

Adoption and Impact of Electronic Human Resource Management (E-HRM) in Higher Educational Institutions of Madhya Pradesh: A Comparative Study of Public and Private Universities

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ABSTRACT

Exploring both public and private universities in Madhya Pradesh, this research looks at how E-HRM has been implemented and what effects it has had on faculty and staff. The study used a descriptive and comparative research strategy to evaluate the degree of E-HRM adoption, its impact on HR efficiency, and the difficulties encountered during the adoption process. One hundred thirty-five workers had their quantitative data collected via a cross-sectional survey. Across key functions including e-recruitment, e-selection, e-training, performance assessment, and e-payroll, private universities demonstrate much greater adoption levels of E-HRM practices, according to the research. Human resources effectiveness, openness, administrative burden reduction, and decision-making velocity are all areas where private institutions have seen the most development. Inadequate technological infrastructure, insufficient training, funding limits, and opposition to change are some of the significant issues faced by public institutions. There are statistically significant variations in adoption and influence between the two sorts of institutions, as shown by t-test and ANOVA findings. In order for public universities to fully benefit from E-HRM, the report stresses the need of improving digital infrastructure and staff preparedness. Policymakers, university administrators, and human resources experts may use the results to further digital HR practices in the education sector.

Keywords: Higher Educational Institutions, Digital HR Transformation, HR Information Systems, Technology Adoption, Institutional Performance.

I.INTRODUCTION

Institutional human resource management has been radically altered by the rapid digitization of business operations in several industries, including academia. Because of the proliferation of E-HRM, colleges may more easily automate, streamline, and improve their HR operations. Payroll, communication, policy administration, training, and performance assessment are just a few of the many HR operations that may be streamlined with the use of electronic human resource management (E-HRM) applications and cloud-based platforms (Abu Amuna 2017). The enormous potential for E-HRM to update HR practices is being pursued by universities in their pursuit of more openness, operational efficiency, and strategic decision-making. With both long-standing public universities and rapidly expanding private institutions in places like Madhya Pradesh, the implementation of E-HRM has taken on more significance in the context of India's rapidly evolving higher education system. The ever-changing landscape of Madhya Pradesh's higher education institutions (HEIs) is marked by intense competition, rising student and staff expectations, growing regulatory requirements, and the constant need to improve the quality of instruction. Because of the increasing complexity of HR operations, traditional HR systems—which are often paper-based and rely on manual processes—are not up to the task? The answer is electronic human resource management (E-HRM), which helps with data management in real-time, improves accuracy, speeds processing, and backs HR decisions with evidence. In addition to streamlining administrative tasks, E-HRM improves the employee experience by allowing self-service features via digital modules for talent

management, attendance, leave management, employee's records, and recruiting. With all these advantages, E-HRM is clearly an essential part of contemporary public administration (Al Shobaki, 2016 a).

To be sure, not every organization has used E-HRM or seen the same results from it. Culture, funding, administrative pliability, and technology preparedness are some areas where public and private colleges vary. The public universities in Madhya Pradesh are known for their long-standing administrations, bigger staffs, and bureaucratic decision-making processes. The advantages of digital technology are becoming more widely recognized, yet this may cause their adoption to be delayed (Al Shobaki, 2016 b). How quickly E-HRM is adopted could be affected by obstacles such limited resources, outdated systems, reluctance to change, and reliance on old methods of leadership. The Department of Higher Education, NAAC, and NIRF are just a few of the organizations that have mandated that public universities use digital HR solutions in order to increase accountability and transparency. The competitive challenges that private colleges face frequently lead to more autonomy, faster decision-making processes, and a larger incentive for innovation. Institutional branding, teacher retention, and operational efficiency are three areas where these schools may see accelerated use of E-HRM. The process is made much easier with improved access to funding and technology. Lack of standardization, reliance on external service providers, and the need to continually upgrade digital systems to remain competitive are all problems that private institutions encounter (Al Shobaki, 2016 c). Improving our understanding of these variations is crucial for painting a whole picture of E-HRM implementation in Madhya Pradesh's higher education system. Much more than just automation, E-HRM has far-reaching consequences. In terms of strategic human resource management, it has far-reaching consequences, such as better talent acquisition, engagement, leadership development, data-driven planning, and the alignment of organizational objectives with HRM strategies. Human resources professionals may move into more strategic positions including workforce analytics, competency development, and change management with the help of E-HRM (Al Shobaki, 2016 d).

