Analysing Commercial Banks Performance through E-HRM Functions: Evidence from Pakistan

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Abstract

One of the main goals of the current study is to examine how E-HRM practices are being used in the banking industry. The major purpose of this research is to evaluate how E-HRM practices, functions, and other determinants influence the effective adoption of E-HRM practices in emerging economies such as Pakistan's banking industry. More specifically, this research aims to investigate the specific E-HRM functions i.e., e-recruitment, e-selection, e-motivation, e-training, and e-information technology on banks' performance. The participants in this research are management-level employees from Pakistan's financial sector. Since there are seventeen commercial banks in Pakistan, the researcher decided to choose all of the commercial banks operating in Lahore for data collection from the target group. According to the findings and conclusions drawn from the research, the influence of information technology, recruiting and selection, training, and motivation on the profitability of banks is substantial, however, the effect of communication on bank performance is insignificant. According to the findings of the research, increased profitability may be achieved in the banking industry in Pakistan via the effective implementation of E-HRM solutions. This study may be able to provide fresh insights for banking staff, legislators, bank management, and prospective workers, assisting them in grasping the efficiency of electronic HR management practices.

Keywords: Commercial banks, E-HRM, Pakistan, Banks performance

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1. Introduction

Banking institutions all over the world face numerous HRM challenges such as high labour cost and turnout, recruitment, and training that directly influence their performance. Achievement of organizational outcomes is the desire of banking organizations that operate in a saturated and highly competitive environment (Shamout et al., 2022). Value creation always remained an integral part of the core strategy in the banking sector. Financial institutions invest in technology-enabled HRM systems for effective utilization of differential human capital on one hand and as an environmental performance measure on the other hand for sustainable performance (Al-Alwan et al., 2022). The integration of HRM and information technology has attracted banking institution managers in recent years (Rastogi & Srivastava, 2017). Such phenomena are known as eHRM which has been described as a way to implement HR policies, practices, and strategies by using the capability of information technology to improve operational, relational, and transformational values (Milon et al., 2022). Organizations need to focus on competitive and value-added strategies to improve the quality of services and customer satisfaction. If it is true that distinctive and innovative approaches to HRM create added value for the organization then E-HRM seems a good fit to achieve intended targets (AlHamad et al., 2022). The scholar for example De Alwis et al. (2022) also acknowledged that E-HRM is a viable strategy to increase the performance of banking institution.

Collaboration is imperative for the achievement of banking outcomes (Iqbal, Waseem, & Bilal , 2021). At outset, eHRM exploits IT in two ways. First, technology is crucial for linking organizational actor and provides more interaction and collaboration that is segregated spatially suggesting that technology act as a backbone channel for interaction and integration. Second, technology supports banking professionals partially or completely to perform HR processes more efficiently and effectively. Organizations invest in E-HRM to develop specific capabilities including relational assets, enhanced managerial competencies, efficient deployment, and management of banking professionals (Al-Alwan et al., 2022; Rathee & Bhuntel, 2021).

Besides, multiple studies are also available in which the impact of E-Compensation, E-recruitment, and E-performance Appraisal were checked on a variable like an employee's engagement performance and Individual performance under the E-HRM umbrella (Haque & Nishat, 2022; Nurshabrina & Adrianti, 2020). So, this study will fill the gap by finding E-recruitment, E-selection, E-Compensation, and E-Performance Appraisal effect on banks' performance (Chandradasa & Priyashantha, 2021). As stated earlier, this study will determine whether E-HRM practices, particularly E-Compensation

and E-Performance Appraisal, have any constructive influence on the performance of the Banking sector. We have selected the financial sector, particularly the banking sector because bank employees have to work with tough timelines, with a strict regulatory environment coupled with severe competition for customer deposit retention exist among banks (Kaur, 2021). These challenges can only be mitigated by banks if they have fully motivated and engaged employees. It will put extra pressure on bank management to how to motivate or engage employees which are working in the large scattered branch network. Here, E-HRM can help bank management to fully motivate or engage their employees which are working even in remote areas (Thathsara & Sutha, 2021).

