

# Support Extent Provided by Universities Senior Management in Assisting the Transition to e-Management

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**Abstract:** *The aim of this study is to identify the support provided by senior management at universities to assist in the transition to electronic management. The study population consists of different administrative levels in the universities, with total of (239) employees. The study sample consisted of (148) individuals from different administrative levels, with a response rate of (84.31%). The researchers used the questionnaire as a tool for the study, the descriptive analytical approach to achieve the objectives of the study, and the SPSS program was used to analyze the study data. The results of the study showed that the university administration supports the transition to electronic management. The concept of e- management is a broad concept that involves several different electronic systems, and the transition to it requires extensive changes from organizational structure to business processes. Computerized information systems are sufficient to initiate a transition to electronic management. The use of e-HRM modules is still very limited and greatly reduces the benefits of an electronic pyramid. Self-service systems are not interrelated with pay and payment systems, and researchers explain this because e-HRM systems are not complete at the universities. Universities also follow the strategy of combining traditional and electronic business, a positive indicator of the transition to e- management. The study reached several recommendations for the purposes of the university managements to take the formal and practical approach to the systems of electronic management. The expansion of the use of electronic forms to manage employees to take advantage of their multiple advantages such as reducing costs and reducing the time of completion of transactions.*

**Keywords:** Senior Management, E-Management, Higher Education Institutions, Palestinian Universities.

## 1. INTRODUCTION

In the past few years, the world has witnessed tremendous development in information and communication technology at various levels. This has had a great impact on man, his style and approach to management, and it is therefore necessary to examine the influential administrative and psychological elements of the technology. Many organizations have begun to adopt the concept of e-management around the world, whether in developed or developing countries, by presenting their information on the Internet and many of the internal transactions are done through the Intranet, and thus allowed the networks to the organization and its customer's opportunities to communicate Away from complex bureaucratic procedures (Al Shobaki, 2017), (Al Shobaki & Abu Naser, 2016), (Al Shobaki & Abu Naser, 2017).

Evolution and change are a universal year that applies to all the assets of life on the planet. In no way can we imagine that management is an exception to this change. Human life defined the concept of management in its simplest form through collective human attempts to adapt to nature and manage its life among its dangers and giant objects It surpasses it in size and strength, but the human mind, which has always been the main focus of all its dealings, has finally settled for it and has full control over the creatures of the planet (Abu Naser & Al Shobaki, 2016), (Abu Naser et al, 2017), (Al Shobaki et al., 2010), (Al Shobaki et al., 2017). The traditional bureaucratic systems have emerged in the science of management, through which man has achieved

many achievements and laid the foundations of administrative thought in general, but the human being, the intellectual who has no limits to his ambition, has been practicing his uprisings against all the old, the uprisings and revolutions carried out by man on more than one development front The revolution of information technology that followed the invention of the computer, and then the emergence of the computer network, and then the local networks, and then the global network of the Internet, which caught the attention of scientists management to the emergence of a new tool can be managed by the founder And it will not be the task of the new machine, which will link the administrative units or departments of each other, but the task will go beyond that to link the administrative department in the whole institution management networks around The world, which made the management scientists dream of this day, which binds the world into a single administrative circle (Al-Qahtani, 2006).

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). The changes that will result from this factor over the next 50 years are equivalent to the changes that have occurred in this area over the past thousand years (moudy & noe, 2005). With the advent of the Internet and the evolution of information technology and methods Connection And the transformation of the functions of marketing, accounting and various operations into electronic business, and with the

increase of digital technology 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 and employees and customers are through internal networks, (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 resource 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, Which takes into account creativity, innovation and the advancement of science on the basis of equality and equality and advancing it to reach the contemporary level. The researchers selected the study community 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.

E-governance is one of the fruits of technical achievements in the modern era. The developments in communications and the development of advanced communication technologies led to serious thinking by states and governments to take advantage of the achievements of the technological revolution, using computers and internet networks to accomplish the work, Contribute effectively to solve many of the problems, the most important of which is crowding and standing for long queues in front of employees in the departments and government departments, as well as avoiding red tape, mediation and other factors that prevent the development of The current administrative systems, in addition to the electronic management of speed in the completion of work and save time and effort, which is also one of the fruits of technical development in the field of communications, after the explosion of information and the revolution of communications helped by the development of computers and technologies, Realistic use of computer applications in the field of public services to develop traditional methods of work to provide more flexible and effective ways on the one hand, while benefiting from the achievements of the technical revolution in saving time, effort and cost, and the use of the Internet in support of communication between the Internet has contributed to eliminating the need for terminal terminals as a way to connect the computer ready, which leads to the ease of communication between the various computers using the Internet, which supported the directions of governments and administrative organizations and drew their attention to the possibility of managing all transactions, both with Departments or departments of the relevant bodies through

Internet networks, which paved the way for the emergence of the term electronic management as an evolving management style uses the achievements of technology in the development of administrative processes and give them qualitative advantages.

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

### **2.1 RESEARCH PROBLEM**

The real revolution of management development was strongly associated with the beginning of the advent of the computer, which was a major shift in the field of machine dependence. The administration learned new patterns in its management through computer digital control, computer aided design and manufacturing, integrated computer manufacturing, artificial intelligence applications in production and services, Of the patterns in which the computer was not only a substitute for the human element in its administration but also replaced managers in issuing automated instructions and instructions based on the programs uploaded (Najem 2004).

Researchers noted that the complexity of the services, activities and events offered by the university departments and their importance necessitates the need to shift from traditional management to electronic management through the use of modern electronic means and techniques to provide the necessary flexibility in response to the internal and external changes and to shorten the procedures that waste time, effort and expenses. .

Where e- management is the lifeblood of modern societies whose daily life has been facing stifling crises under its traditional administrations so that it has been able to take remarkable steps to overcome these crises by means of technology, taking into consideration the electronic management as a modern alternative that keeps pace with the evolution of human life and fulfills its administrative demands, and satisfies its ambition to obtain higher and easier capabilities in the management of its life affairs and details. It is also important that it shortens electronic administration at the time of executing various administrative transactions, facilitates communication between administrations, for departments, provides precision and clarity in administrative processes, and guides the use of papers.

The Palestinian universities directly affect the Palestinian society and have a great role in providing institutions and sectors of society with the necessary human resources in all fields. Universities are the leading institutions in adopting modern systems and concepts in various fields to achieve competitive advantage. Of contemporary developments are able to contribute to the development of human resources and society.

## 2.2 STUDY QUESTIONS

**Q1:** What is the extent of support provided by senior management in universities to help in the transition to electronic management?

## 2.3 OBJECTIVES OF THE STUDY

The study aims at highlighting that achieving two types of objectives: practical and scientific objectives:

1. The definition of electronic management and the role it plays in the service of society, while clarifying the difference between traditional management and electronic management.
2. Statement of the most important characteristics of electronic administration in Palestinian universities and their modern features.
3. Statement of the most important requirements and elements of the modern electronic management project.
4. Statement of the most important features and elements of modern electronic management.
5. Identify the orientation of the departments of Palestinian universities to shift to electronic management.
6. Recognize the importance of electronic management as a modern administrative concept at different administrative levels in Palestinian universities.
7. To 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.
8. To make recommendations on the importance of the support provided by senior management in universities to help shift to electronic administration in the Palestinian universities, and the appropriate proposals to enhance the level of its application and benefit from its advantages.

## 2.4 IMPORTANCE OF THE STUDY

1. 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.
2. The importance of the technology factor in influencing the efficiency and development of organizations in general, both in the public and private sectors.
3. To keep abreast of the latest scientific developments and harness them to serve the local community, and try to generalize the various administrative functions used electronically to all institutions of society, in an attempt to reach the broader concept that includes e-government and electronic management.
4. The lack of studies regarding e-HRM, where libraries lack extensive scientific contributions in this field, is expected to open many fields for researchers and interested in this subject and related topics, such as e-management and e-government.
5. The increasing interest of Arab governments in the field of electronic management and administrative

development, where several Arab conferences were held in this regard, including part of the dialogue of information technology and its role in the development of human resources.

## 2.5 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 hypothesis:

**H1:** The support of the University's administration towards the transition to electronic management has a statistically significant impact on electronically human resources management.

## 2.6 LIMITATIONS OF THE STUDY

1. **Subject Limit (Academic):** The study was limited in its subject to study the extent of support provided by senior management in universities to help in the transition to electronic management.
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, 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.

## 2.7 PREVIOUS STUDIES

- 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 (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 (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 (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.

