An-Najah National University
Faculty of Graduate Studies

Factors Affecting the Acceptance of Electronic Human Resource Management System in Palestinian Service Sector

By
Maha Mohammed Ibrahim Saleh

Supervisor
Dr. Yahya Saleh

This Thesis is submitted in Partial Fulfillment of the Requirements for the Degree of Master in Engineering Management, Faculty of Graduate Studies, An-Najah National University, Nablus, Palestine.
2014

Factors Affecting the Acceptance of Electronic Human Resource Management System in Palestinian Service Sector

By

Maha Mohammed Saleh

This Thesis was defended successfully on 20/11/ 2014 and approved by:

Defense Committee Members		Signature
– Dr. Yahya Saleh	(Supervisor)	.....
– Dr. Khalid Rabayah	(External Examiner)	.....
– Dr. Ayham Jaaron	(Internal Examiner)	.....

Dedication

To My LOVE

Acknowledgement

First of all, I would like to express my sincere thanks to Almighty Allah for giving me the ability, chance, and patience to accomplish my goals during my study.

My thanks go to my family for the support they provided me through my entire life and specially, I must acknowledge my parents for their constant encouragement. Thank you, mom for your prayers to during my study.

I would like to dedicate this master thesis to my beautiful sisters and brothers for giving my life a whole beautiful meaning and for enduring love and encouragement. From the bottom of my heart “I love you all so much”.

I would like to express my sincere thanks and my appreciation to my supervisors, Dr. Yahya Saleh for his support, understanding and patience. His constant encouragement, motivation and valuable advices have resulted in the completion of this thesis. I have gained so much knowledge from working with him for the past two years

I would like also to thank the members and chair of my examinations committee for taking their time reading the thesis and doing their efforts to improve it. Finally, I would like to extend my thanks to my friends for giving me the chance to spend a great time with them. A Big thanks to all of you and may Allah bless you.

الإقرار

أنا الموقع أدناه مقدم الرسالة الت يتحمل العنوان:

Factors Affecting the Acceptance of Electronic Human Resource Management System in Palestinian Service Sector

أقر بأن ما اشتملت عليه هذه الرسالة إنما هي نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وإن هذه الرسالة ككل، أو أي جزء منها لم يقدم من قبل لنيل درجة أو لقب علمي أوبحثي لدى أية مؤسسة تعليمية أو بحثية أخرى.

Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's name: الاسم: هشام محمد ابراهيم صالح

Signature: التوقيع:

Date: التاريخ: 20/11/2014

Abbreviations

e-HRM	Electronic Human Resource Management Technology
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
HR	Human Resource
IT	Information Technology
ICT	Information and Communication Technologies
HRM	Human Resource Management
CRM	Customer Relationship Management
ERM	Employee Relationship Management
HRMS	Human Resource Management Systems
IS	Information System
SMS	International Labor Organization
SME	Short Message Service
MMS	Multimedia Messaging Service
ADSL	Asymmetric Digital Subscriber Line
GDP	Gross Domestic Product
CPM	Computerized Performance Monitoring
CEO	Chief Executive Officer
HRIS	Human Resource Information Systems
H	Hypothesis
SPSS	Statistical Package for the Social Sciences
Comm.	Communication
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
ATT	Attitude
ITA	IT Availability (Employee training and Availability of IT resource)
INT	Intention
SS	System Security
TIME	Time Performance
OR	Organization Roles
SR	Social Risk

Abbreviations

PR	Perceived Risk
Std. Deviation	Standard Deviation
N	Numbers
Sig.	Significant
LSD	Least Significant Difference

Table of Contents

List of Tables

List of Figures

List of Appendices

Factors Affecting the Adoption of e-HRM Technology in West Bank Companies

By
Maha Mohammed Saleh
Supervisor
Dr. Yahya Saleh

Abstract

This study aims at investigating factors affecting the adoption of Electronic Human Resource Management system (e-HRM) in Palestine and to develop an e-HRM framework that can be adopted by the Palestinian organizations to utilize technology effectively in their operations. The study relied on a representative sample of banks, government organizations, hospitals, insurance companies, internet service providers, logistics companies, telecommunication companies and universities working in Palestine. The development of the framework was based on the extension of other existing models, namely, Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Yale model of Communication and Persuasion, Perceived Risk, Social Risk, and Organizations Role.

