



Electronic Human Resource Management Information Systems and Their Impact on Organizational Sustainability: An Analytical Study at the Directorate of Education in Anbar

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Abstract

This study aims to identify the effect of electronic human resource management information systems (e-HRMIS) on organizational sustainability at the Directorate of Education in Anbar, Iraq. The researchers adopted the descriptive-analytical methodology. The study population comprised 975 male and female employees, from whom a stratified random sample of 450 employees was selected. The study found a moderate to relatively high level of agreement regarding the implementation of e-HRMIS across their five dimensions, with an overall arithmetic mean of 3.35. The results further revealed a moderate to relatively high level of agreement regarding organizational sustainability at the directorate across its three dimensions, with an overall arithmetic mean of 3.28. In addition, the results demonstrate a statistically significant effect of e-HRMIS as a whole on organizational sustainability.

Keywords: Electronic Human Resource Management Information Systems (e-HRMIS); Organizational Sustainability.

1. Introduction

The need to employ computers and information technology within organizations has grown considerably, as these are recognized as a strategic instrument that contributes to the execution of functional tasks with greater efficiency and effectiveness. In particular, the use of computing enables the provision of facts and information in a more effective and efficient manner than manual processes. The concept of this technology, as applied to organizational operations, became associated with a newly emerging term known as electronic human resource management information systems (e-HRMIS)—owing to its direct engagement with the fundamental pillar of any organization: the human resource, which constitutes the primary driver of organizational existence and continuity. Enhancing organizational effectiveness requires the integration and coordination of human resource management with information technology, in order to establish an effective human resource system.



As a result of the expanding scope and diversifying functions of electronic human resource management, most organizations recognized the necessity of addressing all administrative, financial, and technical requirements—and identifying appropriate solutions. Most organizations also came to appreciate the advantages yielded by technology and its modern tools, leading to business process re-engineering, the elimination of many functions replaced by technology, and the merging of others—resulting in considerable revenue generation and increased output. Electronic human resource management information systems are accordingly regarded as one of the most important core functions in organizations, contributing to organizational effectiveness through the provision, analysis, retrieval, and distribution of the necessary data and information pertaining to human resources, activities, policies, procedures, and instructions relevant to organizational operations and continuity. e-HRMIS may further be considered the engine that sustains organizational sustainability by reducing dependence on routine transactions, enhancing transparency, and rationalizing resource consumption. These systems also assist in achieving a balance between economic performance and employee well-being, and strengthen the organization's capacity to adapt to environmental changes.

1.2 Research Problem

In recent years, organizations have witnessed a radical and rapidly accelerating transformation toward the automation and digitization of electronic human resource management functions and electronic management information systems. These functions have transcended mere data storage to encompass e-recruitment, e-selection, e-training, electronic performance appraisal, and electronic compensation—thereby restructuring traditional human resource functions and their information systems and giving rise to new management approaches. Much of the contemporary literature indicates a growing interest in the relationship between electronic management information systems and organizational sustainability; however, most studies have not engaged with electronic management information systems from a comprehensive perspective, nor have they treated organizational sustainability holistically—concentrating instead on sustainability in a partial manner and reducing it to performance and economic indicators, or focusing predominantly on environmental sustainability.

Proceeding from this gap, the present study was undertaken to address these shortcomings and to examine the role that e-HRMIS plays in organizational sustainability, through answers to the following research questions:

- Is there a significant effect of e-HRMIS on the organizational sustainability of the Directorate of Education in Anbar?
- What is the level of e-HRMIS use at the Directorate of Education in Anbar?
- What is the degree of organizational sustainability at the Directorate of Education in Anbar?

1.3 Significance of the Study

The significance of this study resides in the following:

- Electronic human resource management information systems are one of the foundational pillars of modern organizations and a key factor in their construction, stability, and



development. Organizational effectiveness, efficiency, and continuity depend on the existence of an effective information system that equips organizational members with the information required for sound decision-making. This study was undertaken to probe the depth of this importance.