Market saturation, intense competition, and burnout are key challenge that faces financial institutions (Sohail et al., 2020). Organizational redesign options offered by E-HRM offer various value creation opportunities to improve operational, relational, and transformational values for sustained financial institutions (Waheed et al., 2020). Therefore, the objective of the study is to develop a proposition for E-HRM value creation causal relationships within financial institutions. The study offers information on the efficiency of electronic employee retention techniques in the banking industry of Pakistan, which has heavily used these techniques in recent years. The development of the banking sector has greatly benefited from the combination of technology and the banking industry. Investment in technology is increasing dramatically on a global scale. The banking industry's usage of financial technology is severely limited. The major purpose of this research is to evaluate how E-HRM practices, functions, and other determinants influence the effective adoption of E-HRM practices in emerging economies such as Pakistan's banking industry.

2. Literature Review
2.1 Social Exchange Theory

Social Exchange theory is very much applicable in an organizational context, it explains why employees respond favourably to the organization when they treat favourably (DeJoy et al., 2004). In simple words, employees react according to how they perceive they are treated by the management of the Organization (Mearns et al., 2010). The current study focuses on the same base of Social Exchange theory. E-HRM (E-Compensation, E-Recruitment, E-Selection, E-motivation, and E-IT) is used as (Independent Variable) toll used by the organization to treat employees, and banks performance (Dependent Variable) is employee response against that treatment.

2.2 Adaptive Structuration Theory

Adaptive structuration theory (DeSanctis & Poole, 1994) reveals the effect of communication and information technology on the organizational process. AST focus on

the active affiliation between the structure provided by technology and its appropriateness in the eyes of its users. AST theory which is developed by (DeSanctis & Poole, 1994) focuses on the implication of technology (Rains & Bonito, 2017) and provide a model that focuses on the interaction between advanced information technology, social structure, and human interaction. AST focuses on social structures, rules, and resources by technologies and institutions as the basis for human activity (DeSanctis & Poole, 1994). The current study is also focusing on AST theory in which E-Compensation and E-Performance Appraisal used as technology (Independent Variable) and Employee Engagement used as human interaction (Dependent Variable).

2.3 E-HRM

It is quite difficult to come up that characterizing and assessing E-HRM and information technology because technology includes both physical and functional properties (Dede, 2020; Imran et al., 2021) Information technology is a body made up of physical components (such as hardware, software, and communication network infrastructure), but it differs from people in that it is believed that without human use, physical technology has no value in the organizational endeavor (Shamout et al., 2022). As a result, in this investigation, E-HRM is made up of specially arranged computer hardware, software, and electronic working resources. It aids in the development of actual HRM activities (uses of policies and resources), the relational and benchmarking analysis of individual and collective data, the operation and performance of information, and the dissemination of information within or without the confines of an organization. Although there are limitations due to horizontal, vertical, and geographic differences, the E-HRM Institute deviates from the norm in terms of physical appearance and the use of the point that helps in increasing the level of individual coordination and business that stores HR data at the group level, generates HR statistics, and distributes access to HR data and statistics. A company's ability to support expanding and automated group interactions that involve communication, data generation, and storage while also leveraging technological communication resources is reflected in changes to E-HRM.

Electronic HRM "is a technique of executing HR policies and approaches in the organization through practical and attentive backing of comprehensive utilization of web-technology dependent networks (Ruël et al., 2004). Electronic HRM is the backing of the HRM in performing responsibilities in firms by utilizing information technology. The blend of all computer accessories for processing information for Human Resources. They define E-HRM as the usage of IT in the organization for backing the HR department. Electronic HRM ultimately enhanced the worth of HRM by re-positioning it from the staff department to the line department (Voermans & Van Veldhoven, 2007). Irrespective of

the difference of opinion among writers and professionals about a single and acceptable definition of Electronic Human Resource Management practices, they agreed that Electronic HRM practices are in-depth interrelated automated arrangements within the organization which use information as a gadget for various usage (Galanaki et al., 2019) but now scholars focusing on Electronic HRM with a more strategic outlook.