To conduct the study, both qualitative and quantitative research methods were used. Qualitative data were collected via interviews with IT specialists and HR managers. Besides, a self-report questionnaire was designed to gather the pertinent quantitative data from sample of HR managers, IT managers, department managers, and employees in the targeted organizations.

The analysis of collected data indicates that perceived ease of use, attitude, intention, and communication are the most significant factors influencing e-HRM adoption by Palestine businesses. Additionally, perceived risk, system security, organizations role, and availability of resources are influencing e-HRM technology adoption in less degree.

Based on the research findings, Palestinian organizations should work on formulating new strategies, developing their operational process, introducing services with high quality, and coordinating with other entities such as ICT companies and government that would be helpful in achieving employees and managers trust in order to spread e-HRM system among Palestinian society.

Chapter One

Introduction

Chapter One

Introduction

This chapter introduces a general background of the research title, and clarifies problem statement, motivation of the research, research objectives, and research questions. Also, it presents the research hypotheses, and the structure of the thesis.

1.1 Background

Human Resources Management (HRM) is the management of an organizations workforce, or human resource and it is responsible for the attraction, selection, training, assessment, and rewarding of employee. HRM is the most important management function that focuses on the human element, which is the most precious resource and the most influential element in productivity of the organization.

Management and development of human resources is an essential cornerstone in the majority of organizations which aims to strengthen the organizational capacity, and enable companies to do rehabilitation of the necessary competencies and ability to keep up with current and future challenges. Human resources can contribute strongly to the goals achievement, and profit maximization for the organization (Alleyne et al., 2007).

HRM means the optimal utilization of available human element, more specifically, use HRM to utilize capacity and expertise of the human

element in the organization and its success in reaching its intended goals. So, researchers are interested in HRM to make the principles more helpful in effectively and efficiency which help every individual in the organization through management of human resources. These foundations begin with planning and selection, training, incentives and evaluation of the human element.

Information technology has serious effects on human resource management processes and practices, and is propelling them to adopt new ideas in order to improve the development environment and workflow to reach the goals in a more effective manner.

Because of the importance of human resource (HR) department, many organizations began to develop the culture and the tools used to reach the desired goals in order to develop their work that fits with requirements of customers in the market.

The development of information and communication tools has rapidly changed our economic and social live, It also given us multiple ways to accomplish tasks better and faster, and has had a significant effect on the way organizations are managed (Kavanagh et al., 2012).

As a result, companies have become more focused on providing the best services to their customers through the use of the latest technological methods to realize competitive advantage. These trends have become more interesting after the emergence of e-commerce era and electronic customer

relationship management (CRM) system which is strategy, programs and technology to effectively manage how firms relate to prospective, current and former customer (Rogers, 2008).

Later on, companies have become more knowledgeable that the role of employees in the organization success is not as important as the role of customers so there is an increased interest in the use of modern technology in employee's side and the emergence of employee relationship management (ERM).

CRM is a model for managing a company interaction with customers and it involves using technology to organize, automate, and synchronize sales, marketing, customer service, and technical support. ERM has been openly emerged from the more widely used CRM and it aims at transferring principles of technology-based relationship from customer to employee domain.

Major values provided to employees are the greatest possible satisfaction of their individual needs, while the increased attraction, retention, motivation and performance of employees are values promised to employers (Keimand Fritsch, 2008).

The two important resources in organizations; people and information, can significantly affect the overall performance of a business and the business success naturally requires the management of resources (Martinsons, 1994).

Therefore, the managers must combine the two resources (people and information) by adopting new systems which can drive the organization to success. So, that stems the need for these systems due to the great development of technology that could be employed in all areas.

The performance of HR system promotes the organization success in today's knowledge economy, so we need to increase the effectiveness of HRM by becoming strongly dependent on technology. Technology, especially the Internet, has helped the advancement of many HR processes including human resource planning, recruitment, selection, performance management, work flow, training, development, and compensation.

Most large organizations now use Web-based recruiting systems, and have implemented Web-based training programs. These new systems have enabled HR professionals to provide better service to all of their stakeholders (e.g., applicants, employees, managers), and thus reduced the administrative burden. These changes made it possible for organization to focus on HR strategy, and become true business partners in organizations (Gueutal and Stone, 2005).

E-HRM provides the HR function with the opportunity to create new avenues for contributing to organizational effectiveness through such means as knowledge management and the creation of intellectual and social capital (Lengnick-Hall and Moritz, 2003).

Besides that, the HR function has not been proactive in its use of Internet technology in order to provide integrated services or to communicate more effectively with its customers to elicit and fulfill their changing expectations (Alleyne et al., 2007).

