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# Importance Degree of eHRM and its Impact on Various Administrative Levels in Palestinian Universities

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**Abstract:** This study aims to identify the degree of importance of human resources management electronically and its impact on the different administrative levels in the Palestinian universities. The study population consists of the different administrative levels in the universities. The number of employees reached (239). The study sample consisted of (148) individuals from the different administrative levels and (35) from IT centers. The response rate was (84.31%). The researchers used the questionnaire as a tool for study and the analytical descriptive approach to achieve the objectives of the study. The SPSS program was used to analyze the study data.

The results of the study showed that the clarity of the importance of human resources management electronically and the support of senior management are available and contribute greatly to the process of transition to electronic management in general and e-HRM in particular. There is clarity in the sample of the study of the importance of human resources management electronically, fully aware of their multiple benefits, this greatly helps to adopt and develop e-HRM and the development of the members of the study from the higher administrative levels and those who influence decision-making. The University's system of human resources management varies in different ways from one university to another and has a significant impact on human resources management electronically, and researchers explain this difference due to the different priorities of universities and their development plans and their material and human resources. The concept of e- management is a broad concept, encompassing several different electronic systems, and the transition to it requires extensive changes, from organizational structure to business processes. The most important electronic management systems that universities develop according to their need are electronic human resources systems. Universities also provide different means of communication with their employees using various ICT means such as e-mail and SMS. The use of e-HR forms is still very limited and greatly reduces e-HRM benefits. Self-service systems are not interrelated with pay and pay systems and researchers explain this because e-HRM systems are not complete at universities. Universities follow a strategy of combining traditional and electronic business, a positive indicator of the transition to e- management.

The study reached several recommendations with the aim of benefiting from the promotion of the electronic management approach. The most important of these recommendations is the establishment of official and practical approaches to electronic administration and its systems. To keep abreast of the rapid changes in electronic management and ICT tools and means. The development of the administrative structure of universities commensurate with the process of change to electronic management. E-HRM development in universities, as they have a key role to play in the success of the transition to e- management. Expand the use of electronic forms to manage the affairs of employees to take advantage of its multiple advantages such as reducing expenses and reduce the time of completion of transactions. The adoption of internal electronic correspondence instead of paper, which contributes significantly to reduce administrative financial expenses, and the speed of completion of work. The integration of computerized management information systems and the linking of what is currently fully established as the beginning of a gradual transition to electronic management. For example, the pay system can be linked to the attendance system, self-service, or performance appraisal with the pay system.

**Keywords:** Electronically Human resources management, administrative levels, higher education institutions, Palestinian universities.

## 1. INTRODUCTION

Human resources management, both in the public and private sectors of the world as a whole, faces enormous challenges on the threshold of the twenty-first century, which is fraught with rapid and complex political, economic, social, technological and cultural changes (Al-Najjar, 2008). (Moudy & noe, 2005), and with the emergence of the Internet and the evolution of information technology and methods of communication And the transformation of the

functions of marketing, accounting and various operations into electronic business, and with the increase in the digital transformation of organizations, it became necessary to transfer jobs and paper files to electronic files, and relations between the government and business organizations, trade unions, employees and customers are through internal and external networks and the Internet (Al-Najjar , 2008).

New terms such as e-management, e-business, e-marketing, e-HRM, e-recruitment, e-learning, e-government And many new titles that all relate to this development.

The use of technology in human resources management or human resources management is called e-HRM, meaning the application of Web-based techniques in HR-related systems and functions (Hopkins and Markham, 2006).

In order to study the impact of technology on human resource management, the researchers chose the higher education sector in Gaza as the higher education institutions represent an ideal model for studying the changes that take place in the environment because they contribute mainly to the service and development of society, Human, taking into account creativity, innovation and progress of science on the basis of equality and equality and promote it to reach the level of contemporary. The researchers chose the community of study through the higher education sector represented in the regular Palestinian universities in the Gaza Strip, represented by the Islamic University, Al-Azhar University and Al-Aqsa University.

## **2. THE GENERAL FRAMEWORK OF THE STUDY**

### **2.1 Research problem**

In the light of the increasing progress in the use of modern technology and computer applications, the use of electronic management in human resources has become an indispensable requirement in human resources departments in all sectors, including the university education sector, to achieve positive results towards improving the performance of employees in organizations and institutions to raise their efficiency.

As a new management approach, human resources management, as a new management approach, requires a high level of human resources, as well as a change in management methods, organizational structures and the development of electronic infrastructure, in order for organizations to upgrade their services and the efficiency of their staff. Especially in the higher education sector, represented by universities and colleges, has a special importance in protecting society and the state alike. Universities represent an important pillar of the state, which directly affects the Palestinian society and has a great role in providing institutions and sector. The universities are among the leading institutions in adopting modern systems and concepts in various fields in order to achieve a competitive advantage. Even specialists who are in line with contemporary developments are able to contribute to the development of human resources and society, and the problem of the current study is the answer to the following question: What is the reality of human resources management in the regular Palestinian universities in the Gaza Strip?