- The study of (Baloh & Trkman, 2003) conducted in Slovenia, examined the impact of the Internet and information technology in our lives, how to communicate, learn and work, how to change the Internet and information technology for the human lifestyle and way of thinking. The study found that the Internet and information technology are heavily used in new work patterns that have arisen through the development of ICT, such as teleworking and targeted projects. The use of ICT to train, develop and motivate staff. Changing the working environment of organizations and their globalization orientation. Changing leadership style in organizations and increasing delegation. Changing the structure of organizations as a result of the trend towards downsizing of the workforce and structural flattening. Extensive use of polarization and selection of staff. Changing personnel functions and working procedures. Changing the methods of control and control of employees. Changing ways of managing information and exploiting knowledge. The study recommended conducting further studies and research on this subject, especially since the study did not cover all aspects of change arising from the development of ICT. It also recommended that the resulting change due to ICT should not be neglected and widely exploited to increase the efficiency of the organization as an irony in organizations and the working environment. And the need to exploit the

change resulting from the ICT revolution to achieve a competitive advantage for the organization and create new jobs in a rapidly changing environment.

## 2.8 COMMENT ON PREVIOUS STUDIES

The researchers reviewed a previous study that benefited researchers from these studies in enriching the theoretical framework of the current study, building the study tool, and in interpreting the findings of the researchers through his current study, the following are the most important of these results:

1. The studies were characterized by addressing the subject of the study directly, and the existence of studies on major local and international institutions, and dealt with the subject from several different axes.
2. There was a consensus among studies that more research was needed on this topic and a focus on its importance to the organization for the purpose of achieving many advantages.
3. Foreign studies have focused on the issue of training and development, which is one of the most important areas of ICT use in the present era.
4. Studies have identified the need to change the skills required for managers and staff of human resources management.
5. Studies have found that there is a difference in the use of ICT tools and means due to different requirements of organizations.
6. The studies dealt with various aspects related to the study. Some of them are interested in the administrative information systems in the Palestinian universities, in the infrastructure of the information technology centers in the Palestinian universities, the recruitment procedures in the Palestinian universities and the human resources information systems in the ministries of the Palestinian Authority.
7. The studies contributed to the development of a perception among the researchers of the development of universities in relation to the subject of the study. Studies on the Palestinian universities in Gaza were available.
8. Studies have contributed to clarifying the shortcomings in the orientation towards electronic management in general, both in the ministries of the Palestinian National Authority or in Palestinian universities.
9. Studies were diverse, although few, but they were of great benefit to the subject of the study, highlighting the interest of Arab governments in coping with the rapid changes resulting from the technological revolution and economic changes, and how to face the contemporary challenges to Arab human resources.

## 3. THE THEORETICAL FRAMEWORK OF THE STUDY

### 3.1 HRM Definition

Many people find HRM to be a vague and elusive concept - not least, because it seems to have a variety of meanings. This confusion reflects the different interpretations found in

articles and books about human resource management. HRM is an elastic term. It covers a range of applications that vary from book to book and organization to organization (Alan price, 2011).

HRM refers to activities and tasks useful in maximizing employees performance in the organization, it is a dynamic and evolving practice used by leaders and managers throughout a firm to enhance productivity, quality, and effectiveness (Gilley, et.al 2009). Besides, the HRM is a process of the utilization of an organization's human resources to achieve organizational objectives (Mondy and Noe, 2005). Other researchers defined HRM as a set of philosophies, processes, and procedures that a company uses to manage (Bruner, et.al, 2003):

1. Entry and exit processes in the firm.
2. The growth and development of employees.
3. The reward and recognition systems.
4. The total organizational climate for how people are treated.

While other believes that HRM is concerned with all aspects of how people are employed and managed in organization (Armstrong, M., 2012). Dessler says that HRM refers to the policies and practices involved in carrying out the 'human resource' aspects of a management position including human resource planning, job analysis, recruitment, selection, orientation, compensation, performance appraisal, training and development, and labor relations (Dessler, 2007). HRM contributes to create high performance work systems by linking various employees in different departments in the same organization (Brewster, 2007). Further, organizations use the effectual HRM system to increase their competitiveness by investing in employee development (Sutiyono, 2007). Additionally, HRM is a pattern of planned HR development and activities, which affect the behavior of individuals with the intention of enabling organizations to achieve their goals (Wood, et al., 2006). In fact, all HR activities are dependent upon the managers' efforts to formulate and implement the organizational strategy (Wei & Lau, 2005). While, Stone believes that HRM refers to the policies, practices, and systems in organizations for recruiting and developing their employees, as well as influencing their behavior, attitudes, and performance to achieve the organization's goals (Stone, 2008). Having referred to several researchers and authors' views on what HRM actually is, the researcher can therefore say that HRM is an essential tool to link different people in the same organization to use their various capabilities for achieving the organization's goals. HRM has not understood as only working for managers or employees. Rather, it is a managerial function for creating the organization's competitive advantage and growth.

### Definitions of E-HRM

Researchers use a wide range of terms to describe the use of technology in human resources management; for example, the terms E-HR, E-HRM, HR intranet, HR portals and self-service are in common usage, while terms such as web-based HRM and Business-to-Employee (B2E), are less common

but equally valid (Ruel et al., 2004). Older definitions, still used by many organizations and some academics, include the terms 'HRIS' (Human Resources Information Systems) and 'HRMS' (Human Resource Management Systems). If taken to its extreme, one might conclude that E-HRM consists of any form of technology that supports the delivery of HR services (Lengnick, et al., 2003). In general, E-HRM has defined as an enterprise-wide strategy that uses scalable, flexible, and integrated technology to link internal processes and knowledge workers directly to the business objectives of the organization (Marler, 2007). In addition, other researchers define E-HRM as the application of any technology that enables managers and employees to have direct access to HR and other workplace services for communication, performance appraisal, reporting, team management, knowledge management, and learning of administrative applications (Lujan et al, 2007). Additionally, E-HRM could be defined as "the application of any technology enabling managers and employees to have direct access to HR and other workplace services for communication, performance reporting, team management, knowledge management, learning and administrative applications" (Wyatt,2006). Besides, E-HRM was defined as a way of implementing HR strategies, policies and practices in organizations through a conscious and directed support of and /or with the full use of Web-technology –based channels (Challapalli, 2005). Further, E-HRM "as the administrative support of the HR function in organizations by using Internet technology", but also emphasis the importance of understanding that the introduction of E-HRM may lead to change in content and positioning of the HR function (Voermans and Veldhoven ,2007)

Others defined E-HRM as the umbrella that covers all the mechanisms and implications of the possible integration between human resources management and information technology in order to create value for employees and management in the organizations (Bondarouk et al., 2009). This definition suggests integration of the four aspects as following (Bondarouk et al., 2009) and (Gregeby, 2007):

1. The content of the E-HRM system: where it focused on the used practices of both human resources and information technology and the link between these departments.
2. Application of the E-HRM system: where it focused on the E-HRM system adoption process and its suitability for workers in the organization
3. The targeted employees and directors: where it focused on stakeholders specifically, not on the human resources department or even on the organization. In fact, it focused on the executives and employees who use the E-HRM system applications significantly
4. The consequences of the use of E-HRM system: these multi-levels consequences, where the application of the system leads to the creation of value not only at the enterprise level, but also on the user's personal level.

As stated, E-HRM is the use of web-based technologies for the implementation of various HRM strategies or practices

(Ruël et al., 2004). While, other says that "E-HRM is an umbrella term covering all possible integration mechanisms and contents between HRM and information technologies aiming at creating value within and across organizations for targeted employees and management" (Bondarouk et. al., 2009). Through this research, the researcher will use the latter definition. This is because we believe that it captures all-important components of E-HRM and as stated by its authors, it is a consensus understanding of most existing definitions of E-HRM .The application of web-based technologies to the human resource function combines two elements, namely the use of electronic media and the active participation of people in the process. People are the drivers behind the technology. They make use of the technology that helps organizations lower administration costs, improves employee communication and satisfaction, provides real time access to information, while at the same time reducing processing time and costs (Hawkin et. al, 2004).E-HRM also involves many more stakeholders besides personnel in the HR department and the business and also includes job applicants and employees from all levels. EHRM and the use of web-based technologies for human resource management practices and policies are growing within organizational life (Bondarouk et. al., 2004).

There is a fundamental difference between human resource information systems and EHRM. HRIS is intending for the human resource department where users of this technology are largely HR professionals who use the system to enhance processes within the HR department, with the aim of improving service to the business. E-HRM, on the other hand, targeted at employees and management. The authors identify the main difference between HRIS and E-HRM. HRIS concerns the automation of HR services and E-HRM provides technological support of information regarding HR services. "Technically speaking, it can be said that e-HR is the technical unlocking of HRIS for all employees of an organization" (Ruël, et. al., 2004). Therefore, the researcher defines the E-HRM as the process of integration between Human resources management, and information technology, using web-based applications in human resources management.

#### **E-HRM Goals**

The objectives of the application of Electronic Human Resources Management system (E-HRM) are:

1. Reduce costs by streamlining human resource management processes (Marler and Fisher, 2010).
2. Improve efficiency by improving the services provided by the Human Resources Management (Marler et al., 2010, PP.33-34).
3. Improve the strategic direction of the Human Resources Management department (Foster, 2008) and thus convert human resources management to a strategic partner of the organization (Marler et. al., 2010).
4. Facilitate things, management and staff (Ruel, et. al., 2004).