Various scholars attempted to describe E-HRM. E-HRM is a multilevel phenomenon that has been defined as a way to implement HRM strategies, policies and practices to support an organization to achieve business objectives by using the capability of web-based technologies (Iqbal et al., 2019). E-Commerce provides a referential platform for the development of E-HRM that is referred to conduct the business transaction -human resources in this state of affairs by using web-based technologies for operational, administrative, and transformational purposes (Bondarouk et al., 2017; Van den Heuvel & Bondarouk, 2017) defined E-HRM as HR service delivery channel that enables the manager and internal customers to have direct access to HR resources for effective communication, performance management, team and talent management, knowledge management, training, and learning. Strohmeier (2007) viewed E-HRM as an IT application to support managers and employees to perform HR activities. Despite aforementioned view of E-HRM, there is no consensus on the definition of E-HRM. However, Bondarouk and Ruël (2009) provided a comprehensive view of E-HRM that describes E-HRM 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" (Chandrasekhar et al., 2015).

2.4 Empirical Review

Zhou et al. (2022), conducted a study to find out the answer to the question of whether "EHRM implementation enriches organizational performance or not and if does then what are the elements who can support its implementation". After a meta-analysis of significances, limitations, and backgrounds of E-HRM implementation, they found the varied level of a positive relationship between E-HRM and organizational performance among countries but they found technology, organizational, people and social factors as favorable factors in all over countries in E-HRM implementation (Zhou et al., 2022). In MD and Tanjil (2019) conducted a study on "E-HRM impact on Organizational performance of Manufacturing industry of Bangladesh". They used 9 dimensions of E-HRM and 6 dimensions of organizational performance. After adopting the convenience sampling method and non-probability sampling technique, they collected primary data through structured questionnaires and Interviews from 223 employees of the

manufacturing industry from September to December 2018. After descriptive and regression analysis, they found E-HRM has a positive and significant influence on Organizational Performance (Ahmed & Ogalo, 2019). Edeh and Onyemauche (2018) investigate the effect of electronic human resource management on the enterprise sustainability of oil and gas firms in Nigeria. A cross-sectional research design was employed in the study. The study found that electronic human resource management has a positive significant effect on enterprise sustainability of oil and gas firms in Nigeria.

Malhotra and Jain (2017) investigated the effect of E-HRM policies along with Implementation strategies' effect on employee satisfaction level. Both primary and secondary data were collected via a questionnaire developed for the research. They found a significant relationship between employee satisfaction and utilization of E-HRM practices. Imran et al. (2021) checked the linkage between E-HRM usage impact on HRM usefulness by using the UTAUT model developed by (Venkatesh et al., 2003). In this study, Determinants of E-HRM (Performance Expectancy, Effort Expectancy, and Social Influence) were used as the independent variables, Behavioral Intention (BI) and E-HRM usage (Use) were used as the mediating variable, and HRM effectiveness (policy level and practice level) used as the dependent variable. After analyzing through SEM model, the study concluded that the applicability of E-HRM increased HRM effectiveness. Moreover, Behavioral intentions serve as mediating variable among E-HRM determinants. Obeidat (2016) conducted a study on "The Impact of Electronic Human Resource Management (E-HRM) practices on business Performance in Jordanian Telecommunication sector: The employee Perspective. In said study, E-Performance Appraisal and E-Compensation were used as Independent Variable and Operational Performance as a dependent variable. After getting data from three Jordanian telecommunication companies through 114 questionnaires, they found a significant and positive effect of E-Performance Appraisal and E-Compensation on operational performance (Khashman & Al-Ryalat, 2015).

Employees can access internal human resources within a company via E-HRM without having to leave the workplace (Dede, 2020). Due to the time and money savings for businesses, many companies now decide to complete their recruiting procedures online, employing the concept of the E-HRM (Fındıklı & Rofcanin, 2016). E-commerce functions are particularly distinctive because the e-recruitment process synchronises the connections of mid-level efforts to the Internet applications of various firms (Mahfod & Khalifa, 2017). As opposed to the standard recruitment procedure, which ties chain links together, businesses have used integrated hiring systems in large part because of their advantages (Sylva & Mol, 2009). E-Recruitment is the process of using electronic technology to successfully fill open positions inside a company (Marler & Parry, 2015).