### **2.2 Objectives of the study**

The study aims to highlight the following objectives:

- Identify the orientation of the administrations of Palestinian universities to shift to electronic management.
- Recognize the importance of electronic management as a modern administrative concept at different administrative levels in Palestinian universities.
- Knowledge of the availability of IT infrastructure for the application of HR.
- Know the availability of human cadres necessary for this transformation.
- Identify the degree of importance of human resources management electronically at different administrative levels in universities.
- Recognize the extent to which the University's departments are interested in applying human resources management electronically in comparison to its main field of activity: providing educational services.
- Make recommendations on the extent to which human resources management is applied electronically in Palestinian universities, and the appropriate proposals to enhance the level of its application and benefit from its advantages.

### **2.3 Importance of the study**

The aspects of the importance of the study can be determined by the contribution and the expected addition, as follows:

- The importance of this study stems from the fact that it deals with institutions of higher education, which is a source of skills and competencies that provide the society with its needs.
- The study focuses on the modern management methods of e-HRM and the extent to which they are used in educational institutions and is considered as a suitable model for application at the level of public and private institutions.
- The importance of the technology factor in influencing the efficiency and development of organizations in general, both in the public and private sectors.
- To keep abreast of the latest scientific developments and harness them to serve our local community, and try to generalize the various administrative functions used electronically on all institutions of society, in an attempt to reach the broader concept of electronic management.
- This study is expected to open many fields for researchers and interested in this subject and related topics, such as e-governance and e-government.

## 2.4 The hypothesis of the study

In order to provide an appropriate answer to the questions posed, and the study seeks to test the validity of the following assumptions:

**H01:** The clarity of the degree of importance of human resources management electronically at different administrative levels has a statistically significant impact on human resources management electronically.

## 2.5 Limitations of the study

1. **Subject Limit (Academic):** The study was to study the importance of human resources management electronically and its impact on the different administrative levels in the Palestinian universities in the Gaza Strip.
2. **Human Limit:** The study was conducted on the academic staff and administrators at the universities of the various administrative levels under study.
3. **Institutional Limit:** The study was conducted on universities in the Gaza Strip (Islamic University, Al-Azhar University, and Al-Aqsa University).
4. **Spatial Limit:** The study was conducted in the State of Palestine, and was limited to universities in the Gaza Strip.
5. **Timetable:** This study was applied and the collection of preliminary data on the universities and statistical analysis in the year (2017) and therefore represent the reality at this time.

## 2.6 Previous Studies

- Study of (Saleh, 2014), Factors Affecting the Acceptance of electronic human resource management System in Palestinian Service Sector. This study aims at investigating factors affecting the adoption of Electronic Human Resource Management system (e-HRM) in Palestine and to develop an e-HRM framework that adopted by the Palestinian organizations to utilize technology effectively in their operations. The study relied on a representative sample of banks, government organizations, hospitals, insurance companies, internet service providers, logistics companies, telecommunication companies and universities working in Palestine. The development of the framework has based on the extension of other existing models, namely, Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Yale model of Communication and Persuasion, Perceived Risk, Social Risk, and Organizations Role. To conduct the study, both qualitative and quantitative research methods have used. Qualitative data has been collected via interviews with IT specialists and HR managers. Besides, a self-report questionnaire has designed to gather the pertinent quantitative data from sample of HR managers, IT managers, department managers, and employees in the targeted organizations. Research Conclusions: The results indicate the perceived ease of use; attitude, intention and communication are the most significant factors influencing e-HRM adoption in Palestine. The results indicate that perceived risk, system security, organization role and availability of resources are influencing e-HRM technology adoption in less degree.
- Study of (Abu Amra, 2012), The Evaluation of UNRWA Organizational Development from Gaza Field Office staff member's perspectives. This Study aims to identify UNRWA – Gaza Field Office staff member's evaluation of the UNRWA Organizational Development Plan, especially the Leader and Management sector. The researcher used the descriptive method and comprehensive survey to collect data to meet the research objectives using SPSS program to analyze data. Ninety-nine Questionnaire was used as a tool to explore the

responses of the study population, the collected questionnaires were (81) with recovery rate (82%). Research Conclusions: Gaza Field Office staff members have moderate evaluation regarding the results of organizational development initiatives that related to leadership and management. There is a positive relationship, statistically significant at a level of 4%, between the following variables (leadership and management skills improve. Discussion and internal communication with staff members. Accountability, transparency, monitoring, and networking fundraising) and leadership and management development level.