5. Compilation, storage and dissemination of information about the organization staff. (Strone and Lukaszewski, 2009).

The researcher believes that the most important objectives of the E-HRM system is to facilitate the performance of the functions of human resources, which leads to saving time and effort of the human resources department staff, and improve the services provided, reduce paperwork and eliminate the complexities of daily work. Further, collecting data and made it available to the decision-makers with high speed and accuracy.

#### **Objectives of E- Human Resources Management (e-HRM)**

The goals of e-HRM stem from its integration with e-management objectives 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, Human resources management is directed towards the management and staff of the organization (Ruel & others, 2007). The changing forces and factors influencing the 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 required labor forces. This was one of the main reasons for the organizations' approach to e-HRM. (Al-Najjar, 2008):

1. Improve the strategic direction of human resources.
2. Reduce the cost of labor and administrative expenses.
3. Achieving human resources gains.
4. Facilitate the performance of HR management functions.
5. Raising performance and productivity in the organization.
6. Developing and improving labor relations and employee satisfaction.
7. Better support for cross departmental management.
8. Provide greater opportunities for participation and training.
9. 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 resource 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 and influential factor 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):

1. Implement training faster and apply acquired skills effectively.

2. Acquire distinct abilities that distinguish them from others.
3. Improve relations between different functional sectors within the organization.
4. Improve customer services.
5. Flexibility and better response to market variables.

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

#### **The Importance of Electronically Human Resources Management (e-HRM)**

The application of human resources management technology is diverse and wide-ranging as required by the organization. It may be limited to electronic scales and may extend to complex systems.

Based on HRMIS applications, according to the CIPD (2006) report of three major British institutions (2003-2006), this importance has emerged in the following areas:

1. Improve the quality of information availability by 91%.
2. Improve the availability of information by 81%.
3. Improve services to employees by 56%.
4. Reduce costs and expenses by 35%.

The HR motivations in management, such as payroll management and personal information management, while the relational drivers are concerned with advanced HR activities, the focus here is not on management but on the HR tools that help in the organization's operations to attract, select, train, evaluate performance, The last motive of transformational motivation focuses on HR functions with strategic advantage, such as changing organizational processes, strategic reorientation, strategic competitive advantage management and strategic knowledge management (Ruel & others, 2004)

This importance is highlighted by the various HR functions that serve individuals. British organizations use technology to manage human resources significantly in the following functions (Parry & others, 2007):

1. Management of absenteeism and attendance by 85%.
2. Rewards and incentives of 75%.
3. Training and development by 75%.
4. Manage diversity by 57%.
5. Polarization and selection by 51%.
6. Wages by 50%.
7. Performance assessment by 47%.
8. Human resources planning by 29%.
9. Knowledge management at 25%.
10. Manage expenses by 18%.
11. Develop a strategic plan for human resources by 18%.
12. Contact 18%.

The use of technology in human resource management has a significant impact on reducing administrative costs resulting from personnel operations, reducing the duration of recruitment and recruitment, increasing interaction of individuals with HR activities, such as the identification of benefit packages, compensation and training through the Internet and many other benefits related to all HR functions.

Thus, the organization receives many benefits from the use of e-HRM, and these benefits vary between the benefits of the greatest impact, and the ordinary benefits of the effects, as table (1) shows those benefits. (Parry, & others, 2007).

**Table 1: Potential Benefits of E-HRM**

No.	Great benefits	Ordinary benefits effect
1.	Reduce costs by automating human resources operations and activities	Enable immediate processing of information leading to a reduction in the time cycle
2.	Reduce correction costs by improving the accuracy of human resources information	Increase employee satisfaction by improving the quality of human resources services and access to information
3.	Reduce the costs of printing and disseminating information by providing direct access	Allow human resource management to become a strategic partner of the organization
4.	Improve employee productivity by providing access to information at any time from anywhere	Is likely to change the culture of the organization that stimulates self-innovation and the evolution of internal service standards
5.	Reduce data entry and search costs through staff and self-management services	
6.	Increase the efficiency of decision-making costs through improved analysis of human resources information	
7.	Reduce the IT infrastructure requirements by using the HR Services interface	

Source: Emma Parry, Shaun Tyson, Doone Selbie, Ray Leighton, "HR and Technology: Impact and Advantages", [www.cipd.co.uk](http://www.cipd.co.uk), 2007

The increase in the need for e-HRM workers because of the ease of competition and the search for alternative jobs led to the use of portals to increase their competitive positions and thereby increase overall productivity and quality (Al-Najjar, 2007).

1. Immediate self-service workers.
2. Manpower Planning Services.
3. Link the company's various websites such as in-kind benefits, education portal and recruitment portal with HR portal.
4. Enable employees to learn performance data.
5. Enable managers to make strategic decisions.
6. Linking different databases within human resources management, such as payroll software and performance software, and making them available on the website for both staff and managers.
7. Write online reports of employees from the company's website using the criteria used, providing managers with objective decisions.

In spite of this importance, some organizations and institutions, especially those operating within the public sector, still do not take advantage of these benefits or take them as a kind of change in the changing business environment. According to a study in Britain, ), Attributed to the lack of confidence and the relationship between

managers and human resources management on the one hand, and the lack of confidence in the possibility of technology to achieve the required at various levels of careers (Foster, 2008).

**Areas of Electronically Human Resources Management (E-HRM)**

The core e-HRM areas can be divided into four, which include provision of basic staff services, personnel management, and facilitation of collaboration, training and communication and motivation of staff.

Although these areas may overlap together in daily business life, their software solutions may vary widely. The use of e-HRM in human resource operations does not necessarily mean providing training programs over intranet networks or vice versa.

There are many applications for each of these areas, but some may not be appropriate for all organizations. Many organizations may not need to use all available applications. One system may have the capacity to meet most of the organization's needs, but FAO does not need all the possibilities offered by the system or are looking at application suppliers for a custom application.

Different electronic systems can support all HR functions in all fields. The following table illustrates the possibilities that can be provided through e-HRM:

**Table 2: Areas to be provided through e-HRM**

No.	Human Resource Management Function	Potential uses of technology
1.	Development and performance management	* E-Learning * Evaluate online performance such as 360 degree evaluation * Identification of training needs * Professional track management
2.	Supply	* Polarization and selection through the Internet * Planning and forecasting human resources needs
3.	Staff relations and communications	* Intranet



		<ul style="list-style-type: none"> <li>* Shared Services Centers</li> <li>* Developing teams</li> <li>* Development of the Organization</li> </ul>
4.	Human Resources and Accounting Information	<ul style="list-style-type: none"> <li>* Intranet</li> <li>* Services of managers and self-employed</li> <li>* Measurement of human capital</li> </ul>
5.	Retain and reward the employee	<ul style="list-style-type: none"> <li>*Wages</li> <li>* Rewards and incentives</li> <li>* Self-service staff</li> <li>* Configuring flexible utility packages</li> <li>* Review financial statements and bonuses</li> <li>* Benefit management</li> </ul>

Source: Emma Parry, Shaun Tyson, Doone Selbie, Ray Leighton, "HR and Technology: Impact and Advantages" [www.cipd.co.uk](http://www.cipd.co.uk), 2007, P3.

You can also distinguish between two types of system applications: administrative applications and strategic applications. In administrative applications we mean those that help automate and often help to automate many routine work tasks.

For example, linking time, attendance, financial systems and e-mail systems automates the process of collecting and accelerating customer billing data.

The strategic applications are those that enable the company to perform many tasks that were difficult to perform before. For example, e-sharing applications from different continents help to see each other and talk together on their desktops while working together to set up an electronic spreadsheet or Presentation of a graphic software package.

The development of access to information makes the transfer of power to executives simpler and over time the importance

of these strategic applications will appear to provide enormous opportunities for the development of organizations (Hopkins and Markham, 2006).

**Basic services**

One of the most important technology outputs for HR practitioners is to allow non-HR professionals to participate and carry out some of the tasks traditionally assigned to HR practitioners. One example is the development of self-service applications and technology for managers and staff (Schramm, 2006).

According to a study conducted by Hamerman (2002), the recent trends in human resources management from 1998 to 2006 have shown a strong trend towards ESS applications primarily by (70%), followed by interface applications, and MSS Applications of strategies, Figure 6.3 illustrates this trend (Hawking & others, 2004).

