

# BOLSTERING A POTENT ORGANIZATIONAL DEVELOPMENT THROUGH ELECTRONIC HUMAN RESOURCES IN PRIVATE BUSINESS

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## Abstract

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In the present era, developing companies has become a massive challenge for human resource management. In this way, the present study examines the effect of electronic human resources (E-HRM) implementation on organizational development (OD) private sector businesses in the eastern province of Saudi Arabia. The researchers followed well-known scholars like Atallah (2016) and Sehgal and Nanda (2023) and based the study on quantitative methods, which collected cross-sectional data from administrative and management workers. The study utilized 323 valid samples to conclude the investigation. Using SmartPLS 4, the study's results underline that the components of E-HRM, such as e-training and development (ETD) and e-performance appraisal (EPA), positively and significantly affect OD. On the other hand, e-recruitment (ER) is not a significant predictor of OD. The study's findings would assist policymakers and human resources (HR) authorities in considering the ETD and EPA to enhance the performance and OD of the organizations. Furthermore, the study would support overcoming the literature gaps by offering empirical evidence, particularly from a developing Arab context.

**Keywords:** E-HRM, E-Training and Development, E-Recruitment, E-Performance Appraisal, Organizational Development

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## 1. INTRODUCTION

In the present era of industrialization, electronic human resource management (E-HRM) is a new concept, especially for developing countries like Saudi Arabia. The way HR departments retain records and share information is changing because of technological advancements. This significantly reduces paperwork and enables quick access to large amounts of data. E-HRM refers to the processing and transmission of digitalized human resources (HR) data (Nenwani & Raj, 2013) and a method of implementing HR strategies, policies, and practices in enterprises through the deliberate and planned use of web-technology-based channels (Looise & Paauwe, 2001).

E-HRM, an information technology (IT) solution that includes all conceivable HRM and IT integration processes and contents, is increasingly used by organizations to provide value for specific employees and management inside and between organizations (Alomari, 2023). Utilizing information and communication technologies in human resource services has become critical for gaining competitive advantages for businesses (Stanton & Coovert, 2004; Bondarouk et al., 2017). E-HRM is an essential organizational development (OD) catalyst in expanding enterprises (Singh, 2020). By automating HR processes, E-HRM enhances operational efficiency, allowing HR professionals to concentrate on strategic aspects of development. The data-driven nature of e-HRM systems facilitates informed decision-making by providing insights into employee performance and engagement metrics (Obeidat, 2016). This technology aligns HR strategies with organizational goals, ensuring talent is effectively managed and deployed for optimal impact. E-HRM contributes to learning and development through online training platforms and skill assessments, fostering an adaptable workforce (Bondarouk et al., 2017). The system's role in global communication and remote work support becomes crucial for growing organizations. Cost-effectiveness and streamlined processes enable the reallocation of resources toward strategic initiatives, propelling the organization in its developmental journey. Overall, E-HRM emerges as a pivotal enabler, integrating technology seamlessly into HR practices to drive organizational growth and development. Consequently, the use of intranet technology in HR is unavoidable. On the other hand, HR must go digital, especially now that it is pressured to prove its value. When managers and employees are granted the power to complete particular HR responsibilities, the HR department is released from these obligations. This enables organizations to lower HR department employment numbers as the administrative load lessens since HR employees are free to focus on strategic rather than tactical HR concerns (Swaroop, 2012). The E-HRM has an intrinsic connection to organizational growth. This enhances organizational development as a transformational process through an evolutionary trajectory from traditional HRM to E-HRM. This evolution signifies not only a technological shift but a strategic realignment, wherein E-HRM becomes a pivotal tool for achieving organizational goals

(Bondarouk et al., 2017). The integration of E-HRM portrays the instrumental in talent management, promoting efficiency from recruitment to performance appraisal (Myllymäki, 2021). In the organization, challenges of change management during E-HRM adoption and presenting concrete examples of successful integration in organizations can further solidify the link between E-HRM and the transformative journey of organizational development (Marler & Fisher, 2013). Besides, it facilitates the conversion of HR operations to web-based technology and quickens the execution of business objectives and procedures. E-HRM systems provide never-before-seen advantages for organizations but also come with high prices and hazards. These costs cover the system's expense, the price of altering organizational practices, employee training, and the time senior management and HR spend setting up, implementing, and marketing these systems. Employee non-use of the system, disengagement, and resistance to change are all present dangers. Despite the theoretical connection between E-HRM practices and organizational results, more evidence must be available. The study aims to provide insight into E-HRM practices in the sample of companies and their impact on OD. Thus, the study raises the question:

*RQ1: What is the relationship between E-HRM (e-recruitment (ER), e-training and development (ETD), and e-performance appraisal (EPA)) and OD?*

The study's findings would guide policymakers and HR authorities to develop the policies reading provision of ETD and EPA among private and public business enterprise employees. Besides, the ER system needs more concentration as it takes significance in hiring as employees are the massive units that significantly make the organization successful.

