
E- Human Resources Management and Performance of Deposit Money Banks in Gombe State

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Abstract: *This study evaluated the relationship between e-HRM and performance of selected Deposit Money Banks, DMBs in Gombe State, Nigeria. E-training, e-compensation, e-performance appraisal were used as dimensions of e-HRM. The study adopted the cross-sectional survey in its investigation of the variables. Primary source of data was generated through self-administered questionnaire. The population of the study was the entire employees of four selected DMBs. A total of 137 workers were obtained from the Human Resources Department of the DMBs which represent the sample frame. The sample size was obtained using the Krejcie and Morgan (1970) table for determining minimum returned sample size for a given population. For our population, the table placed our sample size at ninety four. The research instrument was validated through supervisor's vetting and approval while the reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above 0.70. Data generated were analyzed and presented using both descriptive and inferential statistical techniques. The hypotheses were tested using the Spearman's Rank Order Correlation Statistics. Findings from the data analysis revealed that e-HRM (e-training, e-compensation, e-performance appraisal) positively and significantly related with performance in DMBs in Gombe state. The result of the findings recommends that DMBs should facilitate access to e-training for staff and reduce any barriers related to access to training courses electronically. Similarly, the e-training should be linked with the results of the performance evaluation which determines the strength or weaknesses of the process. More efforts should be undertaken by DMBs to encourage staff to participate in training programs related to the use of E-HRM applications. To improve e-compensation in DMBs, technology should be used to provide integrated and adequate information about the compensation. As a result, there will be less need for referral to the HR staff asking for information or clarification. In the same vein, DMBs should prepare and issue leaflets on compensation system, to explain the compensation and benefits for staff.*

Key words: *e-HRM, e-Training, e-Compensation, e-Performance Appraisal and Performance*

INTRODUCTION

The massive technological change has been resulted in wider integration of technology in different sectors and fields of work. The use of these applications /technology solutions in the human resource area is major trend that change ways how Human Resource functions are carried out (Sima, Gheorghe, Subić, & Nancu, 2020). Beside a recent concept was used to highlight the use of technology in HRM. The use of technology in human resources management, known as E-HRM is becoming one of the emerging issues in the HRM field. HRM function is one of the main organization's functions that significantly enhances the organization ability to achieve its goals and strategies. Therefore, introduction of e-HRM may lead to change in content and positioning of the HR function, which may positively contribute to the overall organization goals and effectiveness (Ilek, Maier, & Weinert, 2022).

Nowadays, technology is an inherent part of our daily lives. People have been simplifying some routine tasks and problems with the use of computers and the Internet. It has sped up some

processes and increased the efficiency of performing assignments (Wamba-Taguimdje, Wamba, Kamdjoug, & Wanko, 2020). In contemporary business, information technology (IT) tools are fundamental to realize processes in a faster and more efficient way. Global competition is demanding and organizations have to use innovative ideas to stay competitive. Every department in company plays a fundamental role for success, but there is one of special significance: Human Resources Management (HRM) (Rana, & Sharma, 2019).

Human Resources Management (HRM) is a crucial part of every organization as it deals with a vital resource: human capital. HRM has been going through a transformation adopting technological tools to improve its performance (Vahdat, 2021). It was said that the HRM function is subject to radical and dramatic change because of the implications of web based organizing. The combination of information technology (IT) tools in HRM processes has named “electronic Human Resources Management e-HRM (AlHamad, Alshurideh, Alomari, Kurdi, Alzoubi, Hamouche, & Al-Hawary, 2022). E-HRM strives to implement all the operational activities that HRM is concerned with, with the help of technological tools in a fast and accurate way (Shah, Michael, & Chalu, 2020).

E-HRM was defined as an umbrella term covering all possible integration mechanisms and contents between HRM and Information Technologies aiming at creating value within and across organizations for targeted employees and management (Galanaki, Lazazzara, & Parry, 2019). Also e-HRM was defined as the ‘planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities’ (Al-Harazneh, & Sila, 2021). Further, it is believed that, ‘E-HRM could be narrowly defined as the administrative support of the HR function in organizations by using Internet technology’ (Tataru, 2019).