Compared to earlier eras, the employment procedure was cut back by 75%, while spending was cut back by 95% (Marler & Parry, 2015). By strengthening work skills, training and development aim to improve "present and future employees in the organizations."

2.5 Research Hypothesis

- There is a significant effect of Information Technology on banks' performance.
- There is a significant effect of e-recruitment and selection on banks' performance.
- There is a significant effect of electronic training on banks' performance.
- There is a significant effect of E-motivation on banks' performance.

There is a significant effect of Electronic Communication on banks' performance.

3. Methodology of the study

This study employed a quantitative methodology by surveying the unit of analysis and reviewing pertinent prior research. Management-level employees in Pakistan's banking sector make up the study's population. Since there are 17 commercial banks in Pakistan, the researcher chose all of those that operate in Lahore to be included in the sampling and asked them all to complete the questionnaire (State Bank of Pakistan, 2021). Lahore is a large city in Pakistan and is the location of all major commercial banks, hence the researcher chose it to focus on the workers of commercial banks.

The questionnaire was sent to a bank primary contact who had been chosen by higher management and was familiar with the E-HRM application system, and 202 surveys were returned. The formula given in the literature to compute sample size for known populations was used to calculate this figure (Krejcie & Morgan, 1970). The researcher's questionnaires were responded by 202 participants. Due to incomplete information and repetitive answers to questions, 05 questionnaires were removed from the returned surveys. As a consequence, 197 responses were considered valid for data analysis. The adopted questionnaire utilized in this study is divided up into two sections: the first section includes questions on participant demographics and the second section asks about independent and outcome variables.

4. Results
4.1 Reliability Analysis

The table below indicated that all the values of CA are higher than the threshold which is 0.70. So, based on the results it is concluded that all variables' data is reliable for further analysis.

Table 1. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BP	12.3733	24.316	.821	.910
IT	12.6133	28.306	.730	.921
ERS	12.2600	27.294	.808	.911
ET	12.6133	26.037	.820	.909
EM	12.2600	28.784	.689	.925
EC	12.9800	24.073	.885	.900

EBP: E- Banks performance, IT: Information Technology, ERS: E-recruitment and selection, ET: Electronic training, EM: E-motivation, EC: Electronic Communication

4.2 Correlation Matrix

Table 2. Correlations

		EBS	IT	ERS	ET	EM	EC
BP	Pearson Correlation	1					
IT	Pearson Correlation	.399	1				
	Sig. (2-tailed)	.000					
ERS	Pearson Correlation	.449	.609	1			
	Sig. (2-tailed)	.000	.000				
ET	Pearson Correlation	.307	.354	.450	1		
	Sig. (2-tailed)	.000	.000	.000			
EM	Pearson Correlation	.361	.335	.522	.472	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
EC	Pearson Correlation	.314	.240	.379	.279	.328	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

The above table displays the analysis of correlation performed to examine the relationship between the variables. The results demonstrate a positive and statistically significant correlation between the variables. Specifically, a value of .399 with a p-value of 0.000 suggests a favorable link between EBP and IT. The value of the correlation between EBP and IT is 0.449, with a significance level of 0.000. Additionally, there is a favorable and statistically significant correlation between the remaining variables.

4.3 Regression Analysis

In regression analysis, the independent variables and the dependent variables are analyzed to see whether or not there is a link between them. This test is also used to determine whether or not the model is appropriate for use and how accurate its predictions are.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.932[a]	.870	.868	.23879

a. Predictors: (Constant), EC, IT, ET, EM, ERS

Table 4: ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	136.447	5	27.289	478.588	.000[b]
	Residual	20.470	192	.057		
	Total	156.917	197			

a. Dependent Variable: EBP

b. Predictors: (Constant), EC, IT, ET, EM, ERS

The value of the R-square, which can be seen in the above table, explains the predictive capacity of the model. Based on the findings, the R square value was calculated to be .870. This indicates that the independent variable is explaining 87.0% of the outcome variables. Further, the ANOVA table shows the fitness of good fit. The results indicated that the model is a good fit for further analysis as the value of sig is less than the threshold.