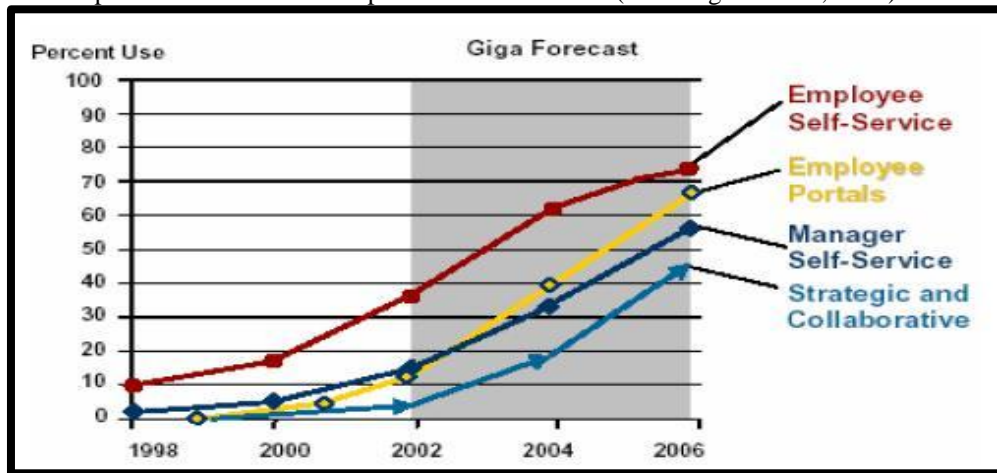


Figure 1: Forecasting trends towards ESS applications

Source: Paul Hawking, Andrew Stein, Susan Foster (2004).

"e-HR and Employee Self Service", Journal of Issues in Informing Science and Information Technology, Vol. (1), p1020.

According to (Gueutal, 2003), 80% of major US companies use ESS systems. The CIPD (2006) report of British organizations shows that 22% use ESS systems. These systems range from systems to record attendance to integrated systems Includes most HR functions and activities through the web. (Parry & others, 2007).

The Self-Service Self-Service (ESS) is based on the performance of individuals for some of the HR tasks themselves, such as changing the address of the residence, applying for leave, adding a child or spouse or other functions.

The provision of basic services in electronic form, whether through the Internet or Intranet has many advantages (Hopkins and Markham, 2006):

1. Save data in a more accurate way, avoiding errors in moving information from manual forms to databases.
2. Reduce the administrative expenses of the HR department, where the paper forms have been eliminated, and the employee no longer needs routine administrative processes such as data entry.
3. Reduce paper usage, in terms of saving storage places and costs of paper forms of printing and distribution.
4. Increased interaction of human resources systems as a result of database integration, for example identifying training needs through databases or reminding staff of training schedules.
5. Improve the efficiency of administrative information, so that managers at different levels can access the data and produce reports and statistics according to their needs and according to special criteria determined by managers.
6. The possibility of monitoring the progress of work, and the disappearance of problems that occurred in the past as a result of the loss of paper models.
7. Greater integration of payroll systems with time and attendance recording systems, especially in salary systems that depend on the number of hours worked.

In a study conducted by Barron (2002), routine human resources management work consumes 70% of the staff time at an estimated cost of (1,700\$). In another study (Wagner, 2002), the cost of human resources paper forms Costing (20\$ - 30\$) to complete the process, while the cost of e-models online is (5-10 cents). "(Hawking & others, 2004). Providing employees with access to their personal information through ESS around the clock increases the mandate given to employees, through which the employees are responsible for the accuracy of the data, creates a proprietary relationship to the data and makes it accurate enough, as well as an effective means of communication between the organization (CIPD, 2006). ESS systems are accessed through the organization's portal, or through an ESS user interface. Each employee has their own account with an access password, to view or edit their personal data, or to record times of attendance, departure and other tasks. The design of the portal is easy to use because the users are all employees of the organization, and the differences between them are great in dealing with technology, and therefore must take into account this aspect when designing these systems.

In addition to the ease of design, you must consider the ease of access to systems, where there are systems that require access to more than one level, such as access to the computer first and then the network followed by the system, and may be entering the system on more than one level, forcing the employee to remember more than one password, The system becomes a burden on it.

### 3.2 Management of Human Resources

Individuals can be managed more effectively by converting HR functions into fully electronic functions, such as e-recruitment, e-performance assessment and other functions.

#### 3.2.1 e-Recruitment

**E-Recruitment** is one of the most important areas in which e-HRM can be used. There has been a radical shift in employment practices based on ICT. E-recruitment has been spreading in Western countries since the early 1990s and has become the main source of employment in the public and private sector.

Online e-recruitment increases the efficiency of the recruitment process for both the organization and applicants and is an essential part of the modern recruitment process. According to research by the Society for HRM Career Journal, 88% of HR employees rely on the Internet to place job ads to attract candidates, and 96% of job seekers rely on the Internet for job search (Mondy & Noe, 2005).

The use of the Internet to accelerate polarization is a key field in the search for talent, and the Internet will remain the main engine of polarization technology in the coming years. According to 2006 statistics in the United States, researchers found the following results with regard to Internet use of employment (Schramm, 2006):

1. Three out of every five people looking for an Internet job are looking for jobs.
2. 88% of job seekers read job advertisements online.
3. 60% of job seekers send their CVs and online job applications.
4. 40% of individuals use online recruitment boards to create their resume.

The Internet uses the Internet to advertise jobs and to attract qualified individuals, as well as provide information on job descriptions, qualifications, and organization culture and knowledge identity. It can also be used to give a real and realistic view of the organization through the use of technology to showcase the workplace or identify teams and organization sites.

The Intranet can also be used to search for qualified staff for vacant positions (internal recruitment), and to inform managers and individuals of potential candidates for the vacant position (Stone & others, 2006). E-recruitment systems facilitate many of the procedures associated with the recruitment process (Hopkins and Markham, 2006):

1. Facilitate the announcement of vacancies.
2. Facilitate the identification of vacancies.
3. Dealing with external institutions that nominate applicants.
4. Provide tracking of candidates' applications for posts.
5. Provide access to other sources of information related to the recruitment process, such as training programs and competency requirements.

#### 3.2.2 e-Selection

E-Selection systems are very important as they enable the organization to increase access to qualified people. These systems rely on a variety of strategies, including interviews, capacity tests, personal tests, etc., to properly assess the

potential of the applicant within the required range for the job.

These systems allow job applicants to post autobiographies or complete online application filling, give applicants an overview of the jobs that fit them, and allow the organization to examine applicants and dismiss them. These systems may be used to measure the suitability of applicants in a low-cost and highly efficient manner, and some organizations use them for simulations or direct interviews. For example, in 2005 American Depot used its kiosk system to enable individuals to the online recruitment and testing process reduced the administrative costs of each applicant by \$ 135 and the rate of job applicants who conducted the test decreased by 11% (Stone & others, 2006).

Internet-based tests are an important factor in the screening and screening of job applicants. It is not necessarily necessary to exclude applicants if they are not suitable for the job. Some advanced systems have the ability to sort applications into vacant positions, automatically if new jobs are available.

Although the benefits of these systems provide for administrative and recruitment expenses (the Canadian government has implemented a system to filter online job applicants, resulting in a 50% reduction in recruitment costs), there are some disadvantages to these systems (Hopkins and Markham, 2006):

1. Probability of someone testing other than the actual applicant, especially if they are being tested by a third party.
2. Internet-based tests are conducted against individuals with limited computer skills.
3. The possibility of discrimination against people with special needs.

### 3.2.3 Compensation

Electronic compensation systems are used for the development and implementation of pay systems in organizations, providing benefits packages to employees and assessing the effectiveness of compensation systems, and they are efficient in their ability to achieve the Organization's overall objectives. Stone & others, 2006)

HR legal experts use these systems to ensure that their services are complemented by legislation and laws relating to compensation and benefits in local or international areas, especially in light of the ongoing change in laws and legislation, which leads to the continuous development of these systems to conform to those changes (Schramm, 2006).

) Compensation systems perform a variety of tasks, such as payroll, tax and insurance payments, and some pay receipts, including electronic ones.

In addition, compensation systems inform employees of many aspects of their financial aspects, and managers are able to make several estimates, such as estimating expenses related to wages (Hopkins and Markham, 2006)

E-HRM systems can support pay systems in many ways, including Hopkins and Markham (2006):

1. Greater integration of pay systems and attendance and departure registration systems, especially in jobs that depend on the number of hours worked.
2. Facilitate the management of payroll procedures, such as sending payment receipts via e-mail, thus saving a lot of administrative expenses.
3. The rapid response to changes in the status of employees, such as incentives and bonuses, especially in light of the recent trends of linking pay to performance in all organizations, and linking incentives to achieving specific goals, such as reaching a certain level of knowledge or skill, To the manager and in light of which the employee will be rewarded and the data in the database will be automatically adjusted.
4. If the employee fails to test, the system may be able to direct the employee to his or her weaknesses and identify the training areas he needs to develop his knowledge.
5. Automate routine expense models, such as transportation, travel, etc., where the employee can fill out the form through the Internet or through the organization portal, calculate the value of those expenses and then convert them to the pay system electronically.

One example of these systems is the Metro system, which Cisco uses to manage human resources electronically, to automate the costing process. Employees returning from business trips include details of flight expenses to this system whether paid in cash or through credit cards, through the online model, where they can recover those expenses within 72 hours after the traditional process took 5-6 weeks (Hopkins and Markham, 2006).