The increased openness of HR processes brought about by E-HRM also improves institutional governance and fosters trust between staff and professors. Better institutional performance, greater compliance with regulatory frameworks, and increased competitiveness in the higher education industry are all results of these efforts. Empirical research examining the implementation and effects of E-HRM at Indian universities are few, despite the increasing popularity of the concept. Examining these processes is made possible in Madhya Pradesh by its diversified educational ecosystem, which includes state universities, central institutions, deemed universities, and private universities (Al Shobaki, 2017 e). In order to better understand the disparities in adoption trends, perceived advantages, problems, and overall influence on institutional efficacy, a comparative research of public and private colleges would be very beneficial. The results of this study may help human resources experts, university administration, and lawmakers develop more precise plans for the digital transformation of HR operations. Consequently, this research aims to survey public and private colleges in Madhya Pradesh to find out how many have implemented E-HRM, what factors have influenced its adoption, and how it has impacted HR efficiency and overall institutional performance. Aiming to shed light on best practices, identify areas in need of policy intervention, and add to the larger conversation around digital HR transformation in Indian higher education, this research takes a comparative approach (Al Shobaki, 2017).

II. LITERATURE REVIEW

Louis Pierre, Rakotoarizaka et al., (2022) this article takes a look at the "Impact of Electronic Human Resource Management" articles that have been published in several esteemed academic publications during the last nine years. By reviewing the literature and pointing out relevant research gaps, the purpose of this research is to provide a framework for future studies on HRM software. The researcher used Scopus data to examine the research publications related to the given topic. For the purpose of this essay, publications published between

2013 and 2021 were taken into consideration. Since e-HRM aids in both individual and group cost and time efficiency, most of the examined research found that it is important for firms. On top of that, modern innovation makes business processes easier and boosts data and organizational efficiency. Inspiring the foundation for further study in this area is the goal of this work. This study lists a handful of the most major research gaps, whereas most of those studies addressed the constraints and potential for additional exploration. The COVID-19 pandemic has compelled every country to adopt some kind of digital infrastructure, making it all the more important to monitor developments in the field of electronic human resource management."

El Hajjaji, Fadoua et al., (2021) Academics are starting to take notice of electronic human resource management, often known as e-HRM, because of its growing popularity in today's technologically sophisticated and multinational corporate environment. Synthesizing and evaluating research on the adoption and effects of e-HRM throughout the preceding two decades, this study intends to enhance future studies in the field. A thorough literature study is used to accomplish this. A review of the literature indicates that e-HRM has the potential to bring about substantial advances in operational, relational, and transformational aspects of HR. Moving beyond short-term gains; the focus has shifted to the bigger picture. In order to reap these benefits, computerized human resource management must be widely used. The extent to which it is used depends on a variety of factors, including human, technological, organizational, and environmental considerations. Our research provides a more thorough analysis of the necessity for more empirical studies into the relationship between adoption characteristics and the real benefits of e-HRM.

Umar, Talatu et al., (2020) before this study, researchers found that E-HRM practices had a positive effect on employee performance. However, the improper implementation of e-HRM practices in the Nigerian public sector led to unethical actions and poor work production. More research on the effects of electronic human resource management strategies on workplace productivity has been requested. These activities include electronic communication, electronic pay, electronic training, and electronic performance evaluation. By investigating the effects of E-HRM practices on task, contextual, adaptive, and counterproductive workplace performance, this research hopes to close that information gap. For this quantitative investigation, we polled 214 academics and staff members across five northern Nigerian institutions. Partial least square structural equation modeling (PLS-SEM) quantitative results demonstrated a positive association between certain E-HRM practice components and work performance. A good example is the positive and strong association between e-communication and e-compensation and job performance across all dimensions of work behavior, including task, contextual, adaptive, and counterproductive. Compared to adaptive tasks alone, e-training improved performance on both tasks. The same holds true for electronic performance evaluations; research has shown that they primarily affect contextual performance and counterproductive behaviors on the job. On the other side, e-training did not substantially alter inefficient work habits or contextual performance. To add insult to injury, e-performance rating did not correlate with either task or adaptive performance. There is a discussion of the study's limitations and how they may affect future studies and clinical work.