Therefore, e-HRM can be the integration between human resources management, and information technology, through mainly the use of web-based applications in human resources management (Berber, Đorđević, & Milanović, 2018). The purpose of this web-based tool is to support HR professionals in performing their HR tasks, and to support managers and employees performing their HR tasks. Therefore, using E-HRM, managers can easily access any relevant information, make decisions, and communicate with others without referring to the human resource department each time (Kaur, 2021).

Globally the banking industry is under pressure to concurrently improve the customer experience, meet intense regulative requirements and reduce costs of doing business (Kumar, & Balaramachandran, 2018). By virtue of human capital as a main source for productivity and competitive advantage (Malik, 2019), organizations must consider the critical role of human resource practices and make every effort to develop and sustain this capital. Furthermore, HR practices are significant for improving employee’s performance and enhancing the achievement of organizational goals (Manzoor, Wei, Bányai, Nurunnabi, & Subhan, 2019)..

In the wake of globalization and IT revolution, competition has become even stiffer, both for-profit and nonprofit organizations. The domestic markets have become depleted, and most organizations are seeking new markets in the emerging economies. Nigerian banking industry has to compete in the global market and one way is to compete by employing the best human

resource practices (Alserhan, & Shbail, 2020). This study sought to establish the relationship between e-HRM and performance of selected Deposit Money Banks, DMBs in Gombe State, Nigeria.

The study would provide answers to the following research questions:

- i. What is the relationship between e-Training and Development and performance of selected deposit money banks in Gombe State?
- ii. What is the relationship between e-Compensation and performance of selected deposit money banks in Gombe State?
- iii. What is the relationship between e-Performance Appraisal and performance of selected deposit money banks in Gombe State?

LITERATURE REVIEW

Theoretical Framework

Ability, Motivation and Opportunity (AMO) Theory

Ability, Motivation and Opportunity (AMO) Theory was initially proposed by Bailey (1993), The AMO framework posits that ensuring that employees are willing to perform better than what is the minimum requirement of them they needed three components: they had to have the necessary skills, they needed befitting motivation and employers had to offer them the opportunity to be involved in decision making (Appelbaum, Bailey, Berg & Kalleberg, 2000). Theoretical and empirical work in the field of HRM (Purcell et al., 2003) suggests that according to the AMO view the HRM system of employee's "ability to perform" influences their "skills", the HRM system of employee's "motivation to perform" influences their "attitudes" and the HRM system of employee's "opportunity to perform" influences their "behaviour" (retention, presence).

Since its emergence the AMO framework (Appelbaum et al., 2000; Boxall & Purcell, 2003) has been generally accepted for explaining the link between human resources management and performance. As a matter of fact many of the articles published after the year 2000 that explore the linkage between HRM and performance use this theoretical framework either explicitly or implicitly (Boselie, Dietz & Boon, 2005). Thus the research found it useful to explain the relationship between HRM practices and performance of employees since the earlier studies done based on this theory have encompassed either some or all the four HRM practices including recruitment and selection, training and development, performance management systems and organizational communication.

Concept of Performance

Organizational performance as a concept suffers from problems of conceptual clarifications. The term performance is often used indiscriminately to describe everything from efficiency, effectiveness to improvement. Organizational performance is related to defining and achieving specific goals (Kimhi, & Oriel, 2019). Organization performance is a multidimensional construct operationalized by a variety of financial measures (which include sales, value of net assets and profit) and non-financial measures which include number of workers, market share and overall customer satisfaction (Adubasim & Odunayo 2019).

Lencho, (2020) defines organization performance as an indicator and progressive achievement of tangible, specific, measurable, worthwhile and personally meaningful goals. According to

Ocampo, Acedillo, Bacunador, Balo, Lagdameo, and Tupa, (2018), the term performance has to do with those behaviours or actions which are regarded relevant to those goals of the said organisation in question. They further argue that performance itself cannot be said to be the outcome itself, consequences or the result of behaviors or action, rather can be said to be the action itself. Thus they argued that performance tends to be multidimensional, a situation whereby for any specific-type of job, there tends to be a number of substantive performance components that are distinguished in terms of their inter correlations and patterns on co-variation with other variables. However, there is no one definition of organisational performance.