- Study of (Ramezan et al., 2013), the Effect of Electronic Human Resources Management on Quality of Services Provided By Human Resources in the Insurance Industry (Case Study: Iran Insurance Company in Khorramabad City). This research is attempting to explore and study the important dimensions of electronic human resources management and the effect of these dimensions on quality of services provided by human resources of Iran insurance company in the city of Khorramabad. After studying the previous research to build a conceptual model a questionnaire consisting of dimensions of electronic human resource management and quality of services provided by human resources (with confirmed reliability and validity), the questionnaires were given to the employees of Iran insurance company in the city of Khorramabad and finally, the data collected from 72 questionnaires were analyzed by using the structural equation modeling by AMOS software. The study is a correlation survey in which the electronic human resources management is considered as the independent variable and the quality of services provided by human resources as the dependent variable. Study Conclusions: The organizations have paid more attention to electronic human resources management, the quality of services provided by human resources have been improved. According to the results of the study, Iran insurance company of the city of Khorramabad, from the E-HRM view is in relatively good condition but it needs to be more sensitive in regard to e-learning and to devote more attention to this issue and simultaneously, the electronic programs of assessment of staff performance should not be ignored. The company also should use an electronic rewarding system and further develop the programs of E-HRM and by using of these systems, create motivation and enthusiasm in the organization to provide a more conducive environment in order to improve the quality of services provided by the human resources.
- Study of (Shilpa et al., 2011), the Implications of Implementing Electronic- Human Resource Management (E-HRM) Systems in companies. This study aims to identify the challenges facing the implementation and maintenance of systems (E-HRM), to identify the factors and basic requirements for the success of the system (E-HRM), make the necessary proposals to enhance the effectiveness of systems (E-HRM) through a comparative study between the industrial sector and the services sector in regard to adoption of systems (E-HRM) in Indian companies. The sample was composed of 1,000 companies in the private sector, where these companies apply at least three functions of E-HRM, then these companies were divided into 344 service-company 656 industrial company. The data were collected using both the questionnaire and interview. Study Conclusions: The most important findings of the study that more factors pushed for the adoption of a (E-HRM) system in both service sectors and industry sectors, which will help companies in reducing the human resources management and control expenses and reduce time lost in administrative routines achievement and reduce paperwork. In the services sector, the factors that led to the adoption of (E-HRM) are: the desire to improve transactions and procedures for human resources in terms of accuracy, speed and integration. However, one of the major obstacles in the application of (E-HRM) is the lack of adequate sources of funding in both sectors. Besides, for industrial companies the second obstacle was the resistance to change and a lack of adequate training and poor infrastructure with respect to the technical requirements for the application of the system and poor privatization of services using the existing programs.
- The study of (Parry & others, 2007) was conducted under the supervision of the CIPD in several studies and reports on e-HRM. The study focused on the impact of technology on human resource and personnel management functions and analyzed 10 case studies of different organizations in industry and services. The study found that the use of technology within human resources had a clear impact on the efficiency of the implementation of human resources management functions. The process of transition to human resources management electronically requires a change in the skills required of human resources staff and a change in management and managers. And that the information technology is used to take advantage of human resource management functions in a manner commensurate with the requirements of different organizations. It focuses on the services of the employees themselves, including the focus on the incentive system and the other on the evaluation of performance. The attendance and departure process achieved an 85% utilization rate in the institutions under study by adopting technology. Training, development and incentive activities are equivalent to 75%. The diversity management function received 57%. The selection and appointment function was 51%. Salary and wage activities were 50%. And that the performance evaluation process was 47%. Human resources



planning activities received 29%. While knowledge management activities reached 25%. The strategic planning function for human resources and communication operations was at the lowest rate of 18%. The study recommended that the use of technology within human resources should be applied as a major focus of the Organization, since technology has a major impact on the efficiency and speed of human resources operations. She stressed the importance of developing HRMIS. It also recommended the importance of the participation of serious staff in the development of systems and training them to use the new systems, so that they have an awareness that helps to accept them.

- The study of (Ouda, 2008), entitled "Evaluating the Effectiveness of Application of Employment Procedures in Palestinian Universities in the Gaza Strip", which aims to evaluate the effectiveness of the application of employment procedures in Palestinian universities in the Gaza Strip. Organizational structure of universities and the effectiveness of human resources planning policy. The study concluded that the process of functional analysis in the universities is good, that the tests and interviews are appropriate and there is a competent body that plans the workforce. The results of the study showed that polarization methods are conducted electronically, while interviews and tests are conducted in traditional ways. The study recommended the importance of updating the electronic system on a regular basis in order to keep up with the technological developments in the world.
- The study of (Al-Dahdar, 2006) entitled "The Relationship between the Strategic Direction of Senior Management in Palestinian Universities and its Competitive Advantage", which was aimed at Palestinian universities in Gaza, analyzed the relationship between some variables of strategic direction (the commitment of senior management to strategic planning, Technological change in e-learning, continuous improvement, attention to the human element) as independent variables and the acquisition of competitive advantage according to Porter's theory. The study found a statistically significant relationship between all variables of strategic orientation and competitive advantage of institutions of higher education in the Gaza Strip. The study recommended that the university adopt scientific methods and tools to improve the services provided to employees on an ongoing basis.
- The study of (Abu Rahma, 2005), entitled "Human Resources Information Systems and their Impact on the Effectiveness of Personnel Management in the Ministries of the Palestinian National Authority in the Gaza Strip", which aimed at identifying the human resources information systems used in the personnel departments of the ministries of the Palestinian National Authority in the Gaza Strip, and to assess the areas of their use and analysis with a view to identify the difficulties faced by those systems and limiting their efficiency and effectiveness. The study found that the departments of personnel in the ministries use the manual systems by 73% followed by the computer by 36% as a system supporting the manual systems. The study found that the use of human resources information systems is concentrated in the areas of personnel affairs, which relate to staff time by 75%. Therefore, the limited areas of use of human resources information systems adversely affect the effectiveness of personnel management in the ministries. The study recommended the need for all personnel departments to take advantage of modern file-keeping techniques and the need for coordination and cooperation between them and the staff office to guide the use of human resources information systems towards wider areas such as planning and development, in order to ensure the good use of the human element, such as selecting competent individuals to fill jobs and motivate and reward them for their efforts. The study also recommended that the senior management should provide the necessary financial support to provide personnel departments with the equipment and equipment required for the establishment and operation of human resources information systems using computer.
- The study of (Haroun, 2005), entitled "The New Strategic Directions in Human Resources Management", presented to the 21<sup>st</sup> Annual International Scientific Conference on "A Strategic Vision for Activating the Role of Human Resources in Contemporary Technologies". The study focused on globalization, technological revolution and economic changes taking into account the appropriateness of adapting these changes to the requirements of the local market and the possibilities available. The study recommended several points, the most important of which was the strong entry into the information age, technological competition and the acquisition of the skills required by the work. The importance of technology transfer, assimilation, localization and conversion to production technology that corresponds to our identity and reflect our creativity and skills. Benefit from the huge number of researchers and scientists in Egypt and the Arab world within the framework of a comprehensive plan to achieve a high-level technological breakthrough. And focus on the outstanding role of universities and scientific research centers in the activation and management of human resources in light of technological development and modern technologies and communication with the outside world.