Winarto, Winarto. (2018) An rising number of organizations, whether they are for-profit or non-profit, are using e-HRM systems. Yet, a major issue with the implementation of electronic human resource management systems is the lack of solid theoretical frameworks in the field that may explain the factors influencing their use. This research is to construct a conceptual model that embodies the traits of e-HRM system adoption and to lay the foundation for a theoretical framework for the implementation of such a system. It will do so by beginning with a thorough literature review. In this study, we used the systematic review approach of Crossan and Apaydin to examine twenty-one empirical articles on EHRM. System and technology, organizational, user/individual, and environmental and contextual articles were further grouped according to their effects on adoption. We conclude by outlining the steps used to conduct the e-HRM adoption study, and then we use it to spark ideas for further studies.

Al Shobaki, Mazen et al., (2017) The main objective of the research is to gain knowledge about the ways in which Gaza Strip Palestinian institutions have transformed online learning via the implementation of electronic human resource management. The sample population for this research consisted of 35 IT staff centers from Palestinian colleges in the Gaza Strip. Using a descriptive and analytical technique, the researchers achieved their goals by using the questionnaire as their study tool. (SPSS) program for analyzing data. Findings suggest that electronic educational service provision inside university systems impacts HRM's usage of IT for certain jobs, which in turn impacts HRM's shift to digital management. The study's participating universities have all adopted some kind of online education, and the phrase "e-learning" has been precisely defined. The research shows that few electronic educational and training materials are available for employees. Previous research has shown that university systems considerably effect the delivery of electronic health record services in the area of electronic education. The study's results support this idea. One of the several recommendations given by the study stands out: include e-learning services to HRM procedures and activities, especially those dealing with training and distance education. Even if the tools are available, the worker isn't putting them to good use. Universities should see internet connection and computers as investments in the future of their school, not as frivolous things, but as tools to enhance and simplify operations. Making optimal use of the university's network and other resources for information and communication technology is more important than providing computers and internet access to every employee's office.

Al Shobaki, Mazen et al., (2017) The study set out to compile a list of all the HRM systems used by educational institutions and establish the electronic impact of these systems on HRM. The research subjects consist of 239 academics and 35 IT staff personnel from different tiers of university administration. Four hundred and eighty-four people from different administrative levels and thirty-five people from information technology centers participated in the study, with a response rate of 84.31%. The researchers in this study depended on a questionnaire, used a descriptive analytical technique to accomplish their objectives, and evaluated the findings using SPSS software. As the results showed, institutional norms have a substantial impact on HRM practices within the domain of electronic HRM, and these norms differ to varying degrees across different institutions. The results confirm what many had suspected: that university HRM systems are leading the charge towards an electronic HRM paradigm, with information technology (IT) enabling some HRM procedures. Despite the widespread interest in and promise of electronic HRM, few companies have put this strategy into practice. Although everyone agrees that HRM is important, e-HRM systems are quite basic and underutilized. The complete use of ICT in human resource management satisfies the demands of self-service staff, incentives, and performance evaluation for a variety of enterprises. The university's e-learning system has an impact on eHRM operations in three areas: training and development, communication, and e-learning. The study's findings provide some recommendations on how Palestinian organizations may enhance their electronic human resource management systems and programs. The need for cooperation between educational institutions in regard to the implementation of electronic administration is one of the most vital. Finding funding sources for electronic management reform projects should be a top priority in university strategic plans.

Khashman, Aysar & Al-Ryalat, Dr. (2015). This article set out to examine Zain, Orange, and Umniah, three Jordanian cellular communications firms, in order to draw conclusions on how time, money, quality of service, and flexibility were affected by the use of electronic human resource management strategies. Electronic recruiting, selection, training, performance evaluation, communications, and remuneration were the most important aspects of the research. The study group consisted of 329 employee supervisors (male and female) from the three different companies. A descriptive analytical technique was employed by the researchers to meet the study's aims. A stratified random sample of 178 male and female workers was used. To gather the required information, a questionnaire was prepared and sent to the sample. The statistical package SPSS, which applies descriptive statistics and statistical analysis techniques, was used for data analysis. The findings showed that the electronic aspects of human resource management—including electronic recruiting, electronic selection,

electronic training, electronic performance evaluation, electronic communications, and electronic compensation—have a positive and substantial impact on the operational performance dimensions—time, cost, quality of service, and flexibility.