Organizational performance involves the recurring activities to establish organizational goals, monitor progress towards the goals, and make adjustments to achieve those goals more effectively and efficiently (Adubasim, Unaam, & Ejo-Orusa, 2018). Organizational performance is an important construct in leadership that determines how to manage organizations. Previous literature reviews reveal that organizational performance is a multidimensional concept that reflects the heterogeneous nature, circumstances and objectives of organizations at a given period. This compelled Kirby (2005) to maintain that the definition and meaning of organizational performance is an open subject for further inquiry.

Concept of e-Human Resources Management, e-HRM

The term e-HRM is combination of two words. First 'e' stands for electronic while term HRM can be defined as "the efficient and effective utilization of Human Resources in order to achieve goals of an organization" (Nanayakkara, 2020). E-HRM can be well-defined as the effective utilization of HR functions via network or internet medium which are associated with organizations common goals and objectives (Johnson, Stone, & Lukaszewski, 2020). So with the fast moving technology and evaluation of IT industry HRM is now moving towards more electronic human resource management (Mishra, 2010). There were number of definitions regarding the e-HRM and research studies showed that e-HRM mutually related with HRIS, Virtual HRM, Web based HRM and internet based HRM (Ziebell, Albors-Garrigos, Schoeneberg, & Marin, 2019).

Jayabalan, Makhbul, Selvanathan, Subramaniam, Nair, and Perumal, (2020) indicated that HRIS is only used to acquire, store, capture, analyze and distribute its information about human resources. With this definition concept of E-HRM and HRIS appeared to be a two different concepts where the difference was the vastness and the out stretch of E-HRM (Florkowski, 2018). According to the definitions of Ravarini, and Martinez, (2019), e-HRM is synchronizing HR functions using internet. With this statement many argued that e-HRM is some kind of a supporting service that helps organizations HR administrative process to run smoothly (Rahman, Mordi, & Nwagbara, 2018). However with all these vice versa Tataru, (2019) specified that, "e-HRM could be narrowly defined as the administrative support of the HR function in organizations by using Internet technology". Later there were so many definitions added to the e-HRM and most of them were very similar to each other. Myllymäki, (2021) defined e-HRM as doing HRM activities via internet. Also according to their studies they found that "e" part is the reflection of electronic which means e-HRM is reflection of online HR. Online HR provides real-time information to the owners, managers and employees anywhere, anytime. According to Al-Harazneh, and Sila, (2021), e-HRM is implementing HR strategies, policies and practices based on web based technology. With the evaluation of HR from personnel administration to digitalization, most of the HR functions are now cloud based (Tataru, 2019). With the

digitalization of HRM, HR functions were moved from manual work to internet based (e-based) work.

Empirical Literature Review

In the last five years, several research studies on e-HRM have been published in all parts of the world. Most of the locally published research studies on e-HRM focused on its impact on organizational performance and organizational development. In this section, the researcher samples previous research studies on e-HRM that are strictly related to the topic of study. A study by Imran, Memon, Talreja, and Bhutto, (2021) focusing on impact of E-HRM on performance of nonprofit organization noted significant impact on organizations. Whereas the organization success in their performance and competitive edge were some of the impacts noted in this study, the study also showed statistically significant relationship between e-HRM and organizational performance in terms of productivity, efficiency and effectiveness. Colbran, Ramsden, Stagnitti, and Toumbourou, (2019) indicated that these organizational performances were essential indicators of success of non-profit organizations. However, the study did not focus on humanitarian organizations such as University of Maryland Programs.

Another study conducted by Obama, Keino, Kyongo, Muriithi, and Amata, (2020) among Mexican NGOs implementing e-HRM aiming at finding out the impact of the E-HRM tools on organizational performance and gaining global competitiveness found that the organizations in this sector were able to be more flexible in responding to changes in the stakeholder needs and were even able to achieve their strategic goals more effectively. However, this study did not show the different specific E-HRM practices that are implemented by these NGOs.