- The study of (Ruel & others, 2004) is an experimental exploratory study of five large companies, Ford Motor, Belgacom (IBM, Dow Chemicals, ABN), each containing more than 15,000 employees to study their use of e-HRM functions using Web technology. The study found that the trend towards e-HRM is closely related to the organization's operations and its globalization orientation, and that there is a gap between (E-HRM) as a technical concept on the one hand, and between the use and adoption of management and managers, which leads to the disruption of utilization E-HRM is supposed to help reduce costs as one of its main benefits, but the study found that this reduction was only in reducing the number of people working in human resources management mostly, new functions as a result of the use of technology. E-HRM achieves strategic integration of human resources management with the organization's strategy, enabling employees to exercise certain HR functions on their own, and companies using e-HRM to achieve uniformity and integration of information, helping them play a global and local role. The study recommended several points, including the need to change the mentality of managers and employees, to understand the usefulness and importance of e-HRM, the need for clear objectives and strategies to ensure that there is no conflict with change. E-HRM is an innovation whose importance should not be overlooked, both for management and individuals, bearing in mind that the nature of the work of different organizations makes it difficult to develop specific regulations that are applied to all. And the need for further studies on e-HRM, which aims to identify the process of growth or planning, how to implement, what factors affect the long term and how they affect the role of human resources management.
- A study by (Ruel & others, 2007) on measuring the contribution of e-HRM to the efficiency of human resource management, through a quantitative study conducted on the Ministry of the Interior in the Netherlands and whether the transformation process is useful to the ministry. The study found that the actual implementation of human resources management (e-HRM) is linked to the efficiency of human resources management. Through regression analysis, researchers found that the quality of HR applications in terms of content and content is the most important explanatory factor in the efficiency of HR technology and strategy. The study recommended further quantitative research on measuring the efficiency of e-HR management and introducing more variables to the model developed by the researchers.
- The study of (Abu Sabt, 2005) entitled "Evaluation of the Role of Management Information Systems in the Decision-Making Process of Decision-makers in Palestinian Universities in the Gaza Strip". The study aimed at evaluating the role of management information systems in the decision-making process among Palestinian decision- Gaza. The study found that there are differences in the components of MIS for the Islamic University and the existence of modern techniques in general in the components of information systems in the Palestinian universities have made the users rely on them entirely in decision-making. The study also showed that the current information systems do not rise to the level of expert systems as they do not give solutions to problems and are not connected with each other and are not linked to centers of statistics inside or outside the country. The study presented a number of recommendations, the most important of which is the continued development and upgrading of computerized management information systems, in accordance with the latest technological developments and the continued development of the organizational level of computerized management information systems. The study also recommended increasing the quality of information, updating information systems data and linking them to statistical centers and working to raise the efficiency of employees in these systems.
- The study of (Shaaban, 2006), entitled "Contemporary challenges to Arab human resources and ways to overcome them". The study examined the role of human resources in achieving development, especially in the information age or in the future society (Knowledge Society). The researchers presented the contemporary and future challenges facing Arab human resources in the modernity of information and globalization. The study identified the possible mechanisms to address these challenges resulting from cultural and economic globalization, supported by information revolution tools, through training, development, modernization and change of methods and administrative systems based on the management of Arab human resources. The study recommended a number of measures, including the necessity of eradicating primary illiteracy (illiteracy) and the second (illiteracy of dealing with computers), combating unemployment and disguised unemployment, updating the education system at various stages and in particular, encouraging and supporting scientific research. Through the establishment of independent administrative and financial research centers, to focus on training, rehabilitation and continuing education and to enable contemporary techniques for all levels of management in organizations to increase the capacity of human resources through the use of Internet and communication technologies in the training programs and other tasks.

### 3. THE THEORETICAL FRAMEWORK OF THE STUDY

#### 3.1 Human Resources Management (e-HRM)

One of the most important challenges facing today's organizations is the technological changes and the revolution of the Internet and communications, as they have huge implications for the human resources function, because they mean drastic changes in all human resources functions and activities, and in supporting and implementing the organization's strategic plans. In the era of the end of the concept of secure employment and transformation into a secure profession, the change in organizational structures, the reduction of employment due to automation and technology, and the orientation towards the knowledge economy and customer service, e-HRM emerged as a pattern and orientation that responds to changes and gives flexibility to the human resource function, And flexible in their response to changes. When we talk about e-HRM, it means that there is an HRMIS so that we can distinguish between the two concepts. Human resources information systems emerged like other systems as a result of the computer technology revolution of the 1970s and 1980s. Other systems such as accounting systems Inventory management and financial systems, and the evolution of databases has enabled the availability and evolution of these systems significantly at the time.