### 3.2.4 Performance evaluation

In order to pursue and implement the objectives of the performance appraisal process, many organizations provide an electronic performance assessment process to facilitate the management and implementation of the evaluation process. These systems help managers measure performance, write performance reports, and provide feedback to employees.

Computerized performance monitoring systems (CPMs) are used to facilitate the measurement of performance by measuring certain variables such as the number of units produced, the time taken to perform tasks, or the error rate.

One of the main reasons for the increased use of CPM systems is their ability to dramatically increase the scope of supervision and reduce the time taken by managers to monitor employees, their behavior and performance. Stone & others, 2006)

These systems also enable effective evaluation through the use of 360-degree evaluation through the Internet, a modern and widely disseminated method that is based on evaluation by all staff-related entities both inside and outside the organization. By 65% of US companies during 2000. (Mondy & Noe, 2005)

In addition, electronic performance assessment systems enable this assessment to be conducted more than once a

year, and the possibility of conducting an assessment on more than one criterion, especially when evaluating similar units as workstations or factory branches.

It should be mentioned that e-HRM systems should not replace direct confrontation with the supervisor or executive director, but the system can be used to develop a specific template for the meeting and the fields through which the manager and staff can record the most important points of the meeting, And this template can be placed on the organization's intranet, so the employee can review what was done during the meeting rather than take time to record notes (Hopkins and Markham, 2006)

The importance of the Internet to conduct self-assessment tests is also highlighted here. The employee can conduct the assessment at any time he sees fit. The organizations that use the electronic assessment of their employees provide electronic evaluation models, as well as many websites that are interested in this area.

### 3.3 Attendance and departure

One of the oldest uses of technology in human resources management functions is the function of recording attendance and departure to work, through paper-based electronic recording devices, which then developed into special data entry cards and then developed to register through special computer systems.

Attendance and departure registration systems are concerned with recording the number of employees' working hours and tracking absenteeism for many purposes (Hopkins and Markham, 2006):

1. Registration of working hours for salary purposes.
2. Registration of overtime hours.
3. Registration of required information for project management purposes.
4. Identify those in the organization as well as those absent, for health and safety purposes.
5. Record information on absenteeism and report based on indicators such as weekly or monthly absenteeism.
6. To find out where the workers are at any time, and to find out whether they are in or out of work.

Employees anywhere in the world can register their attendance at work, where a staff member residing outside the country on a work assignment can prove his or her presence through the Internet, and all employees of the organization can be present.

In addition, financial systems and pay systems are fed with attendance and exit registration information, especially as they are important in jobs whose wages are dependent on the number of hours worked.

These systems also provide various advantages, including easy access to information and speed, issuance of reports and disposal of human error errors.

### Training, development and communication

The ICT and Internet revolution has opened up a wide range of applications, including training, e-development or networking, e-learning and other forms of communication and participation within and outside the organization. The organization is educational when information is acquired,

used and changed as a result, and we review below how the organization can benefit from technology and the Internet in the areas of information acquisition and utilization.

#### 3.3.1 Training and development

Knowledge in its simplest definition is valuable information, two types, Explicit Knowledge and Tacit Knowledge.

Explicit knowledge is contained in documents, databases, drawings and writings, which are easily accessible and accessible to all.

The implicit is the intangible accumulation of experience and the secret of the profession acquired by the individual through the years of his work, which is not spoken or written, are transmitted only by the daily experience and experience to dissolve the experiences (AL-Ghorab, 2003)

However, the most important element here is the human element. Whatever we have built of systems and used the latest technology, all of this requires a conscious human being who is always ready to learn in order to keep up with the constant change in all aspects of life. (AL-Ghorab, 2003) FAO should provide through knowledge management an appropriate social environment for all to interact, and explicit knowledge and knowledge of individual knowledge will be combined with institutional knowledge and the organization will be a permanent learning organization.

Al-Najjar (2008) believes that there is a close relationship between knowledge management and e-HRM, so that e-HRM can be considered a KM application in that it performs the following operations:

1. Using data mining and discovering knowledge in databases.
2. Consider information exploration as a key basis for e-HRM.
3. Shift in the perception of HR as a cost element to the success element of the organization.
4. E-HRM as an online site to support and support HRM operations, such as e-polarization and e-learning.

The transformation of implicit knowledge into explicit knowledge requires a focus on individuals primarily through training, development, communication and participation, and will keep knowledge management technology an essential part of organizational strategies, and HR departments should monitor whether these systems benefit individuals in the organization.

Internet-based technology offers many means of retention and development of knowledge and skills, through which the organization can provide quick access to the latest scientific and technological innovations of other organizations, in addition to providing individuals access to search engines, databases, institutions and specialized scientific journals, Mailing lists, e-forms, newsgroups and other means of learning and electronic participation (Baloh & Trkman, 2003).

The training and development tools using the technology of the Internet and the Internet are many and varied. In order for these tools to achieve the competitive advantage of the organization and individuals, the organization needs to carefully examine the needs of the trainees so that the staff

feel the need for the learning materials and their impact on their career path and build confidence and full understanding of this process. The work of the organizers and trainers must be combined to take into account the psychological and social factors that may hamper the march towards this type of training (AL-Ghorab, 2003).

### 3.3.2 e-Learning

Electronic learning is the most flexible form of flexible learning, open learning and remote learning (AL-Ghorab, 2003).

The provision of learning materials over the Internet and Intranet is increasingly important as a means of providing training opportunities. Traditional classroom-based training in US corporations and institutions is expected to fall dramatically in the coming years, with an estimated \$ 11.4 billion. In the UK, 85% of organizations are expected to implement this system (Hopkins and Markham, 2006).

The development of e-learning technology has continued to become an essential part of the technological development of human resources management systems, and its increasing role, especially in the areas of training and simulation, and make simulation more realistic.

The importance of e-learning in providing training and time expenses, helping staff manage the right time for training, and the opportunity to learn and develop their skills while remaining in their jobs.

The American Association for Training and Development (EAD) has identified e-learning as a form of providing job satisfaction and retaining employees at the same time (Schramm, 2006).

When we talk about e-learning, there are general facts that must be mentioned, namely (AL-Ghorab, 2003):

1. E-learning includes information, communication, learning and training.
2. E-learning is not just an e-learning tool but is used for many other purposes such as knowledge management, performance management, virtual office setup and other activities.
3. E-learning not only depends on technology but also on organizational culture, leadership and change management.
4. E-learning can not succeed without the commitment and conviction of senior management, implementers and trainees.
5. E-learning strategies must be consistent with the overall strategies of the organization to achieve its goal. It is a means, not an end, and is not always an alternative to traditional training but may be complementary to it.

E-learning can be started on a single computer or a group of computers on a network with the required software. It can also be started with a modem computer connected to the Internet as well as a telephone line, then expanded to include an integrated internal network connecting all employees, so that employees can deal internally and externally, learning, consulting and problem solving across networks.

E-learning differs from other learning methods in that AL-Ghorab (2003):

1. **In time:** in terms of morning or evening, and from where the study begins and finishes.
2. **For the right person:** Each person takes only the appropriate program according to his or her personal needs, which may differ from other participants in the program itself.
3. **In the right place:** at home, at work, in a public library, or an Internet cafe.
4. **In the form and content appropriate:** in terms of quantity and quality.
5. **At the appropriate speed:** where people vary in their abilities and speed of absorption, each participant moves from one stage to another when he is sure to absorb the above according to his personal abilities and his speed of absorption.
6. Synchronously, the various parties connect from a trainer and online trainers, making the learning environment closer to the traditional way, or asynchronous, where the material is available online for each person to deal with according to his / her own time and speed.
7. It has access to geographically isolated areas, thus helping to interact with different cultures, and helps to reach out to very large numbers of individuals and deal with them according to their abilities and potentials.

The e-learning system has many advantages, including the benefit of the organization, including the benefit of the workers, and we complete the following points (Hopkins and Markham, 2006):

1. Significantly reduce training expenses as a result of eliminating or reducing the need to provide trainers;
2. Minimize the need for travel and travel both for the coach or apprentice.
3. Easy to update, publish, compile and store learning materials.
4. The integration of the media used in e-learning, for example, can be viewed in more than one format (pdf, doc, html, etc.), and providing these formats on training and learning sites.
5. Reuse learning materials more than once whether by coach or apprentice.
6. Provide the time required for learning and training.
7. Access to external resources by links to additional educational materials.
8. Integrating learning into the daily work environment. As a result of staff learning of e-learning materials from their offices, learning materials can be designed to integrate more with day-to-day business responsibilities.
9. E-learning is flexible in terms of time, level of enrollment, dependencies on technology, dependencies, speed of learning, choice of place, and group or individual work.

### 3.3.3 Effective Communication

An important point in the practice of training and development through networks and the Internet, as well as more effective personnel management, is effective communication.

