

The Moderating Role of HR Service Quality Between e-HRM and Employee Performance

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ABSTRACT

The objective of this research is to investigate the relationship between e-HRM implementation and employee performance in organizations that use e-HRM, both directly and indirectly mediated by HR service Quality. Using variant-based structural equation (SEM) modeling techniques or partial least squares regression, this research examined the direct relationship between e-HRM and performance, as well as relationships moderated by HR service quality (PLS). Based on the findings, e-HRM has a positive and significant impact on employee performance. Our results additionally highlight the significance of designing and implementing e-HRM so that managers can support the organization's workflow and employees can perform more efficient HR and non-HR tasks. Current research has revealed an emerging relationship between E-HRM, but it has only examined the potential impact of E-HRM. This research also contributes to the e-HRM literature by identifying how e-HRM can improve performance by perceiving the quality of HR services.

ABSTRAK

Penelitian ini bertujuan untuk melihat hubungan dari implementasi e-HRM terhadap kinerja karyawan baik secara langsung maupun tidak langsung yang di mediasi oleh HR service Quality pada perusahaan yang menerapkan e-HRM. Penelitian ini menggunakan Teknik pemodelan persamaan structural (SEM) berbasis varian atau partial least square (PLS) untuk menguji hubungan langsung e-HRM dan kinerja serta hubungan yang di moderasi oleh HR service quality. Hasil penelitian menunjukkan pengaruh yang positif dan signifikan dari e-HRM terhadap kinerja karyawan. Hasil kami juga menyoroti pentingnya merancang dan mengimplementasikan e-HRM sehingga para manajer mendukung alur kerja organisasi dan memungkinkan para pekerja untuk melakukan kegiatan SDM dan non-SDM yang lebih efisien. Penelitian yang ada telah menunjukkan hubungan yang muncul dari E-HRM, namun hanya fokus pada dampak potensial dari e-HRM. Penelitian ini berkontribusi pada literatur e-HRM dengan mengidentifikasi bagaimana e-HRM dapat meningkatkan kinerja dengan persepsi kualitas layanan SDM.



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INTRODUCTION

Recently, technology has become an indispensable part of our everyday lives. Even as In the era of globalization, the world has become increasingly intricate, ever-changing, and unpredictable. Technology has emerged as a crucial element in expediting the expansion of organizations in our day-to-day workplace setting. (Naveed, Mansoor, & M.C., 2019). (Kwan,

Hermawan, & Hafizhi, 2019). In order to differentiate themselves from their competitors, organizations must become more competitive and innovative (Esther, Huub, Hefin, Linda, & Michael, 2019). Ability to adjust to rapid global competition and technological developments is one of the most crucial capabilities for survival in our century. (Florkowski, 2018). the same is the case with the HR department (Ceric, 2017), which transforms themselves to be managed in a technology-based system. Where this new system has enabled HR professionals to provide better services, reduce the burden on administration, and make data-driven knowledge accessible to stakeholders (Jeannette, Jan, & Christian, 2019). For example, the number of recruitment documents, reducing the use of manual paper that consumes a lot of time and place (Alfes, Truss, Soane, Rees, & Gatenby, 2013). Of course, The use of technology to transform HRM activities from manual to automatic behavior is intended to solve a variety of problems. Marler and Parry (2016) Technology integration Activity relating to HRM, often known as electronic HRM (E-HRM). Using e-HRM within firms has the potential to advance sustainability by minimizing detrimental environmental, social, and financial effects (Florkowski, 2018).

In addition to qualitative interviews and case studies, HRM research has long depended on quantitative survey data (de Leeuw, Minguella-Rata, Sabet, Boter, & Sigurdardottir, 2016). e-HRM has recently become a new approach for organizations. The use of IT is becoming more crucial for performing human resource management tasks (Arian, Hanna, Janne, & Harri, 2019).