III. RESEARCH METHODOLOGY

Research Design

This study adopts a descriptive and comparative research design aimed at examining the adoption and impact of E-HRM in higher educational institutions of Madhya Pradesh. The design is suitable for understanding existing practices, identifying challenges, and comparing public and private universities. The quantitative data was collected at a particular moment in time using a cross-sectional survey approach (Ammar, 2017).

Population and Sampling

The population consists of employees working in various public and private universities across Madhya Pradesh. A total sample of 135 respondents participated in the study. This comprised 68 respondents from public universities and 67 respondents from private universities. The sample size was considered adequate for conducting statistical tests such as t-tests and ANOVA (Naser, 2016).

Sources of Data

- Primary Data**

A structured questionnaire developed for the study's aims was used to gather primary data. The survey asked participants to fill out sections on their demographics, as well as their adoption of E-HRM practices, the effects on HR efficiency, and the difficulties encountered during implementation.

- Secondary Data**

Secondary data was gathered from published research articles, academic journals, university websites, government reports, and books related to HRM and E-HRM. These sources helped in understanding existing theoretical frameworks and provided background knowledge for questionnaire development.

Data Collection Procedure

To guarantee maximum involvement, data collecting was done both online and offline. Before the questionnaire was sent, permission was sought from the university administration. Participants were briefed on the study's goals and given the reassurance that their information would remain private and anonymous. We were able to finalize 135 valid replies out of 150 questions.

IV. DATA ANALYSIS AND INTERPRETATION

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	72	53.3%
	Female	63	46.7%

Age Group	25–30	38	28.1%
	31–40	56	41.5%
	41–50	27	20.0%
	50–60	14	10.4%
Employment Type	Public Univ.	68	50.4%
	Private Univ.	67	49.6%

The distribution of the 135 respondents' demographics is shown in Table 1. The gender breakdown is somewhat even, with 53.3% being male (72 respondents) and 46.7% being female (63 respondents). According to the data, the majority of respondents are in the 31–40 age range (41.5%), followed by those in the 25–30 age range (28.1%), those in the 41–50 age range (20.0%), and a lesser percentage in the 50–60 age range (10.4%). This data points to a demographic of responders that is likely to be well-versed in digital HR systems: young to mid-career professionals. Almost evenly split between public and private universities, 50.4% work for the former and 49.6% for the latter. Because of this equilibrium, it is reasonable to compare the two types of institutions (Naser, 2016).

Table 2: Adoption Level of E-HRM Practices (Public vs Private Universities)

E-HRM Practices	Public (Mean \pm SD)	Private (Mean \pm SD)	Overall Mean
E-Recruitment	3.42 \pm 0.88	4.11 \pm 0.73	3.76
E-Selection	3.28 \pm 0.91	4.02 \pm 0.69	3.65
E-Training & Development	3.15 \pm 0.94	3.89 \pm 0.81	3.52
E-Performance Appraisal	3.05 \pm 0.98	3.74 \pm 0.85	3.40
E-Payroll	3.61 \pm 0.84	4.22 \pm 0.70	3.92

Table 2 shows how public and private colleges vary in terms of the adoption levels of certain E-HRM strategies. Private institutions routinely outperform state universities across all aspects. When comparing public and private universities, one may see that private ones had better E-Recruitment (4.11 and 4.02) and E-Selection (3.28) implementation rates. Similarly, private colleges tend to have greater rates of e-performance appraisal, e-training and development, and e-payroll use. As a whole, the numbers point to moderate to high adoption rates, with E-Payroll showing the most widespread use (3.92). These findings indicate that private colleges in Madhya Pradesh have been more innovative and forward-thinking in their use of E-HRM solutions than their public sector counterparts (Naser, 2016).