- The Directorate of Education in Anbar constitutes an important and vital sector in society, and the study derives its significance from this sector as its study population.
- This study examines two managerial variables of considerable importance in contemporary management theory—e-HRMIS and organizational sustainability—in recognition of the weight these two dimensions carry.
- The study constructs and tests a conceptual model linking the five detailed dimensions of e-HRMIS (e-recruitment, e-selection, e-training, electronic performance appraisal, and electronic compensation) with organizational sustainability—thereby enriching the managerial literature through the findings and recommendations it presents.

1.4 Research Hypotheses

The study seeks to test and verify the following main null hypothesis:

H₀: There is no statistically significant effect of e-HRMIS on organizational sustainability.

The following sub-hypotheses are derived from the main hypothesis:

- H₀₁: There is no statistically significant effect of e-recruitment on organizational sustainability.
- H₀₂: There is no statistically significant effect of e-selection on organizational sustainability.
- H₀₃: There is no statistically significant effect of e-training on organizational sustainability.
- H₀₄: There is no statistically significant effect of electronic performance appraisal on organizational sustainability.
- H₀₅: There is no statistically significant effect of electronic compensation on organizational sustainability.

1.5 Objectives of the Study

- To identify the level of e-HRMIS use at the Directorate of Education in Anbar.
- To identify the level of organizational sustainability at the Directorate of Education in Anbar.
- To determine the role that e-HRMIS plays in organizational sustainability.
- To present recommendations that may contribute to improving e-HRMIS efficiency, thereby ensuring that it fulfills its role in enhancing the organizational sustainability of the Directorate of Education in Anbar.

1.6 Research Model

In light of the research problem and hypotheses, the researchers selected the dimensions of e-HRMIS as the five dimensions of the independent variable: e-recruitment, e-selection, e-training, electronic performance appraisal, and electronic compensation. For the dependent variable—



organizational sustainability—three dimensions were selected that are appropriate to the current research context: environmental sustainability, economic sustainability, and social sustainability.

1.7 Research Methodology

The researchers adopted the descriptive-analytical methodology, drawing on data collected from two directions. The first direction involved a review of published research in reputable scientific journals and foreign and Arabic books. The second direction involved the development of a questionnaire by the researchers for the purpose of collecting field data, distributing it to the study sample at the Directorate of Education in Anbar, analyzing it, and presenting a set of findings and recommendations in pursuit of the study's objectives.

2. Theoretical Framework

2.1 The Concept of e-HRMIS

The concept of electronic human resource management information systems has been defined in diverse ways, reflecting the differing perspectives of researchers and the particular characteristics most relevant to each study. Nassra and Bou Tarfa (2022) describe e-HRMIS as an integrated system of material, human, and software components that contributes to the processing and storage of data in order to support human resource management, facilitate its operations, and thereby raise organizational efficiency and performance. Destiviani and Andriani (2023) add that e-HRMIS is a modern and effective technology used for the purpose of collecting and retaining detailed information by organizational management—including employee personal data, performance appraisals, training records, compensation, and payroll. From the perspective of Mollel and Rutenge (2024), e-HRMIS constitutes a process of integrating information technology into human resource management to support its core functions; these systems have evolved beyond basic automation and administrative tasks to become more sophisticated systems that enhance efficiency, improve performance, and reduce costs. Chitambala and Marvin (2025) further describe e-HRMIS as a system that facilitates the planning, implementation, control, and development of human resources within the organization, encompassing several subsystems that serve the information needs of various HR functions—including recruitment, training, appraisal, payroll, and personal records—thereby raising organizational efficiency.

Drawing on the foregoing, the researchers define e-HRMIS as an interconnected and integrated set of software, hardware, and personnel that aims to automate human resource functions and to support organizational management in directing and managing human resources correctly, through the analysis of incoming data and its presentation in the form of information that contributes to sound decision-making.

