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From Paperwork to Performance: E-HR's Impact on Organizational Performance in Saudi Arabia

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Abstract

Presently, e-HRM practices encompass transactional tasks such as performance management, compensation, training, recruitment, and transformational activities, all of which contribute to organizational performance. This study aims to investigate the impact of e-HR on organizational performance in KSA. Using a deductive and quantitative research approach, data was collected through questionnaires from a sample of 245 individuals selected via simple random sampling. Statistical tools, including descriptive and regression analysis, were utilized for data analysis. The study's findings demonstrate a positive association between e-HR practices and employee performance and HRM effectiveness, which positively affect organizational performance. These findings offer practical insights for managers and supervisors to improve organizational performance through e-HRM practices.

Keywords: Human resource management, HR Managers, Employee Performance, Organization Performance, Electronic Human Resource Management (E-HRM).

1. Introduction

Over the last few years, companies have slowly moved away from traditional human resource management (HRM) practices towards more modern approaches. Businesses are now relying more on technology than physical labor to provide HRM services. HRM functions face increasing pressure to become more efficient, capable, innovative and productive in supporting organizational goals and developing new electronic HRM (e-HRM) systems. (Škudienė et al., 2020).

E-HRM involves using digital tools and techniques to implement HR systems, processes and methods within a company. Technology-based platforms help connect HR to staff in coordinated and planned ways. This allows HR to create new ways of meaningfully adding value by cultivating social connections and shared knowledge among employees. Adopting e-HRM opens doors for HR to significantly help companies by developing human and intellectual capital through knowledge sharing (Nasar and Ray, 2023).

More and more businesses are using digital HRM services these days, all over the world. Digital HRM helps companies work more efficiently. Digital HR, or E-HRM, includes many internet tools and steps to make HR tasks easier (Obeidat, 2016). Rehumanize Things like job performance, pay, training, hiring, and even big changes that help the company - all these can be handled using E-HRM. From getting hired to retiring, E-HRM supports employees

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throughout their jobs. These services are made available directly to employees and bosses, thanks to internet tech (Obeidat, 2016).

Running a business needs good people management. This is where human resource management (HRM) comes in. So, the business's success depends on HRM's skills to find and keep talent. Today, businesses use tech to improve HR tasks. Turning manual HR tasks into automated ones has made businesses work better. (Khashman and Al-Ryala, 2015).

In 2016, Saudi Vision 2030 was launched to diversify the region's economy. It aims to reduce reliance on oil money. This vision emphasizes the importance of investments. Remarkably, the investments centered on adopting new technologies. Rather than focusing on this vision, Saudi Arabian businesses are digitalizing their processes. They use methods like e-HRM to make their organizations better. (De Alwis et al., 2022).

Not many studies discuss how e-HRM tools help a company perform better. Most of these focus on Europe and America, not Gulf states like KSA. However, this study changes that. It shows how Saudi Arabian businesses use e-HRM methods to perform better. It fills a big gap in our knowledge. (Najm, 2024).

After conducting a detailed overview of the existing literature review, the following research questions are developed by the underlying research problem:

- 1) How do e-HR practices impact the HRM effectiveness of business organizations in KSA?
- 2) What is the relationship between e-HR practices and the employee performance of business organizations in KSA?
- 3) How do HRM effectiveness and Employee performance impact organizational performance in KSA?

The Resource-Based View (RBV) can be considered a useful theoretical framework for this paper. This theory assumes that companies and firms benefit from the resources available to them to build a sustainable competitive advantage. These resources include tangible assets, such as technological infrastructure, and intangible assets, such as Knowledge and human capital (Wright et al., 2001). Through this research, the company will benefit from its knowledge and human resources to achieve a competitive advantage, making this theory highly suitable for this paper.

This paper aims to study the impacts of e-HR on organizational performance in KSA. Based on this aim, the following specific objectives are formulated:

- 1) Examining the Impacts of e-HR Practices on HRM Effectiveness in Saudi Organizations
- 2) Assessing the Impacts of e-HR Practices on Employee Performance in Saudi Organization
- 3) Analyzing the impacts of HRM effectiveness and Employee performance on Organizational performance among Saudi organizations

Most research studies on the link between e-HRM practices and organizational performance primarily focus on Western or European countries. There is a dearth of research studies that analyze the role of e-HRM practices in improving the organizational performance of GCC countries like KSA. Most of the studies that focus on the role of e-HR practices in organizational settings only focus on organizational performance as a whole. However, employee performance and HRM effectiveness are the two crucial dimensions of organizational performance that must be included in analysing the link between E-HR practices and the organisation. This study will examine e-HR practices' impact on organizational

performance through their influence of e-HR practices on HRM effectiveness and employee performance.

The managerial relevance of this research analysis lies in providing information to business organization HR departments regarding the effectiveness of e-HRM in improving organizational performance. The findings of this study will outline different practices of e-HRM and their impacts on HRM Effectiveness and employee performance. In addition, the study will also provide information regarding the influence of e-HRM on overall organizational performance. Based on these outcomes, recommendations can be formulated, which business organizations can utilize to improve organizational performance.

This research analysis contributes to the theoretical expansion and development of the research literature on the efficiency of e-HRM and its potential impacts on organizational performance. This research will focus on the role of e-HRM in improving the organizational performance of Saudi business organizations, which has not been done before. By examining this relation, this research analysis will contribute to bridging the scientific gap between existing literature and the stock of knowledge related to e-HRM. It will contribute to the theoretical frameworks, guides, and information regarding practices that will unravel the multifaceted implications of other e-HRM adoption on organizational performance.