However, research on e-HRM revealed contradicting results regarding whether achieved e-HRM had an important effect (Fersht. P, 2016). According to recent research, businesses that use e-HRM improve HR by reducing costs and boosting productivity (Naveed et al., 2019), as well as providing flexible services and increasing employee participation (Sharna et al., 2019). Furthermore, (Bondarouk, 2011) believes that e-HRM enables HR professionals to provide value to organizations while also improving their companies' positions. Especially electronic human resource management is seen as a tool to help managers make policy options (Chierici, Mazzucchelli, Garcia-Perez, & Vrontis, 2019).

This article expands on how e-HRM functions, concentrating on how it directly affects employee performance (M., 2016), as well as the indirect effects on performance mediated by HRM service quality (Ross, Ressler, & Sander, 2017). If e-HRM simplifies the process for employees to perform HR-related tasks, they are more likely to perceive it as an effective HR Service Quality (Heikkilä, Rentto, & Feng, 2017) and more time for other activities. Little research has been done on this connection. Furthermore, e-HRM research (Marler & Parry, 2016) has been widely conducted in the context of advanced European and US economies, with little attention paid to differences in national contexts (Kathleen, Sandra, & E., 2017). This study focuses on the South Sulawesi government, which enables applying cutting-edge technology-based management (BCC News, 2019). The agency also employs individual e-HRM practices (Ahmad & Allen, 2015) with systems that have significantly improved e-HRM enables researchers to evaluate the relationship between employee performance and human resource quality as top-level management places a priority on this (Ramdani, Mellahi, Guermat, & Kechad, 2014).

Essentially, e-HRM study must be further developed by incorporating a list of new phenomena with how e-HRM is implemented and used in big businesses, particularly globally (Bondarouk, Rul, & Looise, 2011), the research has been expanded and developed (Huub, Rodrigo, & C., 2011). E-HRM, on the other hand, can be defined as the administrative support

of HR functions in organizations through the use of internet technology (Gardner, Lepak, & Bartol, 2003). This definition, however, only considers the technology components of E-HRM. This study also discusses adjustments to the structure and role of the HR function that take place in tandem with the use of E-HRM technologies. A transversal framework that considers several elements, including new technologies, organizational and work design, organizational context, and HRM strategies and policies, is favored for studying E-HRM. 2004; Hempel) and (Bondarouk et al., 2011), where e-HRM is assumed for employee acceptance and assimilation, which is a critical factor when implementing E-HRM. Capability to adapt to changes in HR functions and current issues. Employees' attitudes toward E-HRM during E-HRM implementation are also considered important (Kathleen et al., 2017). On concurrent employees' views on the use of E-HRM, there is, yet little empirical information. Also, the adoption of E-HRM and adjustments to the functions that HR plays inside the business are connected and shouldn't be handled separately (Gardner et al., 2003).

Workforce management is a type of e-HRM system that is widely used (Obeidat, B. Y, 2016). "Labor management tools that assist in locating the right people, with the right skills, in the right place, at the right time, and at the right cost" (Sierra-Cedar, Inc, 2015). Time and attendance, scheduling, budgeting, and forecasting, absence and leave management, and analytics are common features of these solutions (Sierra-Cedar, Inc, 2015). These workforce management applications, as one of the specific types of e-HRM systems, can integrate all e-HRM goals, including those from an operational, relational, and transformation perspective (Marler & Parry, 2016). Many of these processes can be made more efficient through workforce management from an operational standpoint. From a relational standpoint, the HR Department may be able to provide better services to organizations by utilizing labor management techniques such as budgeting and forecasting for human capital needs (2014) Ramdani et al. The opportunity to use more sophisticated data analysis to better understand and utilize personnel may best illustrate the transformative worldview (Lal, 2015).

(Esther et al., 2019) indicate that HR managers need access to existing artificial intelligence productivity tools in order to realize the performance advantages from the transformational adoption of e-HRM in enterprises. which provide quality of service in the HR field in improving the organization in this case, namely employee performance. Because improving labor efficiency can increase a company's competitiveness (Aryee, Walumbwa, Seidu, & Otake, 2016), Performance is certainly an outcome that is even more crucial for many firms than the level of service HR provides, and companies frequently adopt e-HRM to allow HR and other employees to focus on greater intensity on activities that bring value (Nivlouei, 2014).