2.2 Importance of e-HRMIS

Most contemporary organizations rely on technology to automate human resource processes through e-HRMIS, owing to their recognition of its capacity to generate organizational benefits and competitive advantage that many other organizations lack, and the wide range of functions it provides (Chakaborty & Abu Mansor, 2013). The importance of e-HRMIS is further evident in its



role as a strategic tool adopted by most modern organizations, given the accurate information and data it provides compared to traditional operations—particularly for strategic decisions at senior management levels (Tripathi, 2011). e-HRMIS has additionally strengthened the organization's capacity to attract and recruit the most qualified workforce and raw materials, thereby conferring a competitive advantage over peer organizations (Mishra & Akman, 2010). The researchers submit that, regardless of an organization's performance level, productivity, or service quality, no organization operates in isolation from its external environment. Organizations must therefore keep pace with development and deploy information systems and modern technology—given the recognition by most organizations of the positive outcomes yielded by technology when deployed correctly. e-HRMIS has assumed most organizational functions and replaced many traditional and manual processes, thereby increasing work efficiency and productivity, and contributing to heightened effectiveness and productive efficiency that confers competitive advantage.

2.3 Functions and Dimensions of e-HRMIS

The researchers adopted five dimensions as the constituent functions of e-HRMIS: e-recruitment, e-selection, e-training, electronic performance appraisal, and electronic compensation and rewards. This selection is grounded in the recognition that these dimensions represent the core functions of human resource management and their automation, information integration, and support—extending beyond the mere storage and retrieval of information to encompass decision support and the electronic execution of core HR management functions. The researchers further hold that these dimensions are the most appropriate for measuring the level of e-HRMIS deployment in the study organization, as they cover the most important core functions of human resource management.

2.3.1 E-Recruitment

E-recruitment refers to the strategic shift in the system for providing and disseminating information about vacant positions within the organization through digital channels—including websites, email, and text messages—in order to build flexible and rapid communication, attract qualified and competent talent, and enhance data accuracy and human resource management efficiency (Alateyah, 2018).

2.3.2 E-Selection

E-selection refers to the automation of traditional recruitment processes—such as the screening and assessment of job applicants—through a digital electronic process that enables organizations to evaluate large numbers of applicants using modern technology, thereby ensuring fairness, transparency, and objectivity in the selection process (Sayed et al., 2025).

2.3.3 E-Training

E-training refers to the remote transfer of skills and knowledge using modern technologies and the internet, multimedia tools, and modern communication means, and the delivery of training programs tailored to the organization's needs. This type of training is characterized by a short timeframe and ease of web-based access from any location at any time (Emran et al., 2026).



2.3.4 Electronic Performance Appraisal

Electronic performance appraisal is an administrative system and process used to monitor and measure the efficiency and productivity of employees, as well as the degree to which they achieve the job objectives assigned to them. It represents a qualitative shift from manual performance appraisal—premised on personal considerations and limited in its capacity for precise measurement—toward a transparent and objective digital system based on tangible work outputs, thereby reducing bias and increasing efficiency and motivation (Ardiansyah & Nurindahwati, 2026).

2.3.5 Electronic Compensation

Electronic compensation refers to digital systems dedicated to the automation and processing of wages and salaries, and the management of rewards and incentives. The distinguishing features of these systems include consistency and transparency in financial decisions, a reduction in errors, enhanced compliance with regulations and instructions, and the provision of real-time, accurate reports—thereby strengthening employee confidence in the financial system (Oyuru et al., 2026).