After providing this introduction, section 2 presents the literature, discusses the impact of e-HRM, and then develops the primary research hypotheses. Then, section 3 covers the methodology used, the data collection mechanism, the target population and sample, and how the data was accessed while considering ethical aspects. Section 4 discusses the most important results of this paper. Section 5 deals with the discussion and the conclusion, mentioning the most important limitations of the research and its applications, and in the end, the references used are listed.

2. Literature Review

2.1 E-HRM: Concept and Definition

De Alwis et al. (2022) have defined E-HR as a specific approach whereby different HR practices, policies, and techniques are implemented within the organization through web-based technological channels. In addition, it was also proposed that the creation of portals through E-HRM technologies allows HR practitioners and employees to modify, extract, and view the necessary data required for handling an organization's human resources.

2.2 E-HR Practices

I. E-Recruitment and E-Selection

E-recruitment utilizes different web-based and digital technologies to facilitate the hiring process. Presently, most business organizations employ an extensive range of online sites and platforms to recruit employees directly or through a third party. Several internet channels are employed to advertise the job openings, and the candidates can apply through online sources by uploading their resumes. It is the most cost-efficient talent acquisition method (Kucherov and Tsybova, 2021). The e-recruitment tools and systems can assign different numerical orders or rankings to each applicant based on factors like GPA, education, etc. Some third-party recruitment services in KSA are Bayt, Mhnati and Naukrigulf.

E-selection is an automated system that enables business organizations to gather and screen applications through different sophisticated and automated computer systems. It involves the evaluation of resumes, online testing services and conducting interviews whereby the recruiters can assess the suitability and skill set of the candidate for the position under consideration. Several business organizations utilize online aptitude tests and video conferences for beginner-level positions to interview potential employees. Since there is the absence of any paperwork, the transactions are often done within a short period (Ruël and Bondarouk, 2014). An increasing demand for digital tools like Zoom has been found among organizations as it provides high-quality video and audio services for conducting interviews.

II. E-Compensation

Another critical e-HR practice is e-compensation, which uses webpage technology to facilitate effective reimbursement communication and administration for LMs. Previously, it was revealed that e-compensation leads to higher employee satisfaction. E-compensation also enables the HR staff or personnel to access the information necessary to maximize the effectiveness of compensation initiatives (Siregar, 2022). E-compensation can be defined as the process whereby employees' cash and non-cash compensation are managed through software. In addition, this software is also employed to model the remuneration structures of employees in an organization (Rathee and Bhuntel, 2022).

III. E-Training

This function or practice of e-HRM systems is related to the provision of proper workspace education and learning, which can lead to the skill development of employees at an organization. Such applications provide employees extensive learning materials and knowledge to enhance their understanding of existing processes. Employees can access different learning content related to their job skills and knowledge through this function. It has been found previously that digital learning tools and techniques have higher and stronger impacts on employees' learning experience (Khashman, 2022).

E-learning and training tools are designed to provide access to knowledge and data irrespective of time and location. It allows the HR managers to share information regularly without considering resources or time constraints. Some of the most common tools utilized for e-learning include self-placed learning modules, professional networking, virtual classrooms, and web conferencing. E-learning practices are gaining recognition as the most effective method of delivering education and training in the context of globalization. Besides enhancing the flexibility of personnel, these tools have also been found to impact the efficiency of a business organization significantly. There are many similarities between e-training and e-learning, considering that both utilize digital solutions for learning purposes (Khashman, 2022).

IV. E-Communication

The E-communication function facilitates and ensures effective interactions among end-users. The web-based technologies improve employee interaction, leading to effective communication within the business organization. In addition, e-HR systems can help conduct personnel communication through different digital means, such as emails. This function has gained a reputation as a core element of organizational culture management, enabling the management to communicate with the employees properly (Khashman, 2022).

Communication is the prime determinant of any HRM system as it is strongly related to the performance of HR systems. Using digital technologies, a communication network can be

developed whereby the employees and management are connected (Almasradi et al., 2020). E-communication has now become a practical approach for exchanging and communicating information. The advantages of utilizing digital solutions such as Emails regarding productivity gains have already been reported (Ruël and Bondarouk, 2014).

V. E-Productivity

A business organization's productivity shows the employees' capability to complete tasks within time while ensuring that the final product meets the quality standards. Another aspect of productivity can be defined as the extent to which a product meets consumer expectations regarding quality and usefulness (Khashman, 2022).

2.3 Impact of e-HRM on Organizational Performance

Shamaileh et al. (2022) To clarify the impact of using e-HRM on talent management, researchers designed a questionnaire and distributed it to a sample of managers of industrial companies in Jordan. They noted that electronic human resources management effectively contributes to achieving organizations' strategic goals through many positive effects that affect talent management and enhance competitiveness and strategic fit. Ahmed (2019) also reported similar results and found that e-HRM practices help improve the productivity levels of employees as well as the efficiency of HR functions. These, in turn, elevate and improve organizational performance (Iqbal et al., 2019). Thathasara and Jayaranjani (2021) have also investigated the link between organizational performance and e-HRM practices. This study revealed that organizational agility is developed through e-HRM practices, leading to higher organizational performance. Cheg and Zou (2021) conducted a meta-analysis of the previous studies. They found that e-HRM Adoption improves organizational performance as automation reduces errors and the time required for intermediary roles. On the contrary, Lazazzra et al. (2020) revealed that e-HRM practices help mediate the link between intellectual capital and organizational performance and thus lead to improved organizational performance. Another study by Shamaileh et al. (2022) noted that e-HRM tools contribute to efficient talent management, leading to higher organisational performance.