The rest of the paper is structured as follows. Section 2 is literature review and hypotheses development. Section 3 underlines methods. Section 4 describes the analysis. Section 5 discusses the results. Section 6 provides the contribution, final limitations, and future research agenda.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1. E-recruitment (ER)

To aid the employment process, ER has extensively used digital and web-based technologies (Ahmed, 2019; Sultana, 2023). To hire new employees directly or indirectly through a third party, practically every firm uses several web portals. Candidates can apply electronically and submit resumes to save time and money when applying for jobs on various Internet platforms (Patel & Dhal, 2017; Olaniyan & Hemlata, 2023). Regarding time spent searching for applicants and response quality, ER has substantial advantages (Ensher et al., 2002). Technology can be utilized to improve the screening and communication of candidates. Regarding distance, the Internet can help with employee selection (Khashman & Al-Ryalat, 2015; Arshad et al., 2023). Electronic selection, sometimes called e-selection, is a paperless method

of selecting applicants that uses cutting-edge computer technology. By giving online exams, reviewing resumes, and conducting interviews, recruiters can determine a candidate's skill set and suitability for a position (Malinowski et al., 2005; Stone et al., 2015; Mrwebi, 2019; Mrwebi & Cici, 2019). For entry-level positions, several companies employ online aptitude exams followed by video conferences. On the other hand, organizations support Zoom, a technological advancement that offers candidate interviews with better audio and video quality (Okolie & Irabor, 2017; Daniel, 2019; Kucherov & Tsybova, 2022).

## 2.2. E-training and development (ETD)

To provide access to knowledge at any time and place, digital technology is employed in e-learning and training. Additionally, it demands ongoing information exchange despite time and resource limitations (Vanitha & Alathur, 2021). Virtual classrooms, self-directed learning modules, online conferencing, and professional networking are some methods employed in the training process. Given that huge organizations are becoming more globally oriented, e-learning has become the best alternative for education and training. Along with cutting costs and saving time, it also boosts corporate productivity and employee flexibility (McCracken et al., 2012). The delivery techniques and technology used in e-training are comparable to e-learning in many ways. Still, the learning duration is significantly shorter and usually intended to attain a particular learning goal or skill set (Shirmila, 2022). E-learning has enhanced faculty staff's capacity in higher educational institutes (Chawinga & Zozie, 2016; Gama et al., 2022; Aderibigbe, 2023). According to Olivas-Lujan et al. (2007), HRM has a robust role in gaining a global competitive electronic advantage in the industrial services sector. Scholars like Moradi et al. (2018) and Janna et al. (2021) underline ETD's positive contribution to employee resilience and productivity. Sehgal and Nanda (2023) recommend a positive connection between ETD job efficacy and the organization's growth.

## 2.3. E-performance appraisal (EPA)

An EPA measures a worker's capacity to meet the requirements of their job descriptions. According to Burbach and Royle (2014), businesses utilize EPA to evaluate employee performance and offer feedback. One of the HR tasks that is frequently carried out continuously is EPA. Utilizing digital technology, organizations may significantly reduce the burden and time needed to conduct performance reviews. Managers can also use IT solutions to connect performance management programs to an organization's objectives, plans, and procedures. E-performance, which retains and inspires top workers, may be used to find top performers throughout the company (Tarigan

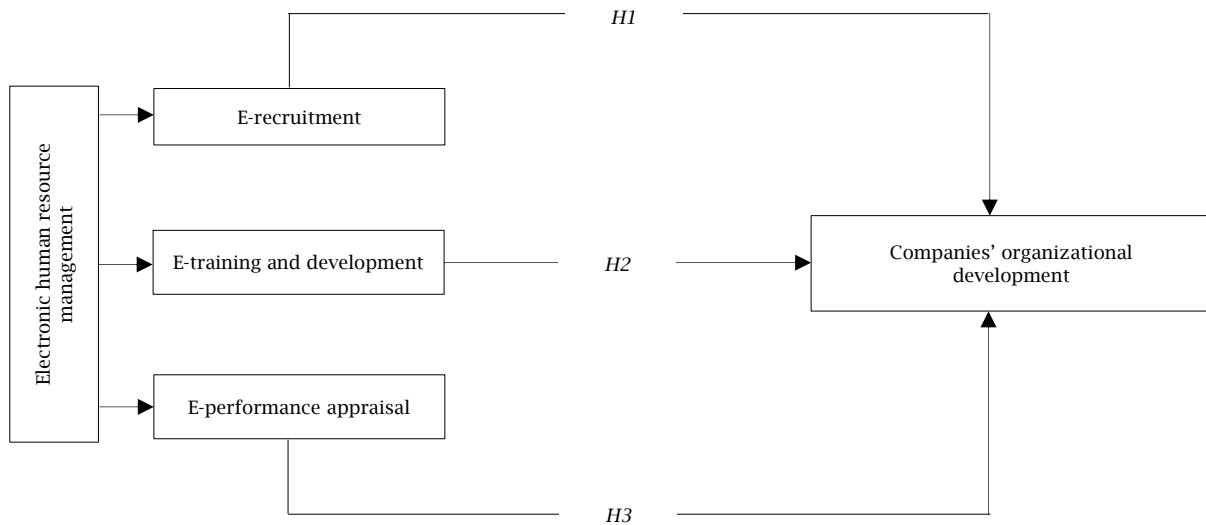
et al., 2017). Compared with traditional performance appraisal systems, EPA has several advantages where managers spend less time and effort performing performance evaluations with the EPA system, the business can remain effective (Njeje et al., 2018), and e-performance reviews boost organizational productivity (Dulebohn & Johnson, 2013). Performance appraisal is a crucial instrument for measuring each organization's guidelines for its staff (Daoanis, 2012). EPA makes it appear as though the process is politically motivated, even though one of its main goals is the growth of each employee (Nurse, 2005).