Prior research has demonstrated that e-HRM systems can enhance the quality of operations and human resources, which can affect strategic outcomes (Bondarouk et al., 2011). As a result, when e-HRM is implemented, the causation chain for performance places a premium on the quality of HR services. As stated by (Uen, J. F., Ahlstrom, D., Chen, S. Y., & Tseng, 2012), the quality of HR services should be assessed using an input, process, and output quality framework. The HR quality of service output describes the outcomes of service quality and demonstrates what the organization achieves by providing quality service to employees. When HR services meet the needs of employees, their productivity rises (Uen, J., Wang, B. J., & Chen, 2005). The effective HR service process links the determinants of perceived HR service quality with its effects, such as collaboration and interaction (Uen, J. F., Ahlstrom, D., Chen, S. Y., & Tseng, 2012). Integrating HR Services indicates the service's organization, procedures,

tools, and technology. According to the literature, effective HRM practices are essential for raising the quality of HR services (Gardner et al., 2003 : Marler & Parry, 2016).

In terms of the effectiveness and efficiency of human resource services, standards have been set (Marler & Fisher, 2013). The effectiveness of HR services has been shown to play a significant role in enhancing employee value. Enhancing the caliber of HR services offered to employees is one of the reasons firms utilize e-HRM (Kathleen et al., 2017). In order to boost their long-term competitive edge, businesses have realized how important it is to improve the quality of their HR services (Bondarouk et al., 2011).

Even though managers' perceptions of improving employee performance are influenced by their employees' opinions about the effectiveness of HR services (Aryee et al., 2016). The quality of HR services is defined as the hope that using e-HRM will increase the standard for HRM services (Bondarouk, 2011). Businesses might be able to perform better if HR provides employees with higher-quality services (Marler & Parry, 2016).

RESEARCH METHOD

Purposive sampling, which was used for the research, was based on (Sarstedt, Henseler, & Ringle, 2011). The South Sulawesi provincial government's employees received 200 online surveys in total. In order to determine indirect affects, this study used structural equation modeling (SEM) approaches (Albright, Jeremy J.; Park, 2009) to experimentally examine the association between e-HRM and employee performance (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). Using the PLS software (Sarstedt et al., 2011), this study calculates Alpha Cronbach (CA), total correlation items, and confirmatory factor analysis to examine the reliability, convergent validity, and discriminant of each conceptual framework In this study, we also used a five-point Likert scale and asked participants to give aspects of how they used e-HRM. The range is (1) not utilized, (2) infrequently used, (3) sparingly used, and (5) commonly used. This study focuses on nine e-HRM topics based on prior research (Bissola & Imperatori, 2013). Examples of management knowledge include performance management, performance appraisal, benefits management, recruitment, selection, training and development, complaint management, talent management, and management knowledge.

Also, employee performance and views of the quality of HR services are employed in this study as endogenous factors. Six questions based on (Naveed et al., 2019) in HR service quality were used to test the perception of HR service quality: (1) The perceived quality of HR services; (2) The e-HRM system ensures error-free administration; (3) The Services are provided in a proper and appropriate manner; (4) E-HRM improves the quality of HR services; (5) E-HRM can quickly complete the manager's tasks; and (6) HR services have attained standardization.

Finally, we use the manager's opinion of employee performance to examine the relationship between e-HRM and employee performance. Additionally, knowledge structures (Naveed et al., 2019) have utilized performance perception as a valid and trustworthy measure (Allen, 2015), which is based on 5 items selected from the literature which include (1) employee absence; (2) employee presentation; (3) quality and quantity of work; (4) task productivity; and (5) technology efficiency.