Elaswy and Ali (2021) have reported that e-HRM practices have severe implications for organizational performance. The study was conducted to analyze the Impact of HRM practices on the levels of organizational performance in the UAE. The results of this study confirmed the existence of a positive link between e-HRM practices and organizational performance. Al-Haziazi (2020) reported that different tools and practices of eHRM improve the efficiency of HRM functions and lead to improvements in the productivity as well as performance levels of the organization. A review of previous studies has indicated a positive link between e-HRM practices and organizational performance.

2.4 Impact of e-HRM on Employee Performance

Employees or the people in an organization are the critical assets that drive the organisation's success. Therefore, people's attitudes, skills, knowledge, and behaviour are essential to the advancement of an organization. De-Alwis et al. (2022) have found that e-HRM possesses excellent potential for improving the effectiveness and efficiency of HR functions. It leads to the reduction of the HR workforce and work cycle times and improves data efficiency. Each of these factors led to improvements in efficiency (Iqbal et al., 2019). In addition, it improves the workers' ability, skills, and competencies through the higher efficiency of the HR department, leading to improvements in employee performance.

Previously, E-HRM strategies and practices were effective ways of developing employees' green behavior. Susanto et al. (2023) used primary-level data and found that the E-HRM practices improve overall employee performance through the development of employee green behavior. This study utilized employee green behavior as the indicator of employee performance. Green employee behavior is based on green employee motivation, which comprises both intrinsic and extrinsic motivation. Factors such as interest, desire, love, and eco-friendly attitude are the elements associated with intrinsic green motivation. In contrast, factors such as recognition, praise, material rewards and money are considered green extrinsic motivational factors.

Several business organizations adopted e-HRM practices in response to the recent pandemic. User experience is the most crucial determinant for increasing the efficacy of e-HRM practices (Chambel et al., 2023). Factors such as perceived usefulness or service quality improve the user experience, enabling e-HRM practices to increase employee performance. Kaewkhamnuan and Rotchanakitumnuai (2022) examined the link between employee performance and the e-HRM system or practices in detail. A comprehensive data set collected through responses from more than 300 employees was analyzed. The findings of this study revealed that factors such as perceived usefulness, expectations and system quality significantly impact the link between employee performance and e-HRM practices.

Another study by Nyathi and Kekewale (2023) also reported that organizational performance, as well as employee performance, can be improved with the adoption of e-HRM practices. Through purposive sampling, detailed data on more than 30 organizations were gathered. The results of this study revealed that in developing countries like Africa, there is excellent potential for e-HRM tools and practices to improve the efficiency of HR and, eventually, employee performance.

E-HRM practices and strategies improve employee performance by offering tools and practices to improve employee relationships. Based on the Structural Equation Modelling, Al-Aljouni et al. (2019) examined the moderated model of employee performance and the electronic e-HRM. The findings of this study revealed that training practices improve employee performance. In contrast to traditional employee training practices, using e-training tools and strategies helped improve the employees' skills, knowledge, abilities, and competencies. These factors, in turn, raised employee productivity.

Marler and Fisher (2013) found that human resources management needs to be made more strategic. To achieve this goal, the researchers studied 40 previous studies published between 1999 and 2011 using integrative synthesis as an evidence-based methodology. The researchers did not find any evidence that using electronic human resources management will improve strategic results, and from here, it is believed that this field still needs more research and studies.

Previous research studies have documented the influence of e-HRM practices on employee performance through improvements in HR service Qualities. Chanda and Goyal (2022) have investigated the link between e-HRM and employee performance from the perspective of improvements within employee performance. This study gathered primary-level data on more than 200 government employees through an online survey in Indonesia. The findings of this study revealed that e-HRM practices have great potential to improve employee performance through improvements in HRM service quality. An analysis of the previous studies has revealed that e-HRM strongly impacts employee performance.

2.5 Impact of e-HRM on HRM Effectiveness

Several studies have been conducted to understand and assess the link between e-HRM practices and HRM effectiveness. Alwis et al. (2022) found that e-HRM has a pivotal role in modernizing role within the context of HRM. This study reported that the E-HRM practices and tools liberate the intermediary roles of the HRM and thus improve the efficiency levels. It enables the HR personnel to focus more on significant activities and automates the processes which require less cognitive skills and more manual work.

Another study by Bondarouk (2017) examined the impact of adopting E-HRM technologies on improvements within HR functions. This study also identified different benefits of e-HRM Adoption. These benefits included a decline in administrative costs, delivery of HRM services, and more time for the HR staff to focus on strategic reorientation, leading to higher HRM effectiveness.

William and Singh (2023) performed a study to analyze the impacts of the e-HRM tools in raising the organisations' efficiency and effectiveness within Ghana's MNCs. Based on the quantitative cross-sectional data, it was revealed that there is a positive link between e-HRM adoption and HRM effectiveness. Al-Harazneh and Sila (2021) also reported similar results for Turkey. Further, they showed that the roles of opt management, HR professionals, and other employees can be highlighted and elaborated correctly with the help of e-HRM tools.