A regression analysis was conducted to evaluate the hypothesis that all E-HRM function has a significant and positive effect on the bank's performance. ERS (β= .621 and P value 0.000 was shown to have a substantial and favourable influence on banks' performance. In addition, the results showed that ET has a considerable influence, both positively and significantly, on banks' performance (β= .102 and P value 0.033).

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.432	.230		1.876	.061
	ERS	.621	.063	.485	9.817	.000
	ET	.102	.048	.098	2.143	.033
	EM	.128	.056	.324	5.492	.013
	EC	.686	.099	.662	6.954	.000
	IT	.915	.118	.765	7.752	.000

a. Dependent Variable: EBP

Further, the results showed that EM has a considerable influence, both positively and significantly, on banks' performance (β= .128 and P value 0.013). Further, the results showed that EC has a considerable influence, both positively and significantly, on banks' performance (β= .686 and P value 0.000). In conclusion, the research showed that IT has a considerable influence, both positively and significantly, on banks' performance (β=0.915 and P value 0.000).

5. Discussion and Conclusion

The study's findings show a strong association between information technology and a bank's profitability as an E-HRM function. Given that several studies on the subject demonstrate that IT greatly boosts the effectiveness of the human resources department, understanding the significance of E-HRM is essential. In a nutshell, E-HRM enables association personnel to use HR software outside of the firm, regardless of their location

or time constraints (Thathsara & Sutha, 2021). The study's findings also showed a strong association between a bank's profitability and e-training, a component of E-HRM. Previous studies also support the findings of the current research study (Nurshabrina & Adrianti, 2020).

According to the study's results, there is a strong correlation between a bank's profitability and e-motivation, which is a component of E-HRM. By using more user-friendly interfaces that fully explain how to utilize the program, managers may inspire staff members. In this sense, the phrases that follow support the statement made before (Talukdar & Ganguly, 2021; Thathsara & Sutha, 2021). Remote workers are more rested and less worn out, which reduces their chance of being weary, burned out, or stressed. Additionally, the research's discoveries demonstrated a direct correlation between a bank's profitability and e-recruitment, a part of E-HRM (Muqaddim & Hosain, 2021). Websites are used to post job openings, gather resources and candidate information, and condense text using database software. Written tests are given online, and interviews take place through a video or audio conference.

This research study strongly proposes conversion from Manual HRM to Electronic Human Resource Management in the banking sector of Pakistan. E-HRM can enhance Employee engagement levels among employees particularly branch banking employees which causes enhanced performance. Imagine an environment where rapid competition coupled with innovations, increasing risk levels, strict laws and regulations, shrinking timelines, and extensive branch networks make it impossible for the HR department to maintain quality service levels without the support of E-HRM which is the utmost part of motivation and banks performance. Electronic HRM is a mix of IT and HRM where all tasks particularly, E-HRM is a crucial milestone towards Digital innovation which positively impacts on bank's performance.

5.1 Recommendations

The study offers valuable insights to banking industry practitioners by providing a theoretically compelling path through which E-HRM delivers value to financial institutions. Without a clear understanding of E-HRM functions, practitioners may incorrectly estimate the benefits of E-HRM. This study provides a useful framework for practitioners and policymakers to evaluate E-HRM functions for achieving competitive advantage. It is the differential labor that creates value for the banking industry. This research recommends eHRM as a key strategy for financial institutions to overcome the shortage of talented workforce. Therefore, this research also assists financial institutions to design an E-HRM system that supports their workflow.