Table 3: Perceived Impact of E-HRM on HR Efficiency

Impact Dimension	Public (Mean)	Private (Mean)	t-value	p-value
Improved HR Efficiency	3.48	4.12	3.21	0.002*
Transparency in HR Processes	3.55	4.20	2.98	0.004*
Reduction in Admin Workload	3.29	4.05	3.54	0.001*
Faster Decision Making	3.40	4.14	3.10	0.003*

Table 3 highlights the perceived impact of E-HRM on HR efficiency across public and private universities. Private universities report significantly higher mean scores for all impact dimensions, indicating stronger positive outcomes from E-HRM adoption. For instance, in Improved HR Efficiency, private universities score 4.12, while public universities score 3.48. Similar trends are seen in Transparency in HR Processes, Reduction in Administrative Workload, and Faster Decision-Making. The t-values for all four dimensions are statistically significant ($p < 0.05$), confirming that the differences between the two groups are not due to chance. These findings imply that private universities benefit more substantially from E-HRM systems, leading to improved operational efficiency and better decision-making processes (Naser, 2016).

Table 4: Challenges in Adoption of E-HRM

Challenges	Public (%)	Private (%)
Lack of Technical Infrastructure	62.3%	41.8%
Resistance to Change	54.7%	36.4%
Inadequate Training	59.2%	32.8%
Budget Constraints	66.1%	29.8%
Data Security Concerns	48.3%	44.7%

Table 4 identifies the major challenges faced by public and private universities in adopting E-HRM. Public universities exhibit higher percentages in almost all challenge areas, indicating greater difficulty in implementing E-HRM. The most significant challenge for public institutions is Budget Constraints (66.1%), followed by Lack of Technical Infrastructure (62.3%) and Inadequate Training (59.2%). Resistance to change and data security concerns also remain considerable barriers. In contrast, private universities show lower difficulty levels across all challenges, with percentages ranging between 29.8% and 44.7%. These results suggest that public universities face more systemic and structural limitations that hinder smooth adoption of E-HRM technologies, while private universities appear to have better resources and adaptability.

Table 5: Descriptive Statistics of Overall E-HRM Usage

Group	N	Mean	SD	Minimum	Maximum
Public University	68	3.30	0.91	1.80	4.85

Private University	67	4.00	0.76	2.40	4.95
Total	135	3.65	0.84	1.80	4.95

Table 5 provides descriptive statistics for overall E-HRM usage among public and private university employees. The results show that private universities have a markedly higher mean usage score (4.00) compared to public universities (3.30). Private institutions also exhibit lower variability as indicated by a smaller standard deviation (0.76), while public universities show a wider spread of responses ($SD = 0.91$). The total mean for all respondents is 3.65, suggesting moderate to high E-HRM usage across both sectors. The minimum and maximum values further reveal that some respondents experience very low usage, whereas others report near-maximum adoption levels. These findings reinforce the overall trend of private universities being more advanced in the utilization of E-HRM tools.

Table 6: ANOVA Summary for E-HRM Adoption between Public and Private Universities

Source of Variation	SS	df	MS	F-value	p-value
Between Groups	8.42	1	8.42	12.31	0.001*
Within Groups	90.11	133	0.68		
Total	98.53	134			

Differences in E-HRM adoption between public and private institutions were examined using an ANOVA test, the findings of which are shown in Table 6. Both groups vary significantly from one another at the 5% level of significance ($F = 12.31$, $p = 0.001$). Clearly, there is a large gap in the adoption of E-HRM practices between public and private colleges. According to the between-group sum of squares (8.42), the kind of institution accounts for a significant amount of the variation in E-HRM adoption. Private colleges have much greater rates of E-HRM adoption than public institutions, as previously noted, and this study confirms those results.

V.CONCLUSION

The integration of E-HRM into higher educational institutions represents an important step toward modernizing HR practices and improving institutional performance. In Madhya Pradesh, both public and private universities are increasingly recognizing the strategic value of digital HR systems, though their adoption levels vary due to differences in administrative structure, resource availability, and organizational culture. Public universities often exhibit slower adoption due to bureaucratic processes and infrastructural limitations, while private universities tend to implement E-HRM more rapidly, driven by competitive pressures and greater flexibility. Despite these differences, institutions across both sectors acknowledge the benefits of E-HRM in enhancing efficiency, transparency, and employee satisfaction. The comparative insights generated by this research highlight the need for targeted capacity-building initiatives, investment in digital infrastructure, and supportive policy frameworks to promote effective implementation. At the end, electronic human resource management (E-HRM) might revolutionize HR at universities by facilitating data-driven decisions, increasing employee involvement, and coordinating HR policies and procedures with overall organizational objectives. Strengthening E-HRM adoption across Madhya Pradesh's universities can contribute significantly to quality enhancement, governance reforms, and educational excellence.