RESULTS AND DISCUSSION

As a multivariate statistical technique, PLS (partial least squares) - SEM was used in this research. Because the technique enables us to examine multiple variables. PLS is most

appropriate when multivariate normality is assumed, interval scale data is not optimal, and the sample size is small. Furthermore, PLS has no problems identifying and analyzing single item constructions, reflective measurements, and formative models, so it can be used in a variety of situations (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). Because of the small sample size and the complex model, PLS was used (Sarstedt et al., 2011). We did the analysis in accordance with the guidelines provided by (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). The findings are presented in two parts. First, the validity and reliability of the concept framework measurement, internal consistency criteria, reliability indicators, convergent validity, and discriminant validity that have been evaluated for the construction model must be ensured. Except for three, all composite reliability values are greater than 0.7. In exploratory research, the reliability of composite values of 0.60-0.70 is deemed acceptable (Sarstedt et al., 2016).

Convergent and discriminant Validity Testing

The validity of convergences and the validity of discriminants are calculated to assess the validity of constructs. Loading factors are used to determine the validity of convergence. An instrument is said to meet convergent validity testing if it has a loading factor above 0. 6 (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016).

Table 1. Convergent and discriminant validity test results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
EP1 <- EP	0.7187	0.715	0.0396	0.0396	18.139
EP2 <- EP	0.8322	0.834	0.0198	0.0198	42.0489
EP3 <- EP	0.751	0.7498	0.0344	0.0344	21.81
EP4 <- EP	0.8466	0.8475	0.0192	0.0192	43.983
EP5 <- EP	0.7747	0.7717	0.0303	0.0303	25.5825
eHRM1 <- eHRM	0.7488	0.7494	0.0399	0.0399	18.7861
eHRM2 <- eHRM	0.6611	0.659	0.0492	0.0492	13.4341
eHRM3 <- eHRM	0.856	0.857	0.0174	0.0174	49.3161
eHRM4 <- eHRM	0.704	0.7018	0.0429	0.0429	16.4075
eHRM5 <- eHRM	0.699	0.6978	0.0393	0.0393	17.7967
eHRM6 <- eHRM	0.7548	0.7537	0.0346	0.0346	21.8387
eHRM7 <- eHRM	0.7128	0.7106	0.0405	0.0405	17.6067
eHRM8 <- eHRM	0.6807	0.6789	0.0469	0.0469	14.5202
eHRM9 <- eHRM	0.7675	0.7692	0.0328	0.0328	23.425

Source: Primary Data processed (2022)

The table shows that every item that compares the e-HRM factor to employee performance is larger than 0. As a result, the item is approved for use in future measurements of the variable. Cross loading is another method used to determine the discriminant's validity. If an item's loading value for a relevant variable is higher than its loading value for other variables, the item is deemed legitimate for measuring that variable (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016).

Discriminant Reliability Testing

There are several calculations that can be used to evaluate the reliability of constructs, including discriminant reliability (AVE), Cronbach alpha, and composite reliability. The construct is deemed trustworthy in accordance with the test criteria if the discriminant

reliability (AVE) is better than 0.5, the Cronbach alpha is greater than 0.6, and the composite reliability is greater than 0.7. The discriminant reliability findings (AVE), Cronbach alpha, and composite reliability calculations are summarized in Table 2 :

Table 2. Composite Reliability

Variable	AVE	Composite Reliability	Cronbach's Alpha
EP	0.6185	0.8899	0.8452
e-HRM	0.5384	0.9126	0.8927
e-HRM*qHRs	0.7391	0.9935	0.9933
qHRs	0.6477	0.9164	0.8897

Source: Primary Data processed (2022)

The discriminant reliability (AVE) value in the e-HRM variable is 0. 5384, followed by the employee performance variable of 0.6 185, the HR service quality variable of 0.6477, and the moderation variable of 0. 7391, as shown in the table above. The final outcome is greater than 0.5. Thus, all items are declared reliable in measuring their latent variables based on the calculation of discriminant reliability (AVE).