Marler and Parry (2016) have also reported several ways to improve HRM effectiveness through e-HRM tools and practices. The results of this study revealed that e-HRM tools have a strong positive influence on the strategic effectiveness of HRM. It helps improve the HR service levels, reduces costs, and provides opportunities for the HR department to improve its performance. Thus, reviewing the previous literature has provided evidence that e-HRM has a strong positive impact on HRM practices.

Hmoud and Varallyai (2023) provided a detailed overview of AI's current role in Human Resources management. The study focused on analyzing AI's role and potential impacts in the context of Middle Eastern organizations. A proper survey was conducted to collect primary data from major Middle Eastern economies, including Qatar, Kuwait, Jordan, and KSA. Most of the respondents showed a positive attitude towards the implementation of technological advancements like AI to improve organizational performance. Furthermore, it was also revealed that e-HR has the potential to improve the efficiency of HRM operations and functions.

A review of the previous studies has outlined the need to analyze the importance of e-HRM practices in improving the organization from the perspective of the Saudi business environment. Therefore, this research is focused on exploring the relationship between e-HR and organizational performance among Saudi-listed companies.

2.6 Research Hypothesis

Following are the research hypotheses formulated for this study:

H1: *The e-HR Practices positively impact HRM Effectiveness in Saudi Organizations.*

H2: *The e-HR Practices positively impact employee performance in Saudi Arabia.*

H3: *The e-HRM effectiveness and Employee performance positively influence Organizational performance among Saudi organizations.*

3. Methodology

3.1 Research Approach

Considering the nature of the present study, a deductive research approach is employed. This research approach is the most suitable as the premises are true, and the conclusion might also be proper. It provides generalizability to the results, and data collection processes are conducted to evaluate hypotheses related to the existing theory. Most importantly, this approach will provide ground evidence for the verification and the falsification of the developed hypothesis (Azungah, 2018)

3.2 Research Design

For the present study, a quantitative research design is selected. This research design will provide a plan and framework for remaining focused on measuring and quantifying phenomena. Numerical data assesses the research hypothesis, and samples are selected to analyse the research problem. Generally, this research design focuses on objectivity and precision. In addition, it involves hypothesis testing as well as statistical analysis (Fisher et al., 2014). A quantitative research design will help gain a better and more detailed understanding of the impacts of E-HR practices on organizational performance.

3.3. Research Philosophy

This paper selects a positive research philosophy. Positivism is the belief that only information or knowledge extracted from observations, such as measurements, is trustworthy. In positivist studies, researchers primarily focus on collecting the data and providing its interpretation to understand and resolve the research problem (Rayan, 2018).

3.4. Data Collection

One of the essential aspects of any research analysis is the process of data collection. Questionnaires are used as the data collection source for this research analysis. The survey is considered a specific research technique in which data is collected from a sample of individuals with the help of surveys.

3.4.1 Target Population and Sample

It is costly and timely to gather information from the entire population targeted for the analysis; hence, only the employees employed in companies with E-HR practices were selected as the target population. The sample of this study is around 383, and after data cleaning, only 245 sampling units were left.

3.4.2 Sampling Technique

The sampling method is considered the technique of investigating the entire population and incorporates both probability and non-probability sampling. Under probability sampling, samples are selected to represent the entire population, and each member of the population has a certain probability of being selected in the sample.

In contrast, non-probability sampling is a technique whereby the sample units are selected based on convenience and personal judgment. Simple random sampling was used to select the sample, whereby each member of the target population had an equal chance of being selected. This technique was selected as the most time-efficient and cost-efficient approach (Yadav et al., 2019).

3.4.3. Data Collection Instrument

Well-structured questionnaires were used as the data collection instrument, which led to the collection of relevant data.

3.4.3.1 Questionnaire Design

The questionnaire was based on a set of close-ended questions to ensure ease in the data analysis process for the respondents. The questionnaires were distributed among respondents through online platforms. Online platforms like Google Forms provide higher access and accuracy in reaching the target population. The questionnaire was developed based on previous research studies.

The questionnaire was segregated into four major sections and structured as follows.

1. The first section included questions related to the demographic features of the population, such as gender, Age, work experience, sector, and designation. This section also includes items related to using E-HR within the organization.
2. The second section is designed to assess the Implementation and extent of different E-HR practices within an organization. These practices included awareness, e-selection, recruitment—e-compensation, e-training, e-communication, and e-productivity.
3. The third section concerns items and statements about organizational performance. Its items relate to the influence of E-HR implementation on different factors such as employee satisfaction, HR performance, workforce agility, organizational Flexibility, and organizational performance.
4. The fourth section is designed to gather information on the impacts of e-HR practices on human resource management's effectiveness and productivity. The items in this section are linked to the influence of e-HR practices on human capital development, HR responsiveness, goal completion, timely service delivery, and HR personnel satisfaction levels.

3.5 Data Analysis

After the data collection, the gathered information in categorical variables is analyzed. Different statistical tools and approaches, such as descriptive analysis and regression analysis, are utilized for.

3.5.1 Data Cleaning

Data cleaning is the initial step of data analysis, which focuses on preparing the data for further analysis. Firstly, the questionnaire assesses and observes for any mistakes or errors. Data editing follows this activity, in which the data is entered and reviewed in detail. Any missing value or outlier is eliminated at this stage. Data coding is used to assign the codes to each choice provided in the questions. For instance, the response "strongly disagree" is coded as one, while strongly agree is coded as 5. The coding was done so that a higher agreement level represents a more significant number.