A study conducted by Berber, Đorđević, and Milanović, (2018) on the impact of the Electronic Human Resource Management (e-HRM) application on Organizational Performance, concluded that E-HRM plays a pivotal role in the employee motivation to ensure that all employees complete their tasks as schedules leading to quality delivery of services, which in turn increases customer satisfaction and retention. It also established that E-HRM application has a positive impact on organizational efficiency whereby the responsibility of implementing e-HRM is shared between HR staff, employees and managers. However it did not address the fact that EHRM applications enhances organizational performance and the performance measures used in the current study were not included in the empirical study by Obama, et al, (2020).

A study conducted by Iqbal, Ahmad, Raziq, and Borini, (2019) on the impact of electronic human resource management system on organizational performance concluded that E-HRM system is extensively used in both public and private banks and that it increases the efficiency and effectiveness of the HR department in the banking sectors. However the study did address the fact that E-HRM enhances organizational performance. A study conducted by Yong, Yusliza, Ramayah, Chiappetta Jabbour, Sehnem, and Mani, (2020) on the influence Human Resource Management on performance of a manufacturing industry found that manufacturing companies pursuing best Human Resource Management practices accomplish higher performance through the interface of these practices with Knowledge Management and organizational learning capability and the conception of OC. However the study did not investigate the need of EHRM to perform these functions better.

A study conducted by Nguti, and Mose, (2021) on the outcomes of Electronic Human Resource Management on organizational performance in the leading firms in Turkey concluded that E-HRM manage time, reduces administration costs and also efficient to access personal data. Electronic Human Resource Management condensed organizational expenses, improved better

and quicker communication between manager and employees reduced the considering time for Electronic Human Resource usage in institutions. However the study did not address the fact that EHRM contribute to organizational performance. A study conducted by Hamid, Muzamil, and Shah, (2022) on the influence of Electronic Human Resource Management on Human Resource managers concluded that Electronic Human Resource Management has strategized Human Resource Management to four functions; responsibility of Change Agent, Employee Champion, Strategic Partner, and Administrative Expert in order. However the study did not align E-HRM to overall organizational performance.

A study conducted by Fan, Zhu, Huang, and Kumar, (2021) on Electronic Human Resource Management commencement using perception maps to illustrate the relation between Human Resource Management and IT through time in Iran University of Science and Technology established that the influence of the Electronic Human Resource Management field provides a holistic and clear understanding by addressing all the related phenomena concerning Electronic Human Resource Management. It can also help forecast and overcome the difficulties that might happen during institutionalization. However, the study did not align E-HRM to organizational performance.

A study conducted by Ahmed, (2019) on the effects of Electronic Human Resource Management on organizational performance concluded that E-HRM is a potential solution and that it enables Human Resource sections to analyze and store data to increase workforce data flows, to devolve many tedious administrative and compliance roles. However the study did not address the fact that E-HRM effect organizational performance. According to a study conducted by Rahman, Mordi, and Nwagbara, (2018) on e-HRM on an empirical study in Indian organizations established that private organizations have successfully implemented e-HRM practices compared. However, the study did not investigate whether the e-HRM practices implemented has marked positive changes in the industry.

It is evident that most of these studies were no done in Africa let alone Nigeria. Hence the need to carry out this study among DMBs in Gombe State, Nigeria. The study would be guided by the following hypothesis:

HO₁: There is no significant relationship between e-Training and Development and performance of selected deposit money banks in Gombe State.

HO₂: There is no significant relationship between e-Compensation and performance of selected deposit money banks in Gombe State.

HO₃: There is no significant relationship between e-Performance Appraisal and performance of selected deposit money banks in Gombe State.

METHODOLOGY

The study adopted the cross-sectional survey method in the generation of data. The target population of the study is the entire staff of Selected DMBs (Access-37, Unity-28, Union-45 and Stanbic-27) in Gombe State making a total of one hundred and thirty seven employees. The sample size was obtained using the Krejcie and Morgan (1970) table for determining minimum returned sample size for a given population. For our population, the table placed our sample size at ninety four (94). The sampling procedure to be used in this study is the purposive sampling technique which focused on managers, supervisors and staff. Descriptive statistics and Spearman's rank correlation were used for data analysis and hypothesis testing with the aid of the SPSS Package version 23.