## 2.4. Organizational development (OD)

OD is a valuable source of improving organizational performance and human development. OD is a systematic transformation effort that employs organizational theory, behavioral research, knowledge, and skills to assist an organization or a unit with sustainable development (Akram et al., 2018). The preparation of OD is guided by a set of core beliefs and concepts that influence practitioner behavior and activities (Murali et al., 2017). OD has broadened its focus to include aligning organizations with a multifaceted and quickly altering working environment through knowledge transfer and organizational learning as a continuous, organized process for active organizational transformation (Al-Raisi et al., 2011). Nurshabrina and Adrianti (2020) suggest a favorable impact on organizational growth and add to achieving organizational goals in a study of the effects of E-HRM on OD.

In consequence, the above literature offers several factors such as organizational learning, knowledge transfer, working environment, learning skills and capacity, electronic advantage, employee resilience, productivity, job efficacy, ETD, training process, EPA, professional networking, ER, digital and web-based technologies and Internet platforms, etc. positively and significantly enhance the OD, performance and organizational success (Olivas-Lujan et al., 2007; Moradi et al., 2018; Ahmed, 2019; Janna et al., 2021; Vanitha & Alathur, 2021; Sultana, 2023; Sehgal & Nanda, 2023). However, in the literature, gaps still exist as it does not offer the effect of ER, ETD, and EPA towards OD integrated way. Besides, the administrative and management workers of the private business sector in the eastern province of Saudi Arabia still need empirical evidence. Considering these gaps and relationships in the literature, the researchers developed a model (Figure 1) offering an integrated approach of ER, ETD, and EPA constructs in developing OD among the companies. The study would offer E-HRM components as determinants of companies' OD. Besides, E-HRM aids staff development and helps companies accomplish their goals.

Figure 1. The researchers' developed a model



Source: Authors' elaboration.

## 2.5. E-recruitment (ER) and organizational development (OD)

Nowadays, ER functionality can be seen in most businesses, ranging from standalone solutions for specific tasks to integrated end-to-end systems. The percentage of ER sources utilized by human resource managers was around 73%, and ER platforms had no discernible effect on worker performance or job satisfaction (Olaniyan & Hemlata, 2023). When communicating with applicants, the capacity to respond quickly becomes essential (Malinowski et al., 2005). ER has excellent prominence in organizations as this hiring procedure is considered the fastest mode and most efficient for finding suitable candidates compared to paper-based recruitment (Lin & Stasinskaya, 2002). This Internet recruitment also tremendously affects organizational performance. According to Holm (2014), the recruitment industry has significantly changed and reassessed its practices due to changes in how people look for work and anticipate being employed. In the banking sector, the internet, newspaper ads, radio and TV ads, transfers, and promotions were the most often utilized hiring methods. ER is an essential part of HRM and is thus a foundational element for the performance and success of a business (Daniel, 2019). Hosain (2017) suggests that strategic performance is impacted by electronic applicant selection, tracking, learning, performance management, and remuneration. Ensuring organizations are more innovative and technologically current in manufacturing firms will boost labor productivity and organizational creativity. The most often utilized hiring methods were the internet, newspaper ads, radio and TV ads, transfers, and promotions (Daniel, 2018). An empirical assessment by Nguti and Mose (2021) demonstrates that ER and selection function positively and significantly affect the organizational outcomes of the Higher Education Loans Board in Kenya. In Russian companies, ER practices are meaningfully associated with ER outcomes (Kucherov & Tsybova, 2022). Organizations can efficiently classify and retain talented individuals by

utilizing ER software and observing recognized best practices, thereby increasing efficiency (Sultana, 2023). Consequently, the literature provides a positive connection between ER and OD, except in the context of private companies in Saudi Arabia. Thus, we proposed:

*H1: ER positively and significantly predicts companies' OD.*

## 2.6. E-training and development (ETD) and organizational development (OD)

The ETD is crucial in enhancing job performance among almost all organizations. This is also a motivating tool for producing better-quality work (Hassan et al., 2020). ETD improves organizational commitment and E-tourism performance, particularly in virtual teams. The employees who participate in ETD assist employee participation in training programs and their perceptions towards it (Moradi et al., 2018). In the same direction, the study of Janna et al. (2021) underlines that e-training and career development substantially positively influenced employee resilience. Factors such as employee resilience and career development positively enhance employee productivity. According to Sehgal and Nanda (2023), ETD positively and significantly enhances job efficacy and the growth of the organization. How successful an organization's ETD activities are depends on its overall training system's efficiency, online training strategies, and supporting infrastructure. On an online learning platform, learning activities that are intended to achieve knowledge transfer with a focus on skills development can be used for new hires and markets like business operations, auxiliary services, guidelines, and future demands that will improve employees' performance and service quality (Akpoviro & Adeleke, 2022). The sense of accessibility to training programs among workers is increased by the support for employee engagement in them, and organizational commitment is a crucial component that impacts an employee's productivity and efficiency at work (Moradi et al., 2017). Sarraipa

et al. (2010) exert a training strategy and a standard methodology to create training courses to offer a practical inter-organizational approach to developing industrial training. ETD programs provide a more straightforward method, allowing numerous groups to engage in its development actively. Oyewusi and Oyeboade (2009) offer a significant association between the use of ETD by secondary school principals and teachers' job performance. Samantaray et al. (2023) demonstrate that positive, important outcomes through e-training improve farmers' resilience. Higher work performance may result from clear communication of training program objectives and employee expectations and an emphasis on aspects that contribute to satisfaction. Both technical and soft skills should be improved through training programs, including emotional intelligence training (Singh et al., 2023). An organization's ETD success depends on its infrastructure, online training approaches, and overall training system efficiency (Islam, 2022).

Consequently, ETD is found to be the best predictor of performance and OD in several organizations. However, the private business companies of Saudi Arabia still need confirmation between these associations (ETD and OD). Hence:

*H2: ETD positively and significantly predicts companies' OD.*

## 2.7. E-performance appraisal (EPA) and organizational development (OD)

Appraisal is one of the critical influences on organizational ability. The performance appraisal reviews an employee's most recent accomplishments and setbacks, personal qualities and areas for improvement, and readiness for advancement or more training (Daoanis, 2012; Botelho, 2023). Performance appraisal in a way that makes it appear as though the process is politically motivated, even though one of its main goals is the growth of each employee (Nurse, 2005). According to Abu-Doleh and Weir (2007), performance appraisal in private organizations considerably influenced promotions, terminations, and layoffs, identifying individual training requirements, transfers, and assignments more than their counterparts in the public sector. There is a positive correlation between EPA, ETD, and organizational commitment, which has an adverse effect on employee turnover intention (Kadiresan et al., 2015). In the perception of Njeje et al. (2018), EPA management significantly affected performance. Many firms utilize electronic performance management systems (e-PMS) to track performance in Arab organizations (Al-Raisi et al., 2011). In recent years, E-HRM practices such as ER, ETD, and E-HRM evaluation have promoted performance (Arshad et al., 2023). As a result, the EPA has greatly contributed to enhancing OD, performance, and organizations' success. However, in an integrated manner, in the presence of ETD and ER, the role of EPA is still undecided, particularly among private business employees in Saudi Arabia. Therefore:

*H3: EPA positively and significantly predicts companies' OD.*

## 3. METHODS

### 3.1. Survey strategy and respondents

We applied the quantitative survey strategy, where quantitative data is collected. The quantitative survey approach is frequently used in large-scale studies and relies heavily on closed questions to collect data that can be rapidly analyzed (Langfield-Smith, 2006). In the previous investigation in the field of management, several scholars like Olivas-Lujan et al. (2007), Moradi et al. (2018), Ahmed (2019), Janna et al. (2021), Vanitha and Alathur (2021), Sultana (2023), and Sehgal and Nanda (2023) applied the quantitative assessment to investigate the OD, ETD, ER, and EPA in several organizations and contexts as well. Regarding respondents, we targeted all administrative and management workers employed by a sample of private sector businesses in the eastern province that comprise the research population, which equals 29869 companies.