3.5.2 Descriptive Analysis

Descriptive analysis is a statistical approach that helps represent the characteristics of the population or selected sample. In addition, this analysis can also facilitate the transformation of the raw data into an understandable form that can be interpreted, rearranged, and manipulated. There are several ways of summarizing data, including frequency distribution, percentages, and averages. The data will be analyzed with the help of frequencies, graphical representations, and percentages.

3.5.3 Reliability Test

Reliability can be defined as the extent of the data collection instrument used to measure the targeted concept. It refers to the accurate representation of the entire population and the consistency of the results over time. In addition, it assists in determining whether the variability within the observed score is representative of the variability in the underlying accurate score. We measure the internal consistency through Cronbach's alpha score. The higher the value of this score, the more significant the correlation among variables. To attain perfect reliability for a range from 0 to 1, the reliability score should be higher than 0.7 (Tavakol and Dennick, 2011).

3.5.4 Multiple Regression Analysis

Multiple regression can be defined as the process whereby a set of independent variables that explain the variance proportion within the dependent variable at a significant level will be tested as potential predictors of the dependent variables. The regression results enable us to understand better the impact of different variables on the dependent variable (Maxwell, 2000). In addition, it highlights which variables are significant and which are not. The regression analysis will examine E-HR's impacts on organizational performance, employee performance and HRM effectiveness.

3.6. Ethical Issues

Ethical concerns have recently been termed the core of research studies involving living human subjects. This study has also considered the ethical concerns of conducting research analysis. The information gathered through the survey was treated with extreme confidentiality, and the respondents' identities were not disclosed at any stage of this study. No information was changed or modified; the information presented within the study is cited with relevant references. Lastly, informed consent was administered as it constituted the essential component of the research (Bernal-Sánchez and Feenstra, 2023).

4. Analysis and Results

4.1. Descriptive Analysis

4.1.1: Gender

The proportion of female participants was lower than the male participants in the sample. Around 43% of the participants were women, while more than half of the sample comprised men.

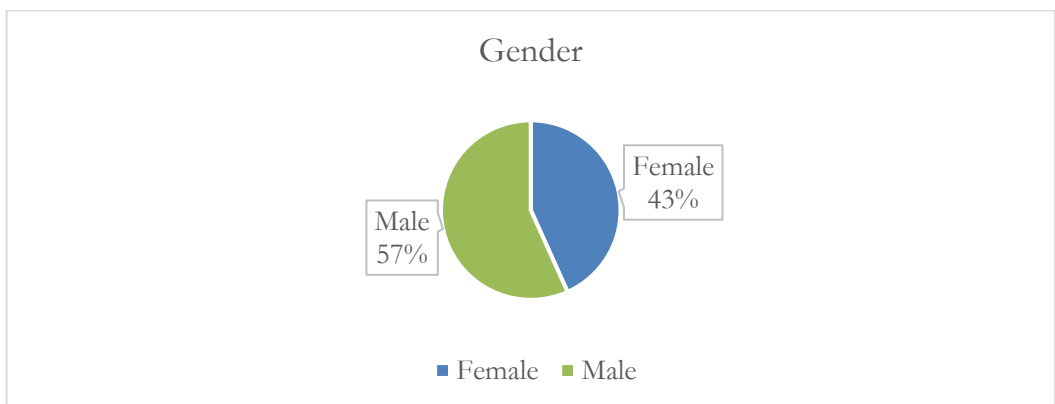


Figure 1: Gender.

4.1.2: Age

More than half of the participants were between the ages of 31-40. Around 128 individuals (52%) were reported to be between the ages of 31 and 40, and 68 respondents (28%) were between the ages of 26 and 30. It was followed by the age group 31-40 years, including 44 respondents (18%). Around 15 individuals (6%) were from the 18-25 age group. Only 3% of the respondents were from the age group of more than 56 years.

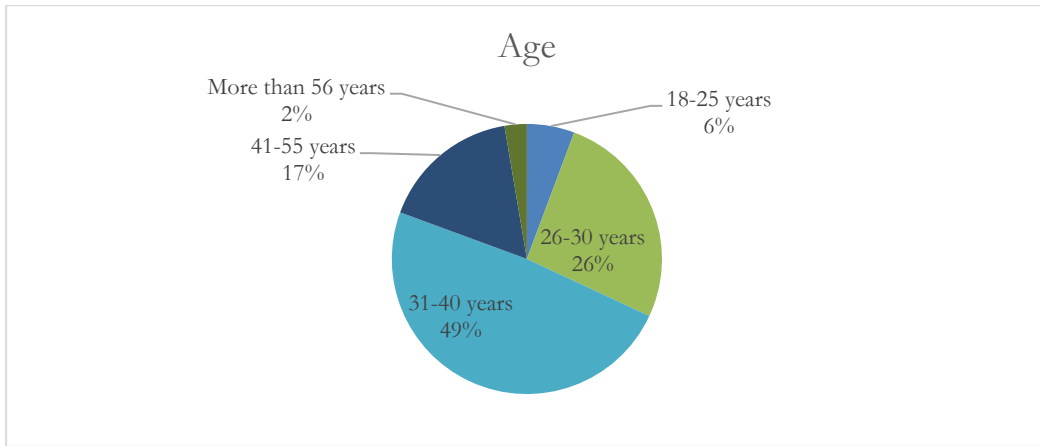


Figure 2: Age.

4.1.3: Work Experience

Most respondents had at least 5 to 10 years of experience. More than 40% of the participants had 5-10 years of experience. This was followed by 22% of the individuals who possessed less than five years of experience. Around 19% of the respondents had 11-15 years of experience, and 24% had more than 16 years of experience.