HR technology is used for effective communication between managers and staff in both directions, from top to bottom, and vice versa, where effective communication stimulates and complements staff more.

Employees who continue to be informed of the instructions and developments on a continuous basis are notified that their feedback and feedback are highly appreciated by the organization, are more actively involved in the operations and are more willing to remain in the organization (CIPD, 2006, p9)

Online or intranet communication also helps organizations communicate effectively with people outside their geographic areas, resulting in faster access and lower costs.

Communication with technology and the Internet through cellular communication technology is one of the latest trends in the organizations, especially in light of the low prices of the devices, and the development of e-mail and Internet receiving techniques on these devices, which contributed to the efficiency and effectiveness of communication in organizations, anytime and anywhere (Schramm, 2006, p8)

According to the report (CIPD, 2006, p9), 71% of the organizations have an intranet, 89% of which use the intranet to access HR information, 88% of which are downloaded HR models, 48% use these systems to facilitate the feedback of employees and 63% of organizations felt that the intranet was an effective means of communication with employees.

Effective communications also provide new workflows, such as teleworking, both at home and in the organization. This type of work offers many advantages to individuals and to the organization: increasing productivity, reducing absenteeism and turnover due to employee satisfaction Method. The organization also benefits from the possibility of recruiting individuals from different geographical areas and reducing office expenses (Baloh & Trkman, 2003).

The use of technology by organizations for effective communication and personnel management has allowed them to manage the workforce more smoothly than before. Flexible work practices have increased over the past years, either through time or place, especially for women. These workers, of course, need access to networks Intranet to benefit from HR activities (Parry & others, 2007).

Also, we can not forget the great role played by technology and the Internet in the growth and growth of outsourcing companies, with a growth rate of about 30% annually. Many organizations that use this method to manage their human resources aim to improve and develop their HR systems, so that the organization eliminates some of the problems resulting from system development, while retaining its ability to benefit from high quality systems (Schramm, 2006).

### 3.4 Development of functional benefits

The last area of EHRMS uses the different ways in which software solutions can be used for the system, which can serve as catalysts, namely providing more services and information to employees to support their working life in one way or another. The most important of these means (Hopkins and Markham, 2006):

1. Total functional services, which allow employees to know in some detail the total benefits offered to them, which are added to their net salary.
2. Online career services, where employees can choose between a range of additional services provided to them.
3. External services provided and other services.

#### 3.4.1 Total functional services

In recent years, many companies and institutions have tended to provide a range of incentive services to their employees through the so-called total benefits, which are added to the employee's salary. This is due to the fact that many owners of new companies and institutions provide cash rewards, In-kind rewards. Companies and institutions that offer a mix of cash rewards and in-kind rewards therefore need ways to differentiate between both types of rewards.

HR technology, especially in the area of labor relations, encourages HR practitioners to speak business language, especially in cases of benefits and compensation, in terms of calculating the health cost of each employee, or in terms of calculating wages or benefits as a percentage of operating costs. Represents a major measure affecting the labor force (Schramm, 2006).

When the user enters the application for his or her full functional services, he or she will see a list of all the features available to him, along with his usual salary.

For example, while any regular listing indicates that an employee pays part of his salary annually for a pension at retirement, the employee can investigate more in detail, where he can find out more about many things by clicking on a link , And the most important of these (Hopkins and Markham, 2006):

1. How to plan pension plans.
2. Expected pension if the employee continues to pay the same amount of money from his monthly salary.
3. How the increase in the amount they pay from their monthly salary affects the pension they will receive.
4. Consider the level of performance of the financial holding system or the extent to which the current performance level reflects the size of the bonuses.
5. These applications contribute to a greater sense of security for employees in their work, by assessing the extent of attention paid to them by employers.

The sophisticated use of web interfaces to manage benefits leads to self-management support by employees for those benefits, through a single place supported by the organization to serve its employees, rather than entering multiple links for each partial benefit on the Intranet, leading to the direction of staff to manage their accounts Of benefits in a personal and flexible manner (Schramm, 2006)

#### 3.4.2 Online career services

A range of services are offered to employees with specific value as part of the range of functional services offered to them. Through these groups, the Cafeteria Compensation can be used to choose and combine some services, including: treatment of incurable diseases, life insurance, life partner

insurance, Childcare expenses, payment of purchase debts, leave grants and participation in recreational services.

Some of these items may be mandatory and some optional, but those services provide the employee with some flexibility in choice. For example, if the employer provides health care services, the employee must approve them but can then replace them with other services.

For example, a 60-year-old will not care about childcare expenses, and a young woman in her 20s who runs every 3 miles may not be interested in a special position for her car at the entrance to the company (Mondy & Noe, 2005). The following table (3) illustrates a set of advantages that can be provided through the Flexible Benefit Set.

**Table 3: Flexible Benefit Group**

No.	Benefit	No.	Benefit	No.	Benefit
1.	Death due to work accident	15	Providing eye and dental care	29	Nursing Services
2.	Holiday Holidays	16	Discount on the company's products	30	Home nursing service
3.	Premiums	17	Scholarships	31	External treatment
4.	Membership in the Organization	18	Right to stock valuation	32	Personal accident insurance
5.	Participation in profit	19	Share premium plans	33	Cash discount for purchases
6.	Membership of clubs	20	Share purchase plans	34	Recreation expenses
7.	Commissions	21	Collective insurance for homes	35	Recreation facilities
8.	Free medical assistance from the company	22	Healthcare fees	36	R & D Vacations
9.	Transportation services	23	Home health care	37	Permanent pension
10.	Housing services	24	Secure surgery	38	Insurance against disease
11.	Travel services	25	Child allowances	39	Free checking account
12.	Primary care	26	Interest-free loans	40	Free meals
13.	Savings allowances	27	Long-term disability benefits	41	Group insurance
14.	Savings plans	28	Education fees	42	Collective life insurance

**Source:** R.Wayne Mondy,Robert M.Noë (2005). **Human Resource Management**,9<sup>th</sup> ed , New Jersey: Pearson ,USA ,p346 .

The introduction of the electronic signature system in domestic and international trade law refers to the United States Act, which was passed in 2000, on authorizing and permitting digital signatures to be used in all commercial transactions where written signatures had to be used before (Hopkins and Markham, 2006)

In addition to the employee's ability to identify all the services provided by the company or organization and the possibility of providing all details to the grantor, the employee can complete the entire application directly online, reducing the costs incurred by the employer and ensuring that these services are suitable for each employee.

Lucent says it has secured savings of up to \$ 1.2 million in the first years that it began to dispense with the distribution of papers that include information on services provided to employees. It also found that the announcement of services available to employees may help attract staff High-performance, so it provided information about those services on its website, rather than just providing them through the intranet of the staff.

Lucent's director of services and compensation for human resources believes that moving forward with this information will benefit the organization in terms of profitability,

productivity and competitiveness significantly (Hopkins and Markham, 2006).

**3.4.3 Functional advantages and other external services**

The various services provided by external suppliers can be identified as a result of the ability of all intranet networks to connect to the Internet. Some of these services are known as external services provided to employees, in which the supplier provides a number of services that may seem simple but require a long time in implementation.

The employee may need to perform many tasks at the same time as shopping and heading to the passport office and other tasks, where the sophisticated technologies of the Internet opened the way to provide many of these services, and helped suppliers to provide low-cost services such as trips and other actions.

For example, an employee of a multinational company may wish to go to the passport office in the same week. The supplier responsible for the external services provided to the staff can send one staff member to perform all the required tasks such as going to the passport office and purchasing the required requirements for all employees they need to do those tasks.

Some of the latest technologies offered by companies and organizations allow employees to take advantage of online

shopping services offering competitive prices, including services such as Hopkins and Markham (2006):

1. Dealing with travel agencies.
2. Shopping online from a supermarket.
3. Insurance companies and many other financial services.

There are many advantages to these systems through which companies and institutions can earn a large income from them. Companies and institutions that allow outsourced suppliers to deal with their employees can receive a corresponding reward for this feature.

There may be a greater opportunity to provide more competitive prices for employees. Suppliers can offer more competitive prices by dealing with huge markets, so many employees prefer to shop online through the employer's intranet for outdoor shopping.

There are a number of other means by which online techniques can be used to provide simple services or functionalities to attract employees, although many staff believe that the scope of these services is limited to certain things. Some examples of the diversity of these methods (Hopkins and Markham, 2006):

1. Some staff install Web cameras at the incubator attached to the company so parents can take care of their children.
2. Employees with some companies and institutions have a standard to assess the mood of their portal.
3. This criterion may be in different forms of faces that express many emotions ranging from sadness to happiness, and the employee clicks on those forms to express the mood of the department or company or institution as a whole.
4. Some competitions can be offered to entertain employees.
5. News articles such as news about the company's or company's stock price can be viewed via the portal.
6. Forums can be organized with chat rooms and billboards where people can chat online or advertise their cars for sale.