Table 1. Reliability statistics for the instruments

S/No	Dimensions/Measures of the study variable	Number of items	Number of cases	Cronbach's Alpha
1	e-Training	4	76	0.882
2	e-Compensation	4	76	0.795
3	e-Performance Appraisal	4	76	0.934
4	Performance	4	76	0.874

Source: Research Data, 2022

Results and Discussions

Bivariate Analysis

The secondary data analysis was carried out using the Spearman rank order correlation tool at a 95% confidence interval. Specifically, the tests cover hypotheses Ho₁, Ho₂ and Ho₃ which were bivariate and all stated in the null form. We have relied on the Spearman Rank (*rho*) statistic to undertake the analysis. The 0.05 significance level is adopted as criterion for the probability of either accepting the null hypotheses at (p>0.05) or rejecting the null hypotheses at (p<0.05).

Table 2: Correlation Matrix showing relationship between e-HRM and Performance

			Performance	e-Training	e-Compensation	e-Performance Appraisal
Spearman's rho	Performance	Correlation Coefficient	1.000	.697**	.902**	.722**
		Sig. (2-tailed)	.	.000	.000	.000
		N	76	76	76	76
	e-Training	Correlation Coefficient	.697**	1.000	.387**	.406**
		Sig. (2-tailed)	.000	.	.002	.001
		N	76	76	76	76
	e-Compensation	Correlation Coefficient	.902**	.387**	1.000	.674**
		Sig. (2-tailed)	.000	.002	.	.000
		N	76	76	76	76
	e-Performance Appraisal	Correlation Coefficient	.722**	.406**	.674**	1.000
		Sig. (2-tailed)	.000	.001	.000	.
		N	76	76	76	76

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data, 2022 (SPSS output, version 23.0)

The table above illustrates the test for the three previously postulated bivariate hypothetical statements.

HO1: There is no significant relationship between e-Training and Development and performance of selected deposit money banks in Gombe State.

The correlation coefficient coefficient 0.697 shows that there is a strong and positive relationship between E-Training and Development and performance. The p value $0.000 < 0.05$ indicates that the relationship is significant. Therefore, the null hypothesis is hereby rejected and the alternate upheld. Thus, there is a significant relationship between e-Training and Development and performance of selected deposit money banks in Gombe State.

HO2: There is no significant relationship between e-Compensation and performance of selected deposit money banks in Gombe State.

The correlation coefficient coefficient 0.902 shows that there is a strong and positive relationship between E-Compensation and performance. The p value $0.000 < 0.05$ indicates that the relationship is significant. Therefore, the null hypothesis is hereby rejected and the alternate upheld. Thus, there is a significant relationship between e-Compensation and performance of selected deposit money banks in Gombe State.

HO3: There is no significant relationship between e-Performance Appraisal and performance of selected deposit money banks in Gombe State.

The correlation coefficient coefficient 0.722 shows that there is a strong and positive relationship between E-Performance Appraisal and performance. The p value $0.000 < 0.05$ indicates that the relationship is significant. Therefore, the null hypothesis is hereby rejected and the alternate upheld. Thus, there is a significant relationship between e-Performance Appraisal and performance of selected deposit money banks in Gombe State.

Discussion of Findings

The findings revealed a strong and positive significant relationship between e-HRM and performance using the Spearman's rank order correlation tool and at a 95% confidence interval. The findings of this study confirmed that e-HRM (e-training, e-compensation and e-performance appraisal) has a significant positive relationship with performance. This finding supports the views of Carnevale, and Hatak, (2020) on human resource management in virtual organizations. He found that there is a relationship between E-HRM and efficiency of organizations when it comes to team management and their performance management. E-HRM provides avenues where each member of the teams and each team can access information upon request, what is

required of them and how they can achieve that and reward systems that are set by management. This allows employees to get it right the first time without repetitions repeating tasks and this is important when it comes to increasing the competitive advantage of the organization.

Similarly, Al-Hawary, et al (2020) studied E-human resources management managing knowledge people” states that customer satisfaction is very important, which is the primary source for this is how the organization be able to manage their operations in order to ensure that they are smooth and allow high-quality products and services. E- HRM played a great role in ensuring that each individual and teams perform their tasks as required. Therefore, the organization is able to ensure quality, and this is the quality of customer's satisfaction and this is important in customer retention. E-HRM has a unique role in doing profiling customers and employees can use this information in performing their tasks and to ensure that meet customer requirements.