1.2 Problem Definition

The development of technology affected the organization needs and tools to achieve its goals. So, some of the positive and negative factors have emerged in affecting the acceptance of these technologies in work environments, especially those associated with a significant correlation capabilities of the human.

The entry of modern technologies in the management of HR has led to a number of factors which are related to the acceptance or rejection depending on the nature of the various companies.

Nowadays, the trend towards using new technologies became widespread, such as e-learning, e-commerce, e-marketing, e-banking and other management systems that depend on achieving goals electronically.

E-HRM integrates HR processes and organization information system to manage all HR activities electronically. So, the researcher aims to identify the factors that constitute impediments or incentives to accept HRM in Palestinian organization to manage human resources electronically based on technology.

1.2.1 Motivation of the Research

During past years, e-management concept became more widespread, so it was necessary to apply this new policy in the management of human resources department, which is one of the most important sections within the company because of its active role in the success or failure of businesses in different company sections.

The importance of this research is represented in extracting the factors that help companies adopt this new technology by clarifying its benefits to the company, staff and administration role in general to facilitate the various processes and organize work in better and in an explained manner.

1.2.2 Research Objectives

The research aims to achieve the following objectives:

1. Study the current system used in human resource management in Palestinian service sector including: banks, hospitals, insurance companies, government, internet providers, logistics, telecommunication, and universities.

2. Study the impact of the advancement in ICT that affect use of e-HRM.

3. Identify positive and negative factors that affect manager to adopt of e-HRM.

4. Define relationship between those factors and how these factors can affect the adoption of e-HRM in the Palestinian companies.

1.2.3 Research Questions

This research aims at answering the following questions:

1. What are the methods currently prevailing in the management of human resources in Palestinian organizations?

2. What is the impact of human resource manager's experience in using computers and modern methods of communication on the acceptance of e-HRM?

3. What is the impression of employees and managers about the benefits that can be obtained as a result of use of electronic administration?

4. Does the prevailing culture of the use of technology in the community and among employees have great influence on the use of electronic administration?

5. Does the development of Information and Communication Technologies (ICT) tools and networks affect the adoption of the use of this new technology for Human Resource Management?

6. What is the impact of manager's fear of safety and confidentiality of electronic information on the trend towards adoption of e-HRM?

1.3 Structure of the Thesis

The thesis consists of six chapters; Chapter One introduces the thesis subject and objectives of this research. Chapter Two introduces a literature review and summarizes studies that addressed the e-HRM, and previous studies which support the hypotheses formulation.

Chapter Three presents the methodology that has been followed in this research .Chapter Four presents the adopted data collection tool which includes interviews and questionnaires. Chapter Five illustrates the analytical results of research variables and gives the hypotheses results. Chapter Six gives brief conclusions on hypotheses results with a set of recommendations and future research suggestions.

Chapter Two

Literature Review

Chapter Two

Literature Review

This chapter aims discusses the research conceptual framework and previous literature concerning e-HRM. It is divided into two parts; the first one discusses e-HRM and ICT terminologies, importance of e-HRM, benefits of e-HRM, and element of e-HRM systems. The second part discusses the previous studies related to e-HRM adoption, factors affecting e-HRM technology, and user acceptance models.

2.1 Background

Both human resource management (HRM) and electronic human resource management (e-HRM) are relatively new research area. HRM literature emerged about 30 years ago (Lengnick-Hall et al., 2009), and early e-HRM studies began to appear around 1995 (Strohmeier, 2007). In addition, both research streams mention potential transformational of HRM within organizations.

In HRM literature, experts focus on strategic outcomes such as organizational performance (Becker and Huselid, 1998), strategic alignment (Schuler and Jackson, 1987), and competitive advantage (Wrightet al., 2001). In the e-HRM practitioner literature, e-HRM suppliers often assert that internet based technological innovations are important in realizing the outcomes predicted in the HRM literature.

HRM departments using ICTs are becoming an increasingly important phenomenon commonly referred to as e-HRM. In addition, e-HRM provides the HR function with the opportunity to create new path for contributing to organizational effectiveness through such means as knowledge management and the creation of social and intellectual capital (Lengnick-Hall and Moritz, 2003). Also, HR has lagged behind other internal departments in its adoption of information system (IS), information technology (IT) innovations (Alleyne et al., 2007).