### 3.2. Scale insurance

We adopted the questionnaire's items from the domain literature. However, to test its further reliability and validity, we conducted a pilot test (Connelly, 2008). We distributed and collected the twenty-four questionnaires to ensure these crucial assumptions (reliability and validity). Regarding reliability, we provide Cronbach's alpha ( $\alpha$ ) to ensure internal consistency among the scale items. As a result, the alpha (overall) is found to be 0.852, considered excellent (Hair et al., 2020). Besides, every factor's reliability is greater than 0.70 with fair values (Hair et al., 2020). Similarly, to ensure instrument validity, including internal and structural validity, we requested two university professors; one was well-known about the new research trends, and the second was a field expert. As per experts, we made some amendments to the design and content of the items. Consequently, we launched a reliable and valid survey to collect large-scale data.

### 3.3. Data collection procedure

We gathered information from respondents through a survey questionnaire. We applied both modes of data collection, such as online and offline. Because volunteers were readily accessible, the researchers employed convenience sampling, which is often simple and inexpensive (Etikan et al., 2016). The language of the questionnaire is administered in both English and Arabic to make the questionnaire easier to interpret. To encourage a high response rate, a cover letter explaining the study's goals, the manner of responding, the purpose of the research, and the security of the information was included in the questionnaire. Before assigning the survey to the respondents, the researchers correctly followed the ethical values of the respondents. We acknowledged the respondents about the study's aim and objective and ensured the privacy, confidentiality, and usage of their gained responses only for educational purposes. Finally, we collected 323 valid responses, which are applied to conclude the final results.

### 3.4. Measures

We adopted the items of all the variables from Atallah (2016). We measured ER on six items. The sample item of the scale is “electronic announcement about the job is based on the job description clearly defines the tasks” (Atallah, 2016, p. 60). Likewise, the ETD construct was assessed on six items, with sample content as our company is using an electronic system to guide new employees. Furthermore, we used seven items to measure EPA, with sample content as “the process of e-performance appraisal appropriate” (Atallah, 2016, p. 62). Finally, the dependent factor organizational development is gauged on five items with sample content “E-HRM helps to achieve the organization goals” (Atallah, 2016, p. 63). All the items of the scale were measured applying a five-point Likert scale ranging from strongly agree to strongly disagree.

## 4. RESULTS

### 4.1. Demography

In total, 323 respondents contributed to the study, where 75.23% (n = 243) were males and 24.77% (n = 80) were females. A majority of respondents (40.87% or n = 132) were 26-35 years of age; 40.25% (n = 130) were 36-45, and 18.88% (n = 61) were 45 and above. With regard to marital status, 81.42% (n = 263) were married, and only 18.88% (n = 61) were single or unmarried. Concerning experience, 50.78% (n = 164) had less than ten years of experience; 31.89% (n = 103) were 10-15; 11.76% (n = 38) were 16-20, and only 5.57% (n = 18) were 21 and more years of experience. Likewise, the education level indicator suggests that 50.78% (n = 164) had a bachelor's degree, 44.89% (n = 145) had a diploma, and 4.33 % (n = 14) had a master's degree education. Concerning the salary, 41.18% (n = 133) had a salary of 5001-10,000 (SAR), 35.29% (n = 114) had less than 5000 (SAR), and 23.53% (n = 76) had 10001-15,000. The final indicator (residency) shows that 95.97% (n = 310) and 4.03% (n = 13) were from the Southern province (Table 1).

Table 1. Demography

Indicator	Category	Frequency	Percentage
Gender	Male	243	75.23
	Female	80	24.77
	Total	323	100.0
Age (years)	< 25	00	00.00
	26-35	132	40.87
	36-45	130	40.25
	45 and above	61	18.88
	Total	323	100.0
Marital status	Single	61	18.88
	Married	263	81.42
	Divorced	00	00.00
	Widow	00	00.00
	Total	323	100.0
Experience (years)	< 10	164	50.78
	10-15	103	31.89
	16-20	38	11.76
	21 and above	18	5.57
	Total	323	100.0
Educational level	Secondary school	00	00.00
	Diploma	145	44.89
	Bachelor degree	164	50.78
	Master's degree	14	4.33
	Doctor of philosophy	00	00.00
Total	323	100.0	
Salary (SAR)	< 5000	114	35.29
	5001-10.000	133	41.18
	10001-15.000	76	23.53
	15000-20.000	00	00.00
	> 20.000	00	00.00
	Total	323	100.0
Residency	Eastern province	310	95.97
	Western province	00	00.00
	Northern province	00	00.00
	Southern province	13	4.03
	Central province	00	00.00
	Total	323	100.0

Source: Authors' calculation.