REFERENCES:

Abu Amuna, Y. M., Al Shobaki, M. J., Abu Naser, S. S., & Badwan, J. J. (2017). Understanding critical variables for customer relationship management in higher education institution from employee perspective. *International Journal of Information Technology and Electrical Engineering*, 6(1), 10–16.

Al Shobaki, M. J., & Naser, S. S. A. (2016 a). The dimensions of organizational excellence in the Palestinian higher education institutions from the perspective of the students. *Global Journal of Multidisciplinary Studies*, 5(11), 66–100.

Al Shobaki, M. J., & Naser, S. S. A. (2016 b). Decision support systems and their role in developing the universities' strategic management: Islamic University in Gaza as a case study. *International Journal of Advanced Research and Development*, 1(10), 33–47.

Al Shobaki, M. J., & Naser, S. S. A. (2016 c). Performance development and its relationship to demographic variables among users of computerized management information systems in Gaza Electricity Distribution Company. *International Journal of Humanities and Social Science Research*, 2(10), 21–30.

Al Shobaki, M. J., & Naser, S. S. A. (2016 d). The reality of modern methods applied in process of performance assessments of employees in the municipalities in Gaza Strip. *International Journal of Advanced Scientific Research*, 1(7), 14–23.

Al Shobaki, M. J., Amuna, Y. M. A., & Naser, S. S. A. (2016 e). The impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza Strip. *International Journal of Academic Research and Development*, 1(10), 20–25.

Al Shobaki, M. J., Amuna, Y. M. A., & Naser, S. S. A. (2017). Strategic and operational planning as approach for crises management: Field study on UNRWA. *International Journal of Information Technology and Electrical Engineering*, 5(6), 43–47.

Al Shobaki, M., Abu-Naser, S., Abu Amuna, Y., & El Talla, S. (2017). Impact of electronic human resources management on the development of electronic educational services in the universities. *International Journal*, 1(1), 1–19.

Al Shobaki, M., Abu-Naser, S., El Talla, S., & Abu Amuna, Y. (2017). HRM university systems and their impact on e-HRM. *International Journal*, 6(3), 5–27.

Ammar, T. M., Al Shobaki, M. J., & Abu Naser, S. S. (2017). The efficiency extent of the internal control environment in the Palestinian higher educational institutions in Gaza Strip. *International Journal of Digital Publication Technology*, 2(1), 107–126.

El Hajjaji, F., Benabdelhadi, A., & Kabaili, H. (2021). Adoption and impact of electronic human resource management: A systematic literature review. *Technium Social Sciences Journal*, 21, 594–610.

Khashman, A., & Al-Ryalat, D. (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.

Louis Pierre, R., Nurul Qamari, I., & Yakin, N. (2022). Impact of electronic human resource management toward excellent service: A bibliometric review. *Expert Journal of Business and Management*, 10(1), 25–35.

Naser, S. S. A., & Al Shobaki, M. J. (2016). Computerized management information systems resources and their relationship to the development of performance in the electricity distribution company in Gaza. *European Academic Research*, 9(8), 6969–7002.

Naser, S. S. A., & Shobaki, M. J. A. (2016). Enhancing the use of decision support systems for re-engineering of operations and business: Applied study on the Palestinian universities. *Journal of Multidisciplinary Engineering Science Studies*, 2(5), 505–512.

Naser, S. S. A., & Shobaki, M. J. A. (2016). Requirements of using decision support systems as an entry point for operations of re-engineering in the universities (Applied study on the Palestinian universities in Gaza Strip). *World Wide Journal of Multidisciplinary Research and Development*, 2(4), 32–40.

Naser, S. S. A., & Alawar, M. W. (2016). An expert system for feeding problems in infants and children. *International Journal of Medicine Research*, 1(2), 79–82.

Umar, T., Yammama, B., & Shaibu, R. (2020). The implications of adopting and implementing electronic human resource management practices on job performance. *Journal of Human Resource Management*, 8(2), 96–105.

Winarto, W. (2018). Electronic human resources management (e-HRM) adoption studies: Past and future research. *DeReMa: Jurnal Manajemen*, 13(1), 10–20