Stone (2003) discusses the impact of technology and word wide web (WWW) on HRM practices such as planning, selection, recruitment, and performance evaluation. Despite the extended use of these systems, there has been a surprising dearth of research and theory on this topic. Most of the research on this topic has focused on examining the effectiveness of different applications in HRM.

In addition, many of the researches on e-HRM have focused on e-recruiting (e-recruiting can be defined as "the use of Web-sites, Web-portals, or kiosks to attract applicants to the organization (Braddy, Meade, and Kroustalis, 2009), and enable them apply for jobs online" (Stone et al., 2005).

One notable exception is the article by Kehoe et al. (2005). It outline some of the key parameters associated with using web-based systems in the selection process which is one of the most important functions of the Human Resources Department. However, most of the research on these

systems has focused on the equivalence of personality inventories and computerized or paper employment tests. In addition, other studies have assessed applicant's reactions to the use of new technology in the interview practice.

Some other studies have examine the use of web-based systems to enhance the effectiveness of other HR processes, for instance, a study on the effectiveness of electronic job analysis (Reiter-Palmon et al., 2006).

Likewise, there have been different articles on electronic compensation and benefit systems. Dulebohn and Marler (2005) discover that e-compensation involves the use of web based software tools that allow managers to effectively communicate, administer, and benefits information.

In addition, Strohmeier (2007) review current empirical work on e-HRM and discusses some implications for future research. The review reveals an initial body of work from different disciplines that is mainly non theoretical, employs diverse empirical methods, and points several levels of analysis to diverse focal topics of e-HRM.

Also, Strohmeier (2012) refer to the importance of employee relationship management (ERM) beside to customer relationship management (CRM), these encourage companies to adopt modern tools and systems to increase employee effectiveness and achieve companies' goals.

A review of the literatures reveals the importance of adoption information system in managing different companies and the effect of using different technologies in their goals and achievement.

2.1.1 Definition of e-HRM Technology

Given that various authors published articles related to e-HRM and information technology, it is visible that there are interchangeable terms used to refer to e-HRM. For instance Human Resource Information Systems (HRIS), HR intranet, web-based HR, computer based human resource management systems, virtual HR, and HR portals.

Several authors argued about internet or web-based channels as a venture of HRIS (Lengnick-Hall and Morritz, 2003). While some authors preferred to use the term e-HRM over HRIS, many authors agreed that a line cannot be drawn between IT-based information system for HR and internet-based HR applications as these two are basically doing similar jobs (Ruel et al., 2011). Thus, Ruel et al.(2011) defined HRIS as " all IT-based information system and application either stand alone or networked, for the human resource management purpose, be it for facilitating HR practices, policies or strategies".

The core difference between HRIS and e-HRM in that basically HRIS are direct towards the HR department itself whereas with e-HRM, the target group is not only the HR staff but people outside this department it including the employees and management in the organization.

Technically speaking, it can be said that e-HRM is the technical unlocking of HRIS for all employees of an organization.

Kavanagh et al. (2012) mention although HRIS includes hardware and software, it also includes people, forms, policies and procedures, and data. Recently, the focus of HRIS has shifted to more strategic applications of an organization like recruitment, performance and compensation management, self-service technologies and HR planning alignment with the organizations planning (Lengnick-Hall and Moritz, 2003).

Olivas-Lujan et al. (2007) mention that the term E-HR or E-HRM was first used in the late 1990s when "e-commerce" was sweeping the business world. In the literature, E-HR is used interchangeably with virtual HRM, HR intranet, web-based HR, computer-based human resource management systems (CHRIS), and HR portals (Ruel et al., 2007).

According to Voermans and van Veldhoven (2007), E-HRM could be narrowly defined as the administrative support of the HR function in organizations by using Internet technology.

Lengnick-Hall and Moritz (2003) referred E-HR to conducting business transactions (and in particular HRM) using the Internet along with other technologies. Ruel et al. (2011, 2007) define E-HRM as a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support and/or with the full use of web-technology-based channels.

2.1.2 Importance of e-HRM Technology

Technology indicates to the collection of tools that make it easier to collect, create, use, manage and exchange information, it refers the knowledge and exploitation of tools, techniques and systems in order to solve problems, improve a pre-existing solution, achieve a goal, handle an applied input/output relation or perform a specific function to serve a bigger purpose such as making life better and easier.

Technologies significantly affect human ability to control and adapt to their natural environments. The term can either be applied generally or to specific areas: examples include construction technology, medical technology, and information technology.