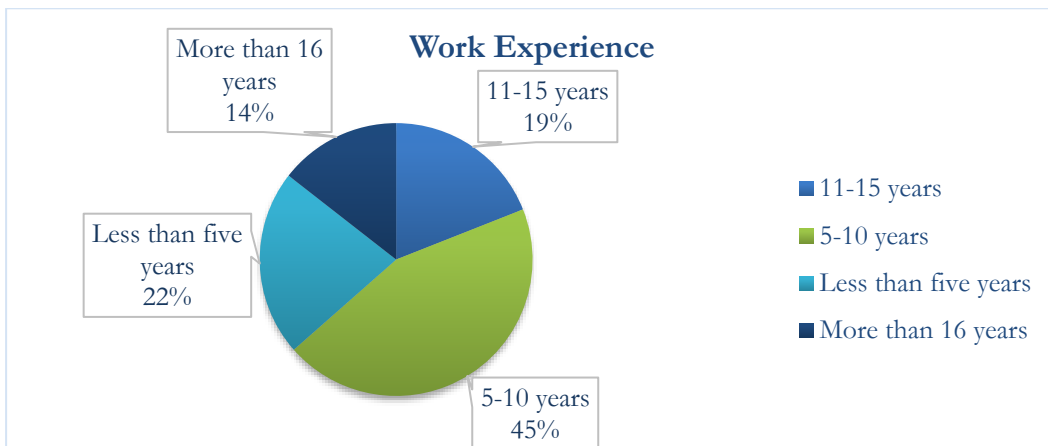


Figure 3: Work Experience.

4.1.4: Designation

The sample selected for this analysis comprised individuals with diverse organizational roles and levels. Around 30% of the respondents were senior officers, and 24% were junior officers. 17% of the respondents were managers in different business organizations, while 14% were

supervisors. Around 6% of the participants were workers, while only 6% were in top management.

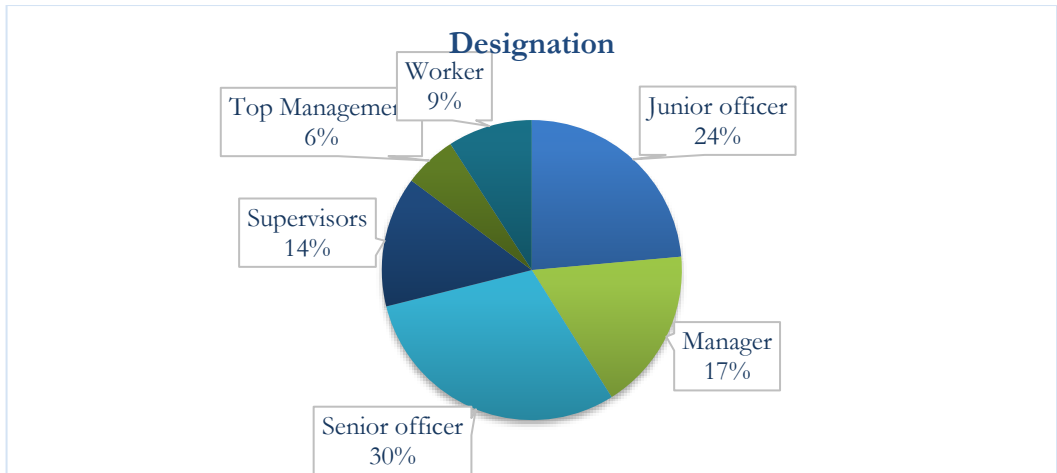


Figure 4: Designation.

4.1.5: Type of Sector

Another essential feature of the selected sample is that it comprises individuals from diverse sectors. 40% of the respondents worked in other sectors not defined within the survey item. Around 29% of the participants worked in the healthcare sector, and around 13% worked within the service sector. 6% of the respondents were associated with the telecom sector, and 4% were employed in the construction sector. Around 3% of the respondents worked in the banking and retail sectors. Only 2% of the employees were in the petroleum and gas sector.

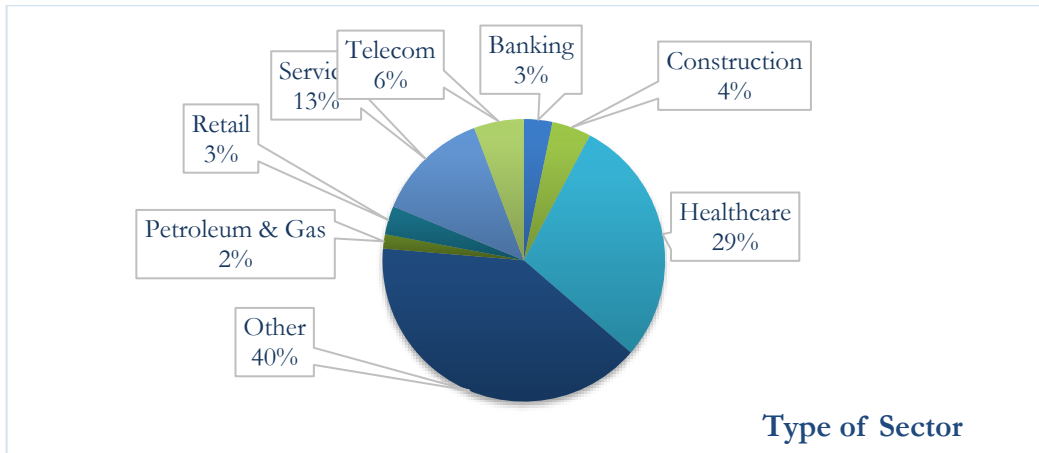


Figure 5: Type of Sector.