2.4 The Concept of Organizational Sustainability

The concept of organizational sustainability varies according to the perspectives from which researchers and academics approach it—each according to the nature of their work, the institution in which they operate, and the scope of their responsibilities—particularly in the context of rapid digital transformation. Organizational sustainability is no longer viewed as a secondary option; it has become an urgent necessity, especially for organizations that rely primarily on modern electronic technologies. Ogbumbada and Nwachukwu (2024) define organizational sustainability as the creation of lasting value through the alignment of economic, environmental, and social dimensions, the establishment of a positive work environment, the achievement of employee well-being, and engagement with stakeholders—in order to build strong relationships that enhance long-term competitiveness and resilience. Al-Dousari (2025) adds that organizational sustainability is the organization's capacity to achieve a precise balance between social, economic, and environmental objectives—ensuring its continuity and effectiveness in a dynamic operating environment, and its ability to survive and grow in a manner that balances present demands with future needs. Obaid and Sabr (2026) further define it as the organization's capacity to generate profits and sustain itself within the economic system, and its optimal ability to utilize economic resources—enabling it to contribute to meeting societal needs and achieving sustainable development.

Drawing on the foregoing, the researchers hold that organizational sustainability is a comprehensive concept that transcends the narrow view of profit generation and economic returns, encompassing a broader perspective that includes environmental impacts, the achievement of social justice and equality, and a focus on human capital—through the provision of a work environment characterized by stability and security, the enhancement of trust and positive bonds, and the optimal use of available current resources without impairing the capacities of future generations.



2.5 Importance of Organizational Sustainability

Organizational sustainability constitutes a foundational basis for the execution and support of planning and strategic decisions, with positive repercussions for production operations and marketing plans. Its importance also lies in raising operational efficiency and meeting current requirements without impairing the capacities of future generations through balanced management. Its applied value is evident in the guidance of administrative decisions and organizational policies beyond material objectives, and in the forging of strong bonds between the organization and stakeholders—alongside the external dimension, represented by the strengthening of partnerships with the local community, regulatory bodies, customers, and suppliers (Silva & Costa, 2026). Organizational sustainability is further embodied through the entrenchment of the principle of technological transformation, which in turn guides innovation and digital transformation processes in organizations, and assists organizations in aligning their operations with digital technologies—such as the Internet of Things and artificial intelligence—for the purpose of improving natural resource management, rationalizing energy consumption, and addressing the challenges of climate change. It also contributes to reducing resource waste and limiting environmental pollution through modern digital and technical solutions adopted by organizations in the management of operations and production (Hasan et al., 2026).

2.6 Dimensions of Organizational Sustainability

Organizational sustainability aims to align the objectives of sustainable development with the operational environment across all levels of various institutions and sectors. Accordingly, the transition to organizational sustainability requires the adoption of strategies and practices capable of meeting the organization's current aspirations while effectively ensuring the development and enhancement of the human, electronic, and natural resources necessary for future continuity (Rahman et al., 2022). The dimensions of organizational sustainability are summarized in three dimensions agreed upon by most researchers, and adopted by the present researchers as the basis of this study:

2.6.1 Economic Sustainability

Economic sustainability refers to the capacity to generate additional value for organizational performance, to allocate and protect resources through business practices, and to ensure economic growth without harming society or the environment (Al-Tai, 2025). Braccini and Margherita (2018) add that modern organizations aspire to strengthen the pillars of economic sustainability, thereby ensuring a balance between operational efficiency and financial stability, and an equilibrium between costs and revenues across all stages of the production life cycle—with a positive reflection on increased material returns.

2.6.2 Environmental Sustainability

Environmental sustainability refers to the organization's contribution to the preservation of the environment through the reduction of pollution impacts and resource consumption, the minimization of waste, and the protection of air, soil, and water. Environmental sustainability also



assists in achieving positive impacts on the organization and preserving its brand, through the optimal use of resources, water, and energy, and through product recycling (Ahmed, 2024).

2.6.3 Social Sustainability

Social sustainability is regarded as one of the drivers of the organization's competitive advantage; it has become an integral part of comprehensive competitive success in both global and local markets—necessitating increased transparency, assessment, and disclosure of social performance and performance toward suppliers (Okay et al., 2026). Shygun and Bezverkhyi (2026) further note that social sustainability is manifested in several dimensions, embodied practically through social reports addressing human rights, social accountability, and the disclosure of workers' rights and support for ethnic diversity and equality. It constitutes an integrated strategic system that transcends theoretical frameworks, taking concrete form in tangible field practices as a fundamental pillar of social responsibility—through reports disclosing commitment to human rights and equality. Social sustainability is positively reflected in the application of occupational health systems that safeguard workers' health, and also contributes to building institutional reputation, thereby ensuring sustained organizational performance.