Furthermore, Škudienė, Vezeliene, and Stangej, (2020) posited that E-HRM helps to eliminate a lot of the administrative burden and makes managers and staff focus on more important tasks. This not only reduces cost but also enhance employee satisfaction and financial performance. In the same vein, Adewoye, and Olugbenga, (2018) pointed out that E-HRM can help to moderate the working relationship. Changing labor market, such as in supply shortage, individualization and higher educational level, and causes the transfer of power from the employer to the employee. The progress of E-HRM and better service to employees who are internal clients increases employee satisfaction and commitment.

Shamout, Elayan, Rawashdeh, Kurdi, and Alshurideh, (2022) examined the contribution of E-HRM to HRM effectiveness and they found that individual assessment of E-HRM application affects HRM technical and strategic effectiveness. This is especially so in the perceived quality of the content and the structure of E-HRM application which have a significant and positive effect on technical and strategic HRM effectiveness. They also discovered that the basic expectations are that using E-HRM will reduce costs, will enhance the HR service level and will supply the HR department space to become a strategic partner. In like manner, the current finding corroborates with Echaobari, S. G., Ihunda and Adim (2018) whose study found that there is a significant relationship between collaboration strategy and employee performance in oil producing companies in Port Harcourt, Nigeria.

Conclusion and Recommendation

The purpose of the study was to examining the relationship between e-HRM and performance of DMBs in Gombe state. The study sought to provide answers to three key research question which included: what is the relationship between e-training and development and performance of selected deposit money banks in Gombe State, what is the relationship between e-compensation and performance of selected deposit money banks in Gombe State? And what is the relationship between e-performance appraisal and performance of selected deposit money banks in Gombe State?

The data collected where a total of 76 out of 94 responses and analyzed using SPSS version 23. With regard to the first research question, the study found that e-training and development had a significant relationship performance. Likewise, the second question also showed that e-compensation had a significant relationship performance. Furthermore, the answers to the third

research question showed that e- performance appraisal had a significant relationship performance. The implementation of e-training and development, e-compensation and e-performance appraisal has a significant influence on performance. The study thus conclude that e-HRM has a significant relationship with performance.

The study recommended that

- i. DMBs should facilitate access to e-training for staff and reduce any barriers related to access to training courses electronically. Similarly, the e-training should be linked with the results of the performance evaluation which determines the strength or weaknesses of the process. More efforts should be undertaken by DMBs to encourage staff to participate in training programs related to the use of E-HRM applications.
- ii. To improve e-compensation in DMBs, technology should be used to provide integrated and adequate information about the compensation. As a result, there will be less need for referral to the HR staff asking for information or clarification. In the same vain, DMBs should prepare and issue leaflets on compensation system, to explain the compensation and benefits for staff.
- iii. To increase e-performance appraisal in these DMBs, improve communication regarding the timing of performance appraisal should be part of organizational goals. This is beside Improving employees ability to access information on performance appraisal

REFERENCES

- Adewoye, J. O., & Olugbenga, O. B. (2018). Evaluation of the effects of E-HRM on customer deposits in selected deposit money banks in Nigeria. *Noble International Journal of Economics and Financial Research*, 3(9), 95-105.
- Adubasim E. I. & Odunayo O. A. (2019). The relationship between technological orientation and organizational performance of deposit money banks in Port Harcourt, Nigeria. *Journal of Management Sciences and Entrepreneurship*, 14(7), 21-37
- Adubasim, I. E., Unaam, A. O., & Ejo-Orusa, H. (2018). Knowledge transfer and organizational performance of deposit money banks in Port Harcourt, Nigeria. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 02(12), 90-98
- Ahmed, M. T. (2019). E-HRM Practices and its impact on organizational performance: A study on the manufacturing industry in Bangladesh. *European Journal of Business and Management ISSN*, 2222-1905.
- AlHamad, A., Alshurideh, M., Alomari, K., Kurdi, B., Alzoubi, H., Hamouche, S., & Al-Hawary, S. (2022). The effect of electronic human resources management on organizational health of telecommunications companies in Jordan. *International Journal of Data and Network Science*, 6(2), 429-438.
- Al-Harazneh, Y. M., & Sila, I. (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 (JGIM)*, 29(2), 118-147.
- Al-Harazneh, Y. M., & Sila, I. (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 (JGIM)*, 29(2), 118-147.