Today's companies are different from the ones that existed in the past. Because it is constantly changing, the most important characteristics of our era may be the transformation, transmission and dominion of information. We live in an information era where the leading role has been given to new technologies. Organizations use a number of strategies for improving their operation and procedures, one of which is the development and use of HRM systems.

The importance of e-HRM is derived from the importance of technology in different areas of work. Surveys of HR consultants suggest that both the number of organizations adopting e-HRM and the depth of applications within the organizations are continually increasing

(CedarCrestone, 2007). This increase in adopting new technologies in different companies is an indicator to the importance and multi-benefits of it. In addition, a number of practitioner reports provides a strong evidence that e-HRM is becoming increasingly common and must lead to remarkable changes and support for competitive advantage.

The advancement in tools and procedures of information technology has driven many companies to change its policies in all directions. For instance, almost all large organizations use electronic human resource (e-HR) systems to attract job applicants (Stone et al., 2005).

In addition, they are increasingly using these systems to determine employee needs, deliver training, manage employee performance, and administer compensation and benefit systems plus evaluation systems (Strohmeier, 2007).

To date, research has suggested that e-HR systems typically increase the efficiency of all HR processes and procedures, reduce administrative costs, and decrease transaction times (e.g., the time of recruitment, time to replace employees) (Gueutal and Stone, 2005).

However, results of old surveys show that only 14% of companies which use e-HR systems report that they have enabled them to make better HR decisions (CedarCrestone, 2007). As a result, there may be problems with the design or implementation of these systems that preclude them from achieving their intended goals (Stone et al., 2003).

Interestingly, results of one survey show that 74% of large organization now uses electronic recruitment (e-recruitment) and electronic selection (e- selection) technology (CedarCrestone, 2007).

On the other hand, connecting e-HRM and strategic decision making improves organizational performance. Based on data of over 19,000 organizations, Liuet al., 2007 showed that HRM has a significant added-value in terms of influencing an organizations performance. Also it shows the importance of strategic decision making and the added-value of HRM was strongest when HRM decisions were related to strategy.

Electronic HR systems may be less interesting compared with the traditional HR systems, especially in tools and procedures, and cannot attract the attention of employees. For example, messages in electronic systems may lack the richness of face-to-face communication, and prevent individuals from understanding important HR information (e.g., HR rules and procedures, safety guidelines).

2.1.3 Types of e-HRM Technology

To consider IT as the backbone of HR department which moves along e-HRM, IT might influence the structural integration within HR in three types: operational e-HRM is concerned with administrative functions, payroll, and employee personal data, by streamlining operations and alleviating much of the administrative burden, relational e-HRM is concerned with supporting business processes by training, recruitment, and

performance management to increasing the timeliness and service levels with employees and managers, as well as outside partners, and transformational e-HRM is concerned with strategic HR activities such as knowledge management, and strategic re-orientation because IT has enabled people to communicate across geographic boundaries and share information which eliminates barriers of time and space (Lepark and Snell, 1998).

Operational e-HRM: This type of HRM includes the basic activities in the department which can be named as administrative tasks such as capturing of personnel data, keeping records, payroll, company policies and procedures. According to Snell et al. (2001), about 75-75 percent of the workload is related to this type of activities.

Regardless of the activities themselves and their types, Strohmeier (2007) also considers functions such as e-learning, e-recruitment and e-selection (these activities belong to the relational HRM) to review efficiency and effectiveness outcomes of e-HRM, namely operational consequences, which were report by employees, like

1. Reduction of HR staff.
2. Faster processes.
3. Cost reduction.
4. Release from administrative burdens resulting from automation.

5. Shifting responsibilities from HR to line managers and employees.
6. Considerable cost savings from e-recruiting and e-selection, due to reduce employee turnover.
7. Reduce staffing costs.
8. Increase hiring efficiency.

Relational e-HRM (Transactional): Activities which require direct and two-way relationship among HR professionals and internal or external sources can be classified in this type of HRM (e.g., e-recruitment, e-learning, performance appraisal). As Strohmeier (2007) says it refers to interacting and networking of different actors.

Also Ruël and Bondarouk (2004) put emphasis on HR tools that support business processes, not on administration. About 15-30 percent of HR workload is related to this type of activities (Snell et al., 2001).

Transformational e-HRM: This is the highest-level and most complex type of activities which has nothing to do with HR routines and transactions. According to Snell et al. (2001) these activities tend to be strategic with the same pace of the company mission and vision and only about 5-15 percent of the time are devoted to this type.