3. Empirical Framework

3.1 Demographic Characteristics of the Study Sample

The study population comprises all employees of the Directorate of Education in Anbar Governorate—across its administrative and educational cadres—totalling 975 male and female employees. A stratified random sample of 450 male and female employees was selected, distributed across the three administrative levels to ensure representation of all departments and job categories. The demographic characteristics of the sample are described below according to gender, age, educational qualification, years of service, and administrative level:

Table 1: Distribution of Study Sample Members According to Demographic Characteristics

Variable	Category	Freq.	Percentage
Gender	Male	268	59.6%
	Female	182	40.4%
Age	Under 30	95	21.1%
	30–39	168	37.3%
	40–49	132	29.3%
	50 and above	55	12.2%
Education	Diploma or below	74	16.4%
	Bachelor's degree	261	58.0%
	Postgraduate (Master's / PhD)	115	25.6%



Years of Service	Less than 5 years	88	19.6%
	5–10 years	142	31.6%
	11–15 years	127	28.2%
	More than 15 years	93	20.6%
Management Level	Senior Management	23	5.1%
	Middle Management	158	35.1%
	Operational (Lower) Management	269	59.8%
Total	450	100%	

Source: Prepared by the researchers based on SPSS V.26 output.

The data presented in the table above indicate that the study sample is distributed in a manner that reflects the actual occupational composition of the directorate. Males represent a relatively greater proportion than females; the most heavily represented age group is 30–39 years; holders of a bachelor's degree constitute the substantial majority of sample members; years of service are distributed in a manner reflecting a mixture of recent, intermediate, and long-tenured experience. The sample is distributed across the three administrative levels (senior, middle, and operational) in proportions consistent with the directorate's actual organizational structure, with operational (lower) management forming the largest proportion given that it is the most numerically extensive category in the job hierarchy.

3.2 Instrument Reliability: Cronbach's Alpha

To verify the reliability of the study instrument (questionnaire), Cronbach's alpha coefficient was used to measure the degree of internal consistency among the items of each dimension of the two study variables. The statistically accepted standard for instrument reliability in the administrative and social sciences requires that the coefficient value not fall below 0.70. The following table presents the reliability coefficients for each dimension and for the instrument as a whole:

Table 2: Cronbach's Alpha Reliability Coefficients for Study Instrument Dimensions

Dimension	No. of Items	Cronbach's α
E-Recruitment	5	0.79
E-Selection	5	0.76
E-Training	5	0.81
E-Performance Appraisal	5	0.77



E-Compensation	5	0.80
Economic Sustainability	5	0.78
Environmental Sustainability	5	0.75
Social Sustainability	5	0.82
Overall Questionnaire Reliability	40	0.91

Source: Prepared by the researchers based on SPSS V.26 output.

The results presented in the table above indicate that all reliability coefficients for the eight study dimensions exceeded the statistically accepted minimum threshold of 0.70, ranging from 0.75 as a lower bound to 0.82 as an upper bound. The overall reliability coefficient for the questionnaire reached 0.91—a high value that confirms the instrument’s high degree of internal consistency and reliability, qualifying it to measure the two study variables with statistically acceptable precision.

3.3 Analysis of Study Sample Responses: e-HRMIS Dimensions

3.3.1 E-Recruitment

The results pertaining to the e-recruitment dimension revealed a moderate level of agreement among study sample members at the Directorate of Education in Anbar Governorate. The overall arithmetic mean for the dimension reached 3.40, with a response rate of 68%—reflecting a moderate assessment of the actual application of this dimension at the directorate. The statistical indicators—comprising a standard deviation of 0.74 and a coefficient of variation of 21.8%—confirm an acceptable degree of homogeneity in sample responses with limited relative variation.