5.2 Limitations and future directions of the Study

This study is limited to checking the impact of only a few dimensions of E-HRM on banking sector performance. Upcoming research can include other dimensions like E-training etc. Further, more districts, cities, and countries should be added for generalizing its outcomes at provincial, national, regional, and international levels. Future researchers can compare its result with Area, Zonal, and regional level branches. Comparative study within the banking industry can be done (i.e., government banks, microfinance banks, industrial banks, Islamic banks, and investment banks, etc). A comparative study can also be done among other industries of the financial sector like insurance, Leasing, and Modarba, etc. Comparison of the impact of E-HRM between financial and non-financial firms (i.e FMCG, Oil & Gas, Pharma industry, etc.) will add a new dimension to Literature and HRM field.

6. References

Ahmed, A., & Ogalo, H. S. (2019). From hrm to E-HRM: Contemporary developments from scholarly work. *Annals of Contemporary Developments in Management & HR (ACDMHR)'*, *1*(1), 1-6.

Al-Alwan, M., Bader, D., Al-Qatawneh, M., Alneimat, S., & Al-Hawary, S. (2022). E-HRM and employee flexibility in Islamic banks in Jordan. *International Journal of Data and Network Science*, *6*(3), 703-710.

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 telecommuni-cations companies in Jordan. *International Journal of Data and Network Science*, *6*(2), 429-438.

Bondarouk, T., Parry, E., & Furtmueller, E. (2017). Electronic HRM: four decades of research on adoption and consequences. *The International Journal of Human Resource Management*, *28*(1), 98-131.

Bondarouk, T. V., & Ruël, H. J. (2009). Electronic Human Resource Management: challenges in the digital era. *The International Journal of Human Resource Management*, *20*(3), 505-514.

Chandradasa, A., & Priyashantha, K. G. (2021). Key Determinants of E-HRM Adoption Behavior.

Chandrasekhar, J., Hibbert, B., Ruel, M., Lam, B.-K., Labinaz, M., & Glover, C. (2015). Transfemoral vs non-transfemoral access for transcatheter aortic valve implantation: a systematic review and meta-analysis. *Canadian Journal of Cardiology*, *31*(12), 1427-1438.

De Alwis, A. C., Andrlić, B., & Šostar, M. (2022). The Influence of E-HRM on Modernizing the Role of HRM Context. *Economies*, *10*(8), 1-13.

Dede, N. P. (2020). The role of E-HRM practices on digital era. In *Tools and techniques for implementing international e-trading tactics for competitive advantage* (pp. 1-20). IGI Global.

DeJoy, D. M., Schaffer, B. S., Wilson, M. G., Vandenberg, R. J., & Butts, M. M. (2004). Creating safer workplaces: assessing the determinants and role of safety climate. *Journal of safety research*, *35*(1), 81-90.

DeSanctis, G., & Poole, M. S. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization science*, *5*(2), 121-147.

Edeh, F., & Onyemauche, U. (2018). Electronic human resource management and enterprise sustainability: A study of selected oil & gas firms in Nigeria. *Elysium Journal of Engineering Research & Management*, *5*(4), 1-10.

Fındıklı, M., & Rofcanin, Y. (2016). The concept of e-HRM, its evolution and effects on organizational outcomes. In (pp. 35-50). https://doi.org/10.1201/b19570-3

Iqbal, N., Waseem, M., & Bilal, H. (2021). Developing E-HRM value creation propositions to improve performance of hospitality and Tourism Organizations. *Indian Journal of Economics and Business*, *20*(4), 2017-2031.

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.

Haque, M. A., & Nishat, S. S. (2022). The Impact of HRM Digitalization on Employee Performance in the RMG Industry of Bangladesh. *European Journal of Business and Management Research*, *7*(4), 192-198.

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), 889-903.

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*(01), 48-69.

Kaur, C. (2021). Changing pattern of E HRM in corporate world after globalization. *IOSR Journal of Business and Management*, *23*(4), 23-30.

Khashman, A. M., & Al-Ryalat, H. A. (2015). The impact of electronic human resource management (E-HRM) practices on business performance in Jordanian telecommunications sector: The employees perspective. *Journal of Management Research*, *7*(3), 115-129.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Mahfod, J., & Khalifa, N. Y. (2017). Electronic human resource management (E-HRM) system. *International Journal of Economic Research*, *14*, 563-576.

