cement company in Saida by distributing a questionnaire to its employees, which includes a series of items that focus on six main elements of E-HRM and employees' performance.

Through hypotheses testing and discussion of results, the following conclusions were obtained:

- The cement company in Saida applies E-HRM with an average degree;
- The employees achieve their performance in the cement company with an average degree;
- There is a statistically significant impact of E-HRM practices (as a whole) on employees' performance in the cement company in Saida;
- The significant impact of the variance in employees' performance at the cement company was attributed to (E-Compensation, E-Performance Management System, E-Selection and E-Recruitment), as they jointly explained 69% of the variance in employees' performance;
- There is no statistically significant impact of E-Communication and E-training on employees' performance in the cement company in Saida;

Depending on the previous results, the study recommends the following:

- Focus on training employees, especially on using modern technical programs due to their importance in improving employees' performance;
- Attempt to cooperate and coordinate among all departments of the company regarding information exchange, which contributes to enhancing communication between employees electronically;
- Support the culture of transition from traditional HRM to E-HRM;
- Expanding regulations and managerial processes in line with digital practices imposed by E-HRM practices.

6. Bibliography List :

- Abedi, Mehdi. (2016). "E-HRM (Electronic Human Resources Management) and Its Impact on the Effectiveness of Human Resources." *International Journal of Humanities and Social Sciences* 1:340–351.
- Adli, M., Sousan Gharib, Mahdis Hakami, and Katayoon Pourmahdi. (2014). "A Survey on Electronic Human Resource Management Consequences, Its Outcomes and Performances." *Journal of Basic and Applied Scientific Research* 4(10):71–82.
- Arefin, Abu Hena Mohammad Manzurul, and Sajjad Hosain. (2019). "The Role of Human Resource Information System on Organizational Performance: Evidence from Bangladeshi Pharmaceutical Industry." *European Journal of Applied Business Management* 5(1):37–53.
- Bataineh, Khaled Adnan. (2017). "The Impact of Electronic Management on the Employees' Performance Field Study on the Public Organizations and Governance in Jerash Governorate." *Journal of Management and Strategy* 8(5):86–100.
- Debi, Prasad Das, and Guliti Buba Mengistu. (2018). "The Role of Human Resource Development on Employee Performance and Job Satisfaction." *Case Studies Journal* 7(10):23–32.
- Deshwal, Parul. (2015). "Role of E-HRM in Organizational Effectiveness and Sustainability." *International Journal of Applied Research* 1(12):605–609.
- Donatus Adi, Kurniawan, Guswandi, and Akhmad Sodikin. (2018). "The Effect of Competence and Motivation on Employee Performance through Employees Capabilities on Pt. Binasinan Amity." *International Journal of Research Science and Management* 5(5):48–60.
- Dwitawati, Ima. (2017). "E-Human Resource Management Thought And Words - In The Human, Organization, Communication, and Technology." *Elkawnie: Journal of Islamic Science and Technology*

- 3(1):35–66.
- Esen, Murat, and İzmir Katip. (2014). “An Investigation of the Effects of Organizational Readiness on Technology Acceptance in E-HRM Applications.” *International Journal of Human Resource Studies* 4(1):232–247.
 - Field, Andy. (2009). *Discovering Statistics Using SPSS*. 3rd Editio. London: Sage Publications Ltd.
 - Fındıklı, Mine Afacan, and Ebru beyza Bayarçelik. (2015). “Exploring the Outcomes of Electronic Human Resource Management (E-HRM)?” *Procedia - Social and Behavioral Sciences* 207:424–431.
 - Halid, Hafinas, Yusmani Mohd Yusoff, and Hemalatha Somu. (2020). “The Relationship Between Digital Human Resource Management and Organizational Performance.” *Proceedings of the First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019)*, (pp. 96-99).
 - He, Guo Zheng, and Rong Qiu Chen. (2007). “E-Enterprise and E-Management Concept and Process Model Research.” *International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2007*, (pp. 3552-3555).
 - Hosseini, Seyyed Abdorasoul, and Khalil Nematollahi. (2013). “Electronic Human Resources Management and the Effectiveness of Human Resources Management.” *European Online Journal of Natural and Social Sciences* 2(3):1812–1819.
 - Iliyas, S. Mohamed. (2019). “A Study on E-HRM On Role of Human Resource Management.” *International Journal of Research and Analytical Reviews* 6(1):245–253.
 - Koech, Caroline Sitienei. (2016). “Knowledge Implementation and Employee Performance, Evidence from Kenya.” *Africa International Journal of Management Education and Governance* 1(2):43–58.
 - Menka. (2015). “E-Hrm: An Innovative Tool for Organizational Performance - IJAR - Indian Journal of Applied Research.” *Indian*

Journal of Applied Research 5(2):95–97.

- Nabayinda, Hasanati, and Musa Matovu. (2020). “An Analysis of Psychological Orientation, Commitment and Employee Performance in Public Institutions: A Case Study of Kampala City Council Authority (Kcca), Uganda.” *International Journal of Research - GRANTHAALAYAH* 8(1):176–188.
- Nivlouei, Fahimeh Babaei. (2014). “Electronic Human Resource Management System: The Main Element in Capacitating Globalization Paradigm.” *International Journal of Business and Social Science* 5(2):147–159.
- Nurshabrina, Nadiailhaq, and Riza Adrianti. (2020). “The Effect of E-Human Resource Management (E-HRM) on Cost Efficiency and Productivity of Employees in the Company.” *International Research Journal of Advanced Engineering and Science* 5(1):212–215.
- Quaosar, G. M. Azmal Ali. (2018). “Adoption of Human Resource Information Systems in Developing Countries: An Empirical Study.” *International Business Research* 11(4):133–141.
- Rahman, Mushfiqur, Chima Mordi, and Uzoechi Nwagbara. (2018). “Factors Influencing E-HRM Implementation in Government Organisations: Case Studies from Bangladesh.” *Journal of Enterprise Information Management* 31(2):247–275.
- Saranya, B., and B. Saravana Kumar. (2019). “E-Human Resource Management.” *Journal of Emerging Technologies and Innovative Research* 6(1):237–240.
- Semuel, Hatane, and Lindah Herlina. (2017). “Leadership, Employee Empowerment, Organizational Commitment, and Employee Performance in Senior High School.” *Journal of Progressive Research in Social Sciences* 4(2):309–318.
- Shoeb, Ahmad. (2015). “Electronic Human Resource Management: An Overview.” *International Journal of Science, Technology & Management* 4(1):79–85.
- Simamora, Hery Alendro, Sukaria Sinulingga, Isfenti Sadalia, and Muhamad Toyib Daulay. (2019). “Analysis of the Influence of Job

Satisfaction and Work Motivation on Employee Performance at PT PLN (PERSERO).” *International Journal of Science and Business* 3(2):74–86.

- Wege, Lenu Goodluck, Chigbo Donatus Ngige, and Onochie Jude Dieli. (2019). “Electronic Human Resource Management (e-HRM) and Organizational Performance in Nigeria.” *International Journal of Management and Entrepreneurship* 1(1):53–67.
- Zulfina, Aida, Abdul Rahim Matondang, and Beby Karina Fawzee Sembiring. (2020). “The Effects of Employee Management Information System (SIMPEG), Workplace Environment and Human Resources Quality on Performance through Employee Motivation to Digital System.” *International Journal of Research and Review* 7(7):75–93.