- Al-Hawary, S. I. S., Mohammad, A. S., Al-Syasneh, M. S., Qandah, M. S. F., & Alhajri, T. M. S. (2020). Organisational learning capabilities of the commercial banks in Jordan: do electronic human resources management practices matter? *International Journal of Learning and Intellectual Capital*, 17(3), 242-266.
- Alserhan, H., & Shbail, M. (2020). The role of organizational commitment in the relationship between human resource management practices and competitive advantage in Jordanian private universities. *Management Science Letters*, 10(16), 3757-3766.
- Appelbaum, E. Bailey, T. Berg, P. and Kalleberg, A. (2000). Manufacturing advantage: why high-performance work systems pay off. Ithaca. Cornell University Press.
- Berber, N., Đorđević, B., & Milanović, S. (2018). Electronic human resource management (e-HRM): A new concept for digital age. *Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management*, 23(2).
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, Vol. 15 (3), 67-94.
- Boxall, P., & Purcell, J. (2003). Strategy and human resource management. London: Macmillan.
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183-187.
- Colbran, R., Ramsden, R., Stagnitti, K., & Toumbourou, J. W. (2019). Advancing towards contemporary practice: a systematic review of organisational performance measures for non-acute health charities. *BMC health services research*, 19(1), 1-12.
- Echaaobari, S. G., Ihunda, C. C., & Adim, V. C. (2018). Collaboration strategy and employee performance in oil producing companies in Port Harcourt, Nigeria. *International Journal of Social Sciences and Management Research*, 4(3), 21-30.
- Fan, D., Zhu, C. J., Huang, X., & Kumar, V. (2021). Mapping the terrain of international human resource management research over the past fifty years: A bibliographic analysis. *Journal of World Business*, 56(2), 101185.
- Florkowski, G. W. (2018). HR technology systems: an evidence-based approach to construct measurement. In *Research in Personnel and Human Resources Management*. Emerald Publishing Limited.
- Galanaki, E., Lazazzara, A., & Parry, E. (2019). A cross-national analysis of e-HRM configurations: integrating the information technology and HRM perspectives. In *Organizing for digital innovation* (pp. 261-276). Springer, Cham.
- Hamid, Z., Muzamil, M., & Shah, S. A. (2022). Strategic human resource management. In *Research Anthology on Human Resource Practices for the Modern Workforce* (pp. 1-16). IGI Global.
- Ilek, T., Maier, C., & Weinert, C. (2022). Electronic human resource management: A literature analysis of drivers, challenges, and consequences.
- Imran, M., Memon, A. W., Talreja, K., & Bhutto, S. A. (2021). Does E-HRM advance employee engagement? A study of commercial bank operating in Sukkur and Khairpur District. *Indian Journal of Economics and Business*, 20(4).