Many companies are trying to make this share bigger by reducing the activities in operational sector (e.g., outsourcing). Nevertheless, as

Strohmeier (2007) reviewed as an evidence-based approach there is no strong evidence to support this phenomenon since no studies directly examined the relationship between E-HRM and any kind of organizational performance measures.

Ruël and Bondarouk (2004) make a clear distinction on these types of activities by comparing the possible solutions for doing them, through face-to-face interaction or Web-enabled functions. For operational e- HRM the choice is between asking employees to keep their own personal data up-to-date through HR portals or to have an administrative force in place to do this.

For relational e-HRM there is the choice between support recruitment and selection through a web-based application or using a paper-based approach (through advertisements, paper-based application forms and letters.).

Finally, in terms of transformational e-HRM, it is possible to create a change-ready workforce through integrating a set of web-based tools that enable the employees to develop in line with the company strategic choices or to have paper-based materials.

2.1.4 Benefits of e-HRM

Advances in information technologies have changed HR functions within organizations. Today, most organizations implement an HRIS extensively to support basic HR functions, as well as to enhance

administrative efficiency, decision making, and information sharing (Lengnick-Hall and Moritz, 2003).

Organizations can seek to (1) improve the strategic orientation of HRM, (2) reduce costs or increase efficiency, (3) improve client service or facilitate management and employees and (4) improve organizations global orientation by standardizing and harmonizing the HR function (Ruël et al., 2004).

The literature on e-HRM suggests that, overall, the three goals of e-HRM are cost reduction, improving HR services, and improving strategic orientation. E-HRM systems are thought to provide a number of key benefits to organizations. For instance, practitioners and researchers have argued that these new systems (1) enhance HR efficiency, (2) reduce costs, (3) decrease administrative burdens, (4) facilitate HR planning, and (5) allow HR professionals to become a strategic or business partner in organizations (Gueutaland Stone, 2005).

For instance, there are concerns that these new systems focus primarily on efficiency and cost containment, and do not enhance the effectiveness of HR processes (e.g., recruitment systems). There are also concerns that e-HRM systems may (1) have an adverse impact on members of some protected groups (e.g., older job applicants) (McManus and Ferguson, 2003), and (2) have the potential to invade personal privacy (Eddy, Stone, and Stone-Romero, 1999; Harris et al., 2003).

In an effort to overcome system-related problems in organizations, practitioners and researchers have started to establish HR standardized criteria that can be used to assess system effectiveness (Cascio and Boudreau, 2008).

Some common used HR standardized criteria include: (1) system impact (e.g., new hire quality, turnover of high performers), (2) system effectiveness (e.g., vacancies filled internally, grievances resolved successfully), and (3) system efficiency (e.g., time to fill vacancies) (CedarCrestone, 2007).

According to Ruel et al. (2004), who refined Lepak and Snell's (1998) classification of pressures for virtual HR by the implementation and usage of e HRM, organizations can seek to (1) improve the strategic orientation of HRM, (2) reduce costs or increase efficiency, (3) improve client service or facilitate management and employees and/or (4) improve the organization's global orientation by standardizing and harmonizing the HR function (Ruël et al., 2004). Of course, a stronger focus on HR strategy can also be a goal in itself, and strategic arguments can drive an organization's intention to reduce costs, improve services or standardize the HR function.

Marler (2009) presents a model of e-HRM strategy formulation that distinguishes three primary goals of e-HRM: cost savings, strategic alignment, and building resources. Each of these primary goals is seen as fitting within the overall deliverables and roles for HR, related to strategy

and competitive advantage. Strategic e-HRM is focused on increasing added-value through increased business focus by the following activities:

1. Acquire the right employee for the right job at the right time.
2. Provide conditions for optimal alignment between personal objectives and company objectives.
3. Provide means for keeping the right employees and outplacement of the lesser qualified.
4. Maximize capitalization of employee capabilities.
5. Analyze and report on factors that lead to employee turnover and how it affects business performance goals.
6. Analyze the impact on the workforce of possible restructuring or new market approaches.
7. Improve effectiveness and efficiency of HR processes.

2.1.5 Challenges of e-HRM Technology

E-HRM technology faces challenges and difficulties influence the adoption of this technology. Several authors argue about the most prevalent issues facing management are control, business requirements, and best practices. Varma and Gopal (2011) explain the most important challenges impeding the spread of e-HRM technology in different organizations:

1. Cost Implications: cost is one of the biggest obstacles to the adoption of e-HRM due to the hardware and software cost of building or purchasing equipment as well as the cost of training employees on the new technology.