### 4.2. Measurement model

As we presented in Table 2 and Figure 2, the values of composite reliability up to (0.950) and Cronbach's alpha represent that each factor unveiled strong internal reliability (Hair et al., 2006). We applied

the variance inflation factor (VIF) to detect multicollinearity (Kemalbay & Korkmazoglu, 2012). This determines which variables it impacts and how strongly the connection holds. As a result, we found all the items with less than 5.00 VIF, which ensured any availability of multicollinearity (Kemalbay &

Korkmazoglu, 2012). We assessed the convergent validity by observing the average variance extracted (AVE). As per the rule of thumb, it should exceed 0.50 (Hair et al., 2014). Besides, the confirmatory factor analysis (CFA) is regarded as another gauge of convergent validity where it is grasped if the items of each construct load exceed 0.70 on their variable than the other variables (Hair et al., 2014). So, in this

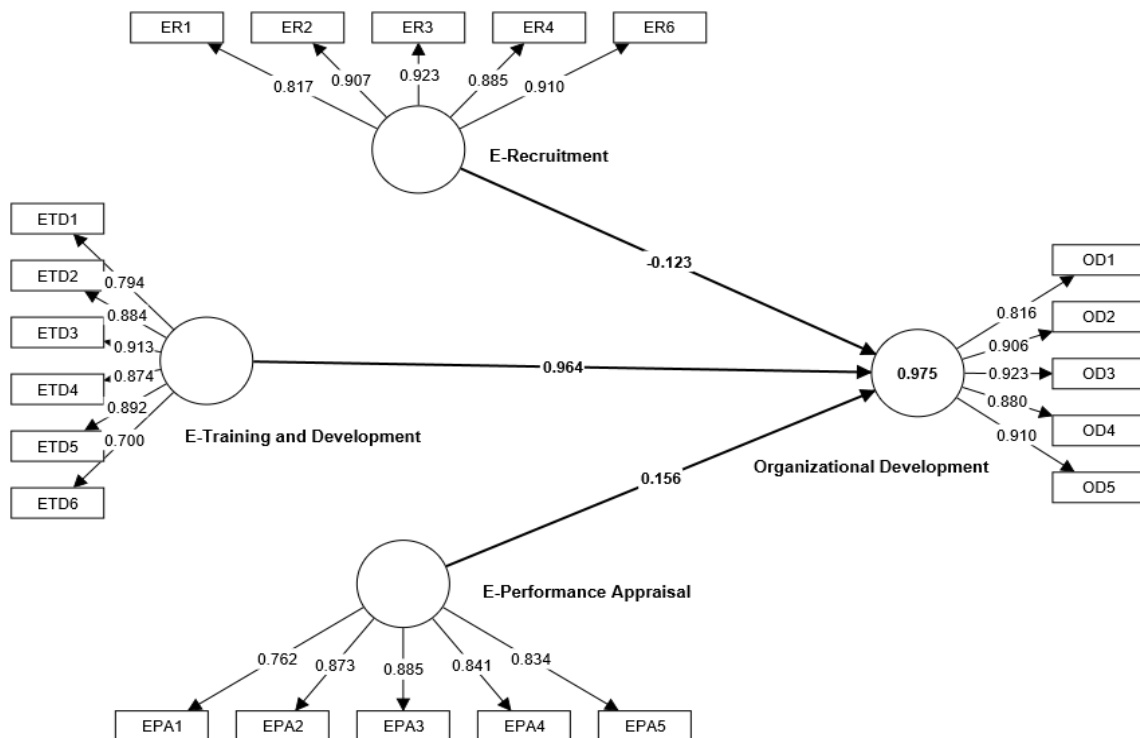
study, loading values for all items of the construct are observed to have values greater than 0.70 except ER5, EPA6, and EP7 (deleted items), along with AVE scores as > 0.50 for the rest of the constructs, indicating the excellent and acceptable measure of the model (Hair et al., 2006). As a result, we achieved good convergent validity among all the constructs of the study.

Table 2. Measurement model

Factors	Item	Loading	VIF	AVE	Alpha ( $\alpha$ )	CR
E-performance appraisal (EPA)	EPA1	0.762	1.884	0.706	0.895	0.923
	EPA2	0.873	3.269			
	EPA3	0.885	3.368			
	EPA4	0.841	2.752			
	EPA5	0.834	2.068			
E-recruitment (ER)	ER1	0.817	2.442	0.790	0.933	0.950
	ER2	0.907	3.755			
	ER3	0.923	4.244			
	ER4	0.885	3.657			
	ER6	0.910	4.135			
E-training and development (ETD)	ETD1	0.794	2.397	0.716	0.919	0.938
	ETD2	0.884	3.677			
	ETD3	0.913	4.038			
	ETD4	0.874	3.402			
	ETD5	0.892	4.484			
	ETD6	0.700	2.305			
Organizational development (OD)	OD1	0.816	2.456	0.789	0.932	0.949
	OD2	0.906	3.755			
	OD3	0.923	4.253			
	OD4	0.880	3.450			
	OD5	0.910	4.038			

Note: Excluded items: ER5, EPA6, EP7; CR = Composite reliability; AVE = Average variance extracted;  $\alpha$  = Cronbach's alpha reliability.