3.3.2 E-Selection

The results pertaining to the e-selection dimension revealed a moderate level of agreement among study sample members. The overall arithmetic mean reached 3.13, with a response rate of 62.6%—reflecting a moderate assessment of the actual application of this dimension. The standard deviation of 0.78 and coefficient of variation of 24.9% confirm an acceptable degree of homogeneity in responses.

3.3.3 E-Training

The results pertaining to the e-training dimension revealed a relatively high level of agreement among study sample members. The overall arithmetic mean reached 3.54, with a response rate of 70.8%—reflecting a relatively high assessment of the actual application of this dimension at the directorate. The standard deviation of 0.78 and coefficient of variation of 22.0% confirm an acceptable degree of homogeneity in responses with limited relative variation.



3.3.4 Electronic Performance Appraisal

The results pertaining to the electronic performance appraisal dimension revealed a moderate level of agreement among study sample members. The overall arithmetic mean reached 3.25, with a response rate of 65%—reflecting a moderate assessment of the actual application of this dimension. The standard deviation of 0.87 and coefficient of variation of 26.8% confirm an acceptable degree of homogeneity with limited relative variation.

3.3.5 Electronic Compensation

The results pertaining to the electronic compensation dimension revealed a relatively high level of agreement among study sample members. The overall arithmetic mean reached 3.44, with a response rate of 68.8%—reflecting a relatively high assessment of the actual application of this dimension. The standard deviation of 0.75 and coefficient of variation of 21.8% confirm acceptable homogeneity with limited relative variation.

3.4 Analysis of Study Sample Responses: Organizational Sustainability Dimensions

3.4.1 Economic Sustainability

The results pertaining to the economic sustainability dimension revealed a moderate level of agreement among study sample members. The overall arithmetic mean reached 3.20, with a response rate of 64%—reflecting a moderate assessment of the actual application of this dimension at the directorate. The standard deviation of 0.83 and coefficient of variation of 25.9% confirm an acceptable degree of homogeneity with limited relative variation.

3.4.2 Environmental Sustainability

The results pertaining to the environmental sustainability dimension revealed a moderate level of agreement among study sample members. The overall arithmetic mean reached 3.15, with a response rate of 63%—reflecting a moderate assessment of the actual application of this dimension. The standard deviation of 0.81 and coefficient of variation of 25.7% confirm an acceptable degree of homogeneity in responses.

3.4.3 Social Sustainability

The results pertaining to the social sustainability dimension revealed a relatively high level of agreement among study sample members. The overall arithmetic mean reached 3.49, with a response rate of 69.8%—reflecting a relatively high assessment of the actual application of this dimension. The standard deviation of 0.81 and coefficient of variation of 23.2% confirm acceptable homogeneity with limited relative variation.

3.5 Multiple Linear Regression Analysis: e-HRMIS Dimensions Jointly on Organizational Sustainability

Supplementing the analysis of the effect of each independent variable dimension individually, multiple linear regression analysis was conducted to test the joint effect of the five e-HRMIS dimensions on organizational sustainability, and to determine the relative weight (relative importance) of each dimension in this effect. The model summary results are presented in the following table:



Table 3: Multiple Regression Model Summary for Independent Variable Dimensions Jointly

Indicator	Value
Coefficient of Determination (R^2)	0.310
Adjusted R^2	0.302
Computed F-value	39.90
Degrees of Freedom (df1, df2)	(5, 444)
Significance Level (Sig.)	0.000

Source: Prepared by the researchers based on SPSS V.26 output.