The composite reliability value in the employee performance variable is 0.8899, 0.9126 in the e-HRM variable, 0.9935 in the HR service quality variable, and 0.9164 in the moderation variable. The end result is greater than 0.7. Thus, all items are declared reliable in measuring their latent variables based on the calculation of composite reliability. Furthermore, Cronbach's Alpha values for the employee performance variable were 0.8452, 0.8927 for the e-HRM variable, 0.8897 for the HR service quality variable, and 0.9933 for the moderation variable. The end result is greater than 0.6. Thus, all sub variables are declared reliable in measuring their latent variables based on Cronbach's Alpha calculations.

Goodness of Fit Model Testing

The Goodness of Fit Model is used to estimate the extent to which endogenous variables can account for the variety of exogenous factors, or, to put it another way, the extent to which exogenous variables contribute to endogenous variables. Using Q-Square predictive relevance, PLS analysis was conducted to determine the model's goodness of fit (Q2).

Table 3. Test Goodness of Fit Model

Variable	R ²
EP	0.5864
EP*qHRs	0.7467

Source: Primary Data processed (2022)

Employee performance variables have an R-square of 0.5864. This demonstrates that the electronic HRM variable of 58.6% can explain the diversity of employee performance variables. In other words, the e-HRM variable contributes 58.6% to the performance variable. The remaining 41% is due to the contribution of other variables not discussed in this study. The R-square of employee performance variables moderated by HR service quality is then 0.7467. This demonstrates that the electronic HRM variable, which is moderated by the quality of HR services by 74.6%, can explain the diversity of employee performance variables, while

the remaining 26.4% is the contribution of other variables that were also not discussed in this study.

Evaluation of structural models and hypothesis testing

After confirming the model's validity in our measurements, the researcher evaluated the structural model (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). It contains each endogenous variable's coefficient of determination (R^2) in order to account for the dependent latent variable's change in the independent latent variable (Fidell, S., Tabachnick, B., Mestre, V. 2016). There are two endogenous latent variables in this study: quality of e-HRM services. The value of R^2 indicates that the predictor accounts for 58.6% of the variance to employee performance. R^2 for the HR service quality moderation variable is 0.746, this indicates that e-HRM accounts for about 74 percent of quality differences in HRM services.

We calculate Q² Stone-Geisser for the predictive power of models in (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). The Q² values for HR service quality ($Q^2 = 0.601$) and employee performance ($Q^2 = 0.503$) are both significantly higher than the zero limit values, indicating that e-HRM has sufficient predictive relevance for HRM service quality and employee performance. In order to validate the proposed theoretical correlations of model construction, the study empirically estimates the coefficient and statistical significance using bootstrap techniques. There is a direct, positive, and statistically significant relationship between e-HRM implementation and employee performance ($t=1.9793$, $p=0.02877$). As a result, Hypothesis can be said to be supported.

Moderation Analysis

The moderation effect of HRM service quality was examined using a variety of phases in this study, including the step-analysis or bootstrap stage that is advised by (Hair et al., 2016). Exogenous variables must first have a direct impact on endogenous variables. Second, statistical significance is expected for indirect pathways; this is a crucial prerequisite for mediation analysis (Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, 2016). Estimating the indirect effect's magnitude is the last stage. This is demonstrated by the calculated value (VAF), which gauges and displays the proportion of indirect to total impacts. It's critical that there be a direct (without qualification) correlation between e-HRM and employee performance; therefore, it must meet the moderation requirements. Firstly, even if it is not very complicated, it is crucial to consider when understanding the moderation effect (Hair et al (2016). The findings revealed a statistically significant indirect relationship of 0.746 between e-HRM and employee performance, demonstrating the value of using HR service quality as a moderating variable. This further supports the idea that the quality of HR services (qHRs) can entirely modernize the association between e-HRM and employee performance, accounting for up to 74% of the overall effect. Then, it can be claimed that as the quality of HR services is moderated, employee performance would improve.