Figure 2. Factor loadings



Source: Authors' elaboration.

Furthermore, we assessed discriminant validity (DV) as it refers to the degree to which construct is distinct from other constructs (Hair et al., 2010). We compared the values of AVE with the construct's squared correlation between the factor and other

factors (Fornell & Larcker, 1981), where we found all AVE scores as greater than the squared inter-construct correlation scores (Hair et al., 2010). Thus, we confirmed the attainment of good DV (Table 3).

**Table 3.** The heterotrait-monotrait ratio of correlations (HTMT) results

Construct	1	2	3	4
1. EPA				
2. ER	0.881			
3. ETD	0.622	0.721		
4. OD	0.578	0.619	0.821	

Note: EPA = e-performance appraisal; ER = e-recruitment; ETD = e-training and development; OD = organizational development.

**4.3. Structural model**

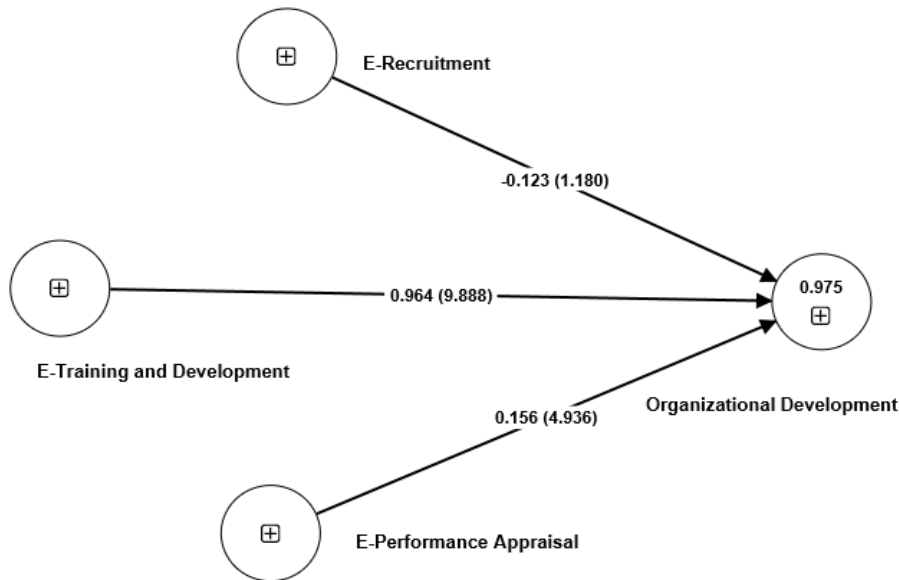
We applied a structural equation model (SEM) to examine the hypothesized associations using SmartPLS 4 (<https://www.smartpls.com/>) as the best software. With regard to the association between ER and OD, the path co-efficient ensured a negative and insignificant effect ( $H1 = \beta = -0.123$ ;  $p > 0.01$ ). Hence,  $H1$  is rejected. Besides, the analysis confirmed a positive significant effect of STD on OD ( $H2 = \beta = 0.964$ ;  $p < 0.01$ ), which accepted  $H2$ . Likewise, the final hypothesis is also supported by the data ( $H3 = \beta = 0.156$ ;  $p < 0.01$ ) (Table 4 and Figure 3) showing a significant effect of EPA on OD.

**Table 4.** Path results

No.	Proposed paths	Std. ( $\beta$ )	Mean	Std. Dev.	t-value	p-value	Decision
H1	e-recruitment → organizational development	-0.123	-0.1	0.104	1.18	0.238	Rejected
H2	e-training and development → organizational development	0.964	0.943	0.098	9.888	0.000	Accepted
H3	e-performance appraisal → organizational development	0.156	0.154	0.032	4.936	0.000	Accepted

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

**Figure 3.** Path analysis



Source: Authors' elaboration.

**5. DISCUSSION**

The study aimed to explore the impact of electronic human resources implementation on organizational development in a sample of companies in Saudi Arabia. The path analysis found a negative effect of ER on OD, which rejected the  $H1$ . In the literature, these associations are not reinforced by several scholars like Daniel (2019), Nguti and Mose (2021), Kucherov and Tsybova (2022), Olaniyan and Hemlata (2023) and Sultana (2023), who appeared with positive associations between ER and OD. There may be several reasons behind the negative connection between ER and OD. The job description, which outlines the duties, responsibilities, and qualifications needed for the open position, may not be included in the electronic announcement of the post. The electronic job board does not accept employment applications. Applications for employment screening are not submitted electronically. Using an internet job board will not

bring in more qualified candidates. ER might not help the selection process. Utilizing Internet advertising might not help fill open positions with qualified candidates.