2. Aligning the e-HRM system with the business requirements: conformity between the functions provided by the e-HRM system with business requirements within the organization goals and objectives.

3. Security of the information: security concern is the most important challenge which influences e-HRM technology. The company needs to ensure that outsiders or competitors cannot access to company information to ensure confidentiality.

4. Managing the data: managing the huge amount of data generated through e-HRM is a relatively new challenge for companies.

5. E-HRM to function along with other systems to be successful: ensure of compatibility between all systems within the company, such as accounting system and work control system.

6. Continuous monitoring and feedback: continuous monitoring and feedback are critical for the success of any e-HRM effort in an organization to ensure that all the requirements of future work can be achieved through the system.

7. Training the users: training staff to use the system plays a significant role to achieve the goals of adopting e-HRM because the misuse of e-HRM constitutes a threat to the companies.

Furthermore, to achieve the companies goals from adopting e-HRM technology there are some pre-requisites of e-HRM technology need to be address to ensure the constraints of reducing the obstacles facing e-HRM adoption such as:

- ❖ Employee and mangers commitment to change management style.
- ❖ Presence of an IT usage culture within the company.
- ❖ Support culture of knowledge management.
- ❖ Involvement of all the stakeholders early in e-HRM adoption project
- ❖ Discussion of the value of any technology solution to the users.
- ❖ Adequate users training to encourage them toward the new systems.

2.2 Information and Communication Technology in e-HRM

The development in Information and Communication Technologies (ICTs) sides radically changed the social and economic lives, and created a huge effect on the management tools and strategies within the organization. As a result, internal organization department, such as human resource (HR) function, have been forced to re-examine their own roles in the light of a dramatic increase of organizational demands on them (Gloet and Berrell, 2003). HRM departments using ICTs is becoming an increasingly important phenomenon.

The power of information technology (IT) tools appears in achieving business goals. The utilization of IT tools helps not only to fulfill company targets but to optimize the work processes as well. The trends and results of the contemporary studies constantly confirm contribution of the IT tools in Human Resources (HR) to accomplish assigned HR responsibilities by using the source of IT capabilities.

According to Armstrong (2002), the significance of information systems in HR practices emerge through:

1. Providing better services to managers.
2. Connecting a personal policy and personal processes in all organization and thus facilitating management processes in the company.
3. Providing important data for a strategic personal decision making and enabling a quick acquiring and analysis of information for HR assistants.
4. Reducing cost labors at performance of personal activity.

In addition, Lee (2009) shows that organizations use technologies for HR field such as employee participation, clearly defined jobs and extensive formal training. On the other hand, according to survey, companies which are using external IT capability, only internal career opportunities used IT tools.

2.2.1 Palestinian ICT Sector

The Palestinian ICT sector is recognized as a significant sector for economic viability and growth by both the Palestinian private sector and the Palestinian Authority. The ICT sector currently employs 3% of the Palestinian workforce. ICT sector is highly productive in that they contribute more than 8% to the overall Palestinian GDP (Ministry of Telecom and Information Technology, 2013).

In Palestine, Paltel is the largest Palestine Telecommunications Company which operates all communications in Palestine. Paltel works in many fields such as fixed telephones, leased lines, and VPNs. Recently, Paltel provides Internet services with high speeds by using fiber optics technology (Paltel Corporation, 2011).

In addition, Palestine has two mobile operators (Jawwal and Wataniya), which introduce advanced solutions and services for Palestinian people like local and international calling, SMS, MMS, Internet via mobile devices and other services which introduce benefits for people. The number of Palestinians who are using mobile technology ranges from 2 to 2.5 million users (Jawwal, 2011, Wataniya Mobile, 2011).

In line with technological development in Palestine, the usage of technology (computers, Internet, and mobiles) is rising. Palestinian Central Bureau of Statistics publications and Ministry of Telecom and Information Technology explained the increasing use of mobiles and Internet (Palestinian Central Bureau of Statistics, 2010). Statistics show that:

- At the end of 2011, the number of internet subscribers is 165 thousand, a rise of 44.5% from 2010 where the number of ADSL internet subscribers is 108 thousand.

- At the end of 2011 the number of mobile phone lines 2,865 thousand subscribers, an increase of 10% for 2010.

- At the end of 2011 the number of fixed telephone lines385 thousand subscribers, an increase of 6.1 %for 2010.