Human resources information systems (O'Brien, 2002) are defined as a set of common elements that include the collection, analysis, storage and retrieval of human resources management information to support recruitment and control decisions, measure and improve performance and planning. Tannenbaum defines it as any system that helps the organization to query, store, analyze, retrieve and distribute information on human resources management (Parry & others, 2007). Human resources management functions have not changed within the e-HRM concept, but the methods and methods used in these functions have changed, relying mainly on ICT technology, as well as changing the role of individuals in the organization, becoming more active participants in the department's functions previously.

The evolution of technology, the evolution of a powerful work analysis, on the human resource management function can make decisions, and its impact can be measured by the results of organizations' work, not only large but even small (Schramm, 2006). In a study at the University of Michigan, the study found that the competitive advantage of human resources management consists of (Schramm, 2006):

- Human Resource Management Technology.
- Strategic contribution to human resources management.
- Personal reliability.
- Good delivery.
- Knowledge.

The integration of technology with human resources management increases the efficiency of HRM operations, increases staff interaction and communication processes, as well as changes in business processes and skills required both in human resources management and across the organization (Parry & others, 2007)

Human resources specialists should raise their level of technological knowledge, deal with the language of modern technology-oriented business organizations, develop their knowledge and skills, and increase coordination and organization with other departments of the Organization.

This does not mean neglecting the human element in this process. The aim is to increase interaction with contemporary changes, increase the efficiency of the organization and reduce costs. This is not accomplished in the human element, where the human element remains the focus of attention in the organization; keep abreast of changes in the business environment.

#### 3.2 Objectives of Electronic Human Resources Management (e-HRM)

The objectives of e-HRM stem from its integration with e-management goals and adapt them to changes in the business environment. Lepak & Snell identified these objectives by increasing the focus on strategic issues, increasing the flexibility of procedures and practices, increasing the efficiency of human resources management, and that human resources management is geared towards the management and staff of the Organization (Ruel & others, 2007). The changing forces and factors influencing organizations and the issues of globalization change the perception of the safe job to the secure profession, the high rates of education in the world and the change in the quality of the work force required. This was one of the main reasons for the organizations' approach to e-HRM. (Al-Najjar, 2008):

- Improve the strategic direction of human resources.
- Reduce the cost of labor and administrative expenses.
- Gain from human resources.
- Facilitate the performance of HR management functions.



- Raising performance and productivity in the organization.
- Developing and improving labor relations and employee satisfaction.
- Better management support across company departments.
- Provide greater opportunities for participation and training.
- Improve your company image.

It aims at providing HR services immediately and conducting HRM transactions electronically. This requires a review of the traditional approach to human resources management and procedures, and transforming it into a modern integrated model within the new e-HRM concept. The human resources departments in the past have been traditional in their work and represent a heavy burden on organizations, not a key element in the success of the work.

In recent years, there has been a growing belief that the organization can have a competitive edge to distinguish it from others by developing its human resources and doing so in several ways (Hopkins and Markham, 2006):

- Implement training faster and apply acquired skills effectively.
- Acquire distinct abilities that distinguish them from others.
- Improve relations between different functional sectors within the organization.
- Improve customer services.
- Flexibility and better response to market variables.

Thus, ICT technology provides many means by which human resources services can be managed and developed.

### 3.3 Relationship between IT departments and human resources departments

Building an e-HRM is a process that requires cooperation between IT management and HR management, and may go beyond cooperation with other departments in the organization by size and structure, and according to the organization's strategic directions.

The CIPD report focuses on a series of steps to ensure the successful design, development and implementation of the e-HRM system. (Parry et al., 2007):

- Consult and review any user of the system as much as possible, to ensure that the requirements and needs of each of them are met.
- Attention to the implementation of those requirements in the early stages of the system.
- To identify the competent persons to take responsibility for these requirements and to carry out the necessary operations and follow up with the users.
- Check the processes and order up-to-date.
- Develop an appropriate strategy to manage the relationship between human resources management in the organization and IT staff both within and outside the organization.
- Attention is given to the fact that processes are standardized or directed (custom), although operations are often standard, but there are some processes where allocation is unavoidable.
- Be sure to check the system adequately, to identify problems before putting it into actual service.
- Appropriate consideration of the Organization's brand and human resource management in the design of e-HRM systems.

## 4. FIELD STUDY

### 4.1 Methodology of the study:

The researchers used the descriptive analytical approach, in which he tried to describe the support provided by senior management in universities to help in the transition to electronic administration, as it is more and more appropriate research methods to describe the phenomenon in question, in which researchers try to describe the subject of study, analysis of data and compare It explains and evaluates the hope of reaching meaningful generalizations that enrich and enrich the knowledge base on the subject.

### 4.2 Second- Society and Study Sample:

The study community consists of university administrative staff, academics and employees of information technology centers, as they relate to the subject of the study.

The total number of members of the study community is 239, as shown in Table (1).