- Iqbal, N., Ahmad, M., Raziq, M. M., & Borini, F. M. (2019). Linking e-hrm practices and organizational outcomes: empirical analysis of line manager's perception. *Revista Brasileira de Gestão de Negócios*, 21, 48-69.
- Jayabalan, N., Makhbul, Z. K. M., Selvanathan, M., Subramaniam, M., Nair, S., & Perumal, I. (2020). HRIS contributions and impact on strategic employee engagement and participation in private education industry. *International Journal of Management (IJM)*, 11(10).
- Johnson, R. D., Stone, D. L., & Lukaszewski, K. M. (2020). The benefits of e-HRM and AI for talent acquisition. *Journal of Tourism Futures*.
- Kaur, C. (2021). Changing pattern of E HRM in corporate world after globalization. *IOSR Journal of Business and Management*, 23(4), 23-30.
- Kimhi, S., & Oliel, Y. (2019). Change management and organizational performance in selected manufacturing companies in Anambra state, Nigeria. *The International Journal of Social Sciences and Humanities Invention*, 6(05), 5437-5445.
- Kumar, K. N., & Balaramachandran, P. R. (2018). Robotic process automation-a study of the impact on customer experience in retail banking industry. *Journal of Internet Banking and Commerce*, 23(3), 1-27.
- Lencho, D. M. (2020). Effect of employee motivation on job performance: in case of fiche general hospital. *International Journal of Commerce and Finance*, 6(1), 81-101.
- Malik, A. (2019). Creating competitive advantage through source basic capital strategic humanity in the industrial age 4.0. *International Research Journal of Advanced Engineering and Science*, 4(1), 209-215.
- Manzoor, F., Wei, L., Bányai, T., Nurunnabi, M., & Subhan, Q. A. (2019). An examination of sustainable HRM practices on job performance: An application of training as a moderator. *Sustainability*, 11(8), 2263.
- Myllymäki, D. (2021). Beyond the 'e-' in e-HRM: integrating a sociomaterial perspective. *The International Journal of Human Resource Management*, 32(12), 2563-2591.
- Nanayakkara, N. W. O. K. D. S. P. (2020). Impact of electronic human resource management on employee job performance: A Conceptual Review. *GSSJ*, 8(9).
- Nguti, V. N., & Mose, T. (2021). The role of E-recruitment and selection functions on the organizational outcomes in HELB, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(9), 554-565.
- Obama, M. A., Keino, D. C., Kyongo, J. K., Muriithi, S. M., & Amata, E. (2020). Effects of electronic human resource management practices on organizational performance: A case of University of Maryland Programs, Nairobi Kenya.
- Ocampo, L., Acedillo, V., Bacunador, A. M., Balo, C. C., Lagdameo, Y. J., & Tupa, N. S. (2018). A historical review of the development of organizational citizenship behavior (OCB) and its implications for the twenty-first century. *Personnel Review*.
- Ozkeser, B. (2019). Impact of training on employee motivation in human resources management. *Procedia Computer Science*, 158, 802-810.
- Purcell, J., Kinnie, N., Hutchinson, S., Rayton, B., & Swart, J. (2003). Understanding the people and performance link: Unlocking the black box. London: CIPD
- Rahman, M., Mordi, C., & Nwagbara, U. (2018). Factors influencing E-HRM implementation in government organisations: Case studies from Bangladesh. *Journal of Enterprise Information Management*.

- Rana, G., & Sharma, R. (2019). Emerging human resource management practices in Industry 4.0. *Strategic HR Review*.
- Ravarini, A., & Martinez, M. (2019). Lost in holacracy? The possible role of e-HRM In dealing with the deconstruction of hierarchy. In *HRM 4.0 for human-centered organizations*. Emerald Publishing Limited.
- Shah, N., Michael, F., & Chalu, H. (2020). The Influence of Electronic Human Resource Management Use and Organizational Success: A global conceptualization. *Global Journal of Management and Business Studies*, 10(1), 9-28.
- Shamout, M., Elayan, M., Rawashdeh, A., Kurdi, B., & Alshurideh, M. (2022). E-HRM practices and sustainable competitive advantage from HR practitioner's perspective: A mediated moderation analysis. *International Journal of Data and Network Science*, 6(1), 165-178.
- Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability*, 12(10), 4035.
- Škudienė, V., Vezeliene, G., & Stangej, O. (2020). Transforming human resource management: innovative e-HRM value creation for multinational companies. In *Innovation Management*. Edward Elgar Publishing.
- Tataru, C. (2019). Human Resources in the Digital Age A Manager's Realities and Perspectives. *Revista de Management Comparat International*, 20(4), 473-480.
- Vahdat, S. (2021). The role of IT-based technologies on the management of human resources in the COVID-19 era. *Kybernetes*.
- Wamba-Taguimdje, S. L., Wamba, S. F., Kamdjoug, J. R. K., & Wanko, C. E. T. (2020). Influence of artificial intelligence (AI) on firm performance: the business value of AI-based transformation projects. *Business Process Management Journal*.
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, 29(1), 212-228.
- Ziebell, R. C., Albors-Garrigos, J., Schoeneberg, K. P., & Marin, M. R. P. (2019). Adoption and success of e-HRM in a cloud computing environment: A field study. *International Journal of Cloud Applications and Computing (IJCAC)*, 9(2), 1-27.