Malhotra, T., & Jain, M. S. (2017). Impact Of E-Hrm Practices On Employee Satisfaction. *International Journal of science technology and management,6*, 2394-1529.

Marler, J., & Parry, E. (2015). Human resource management, strategic involvement and e-HRM technology. *The International Journal of Human Resource Management*, *27*(19), 1-21. https://doi.org/10.1080/09585192.2015.1091980

Mearns, K., Hope, L., Ford, M. T., & Tetrick, L. E. (2010). Investment in workforce health: Exploring the implications for workforce safety climate and commitment. *Accident Analysis & Prevention*, 42(5), 1445-1454.

Milon, M., Alam, M. A., & Pias, M. H. (2022). Exploring the Key Practices of E-HRM in Place of Traditional HRM: A Study on Private Industry of Bangladesh. *Journal of Human Resource and Sustainability Studies*, 10(3), 403-417.

Muqaddim, N., & Hosain, M. S. (2021). E-HRM practices and operational efficiency: Evidence from Bangladeshi garment industry. *Asian Journal of Economics, Business and Accounting*, 21(4), 80-95.

Nurshabrina, N., & Adrianti, R. (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.

Obeidat, S. M. (2016). The link between e-HRM use and HRM effectiveness: An empirical study. *Personnel Review, 45*(6), 1281-1301.

Rains, S. A., & Bonito, J. A. (2017). Adaptive structuration theory. *The international encyclopedia of organizational communication*, 1-9.

Rastogi, A., & Srivastava, G. (2017). E-HRM: Emerging HR practices in private banks. *International Journal of Engineering and Management Research (IJEMR), 7*(3), 111-116.

Rathee, R., & Bhuntel, M. R. (2021). A study on employee perception about the use of e-HRM in IT. *SCMS Journal of Indian Management, 18*(1), 37-47.

Ruël, H., Bondarouk, T., & Looise, J. K. (2004). E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. *Management revue, 15*(3), 364-380.

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.

Sohail, A., Hussain, A., & Riaz, A. (2020). Assessment of E-HRM Practices and its functions among Banking Sector of Emerging Economies. *Journal of Social Research Development, 1*(2), 144-154.

Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human resource management review, 17*(1), 19-37.

Sylva, H., & Mol, S. (2009). E-Recruitment: A study into applicant perceptions of an online application system. *International Journal of Selection and Assessment, 17*, 311-323. https://doi.org/10.1111/j.1468-2389.2009.00473.x

Talukdar, A., & Ganguly, A. (2021). A dark side of e-HRM: mediating role of HR service delivery and HR socialization on HR effectiveness. *International Journal of Manpower, 43*(1), 116-147.

Thathsara, A., & Sutha, J. (2021). Investigating the influence of e-hrm practices on organizational performance: The mediating role of organizational agility (with special reference to financial institution). *International Journal of Engineering and Management Research (IJEMR), 11*(1), 1-8.

Van den Heuvel, S., & Bondarouk, T. (2017). The rise (and fall?) of HR analytics: A study into the future application, value, structure, and system support. *Journal of Organizational Effectiveness: People and Performance, 4*(2), 157-178.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, *27*(3), 425-478.

Voermans, M., & van Veldhoven, M. (2007). Attitude towards E-HRM: an empirical study at Philips. *Personnel Review, 36*(6), 887-902.

Waheed, A., Xiaoming, M., Waheed, S., Ahmad, N., & Tian-tian, S. (2020). E-HRM implementation, adoption and its predictors: a case of small and medium enterprises of Pakistan. *International Journal of Information Technology and Management*, *19*(2-3), 162-180.

Zhou, Y., Cheng, Y., Zou, Y., & Liu, G. (2022). e-HRM: A meta-analysis of the antecedents, consequences, and cross-national moderators. *Human resource management review*, *32*(4), 100862.