**Table 1:** Number of university employees concerned with the subject of the study

Job title	Islamic University	Al Azhar university	Al-Aqsa University	Number	percentage
University President	1	1	1	3	1.26

<b>vice president</b>	3	3	4	10	4.18
<b>Dean</b>	19	14	12	45	18.83
<b>Director</b>	24	24	12	60	25.1
<b>Head of the Department</b>	40	37	44	121	50.63
<b>Total</b>	87	79	73		
<b>total summation</b>	239				100.00

Source: Department of Personnel in the universities listed in the study, 2009.

#### 4.3 The Study Tool:

The instrument of the study means that the tool measures what has been set for its measurement. The veracity of the questionnaire has been verified by the following methods:

##### 1. Validity from the point of view of the arbitrators:

The questionnaire was presented to a number of specialized arbitrators in order to ascertain the accuracy of the linguistic language of the questionnaire, the clarity of the instructions of the questionnaire, the affiliation of the paragraphs to the dimensions of the questionnaire and the validity of this tool to measure the objectives associated with this study. The arbitrators looked.

##### 2. Internal consistency:

Table (2) shows the correlation coefficients between each paragraph of the field and the total score of its paragraphs.

**Table 2:** correlation coefficients between each paragraph of the field and the total score of its paragraphs

No.	Paragraph	Coefficient of correlation	Moral level	Level of significance
1	The concept of HR management is clear to you	.568	.001	0.01
2	Human resources management electronically achieves a competitive advantage for the university	.898	.000	0.01
3	Human resources management electronically reduces the number of auditors to manage human resources	.863	.000	0.01
4	Human resources management electronically reduces administrative financial expenditure	.931	.000	0.01
5	Human resources management electronically achieves greater flexibility in work	.793	.000	0.01
6	Using human resources management electronically leads to rapid access to efficient human resources	.921	.000	0.01
7	Human resources management electronically avoid human errors in human resources management	.823	.000	0.01
8	The use of human resources management electronically makes it possible to operate remotely via the Internet	.960	.000	0.01
9	Human resources management electronically facilitates interaction between university departments	.847	.000	0.01
10	Using HRM electronically leads to faster access to staff information	.949	.000	0.01
11	The use of HRM electronically leads to the accuracy of employee information	.918	.000	0.01
12	Helps human resources management electronically in the decision-making process	.930	.000	0.01
13	The availability of e-HR management contributes to increased employee efficiency	.911	.000	0.01
14	The availability of electronic human resources management contributes to increasing the efficiency of administrative processes at the university	.843	.000	0.01
15	EHRM enhances the integration of different functional sectors	.907	.000	0.01

16	The use of EHRM improves the services provided to employees	.935	.000	0.01
17	The Human Resources Department electronically checks the employee's participation in the implementation of human resources management activities	.772	.000	0.01

Table (5) shows that the correlation coefficients between each of the paragraphs of the first field and the total score of its paragraphs are limited between the two values (0.568 - .9600) at the level of significance (0.01). This indicates that the first field verbs are true for the measurement.

#### The structural validity of the questionnaire

Structural honesty is one measure of the validity of a tool that measures the extent to which the objectives of the tool are achieved. It measures the extent to which each paragraph of the study is related to the total score of the study paragraphs.

**Table 3:** The correlation coefficients between each paragraph of the study in the overall grade of the study paragraphs

The field	Coefficient of correlation	Moral level	Level of significance
The importance of managing human resources electronically at various administrative levels	.491	.006	0.01

Table (3) shows that the correlation coefficients between each paragraph of the questionnaire and the total score of the questionnaires are limited between the two values (0.491) at the level of significance (0.01). This indicates that all fields of study are true for the measurement.

#### 4.4 Stability of the study instrument:

The tool of the study means that the tool yields the same results if applied again to the same group of individuals, ie, the results do not change. The questionnaire is confirmed by the following methods:

##### 1. Stability using the formula Alpha Cronbach:

The stability of the study instrument was determined by calculating the correlation coefficients of the axes of the questionnaire by using the Alpha Cronbach formula, as shown in the following table:

**Table 4:** Correlation and Stability Parameters using the Cronbach Alpha Factor

The field	Number of paragraphs	Stability coefficient
The importance of managing human resources electronically at various administrative levels	17	.979

It is clear from Table (4) that the stability coefficients are limited to (0.979) and the stability coefficient for all the paragraphs (0.977).

##### 2. Stability in half-way:

Table (5) shows correlation and consistency coefficients between individual questions and marital questions for each paragraph of the study, as well as correlation coefficient and consistency between all individual and marital clauses. The correlation was calculated by using half-separators, the Jettman coefficient for the individual-spacing areas, and the Spearman-Brown coefficient for matrices.

**Table 5:** correlation coefficients using split-half method

The field	Coefficient of correlation	Stability coefficient	Type of parameter
The importance of managing human resources electronically at various administrative levels	.974	.986	Getman

It is clear from Table (5) that the stability coefficients are limited to -0.986, and the stability coefficient for all the paragraphs (0.988) indicates that the resolution clauses have a high stability coefficient.

### Statistical treatments used:

The statistical package for social sciences was used for the statistical processing of data (SPSS), in order to answer the study questions. The treatment included the following statistical methods:

1. The percentages and frequencies: To describe the characteristics of the members of the study community to the functional variables, and to identify the responses of its members towards the study axes.
2. Alpha Cronbach Test: To calculate the stability coefficients of the questionnaire, and the coefficient of stability of each axis of the study axes.
3. Pearson correlation coefficient: to measure veracity of vertebrae (constructional honesty).
4. Colomgruff-Samarnov test (1-Sample K-S): To determine the data type, do you follow normal distribution or not?
5. Test one sample t test: to analyze the paragraphs of the questionnaire and hypotheses of the study.