The results presented in the table above indicate that the five e-HRMIS dimensions jointly account for 31% of the variance in organizational sustainability ($R^2 = 0.310$), with an adjusted coefficient of determination of 0.302. Since the computed F-value of 39.90 was obtained at a significance level of 0.000—which is less than 0.05—the statistical significance of the multiple regression model as a whole is confirmed. The following table presents the standardized and unstandardized regression coefficients for each independent variable dimension when entered jointly into the model:

Table 4: Multiple Regression Coefficients for e-HRMIS Dimensions on Organizational Sustainability

Dimension	B (Unstandardized)	Beta (Standardized)	t- value	Sig.	Relative Importance
E-Compensation	0.241	0.229	4.87	0.000	1st
E-Training	0.203	0.196	4.15	0.000	2nd
E-Recruitment	0.158	0.142	2.98	0.003	3rd
E-Selection	0.109	0.097	2.01	0.045	4th
E-Performance Appraisal	0.071	0.061	1.24	0.216	5th

Source: Prepared by the researchers based on SPSS V.26 output.



The multiple regression results indicate variation in the standardized Beta weights of the independent variable dimensions in explaining the variance in organizational sustainability. The following dimensions were found to contribute statistically significant effects, ranked in descending order of the strength of their contribution: electronic compensation, followed by e-training, followed by e-recruitment, and finally e-selection. The electronic performance appraisal dimension, by contrast, did not exhibit a statistically independent significant contribution when entered alongside the other dimensions in the joint model ($\text{Sig.} \geq 0.05$). This outcome may be interpreted as indicating that the effect of this dimension overlaps with those of the other, more explanatory dimensions, such that its independent contribution diminishes when their effects are statistically controlled—a common phenomenon in multiple regression models when the dimensions of a single variable are positively intercorrelated.

3.6 Testing the Effect of e-HRMIS as a Whole on Organizational Sustainability

Table 5: Simple Linear Regression Analysis of the Effect of e-HRMIS on Organizational Sustainability

Independent Variable	Effect Direction	Dependent Variable	β	F	R ²	95% CI (Lower–Upper)	P-value
e-HRMIS	Positive (+)	Organizational Sustainability	0.512	159.05	0.262	0.440 – 0.577	0.000

Source: Prepared by the researchers based on SPSS V.26 output.

The results presented in Table 5 demonstrate the existence of a direct, statistically significant effect of the independent variable (e-HRMIS) on the dependent variable (organizational sustainability), with a coefficient of determination (R^2) of approximately 0.262. This indicates that e-HRMIS possesses moderate explanatory power, accounting for 26.2% of the variance in the level of organizational sustainability among sample members, while the remaining 73.8% is attributable to other factors outside the scope of the current model. The statistical significance of this effect is confirmed by the computed F-value of 159.05 at a p-value of 0.000—less than the adopted significance level of 0.05. Accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted, confirming that e-HRMIS constitutes a statistically significant explanatory variable in predicting and developing organizational sustainability within the studied directorate.

3.7 Individual Dimension Regression Results

The regression analysis revealed statistically significant effects for the dimensions of e-HRMIS on organizational sustainability among employees in the field under investigation, as follows:



Table 6: Simple Regression Analysis of e-HRMIS Dimensions Individually on Organizational Sustainability

Independent Variable	Direction	Dependent Variable	β	F	R^2	95% CI Lower	95% CI Upper	P-value	Effect Rank
E-Recruitment	←	Org. Sustainability	0.398	84.07	0.158	0.317	0.473	0.000	3rd
E-Selection	←	Org. Sustainability	0.365	68.72	0.133	0.282	0.443	0.000	4th
E-Training	←	Org. Sustainability	0.463	121.97	0.214	0.387	0.533	0.000	2nd
E-Performance Appraisal	←	Org. Sustainability	0.341	58.79	0.116	0.257	0.420	0.000	5th
E-Compensation	←	Org. Sustainability	0.479	133.06	0.229	0.404	0.547	0.000	1st

Source: Prepared by the researchers based on SPSS V.26 output.

E-Recruitment: $R^2 = 0.158$; $F = 84.07$; $Sig. = 0.000$. This dimension individually explains 15.8% of the variance in organizational sustainability. The null sub-hypothesis is rejected.