CONCLUSIONS

This study discusses the use of e-HRM as the main variable influencing employee performance. This study proposed and directly tested the relationship between e-HRM and employee performance, with HR service quality included as a moderation variable to test deeper than e-HRM implementation to the success or drivers of employee performance, in order to address the limitations of prior research. In contrast to the bulk of empirical

investigations, we created and tested our first hypothesis in these circumstances (Allen, 2015 ; Naveed et al., 2019 ; Zhou, Fey, & Yildiz, 2020) where the introduction of e-HRM is not influenced by the need for high-quality HR services. The results show that the use of e-HRM in the areas of talent management, performance management, performance appraisal, benefits management, recruitment process, selection, training and development, and complaints management, followed by management knowledge applied by managers, has positive and significant effects on employee performance. These results are in line with those of (Naveed et al., 2019), who discovered that e-HRM had a favorable and significant impact on the performance of bank employees in Pakistan. Besides, indeed in the application of e-HRM is not always easy for companies (Kathleen et al., 2017), managers often use e-HRM to improve their abilities in the recruitment process and manage human resources (Marler & Fisher, 2013).

Managers may overestimate if they do not fully get the value proposition of e-HRM, how the deployment of e-HRM will ultimately affect the organization or the personnel. According to this study, e-HRM and the quality of HR services have a big impact on workers' productivity. In order to support the organization's workflow, HR managers must make sure that e-HRM systems are appropriately built. Managers need to pay close attention to how e-HRM affects the general caliber of HR services (Bondarouk, Harms, & Lepak. 2017), As this is the time when e-HRM can boost worker performance. According to this research, organizations will only gain if e-HRM enables staff to fulfill their various jobs more quickly or easily. In other words, simply installing e-HRM would not boost staff or organizational performance, it is claimed (Bondarouk, Schilling, & Rul, 2016).

In addition, the study found that employing performance appraisal systems well raises employee skill levels. This indicates how e-HRM deployment done correctly in the labor management process may encourage workers to perform productively and efficiently. Nearly all of the hypotheses put out are well supported, with the exception of a few coefficient trajectories of HR service quality. It is a reality that managers must be inventive and creative in their use of e-HRM despite the fact that the outcomes may not be very significant. It is crucial to make modifications and adjustments in order to improve employee performance utilizing the e-HRM system (Lin, 2011).

Finally, based on a variety of existing research sources, we expect that future study can establish a broader and sharper idea of e-HRM deployment in terms of enhancing employee performance and organizational performance. Naturally, with a deeper understanding of the e-HRM phenomena, which is adopted by many organizations. As a result, by identifying more precise HRM practices that can be used to build various aspects of absorption inside the organization, this study simply contributes to the still scant body of literature on the function of HRM practices in promoting employee uptake (Bondarouk, 2011).

REFERENCE

- Albright, Jeremy J.; Park, H. M. (2009). Albright, J. *Indiana University*. Retrieved from <http://hdl.handle.net/2022/19736>
- Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: Examining the mediating role of engagement. *Human Resource Management*, 52(6), 839–859. <https://doi.org/10.1002/hrm.21512>
- Allen, M. A. M. (2015). Employee Relations : The International Journal Article information : In *Employee relations* (Vol. 37).