4.1.2: E-HR Use

Here there are different uses of e-HR at the organizational. The responses of individuals indicated that the most frequent use of e-HR practice is e-communication. It was followed by 77% of the participants who reported that e-HR practice and e-communication are employed in their business organization. 75% of the participants stated that e-training is being offered at their business organization. 51% of the participants reported using e-HR regarding e-

recruitment and selection. Lastly, only 44% of the respondents utilized the e-productivity practice of e-HR practices.

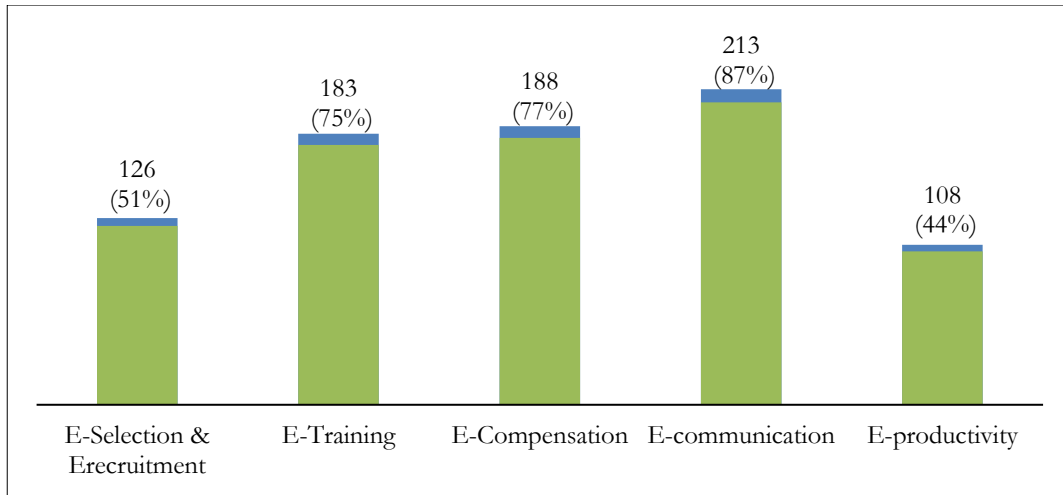


Figure 6: E-HRM Use.

4.2. Reliability Analysis

Through Cronbach’s alpha, the reliability analysis was conducted for each dimension and factor incorporated with the questionnaire. As shown in Table 1, each factor within the questionnaire had a higher reliability score.

Table 1: Reliability Analysis.

Dimension	Cronbach’s α	Number of items
Awareness	0.923	5
e-Selection and e-recruitment	0.931	3
e-compensation	0.848	3
e-training	0.893	2
e-communication	0.854	3
e-productivity	0.881	3
Organizational Performance	0.954	9
HRM Effectiveness	0.931	6

4.3. Multiple Regression

For the hypothesis, a regression analysis approach is utilized, and the indexes were developed based on the factor analysis scores.

4.3.1: Impact of e-HR Practices on the HRM Effectiveness of Business Organizations

Hypothesis 1 states that e-HR practices positively impact the HRM effectiveness of business organizations. The regression analysis findings in Table 2 show that all the practices positively and significantly impact HRM effectiveness. Awareness, e-selection and recruitment, e-compensation, e-training, e-productivity, and e-communication. P-values for all the e-HR practices were significant, and the co-efficient was positive, confirming the first hypothesis that e-HR practices positively influence HRM effectiveness.

Table 2: Impact of e-HR Practices on the HRM Effectiveness of Business Organizations.

Model	B	Std. Error	t.	Sig.
(Constant)	1.3	1.324	0.9819	.327
Awareness	0.346	0.098	3.5306	.001
e-selection & recruitment	0.235	0.119	1.9748	.035
e-compensation	0.309	0.121	2.5537	.011
e-training	0.338	0.115	2.9391	.012
e-productivity	0.519	0.116	4.4741	.030
e-communication	0.432	0.13	3.3231	.001

Note.

B = Beta Coefficient or Regression Coefficient

Std. Error = Standard Error of the Coefficient

t. = t-value

Sig. = Significance Level

4.3.2: Impact of e-HR Practices on employee performance of business organizations

Hypothesis 2 states that e-HR practices positively impact employee performance in business organizations. The regression analysis findings in Table 3 show that all the practices positively and significantly impact employee performance. Awareness, e-selection and recruitment, e-compensation, e-training, e-productivity, and e-communication were found to have a strong positive impact on employee performance. E-communication practices positively impacted employee performance, whereby a unit increase in e-communication would raise employee performance by 0.098 times. Thereby, the regression outcome confirms the second hypothesis of this study.

Table 3: Impact of e-HR Practices on Employee Performance of Business Organizations.

Model	B	Std. Error	t.	Sig.
(Constant)	-0.253	-0.253	-0.253	.423
Awareness	0.05	0.05	0.05	.035
e-selection & recruitment	0.057	0.057	0.057	.015
e-compensation	0.098	0.098	0.098	.001
e-training	0.081	0.081	0.081	.045
e-productivity	0.071	0.071	0.071	.026
e-communication	0.095	0.095	0.095	.002

Note.