## 5. STUDY RESULTS AND INTERPRETATION

### 5.1 Natural Distribution Test

The rule of decision is that the data are subject to normal distribution if the Sig value is greater than 5%. If the number of cases is greater than 50, we use the Kolmogorov-Smirnov test, and therefore we use the tests to examine the results.

Table (6) shows the results of this test, as the values of the significance level are all greater than 5%, which means that the data are subject to normal distribution.

**Table 6:** Natural distribution test

The field	Number of paragraphs	The value of Z	Value of significance level
The importance of managing human resources electronically at various administrative levels	17	1.073	.199

## 6. ANALYSIS OF THE STUDY PARAGRAPHS

The field discusses the importance of human resources management electronically at different administrative levels. It consists of (17) paragraphs. Table (7) shows the results of the use of t-test.

**Table 7:** Analysis of paragraphs (clarity of the importance of human resources management electronically at different administrative levels)

No.	Paragraph	SMA	Relative weight	The value of T	Level of significance
1	The concept of HR management is clear to you	8.16	81.63	14.575	0.00
2	Human resources management electronically achieves a competitive advantage for the university	8.66	86.59	20.604	0.00
3	Human resources management electronically reduces the number of auditors to manage human resources	8.60	86.05	26.557	0.00
4	Human resources management electronically reduces administrative financial expenditure	8.75	87.52	29.669	0.00
5	Human resources management electronically achieves greater flexibility in work	8.30	83.02	16.990	0.00
6	Using human resources management electronically leads to rapid access to efficient human resources	8.06	80.62	18.134	0.00
7	Human resources management electronically avoid human errors in human resources management	7.78	77.83	16.004	0.00
8	The use of human resources management electronically makes it possible to operate remotely via the Internet	8.36	83.64	15.155	0.00
9	Human resources management electronically facilitates	8.33	83.33	16.692	0.00

	interaction between university departments				
10	Using HRM electronically leads to faster access to staff information	9.01	90.08	31.878	0.00
11	The use of HRM electronically leads to the accuracy of employee information	8.47	84.73	22.349	0.00
12	Helps human resources management electronically in the decision-making process	8.12	81.24	18.401	0.00
13	The availability of e-HR management contributes to increased employee efficiency	7.94	79.38	15.283	0.00
14	The availability of electronic human resources management contributes to increasing the efficiency of administrative processes at the university	8.57	85.66	23.102	0.00
15	EHRM enhances the integration of different functional sectors	8.45	84.50	22.152	0.00
16	The use of EHRM improves the services provided to employees	8.69	86.90	25.375	0.00
17	The Human Resources Department electronically checks the employee's participation in the implementation of human resources management activities	7.87	78.68	15.100	0.00
<b>All paragraphs</b>		<b>8.36</b>	<b>83.61</b>	<b>32.168</b>	<b>0.00</b>

Table (7) shows the response by respondents to the first field, where the results are summarized as follows:

- The results of each positive paragraph and t value were greater than the tabular t value (1.98), and the significance level was less than (0.05) where the significance level (0.000) per paragraph.
- The results of all the paragraphs are positive and the value of t (32.168) is greater than the tabular t value (1.98) and the significance level is less than (0.05) where the significance level (0.000) for all the paragraphs. The relative weight of each paragraph was greater than 60%, and the mean was greater than (6).
- The relative weight of all paragraphs was (83.61%) and the mean (8.36).

#### **Interpreting the results and linking them with previous studies:**

- There is agreement from the sample of the study on the clarity of the importance of human resources management electronically. The first field is statistically significant at the level of significance (0.05), where the relative weight of all paragraphs (83.61%) and the mean (8.36).
- All the paragraphs were positive, and this means that the sample members agreed to them to a large extent, since all the results are statistically acceptable and above the arithmetic mean (6).
- The clarity of the importance of e-HRM in promoting e-HRM is in line with Haroun's (2005) focus on the unique role of universities and scientific research centers in the activation and management of human resources under the technological development. The researchers explain that the Palestinian universities always seek to develop their administrative systems in line with the rapid changes in the external environment, and this stems from the keenness of the departments of the Palestinian universities to provide the best and best services for students and staff.
- The results of the first field of study coincided with the study of Shaaban (2006), which called for the need for modern techniques for all levels of management in organizations to increase the ability of human resources through the use of Internet technologies and communications in the implementation of training programs and other tasks, The strategy of university administrations towards the transformation of electronic management because of its great importance.
- The results of the first area of the study coincided with Strohmeier's (2007) study, which showed that the knowledge of this subject is sufficiently available to recognize it as innovation, innovation and renewal in the field of human resources management to cope with the internal and external environment changes. Optimizing its tools in all educational, academic and administrative fields.
- The results contrast with the study by Ruel & others (2004), which showed that e-HRM is closely linked to the organization's processes and globalization. The researchers argue that the trend toward electronic management in general and e-HR management in particular is no longer limited to FAO operations And



their orientation towards globalization, and became a necessity for each local or global organization of the benefits and benefits of those systems.

### 6.1 Analysis of field of study

The following paragraph discusses the area of study. Table (8) shows the results of using t-test.