#### **4. RESULTS OF HUMAN RESOURCES MANAGEMENT APPLICATION ELECTRONICALLY**

##### **4.1 Results of e-HRM for the organization**

We must distinguish between the objectives of (e-HRM) and the expected results of HRM itself, according to the above, the objectives of e-HRM aims to increase the strategic direction of HR management, improve employee service, increase customer satisfaction, reduce costs and increase efficiency.

The expected results of the organization, including the above, are the following points (Ruel & others, 2004):

1. Commitment is high, so that the workforce is motivated and able to understand and interact with management to change within the organization's environment, leading to greater level of trust between management and employees.
2. High competency, indicating the ability of employees to learn new tasks and duties if circumstances so require.

3. Cost savings, through competitive wages and reduced turnover, and HR management ability to perform a distinct management role in order to achieve the Organization's goal of reducing costs.
4. High quality, resulting from the formation of the internal environment, the wage system and the management of personnel to suit the interests of all users.

##### **4.2 Results of e-HRM implementation for human resources management**

E-HRM does not mean abandoning the role of human resources management. It does not mean leaving it as it is. We have already seen a reduction in the administrative functions of HR management and consequently a reduction in management positions and a greater emphasis on strategic objectives.

The overall direction of human resources management is that it is a strategic partner in the planning of the organization, for its ability to provide the organization with accurate and fast information using technology, and has become more customer-oriented as a result of technology.

Ruel & others (2006) summarizes these findings on human resource management based on their different approaches in the following points:

##### **4.3 Challenges of applying human resources management electronically**

Interaction involves introducing new innovations. Innovation requires an experience of everything new. Some of these new things may not work as initially expected, and as usual the focus will be on their negatives rather than their positives.

In the last few decades, many institutions and companies have adopted some new ideas that have not achieved all their objectives. For example, changing the name of the "Personnel Affairs" section to human resources (without much notice of any difference) Standards of excellence within companies (where many of them have not been committed).

The role is now on the electronic human resources management system. Over time, it will become clear whether this system deserves all the publicity that has been given to it like other new ideas. It is expected to be very welcome at first, followed by an inventory of errors resulting from and finally comes the stage of trying to develop and increase the demand for the benefits provided by and to some extent can already be seen.

Many of the pioneers in the implementation of these systems dealt with them and knew the strengths and weaknesses, and companies that wish to implement these systems can benefit from those experiences.

HR managers play an important role in demonstrating the advantages and challenges of this system to others. Expectations from these systems must be realistic. Many people are frustrated with new ideas and systems because excessive promotion has made people over-ambitious pending the achievement of further objectives.

One of the most important challenges facing human resource management when migrating to e-HRM systems, which can



affect their success or failure is (Hopkins and Markham, 2006):

1. The boundaries between the human resources and information technology departments were eliminated, as the IT department staff was somewhat isolated from other departments in the company.
2. The integration of IT departments and other productive sectors of companies in recent years has been improving, with computer technology being heavily introduced into all day-to-day activities, and human resources staff are aware of the importance of improved human resources systems in providing effective and useful information.
3. Enhancing the position of the Human Resources Section Unlike the former human resources management systems that were self-contained and used exclusively for their employees, e-governance systems for human resources are available to all and can integrate them with the various aspects of the company's systems.
4. Transforming HR focus to clients, where many view human resources functions as functional and traditional tasks, ie they do not actually initiate but respond only to the reaction of others.
5. The proper implementation and operation of human resources management systems requires a shift in focus to customers. Target customers should be identified, their needs and services can be provided. Human resources departments should have a more effective role and contribute more to daily activities that increase the company's profits. .
6. The need for human resources workers to understand the nature of the company's work, where the integration of human resources and work that requires an electronic human resources management system to understand the good working staff of the nature of work.
7. A successful EHRM specialist will need to know how different sectors work together and the role of human resources in achieving this, and the various tasks will need to be transferred to and from human resources constantly.
8. The loss of human resources personnel to communicate with individuals, it is possible in any automation to

9. reduce the importance of the human factor and communication between individuals.
9. The introduction of computer systems into the work of staff and human resources departments may cause staff to lose contact with people who are primarily concerned. Staff may feel that the company has reduced its interest in the human element. These are some of the things to consider when planning System and its implementation.
10. Consider the actual needs of the company and know the extent of the ability of its infrastructure to meet them and decide on the implementation of the appropriate system that can maximize the benefit of the work of the company.
11. To maintain quality of service, there is a possibility of low quality of service levels as a result of the conversion of the system from traditional to electronic.
12. Information security, as this is a legal necessity, especially in light of the transfer of responsibility to the personnel working.
13. Ensure access to the system by all employees, and by people with special needs.
14. Compatibility with accepted standards, especially when building web pages.
15. Taking into account different cultural aspects, especially when working in an international environment.

**5. FIELD STUDY**

**5.1 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.

**5.2 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 (4).

**Table 4:** 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
vice president	3	3	4	10	4.18
dean	19	14	12	45	18.83
Director	24	24	12	60	25.1
Head of the Department	40	37	44	121	50.63
Total	87	79	73		
total summation	239				100.00

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

As for the study population of academics and administrators from the other departments of the university, a random

sample of the society was selected, taking into account the size of the representation of each university in the study

society. The researchers determined the optimal size of the random stratum and its size (148) 62%), Table (5) shows the

study population of academics and administrators and the size of the representative sample of the study.

**Table 5:** The study society for academics and administrators and the representative sample of the society

University Name	Study Society	The study sample
Islamic University	87	54
Al Azhar university	79	49
Al-Aqsa University	73	45
<b>Total</b>	<b>239</b>	<b>148</b>

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

The total sample size, which includes academic and administrative staff as well as IT staff, as shown in Table 6.

**Table 6:** Sample of the representative study of the community

University Name	Sample study for academic and administrative staff
Islamic University	54
Al Azhar university	49
Al-Aqsa University	45
<b>Total</b>	<b>148</b>

**Source:** Researchers' Preparation, 2009.

**5.3 The Study Tool:**

The instrument of 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:**

The veracity of the internal consistency of the areas and their determinants was verified by calculating the Pearson correlation coefficient between each paragraph of the questionnaire and the total score of the field to which it belongs, using the SPSS.

Table (7) shows the correlation coefficients between each paragraph of the field and the total score of its paragraphs.

**Table 7:** correlation coefficients between each paragraph of the field (support of the university administration towards the transition to electronic management) and the total score of its paragraphs

No.	Paragraph	Coefficient of correlation	Moral level	Level of significance
1.	The shift to electronic management is in line with the University's strategy	.619	.000	0.01
2.	There are formal decisions regarding the transition to electronic management	.825	.000	0.01
3.	There is no organizational opposition to transition to electronic management	.489	.006	0.01
4.	Through its organizational culture, the University promotes the importance of transition to electronic management	.797	.000	0.01
5.	The University seeks to obtain legal accreditation for electronic signature	.633	.000	0.01
6.	The University provides a special e-mail for each employee	.739	.000	0.01
7.	E-mail is used as a two-way communication channel between all university employees	.815	.000	0.01
8.	Internal electronic correspondence is officially accredited at the university	.866	.000	0.01
9.	The University has a continuous analysis of strengths and weaknesses in ICT	.898	.000	0.01
10.	The University supports the Center for Information Technology with human competencies to achieve the transition to electronic management	.830	.000	0.01

11.	The University provides the financial support required to achieve a shift to electronic management	.656	.000	0.01
12.	The University provides the necessary equipment to operate electronic management systems	.799	.000	0.01
13.	Different departments are involved in the development of strategic plans for the transition to electronic management	.900	.000	0.01
14.	The administrative structure is adjusted to suit the shift to electronic management	.953	.000	0.01
15.	Administrative processes are re-engineered to suit the shift to electronic management	.862	.000	0.01
16.	The employee is trained on electronically transferred administrative systems	.909	.000	0.01
17.	The combination strategy combines traditional and electronic work	.920	.000	0.01
18.	An administrative leadership is being developed to deal effectively with the rapid changes in ICTs	.774	.000	0.01
19.	The University provides various means of communication with all administrative levels	.759	.000	0.01

Table (7) shows that the correlation coefficients between each of the paragraphs of the second field and the total score of its paragraphs are limited between the values (0.489 - .9530) at the level of significance (0.01). This indicates that the second field verbs are true for the measurement.

**Structural honesty of the questionnaire**

**Table 8:** The correlation coefficients between each field of study in the overall grade of the study subjects

The field	Coefficient of correlation	Moral level	Level of significance
Support the university administration towards the transition to electronic management	.940	.000	0.01

Table (8) shows that the correlation coefficients between each area of the questionnaire and the total score of the questionnaires are limited between the two values (0.491 - .9400) at the level of (0.01). This indicates that all fields of study are true.