- Arian, R.-F., Hanna, K.-V., Janne, H., & Harri, H. (2019). Advantages and potential challenges of data management in e-maintenance. *Journal of Quality in Maintenance Engineering*, 25(3), 378–396. <https://doi.org/10.1108/JQME-03-2018-0018>
- Aryee, S., Walumbwa, F. O., Seidu, E. Y. M., & Otaye, L. E. (2016). Developing and Leveraging Human Capital Resource to Promote Service Quality: Testing a Theory of Performance. *Journal of Management*, 42(2), 480–499. <https://doi.org/10.1177/0149206312471394>
- Bissola, R., & Imperatori, B. (2013). Facing e-HRM: The consequences on employee attitude towards the organisation and the HR department in Italian SMEs. *European Journal of International Management*, 7(4), 450–468. <https://doi.org/10.1504/EJIM.2013.055282>
- Bondarouk, T. (2011). Theoretical approaches to e-HRM implementations. In *Advanced Series in Management* (Vol. 8). [https://doi.org/10.1108/S1877-6361\(2011\)0000008005](https://doi.org/10.1108/S1877-6361(2011)0000008005)
- Bondarouk, T., Harms, R., & Lepak, D. (2017). Does e-HRM lead to better HRM service? *International Journal of Human Resource Management*, 28(9), 1332–1362. <https://doi.org/10.1080/09585192.2015.1118139>
- Bondarouk, T., Ruël, H., & Looise, J. K. (Eds.). (2011). Electronic HRM in Theory and Practice. In *Electronic HRM in Theory and Practice* (p. iii). [https://doi.org/10.1108/S1877-6361\(2011\)0000008017](https://doi.org/10.1108/S1877-6361(2011)0000008017)
- Bondarouk, T., Schilling, D., & Ruël, H. (2016). EHRM adoption in emerging economies: The case of subsidiaries of multinational corporations in Indonesia. *Canadian Journal of Administrative Sciences*, 33(2), 124–137. <https://doi.org/10.1002/cjas.1376>
- Ceric. (2017). Electronic HRM in the Smart Era. *Electronic HRM in the Smart Era*. <https://doi.org/10.1108/9781787143159>
- Chierici, R., Mazzucchelli, A., Garcia-Perez, A., & Vrontis, D. (2019). Transforming big data into knowledge: the role of knowledge management practice. *Management Decision*, 57(8), 1902–1922. <https://doi.org/10.1108/MD-07-2018-0834>
- de Leeuw, S., Minguela-Rata, B., Sabet, E., Boter, J., & Sigurðardóttir, R. (2016). Trade-offs in managing commercial consumer returns for online apparel retail. *International Journal of Operations & Production Management*, 36(6), 710–731.
- Esther, N., Huub, R., Hefin, R., Linda, E., & Michael, M. (2019). An Analysis of the Contribution of e-HRM to Sustaining Business Performance. In *Advanced Series in Management: Vol. 23. HRM 4.0 For Human-Centered Organizations* (pp. 21–39). <https://doi.org/10.1108/S1877-636120190000023003>
- Fidell, S., Tabachnick, B., Mestre, V., & Fidell, L. (2013). Aircraft noise-induced awakenings are more reasonably predicted from relative than from absolute sound exposure levels. *The Journal of the Acoustical Society of America*, 134((5)), 3645–3653.
- Florkowski, G. W. (2018). HR technology systems: An evidence-based approach to construct measurement. *Research in Personnel and Human Resources Management*, 36, 197–239. <https://doi.org/10.1108/S0742-730120180000036006>
- Gardner, S. D., Lepak, D. P., & Bartol, K. M. (2003). Virtual HR: The impact of information technology on the human resource professional. *Journal of Vocational Behavior*, 63(2), 159–179. [https://doi.org/10.1016/S0001-8791\(03\)00039-3](https://doi.org/10.1016/S0001-8791(03)00039-3)
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications Ltd.
- Heikkilä, J.-P., Rentto, O., & Feng, Y. (2017). Aiming for Strategic e-HRM: Motives and Consequences of e-HRM Implementation in an MNC. *Electronic HRM in the Smart Era*, 173–199. <https://doi.org/10.1108/978-1-78714-315-920161007>