E-Selection: $R^2 = 0.133$; $F = 68.72$; $Sig. = 0.000$. This dimension individually explains 13.3% of the variance in organizational sustainability. The null sub-hypothesis is rejected.

E-Training: $R^2 = 0.214$; $F = 121.97$; $Sig. = 0.000$. This dimension individually explains 21.4% of the variance in organizational sustainability. The null sub-hypothesis is rejected.

Electronic Performance Appraisal: $R^2 = 0.116$; $F = 58.79$; $Sig. = 0.000$. This dimension individually explains 11.6% of the variance in organizational sustainability. The null sub-hypothesis is rejected.

Electronic Compensation: $R^2 = 0.229$; $F = 133.06$; $Sig. = 0.000$. This dimension individually explains 22.9% of the variance in organizational sustainability—the highest explanatory power among all five dimensions. The null sub-hypothesis is rejected.



4. Conclusion

This study addressed two important and vital topics—particularly in the context of the ongoing development and intensifying competition among organizations—namely, electronic human resource management information systems and their linkage with organizational sustainability, applied in the important and vital education sector. Both the theoretical and empirical frameworks were presented to clarify the effect of e-HRMIS—across its dimensions of e-selection, e-training, electronic performance appraisal, and electronic compensation—on organizational sustainability across its selected dimensions of economic, social, and environmental sustainability.

The study found a positive effect of e-HRMIS on organizational sustainability, reflecting the existence of an acceptable foundation upon which this aspect can be built and enhanced. The multiple regression analysis further demonstrated that the electronic compensation and e-training dimensions are the most influential contributors to organizational sustainability, while the electronic performance appraisal dimension did not exhibit a statistically independent significant contribution when entered alongside the other dimensions in the joint model. The researchers attribute this finding to a weakness in the culture of electronic appraisal among the relevant specialists and their concern about the absence of the human element in comparison with electronic appraisal mechanisms—making it incumbent upon the directorate (the subject of the study) to update electronic appraisal standards and to attempt to overcome the organizational obstacles that impede the general application of technology, and to raise awareness of the advantages and benefits of technology.

- Study sample members at the Directorate of Education in Anbar Governorate demonstrated a moderate to relatively high level of agreement regarding the application of e-HRMIS across its five dimensions, with an overall arithmetic mean of 3.35. The e-training dimension ranked highest in this assessment, while the e-selection dimension ranked lowest.
- Study results revealed a moderate to relatively high level of agreement regarding organizational sustainability at the directorate across its three dimensions, with an overall arithmetic mean of 3.28—reflecting the existence of an acceptable foundation upon which this aspect can be built and enhanced.
- A statistically significant effect of e-HRMIS as a whole on organizational sustainability was established, accounting for 26.2% of the variance in the dependent variable.
- Multiple regression analysis demonstrated that the electronic compensation and e-training dimensions are the most influential contributors to organizational sustainability, while the electronic performance appraisal dimension did not exhibit a statistically independent significant contribution when entered with the other dimensions in the joint model.

Recommendations

- Strengthen the electronic performance appraisal dimension and develop its electronic mechanisms, to ensure its transformation into an effective and independently influential



contributor to enhancing organizational sustainability, rather than remaining an effect that overlaps with the other dimensions.

- Devote particular attention to the electronic compensation and e-training dimensions—identified as the strongest contributors to organizational sustainability—by increasing investment in their electronic systems and expanding the scope of their application.
- Develop the technical infrastructure of e-HRMIS at the directorate in line with modern technological developments, and raise the level of responsiveness among functional cadres.
- Intensify training programs for employees on the use of electronic human resource systems, contributing to raising the degree of competence in dealing with them and increasing their uptake.
- Strengthen organizational sustainability practices across their three dimensions (economic, environmental, and social) through supportive administrative policies and procedures—in particular the environmental sustainability dimension, which recorded the lowest level among the three.
- Conduct future studies addressing mediating or moderating variables in the relationship between e-HRMIS and organizational sustainability, and expand the scope of the study to include other government directorates and institutions.

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