B = Beta Coefficient or Regression Coefficient

Std. Error = Standard Error of the Coefficient

t. = t-value

Sig. = Significance Level

4.3.3: Impact of HRM Effectiveness and Employee Performance on Organizational Performance

The third hypothesis of this study stated that HRM effectiveness and employee performance positively influence organizational performance. The regression analysis findings, presented in Table 3, indicate that HRM effectiveness and employee performance positively influence organizational performance. It outlines that e-HR practices improve HRM effectiveness and employee performance, which results in higher organizational performance.

Table 4: Impact of HRM Effectiveness and Employee Performance on Organizational Performance.

Model	B	Std. Error	t.	Sig.
(Constant)	5.800	1.048	5.533	.000
HRM Effectiveness	.835	.057	14.579	.000
Employee Performance	2.460	.272	9.026	.000

Note.

B = Beta Coefficient or Regression Coefficient

Std. Error = Standard Error of the Coefficient

t. = t-value

Sig. = Significance Level

5. Discussion and Conclusion

5.1. Discussion

5.1.1: Impact of e-HR Practices on the HRM Effectiveness of Business Organizations

Based on the regression findings, the first hypothesis was confirmed that e-HR practices positively and significantly influence HRM effectiveness. This finding is in line with the previous research studies. William and Singh (2023) have also reported similar findings and concluded that there is a positive relation between e-HR practices and HRM effectiveness within business organizations. Al-Harazneh and Sila (2021) also stated that HR professionals and employees better understand their roles through e-HRM tools, contributing to HRM effectiveness.

Marler and Parry (2016) have reported that e-HR practices result in cost reduction, improve service levels, and provide opportunities to HR professionals, leading to the HRM effectiveness of the business organization.

5.1.2: Impact of e-HR Practices on Employee Performance of Business Organizations

Hypothesis 2, that the e-HR practices strongly influence employee performance, is also confirmed. These findings are in line with previous research studies on a similar topic. De-Alwis et al. (2022) also stated that the EHRM practices improve employee and organizational performance. Another study by Kaewkhamnuan and Rotchanakitumnuai (2022) revealed that factors such as perceived usefulness, expectations, and system quality significantly impact the link between employee performance and e-HRM practices. Nyathi and Kekewaletwe (2023) also reported that organizational performance, as well as employee performance, can be improved with the Adoption of e-HRM practices.

5.1.3: Impact of HRM Effectiveness and Employee Performance on Organizational Performance

The third hypothesis that there is a positive link between HRM effectiveness, employee performance, and organizational performance is also confirmed. In addition, this study was also found to align with the previous research findings. Shamaileh et al. (2019) reported similar results and confirmed a positive impact between organizational performance and e-HRM Adoption. Another study by Ahmed (2019) also reported similar results and found that e-HRM practices help improve employees' productivity levels and the efficiency of HR functions. Thathasara and Jayaranjani (2021) have documented that e-HRM practices strongly influence organizational performance through increased organizational agility. The recent study by

Shamaileh et al. (2022) noted that e-HRM tools contribute to efficient talent management, leading to higher organizational performance.

5.2. Conclusion

This research project examines the link between E-HR practices and organizational performance in KSA. This study has adopted a deductive research approach comprising quantitative methods for the data analysis. The data collection was conducted with the help of questionnaires, whereby the sample was selected with the help of simple random sampling. Different statistical tools, such as descriptive and regression analyses, were used for data analysis. The findings of this study revealed that there is a positive link between e-HR practices and employee performance. A positive link between e-HR practices and HRM effectiveness was also identified. Lastly, both HRM effectiveness and employee performance were found to have a positive influence on organizational performance.

5.3. Managerial Relevance

The managerial relevance of this research analysis is evident from the deeper insights and information to HR departments of business organizations regarding the effectiveness of e-HRM in improving organizational performance. The findings of this study have outlined that different e-HRM practices strongly influence HRM effectiveness and employee performance. In addition, the study has also provided information regarding the influence of e-HRM on overall organizational performance. Managers and supervisors can develop recommendations based on these outcomes, which business organizations can utilize to improve organizational performance.

5.4. Scientific Implications

This research analysis contributed to the theoretical expansion and development of research literature on the efficiency of e-HRM and its potential impacts on organizational performance. This research has focused on the role of e-HRM in improving the organizational performance of Saudi business organizations, which has not been done before. By examining this relation, this research analysis has made notable contributions towards bridging the scientific gap between existing literature and the stock of knowledge related to e-HRM. It has also contributed to the theoretical frameworks, guides, and information regarding practices that will unravel the multifaceted implications of other e-HRM Adoption on organizational performance.

We also note that the results of this research paper are basically consistent with The Resource-Based View (RBV), given that the effectiveness of human resources management and the company's performance in general contributes to achieving the desired success of the company, whether at the organizational level or at the operational and financial level, and thus contributes In creating a competitive advantage for the company.

5.5. Limitations and Scope for Future Research

There are three significant limitations of this study. Firstly, the study is only conducted in the KSA-specific context. Therefore, the findings of this study are limited in terms of

generalizability. Secondly, the study only incorporates employee performance and HRM effectiveness as the factors associated with improvements in organizational performance. Other variables like employee motivation can also link with the implementation and Adoption of E-HR practices. Thirdly, the sample size was relatively small.

Here are some recommendations regarding future research. Firstly, the present study can be replicated for other regions and geographical areas to improve the generalizability of the findings. Secondly, other relevant variables like employee motivation can also be included within the model for analyzing the impacts of e-HR on organizational performance. Thirdly, the sample size can be extended and diversified to gain more detailed and valid information.

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