- Huub, R., Rodrigo, M., & C., C. C. (2011). Chapter 2 Human Resource Information Systems: An Integrated Research Agenda. In T. Bondarouk, H. Ruël, & J. K. Looise (Eds.), *Electronic HRM in Theory and Practice* (pp. 21-39). [https://doi.org/10.1108/S1877-6361\(2011\)0000008006](https://doi.org/10.1108/S1877-6361(2011)0000008006)
- Jeannette, P., Jan, K., & Christian, K. T. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of Business & Industrial Marketing*, 34(7), 1410-1419. <https://doi.org/10.1108/JBIM-10-2018-0295>
- Jöreskog, K. (n.d.).
- Kathleen, M., Sandra, F., & E., C. C. (2017). e-HRM Systems in Support of “Smart” Workforce Management: An Exploratory Case Study of System Success. In T. Bondarouk, H. J. M. Ruël, & E. Parry (Eds.), *Electronic HRM in the Smart Era* (pp. 87-108). <https://doi.org/10.1108/978-1-78714-315-920161004>
- Kwan, F. P., Hermawan, L. R., & Hafizhi, N. (2019). *E-Hrm : Pain or Gain for Hrm Effectiveness*. 10, 22-32.
- Lal, P. (2015). Transforming hr in the digital era: Workforce analytics can move people specialists to the center of decision-making. *Human Resource Management International Digest*, 23(3), 1-4. <https://doi.org/10.1108/HRMID-03-2015-0051>
- Lin, L. H. (2011). Electronic human resource management and organizational innovation: The roles of information technology and virtual organizational structure. *International Journal of Human Resource Management*, 22(2), 235-257. <https://doi.org/10.1080/09585192.2011.540149>
- M., O. S. (2016). The link between e-HRM use and HRM effectiveness: an empirical study. *Personnel Review*, 45(6), 1281-1301. <https://doi.org/10.1108/PR-04-2015-0111>
- Marler, J. H., & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1), 18-36. <https://doi.org/10.1016/j.hrmr.2012.06.002>
- Marler, J. H., & Parry, E. (2016). Human resource management, strategic involvement and e-HRM technology. *International Journal of Human Resource Management*, 27(19), 2233-2253. <https://doi.org/10.1080/09585192.2015.1091980>
- Naveed, I., Mansoor, A., & M.C., A. M. (2019). Unveiling the relationship between e-HRM, impersonal trust and employee productivity. *Management Research Review*, 42(7), 879-899. <https://doi.org/10.1108/MRR-02-2018-0094>
- Ramdani, B., Mellahi, K., Guermat, C., & Kechad, R. (2014). The efficacy of high performance work practices in the Middle East: evidence from Algerian firms. *International Journal of Human Resource Management*, 25(2), 252-275. <https://doi.org/10.1080/09585192.2013.826918>
- Ross, P. K., Ressa, S., & Sander, E. J. (2017). Work in the 21st Century. *Work in the 21st Century*. <https://doi.org/10.1108/9781787145771>
- Sarstedt, M., Henseler, J., & Ringle, C. M. (2011). Multigroup analysis in partial least squares (PLS) path modeling: Alternative methods and empirical results. *Advances in International Marketing*, 22(June 2014), 195-218. [https://doi.org/10.1108/S1474-7979\(2011\)0000022012](https://doi.org/10.1108/S1474-7979(2011)0000022012)
- Sharna, W., & H., M. J. (2019). The Human-Technology Interface in Talent Management and the Implications for HRM. In *Advanced Series in Management: Vol. 23. HRM 4.0 For Human-Centered Organizations* (pp. 99-116). <https://doi.org/10.1108/S1877-636120190000023009>
- Uen, J., Wang, B. J., & Chen, W. F. (2005). *Internal service quality factors of human resource department and their relationships with organizational performance Top and middle managers'*

viewpoints.

- Uen, J. F., Ahlstrom, D., Chen, S. Y., & Tseng, P. W. (2012). Increasing HR's strategic participation: The effect of HR service quality and contribution expectations. *Human Resource Management*, 51(1), 3-23.
- Zhou, A. J., Fey, C., & Yildiz, H. E. (2020). Fostering integration through HRM practices: An empirical examination of absorptive capacity and knowledge transfer in cross-border M&As. *Journal of World Business*, 55(2), 0-1. <https://doi.org/10.1016/j.jwb.2018.05.005>