**5.4 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,

**Table 9:** Correlation and persistence coefficients using the Cronbach alpha factor

The field	Number of paragraphs	Stability coefficient
Support the university administration towards the transition to electronic management	19	.966

It is clear from Table (9) that stability coefficients are limited to (0.936 - 0.979) and the stability coefficient for all the paragraphs (0.977).

**2. Split Half-way stability:**

The stability of the study instrument was determined by calculating the correlation coefficients in the half-split way distribution of the identification axes, as shown in the following table:

**Table 10:** correlation and stability coefficients using Siplit Half-way

Structural honesty is one measure of the validity of a tool that measures the extent to which the objectives of the tool are being achieved. It measures the extent to which each area of study is closely related to the study. The correlation coefficient of Pearson is used to calculate this correlation. Table (8).

the results do not change. The questionnaire is confirmed by the following methods:

**1. Persistence using the formula Alpha Cronbach:**

The stability of the study instrument was determined by calculating the correlation coefficients of the cores of the questionnaire using the  $\alpha$ -Cronbach equation. The stability of the questionnaire was measured in another way, the  $\alpha$ -Cronbach coefficient. Table (9) shows the results of this method.

Table (10) shows correlation and consistency coefficients between individual questions and marital questions for each field of 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 individual-spaced areas, and the Spearman-Brown coefficient for matrices.

The field	Coefficient of correlation	Stability coefficient	The type of the parameter
Support the university administration towards the transition to electronic management	.958	.978	Jettman

It is clear from Table (10) that the stability coefficients are limited to (0.945 - 0.986) and the stability coefficient for all paragraphs (0.988).

**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 exceeds 50, we use the Kolmogorov-Smirnov test, and therefore we use the tests to examine the results.

Table (11) 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 11:** Normal distribution test

The field	Number of paragraphs	Z Value	Value of significance level
Support the university administration towards the transition to electronic management	19	1.207	.109

**ANALYSIS OF THE STUDY PARAGRAPHS**

The researchers used a single sample t-test to analyze the vertebrae, where the paragraph is positive and community members agree if the level of significance is less than 0.05 and the relative weight is greater than 60%. The paragraph is

negative and the members of the community disagree with it if the level of significance is less than (0.05) and the relative weight is less than (60%). The opinions of the community in the paragraph are neutral if the level of significance is greater than (0.05).

**Table 12:** Analysis of the study paragraphs

No.	Paragraph	SMA	Relative weight	T Value	Moral level
1.	The shift to electronic management is in line with the University's strategy	8.52	85.19	21.154	0.000
2.	There are formal decisions regarding the transition to electronic management	7.35	73.49	7.201	0.000
3.	There is no organizational opposition to transition to electronic management	7.97	79.69	14.467	0.000
4.	Through its organizational culture, the University promotes the importance of transition to electronic management	7.73	77.29	8.770	0.000
5.	The University seeks to obtain legal accreditation for electronic signature	5.91	59.15	-0.469	0.640
6.	The University provides a special e-mail for each employee	7.43	74.34	8.614	0.000
7.	E-mail is used as a two-way communication channel between all university employees	7.60	76.05	9.647	0.000
8.	Internal electronic correspondence is officially accredited at the university	5.57	55.66	-2.282	0.024
9.	The University has a continuous analysis of strengths and weaknesses in ICT	7.06	70.62	5.999	0.000
10.	The University supports the Center for Information Technology with human competencies to achieve the transition to electronic management	6.57	65.66	2.884	0.005
11.	The University provides the financial support required to achieve a shift to electronic management	5.54	55.43	-2.323	0.022
12.	The University provides the necessary equipment to operate electronic management systems	7.05	70.47	6.016	0.000

13.	Different departments are involved in the development of strategic plans for the transition to electronic management	6.61	66.12	3.159	0.002
14.	The administrative structure is adjusted to suit the shift to electronic management	6.22	62.17	1.348	0.180
15.	Administrative processes are re-engineered to suit the shift to electronic management	6.93	69.30	5.398	0.000
16.	The employee is trained on electronically transferred administrative systems	6.91	69.15	4.743	0.000
17.	The combination strategy combines traditional and electronic work	7.17	71.71	7.011	0.000
18.	An administrative leadership is being developed to deal effectively with the rapid changes in ICTs	7.22	72.25	8.383	0.000
19.	The University provides various means of communication with all administrative levels	8.33	83.26	20.508	0.000
<b>All paragraphs</b>		7.04	70.37	9.589	0.000

Table (12) shows the results of using t-test, summarized as follows:

1. The results of the paragraph "provide university the financial support required to achieve the transition to electronic management" and the paragraph "internal electronic correspondence officially accredited at the university" negative as the value of t is smaller than t-table (-1.98) and the significance level is less than (0.05) Relative to both are less than (60%) and the mean is less than (6).
2. The results of the paragraph "The university seeks to obtain legal accreditation for electronic signature" and the paragraph "Administrative structure commensurate

with the shift to electronic management" is neutral since the level of significance is greater than (0.05).

3. The value of t for all paragraphs (9.589) is greater than the tabular t value (1.98) at a mean level (0.000) which is positive.
4. The relative weight of all the paragraphs was (70.37%) and the mean (7.04).

#### 6. ANALYSIS OF THE STUDY AXES

The following paragraph discusses the areas of study related to the impact of the university administration on the transition to e-management in the management of human resources electronically in the Palestinian universities in the Gaza Strip.

**Table 13:** Analysis of the fields of study

The field	SMA	Relative weight	T Value	Moral level
Support the university administration towards the transition to electronic management	7.04	70.37	9.589	0.000

Table (13) shows respondents' responses to all areas of study. The results were as follows:

1. The mean for all fields of study was 7.04 and the relative weight was 70.35.
2. The value of t was 13,564, which is greater than the tabular value of (1.98) at the level of significance (0.000).
3. 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 by the increasing interest of university administrations towards the shift 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 society.

#### ANALYSIS OF THE HYPOTHESIS OF THE STUDY

The hypothesis states: "The support of the university administration towards the transition to electronic management has a statistically significant impact on human resources management electronically."

To test the relationship between the support of the university administration towards the transition to electronic management in the human resources management electronically in the Palestinian universities in the Gaza Strip and the support of the university administration towards the transition to electronic management, the researchers used the one sample T-Test, Table (14) shows the results of this test.

**Table 14:** Analysis of the main hypothesis

Hypothesis	SMA	Relative	T	Moral
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		weight	Value	level
The support of the University administration towards the transition to electronic management has a statistically significant impact on human resources management electronically	7.04	70.37	9.589	0.000

Table (14) shows that the average response rate was 7.04, which is greater than the arithmetic mean (6). The value of t (9.589) 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 acceptance of the alternative hypothesis that "the support of the university administration towards the transition to electronic management has a statistically significant impact on human resources management electronically."

The support of the university administration towards the transition to electronic management has an impact on the shift to the management of human resources electronic, and this result is consistent with the following studies:

1. (Parry & others, 2007). The application of the use of technology within human resources should be a major focus of the organization as well as the importance of serious staff participation in system development.
2. Ruel & others (2004) notes that e-HRM achieves strategic integration of human resource management with the organization's strategy and is used to achieve uniformity and integration of information.
3. Baloh and Trkman (2003) study that the use of ICT means changing the leadership style of organizations, changing organizational structure, changing the organization's working environment, changing personnel functions and working procedures.

## 7. STUDY FINDINGS AND RECOMMENDATIONS

### 7.1 RESULTS OF THE STUDY

In this last chapter, the researchers review the main findings of the study and the proposed 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 tool, 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:

1. University management supports the process of transition to electronic management.
2. The concept of e-governance is a broad concept that involves several different electronic systems, and the shift to them requires extensive changes from organizational structure to business processes.
3. Computerized information systems are sufficient to initiate a transition to e-management.
4. The use of e-HR forms is still very limited and significantly reduces e-HRM benefits.
5. Electronic education services are the current reality, and they are an important tributary of formal education in the age of Internet technology and information

revolution, and their advantages can be widely used in some human resource management activities such as e-learning and distance training.

6. ICT tools and means are not used optimally in human resources management electronically, and researchers explain the lack of e-HRM systems in universities.
7. Self-service systems are not interrelated with pay and pay systems, and researchers explain this because e-HRM systems are not complete at universities.
8. 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 that 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:

1. The administration of the universities of the official and practical approach towards electronic administration and its systems.
2. To develop computerized management information systems to cover all administrative aspects.
3. E-HRM development in universities, as they play a key role in the success of the transition to e-governance.
4. Expanding the use of electronic forms to manage the affairs of employees to take advantage of its multiple advantages such as reducing expenses and reducing the time of completion of transactions.
5. The adoption of internal electronic correspondence instead of paper, which contributes significantly to reduce administrative financial expenses, and the speed of completion of work.
6. The integration of computerized management information systems and the linking of what is currently fully established as a beginning to a gradual transition to electronic management. For example, the pay system can be linked to the attendance and departure system, self-service services, or performance appraisal with the pay system.

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