Moreover, the study found a positive significant effect of ETD on OD. These results are in line with previous literature, which showed this relationship positive (Sarraipa et al., 2010; Moradi et al., 2017; Hassan et al., 2020; Janna et al., 2021; Akpoviroro & Adeleke, 2022; Islam, 2022; Sehgal & Nanda, 2023; Samantaray et al., 2023; Singh et al., 2023). These outcomes show that the respondents' company uses an electronic method to train new hires. The staff members take online classes. After receiving online training, the performance of the personnel is effectively monitored. Corporate workers who wish to enroll in an electronic training program must register via an electronic system. They are offered materials for electronic training that are appropriate for employee needs. They participate in online training, which benefits the individual and his



coworkers. The results also suggest that E-HRM leverages technology to automate routine HR tasks, enhancing overall efficiency and enabling HR professionals to focus on strategic initiatives. The data-driven nature of E-HRM facilitates informed decision-making in talent management, workforce planning, and organizational structure. With the global shift toward remote work, E-HRM tools have become instrumental in managing dispersed teams, fostering a more flexible organizational structure. Besides, E-HRM contributes to talent acquisition and management through online recruitment platforms and applicant tracking systems. Improved communication is facilitated by E-HRM tools, which utilize intranets, collaboration platforms, and instant messaging to enhance employee engagement. Learning and development initiatives benefit from E-HRM through online training modules and virtual sessions. E-HRM practices play a pivotal role in shaping modern organizational development by fostering efficiency, data-driven decision-making, and enhanced communication.

Finally, the analysis claimed a positive and significant effect of EPA on OD, which is supported by the literature such as Al-Raisi et al. (2011), Daoanis (2012), Kadiresan et al. (2015), Njeje et al. (2018), Botelho (2023) and Arshad et al. (2023). These results suggest that the EPA procedure is appropriate and acceptable to corporate employees. EPA is more efficient than other organizations. To address EPA, employees and their immediate boss meet in person. EPA is assessed using the job description-the participation of those outside the immediate supervisor in the EPA. The managers are capable of managing EPA effectively.

## 6. CONCLUSION

The study would assist management and policymakers in enriching ER procedures, which need to be made more streamlined and adaptable, and employees need to receive clear instructions. The study would encourage reduced impediments to personnel accessing online training programs and make it easier for them to do so. The performance evaluation outcomes, which identify deficiencies, should be connected to online training. The study may guide companies in getting staff members to participate in training sessions using E-HRM software. The higher authorities of companies may benefit and launch information exchange and upgrade of case studies from which staff members can learn about the advantages and disadvantages of E-HRM. It may support developing communication on the timeliness of performance reviews and enhancing access to information about employee performance reviews. This may ensure employees' demands are met and considered. E-HRM calls for creativity, solid interpersonal ties, and more

participation in the design phase of associated applications.

The study offers a theoretical contribution by providing a model that empirically confirms the associations between ER, ETD, EPA, and OD among the equipped companies in Saudi Arabia. These empirical insights guide domain researchers and the business community to develop models and maps regarding these constructs. The study would open new avenues in adding several factors along with ER, ETD, EPA, and OD to provide unique theoretical contributions. Moreover, the study's findings would enrich the contribution to the literature on E-commerce and E-HRM by providing additional empirical insight from an Arab developing context.

The study has numerous limitations as it is conducted only among private business employees in Saudi Arabia. The study is restricted to only quantitative methods with cross-sectional data. The study applied a single source data (survey questionnaire) through online and offline surveys. The study did not underpin the conceptual framework through a theory. Finally, the conclusions of the study are only based on 323 samples.

In the future, the studies may consider factors such as entrepreneurship, environmental culture, green HRM, and talent management towards OD. The diverse sectors such as SMEs, health, banking, and education may be considered. The concerned theories underprop the conceptual model of future studies. The forthcoming researchers should conduct their studies based on mixed and qualitative methods using longitudinal data in future studies. Finally, the sample size may be enhanced to get further valid results.

In conclusion, the overall results highlight a positive effect of ETD and EPA on OD. On the other hand, ER is not a significant predictor of OD among the administrative and management workers of private sector businesses in the eastern province of Saudi Arabia. The study's findings indicate that E-HRM aids in accomplishing organizational objectives. It also helps manage the corporate growth process, enhances communication techniques, and facilitates the exchange of information and data across various administrative divisions. E-HRM helps to resolve workplace issues, improves cooperation across multiple departments, and influences employee growth and development. The study contributed that the E-HRM is prominent in bringing development and success to organizations. E-HRM develops the transformational process of the organizations by converting HRM into E-HRM. This paradigm shift implies strategic realignment and a technological change, making E-HRM a protagonist appliance for achieving organizational targets.

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