**Table 8:** Analysis of fields of study

The field	SMA	Relative weight	The value of T	Moral level
The importance of managing human resources electronically at various administrative levels	8.36	83.61	32.168	0.000

Table (8) shows respondents' responses to all areas of study. The results were as follows:

- The mean for all fields of study was 7.04 and the relative weight was 70.35.
- The value of t was 13,564, which is greater than the tabular value of (1.98) at the level of significance (0.000).
- From the above, we can point out that the reality of electronic resource management (e-HRM) in the Palestinian universities is above average (6) and is considered statistically acceptable. The researchers explain this with the growing interest of the university administrations towards the transition to electronic management in general, especially in order to cope with the rapid changes in the means of ICT, and to use them to serve the administrative and academic system, and serve the students, employees and the community.

### 6.2 Analysis of the hypothesis of the study

The first hypothesis states: "The clarity of the importance of human resources management electronically at different administrative levels has a statistically significant impact on human resources management electronically."

To test the relationship between e-HRM in Palestinian universities and the importance of managing human resources electronically at different administrative levels, the researchers used a single sample T-Test. Table (9) shows the results of this test.

**Table 9:** Analysis of the hypothesis

Hypothesis	SMA	Relative weight	The value of T	Moral level
The clarity of the importance of human resources management electronically at different administrative levels has a statistically significant impact on human resources management electronically	8.36	83.61	32.168	0.000

Table (9) shows that the mean score was 8.36, which is greater than the arithmetic mean (6). The value of t (32.168) is greater than the t table value (1.98) and the result is statistically significant at 0.05.

Resulting in the rejection of the null hypothesis and the acceptance of the alternative hypothesis that "the clarity of the importance of human resources management electronically at the different administrative levels has a statistically significant impact on human resources management electronically."

The clarity of the importance of human resources management electronically at different administrative levels has a significant impact on the acceptance of the shift to electronic management in general and the management of electronic human resources in particular. This result is consistent with the following studies:

- (Ruel & others, 2004) examined the usefulness and importance of e-HRM as an innovation that should not be overlooked by management or individuals and the need to change the mentality of managers and employees to understand the usefulness and importance of e-HRM.
- (Strohmeier, 2007), which concluded that knowledge on this subject is sufficiently available to recognize it as innovation, innovation and renewal in the field of human resources management to cope with the changes of the internal and external environment.

## 7. STUDY FINDINGS AND RECOMMENDATIONS

### 7.1 Results of the study

In this chapter, the researchers review the main findings of the study, and the suggested recommendations based on these findings, followed by a set of prospective future studies that could benefit future researchers.

After conducting various statistical analyzes of the study instrument, and using a carefully selected set of analyzes to obtain accurate results consistent with the importance of the study and its problem, and through the numerous interviews conducted by the researchers, the following results were obtained:

- There is clarity in the sample of the study of the importance of human resources management electronically, and full awareness of their multiple benefits, and this greatly helps to adopt and develop e-HRM and the development of the members of the study from the higher administrative levels and those who influence decision-making.
- The University's system of human resources management differs in varying degrees from one university to another and has a significant impact on human resources management electronically, and researchers explain this difference due to the different priorities of universities and their development plans and their physical and human potential.
- The concept of e-governance is a broad concept that involves several different electronic systems, and the transformation to them requires extensive changes, from organizational structure to business processes.
- The most important electronic management systems that universities develop according to their need are electronic human resources systems.
- Universities provide different means of communication with their employees using various ICT means such as e-mail and SMS.
- Some of the basic activities of human resources management are not applied electronically, such as benefits, interviews, employment tests, wages, distance training, training needs assessment and career planning. The researchers explain the weakness of these activities in his view that universities are local institutions and do not employ large numbers each year, making electronic access to those activities limited.
- The culture of society, which is based on human relations, and the continuous communication among its members, influences the researchers' view that some human resources management activities are not transferred electronically, such as not linking the attendance system to the electronic pay system. , Termination activities and referral to the pension.
- The use of e-HR forms is still very limited and significantly reduces e-HRM benefits.
- Self-service systems are not interrelated with pay and pay systems and researchers explain this because e-HRM systems are not complete at universities.
- Universities follow a strategy of combining traditional and electronic business, a positive indicator of the transition to e-governance

### 7.2 Recommendations of the study

The following is a set of recommendations based on the results of the study, hoping for the administrations of the universities concerned to study the development of e-HRM and to benefit from this field in enhancing the orientation towards electronic management. These recommendations are:

- The administration of the universities of the official and practical orientation towards electronic administration and its systems.
- Making use of ICT tools and tools in the process of change to electronic management.
- Keeping abreast of the rapid changes in the field of electronic management and the tools and means of ICT.
- Developing the administrative structure of universities in line with the process of change to electronic management.
- The development of e-HRM in universities, as they have a key role in the success of the process of transition to electronic management.
- Expanding the use of electronic forms to manage the affairs of employees to take advantage of their multiple advantages such as reducing expenses and reducing the time of completion of transactions.
- The adoption of internal electronic correspondence instead of paper, which contributes significantly to reduce administrative financial expenses, and the speed of completion of work.

- The integration of computerized management information systems and the linking of what is currently present fully to the beginning of the gradual transition to electronic management. For example, the pay system can be linked to the attendance system, self-service, or performance evaluation with the pay system.

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