On the other hand, the Palestinian ICT sector employs over 5,000 people as Table (2-1) shows the great development in this sector, which is one of the most productive workers in the Palestinian economy. The ICT sector is also a critical component of the Palestinian infrastructure which is needed to sustain and develop the local economy.

Table (2-1): Palestinian ICT Sector Statistics.

2011	2010	Year
500	446	**Number of Establishments**
5,418	4,377	**Number of Workers**
681,698,700	588,918,700	**ICT Production in US Dollar**
7,925,022,000	7,365,581,000	**Total Output (US Dollar)**
8.60%	8.00%	**ICT Contribution to Total Output**
87.00%	89.50%	**Value Added to GDP**

Source: PCBS, 2012.

Remarkably, Palestinian ICT creates the highest added-value as compared to total production with 89.6%. The ICT sector is the fastest

growing sector among Palestinian economic sectors with annual growth rate of more than 10% contributing 8% to the Palestinian GDP (Palestinian Ministry of Communications and Information Technology, 2013).In addition, there are several Information Technology companies which are working with global IT and provide the local and regional market with hardware and software solutions (ASAL Technologies, 2011). Table (2-2) shows some ICT Companies in Palestine and other related information.

Table (2-2): ICT Companies in Palestine.

Specialty	Services Provided	# of Staff	Firm Name
Software Solutions	Business Management and Financial Applications	25	**Bisan Systems Ltd.**
Software Development	1) Custom Software Development 2) Staff Augmentation: Creating IT teams that including members with specialized expertise that are offshore 3) Hardware Verification and Design.	120	**ASAL Technologies**
Software Development	1) IT Outsourcing Services 2) Software Development Outsourcing 3) Software development (Mobile application development)	90	**EXALT Technologies Ltd.**
Software Solutions	1) Mobile Application Development 2) Enterprise Solutions 3) E-Health Care Systems 4) Web portals 5) Application Service Provider 6) Custom Software Development	35	**iConnect**
Software development	1) Software Development 2) Internet and e-Commerce 3) Hardware Solutions 4) Networking and Wireless 5) System Integration 6) Security and Protection Solutions	35	**Jaffa.Net**
Software Development	Software Development	52	**Infinite Tiers Group**
Software Development	1) Software Development 2) Mobile Technologies 3) Business intelligence (BI) 4) GIS Services	18	**Art Technologies/ Pal Earth**
Business Solutions	Business Solutions for Paltel Group	131	**Hulul Business Solutions**
Software Development	1) ERP Systems 2) E-Trading Solutions 3) Outsourcing Services	32	**Isra Software and Computer**

Source: Palestinian Ministry of Communications and Information Technology, 2013.

2.3 Human Resources Management Department

Human resource management is a function in organizations prepared to maximize employee performance in service of their employer's strategic objectives. HR is mainly concerned with how people are managed within organizations, focusing on policies and systems.

HR departments and units are typically responsible for a number of activities, including employee recruitment, training and development, performance appraisal, and rewarding, also concerned with industrial relations, that is, the balancing of organizational practices with regulations arising from collective bargaining and governmental laws.

It is well-known that Human Resource Management is the only living factor of production and controlling the other factors, at present globalization is changing the stable workplace systems in the region. This is evident in many countries. Thus, the effects of changes created by the globalization pose major challenges for HRM in the Southeast Asian region (Jaeger et al., 1995).

For instance, in China and India there is some evidence that economic liberalization arising from globalization and competitive pressures is changing the pattern of HRM, employee relations and industrial relations and labor legislation. Some of these changes are occurring both in the private and public sectors in both countries. In China, it is argued that the emergence of market economy is undermining the "nanny employer" image of organizations as there is a concerted effort to

shift the huge welfare burden from employers to individuals (Jaeger et al., 1995).

2.3.1 Human Resource Management in Palestine

Different studies show that several HRM practices at small and medium enterprises are influenced by organizational contextual variables including ownership, age and size of firms, even though the level of formality of HR practices at these firms is low .Using data from micro, small, and medium firms in Australia leads to the fact that human resource practices increase with increasing firm size (Zheng and Morrison, 2009).

While most studies prove that organization size has a positive substantial influence on HR practices, other studies show that organizational size has a limited effect on HR practices (Ding and Akhtar, 2006).

At the Palestinian level the economy has been faced with overwhelming challenges since September 2000. It has been dealing with a tight closure policy, geographical fragmentation, a separation barrier that significantly reduces agricultural land, uncertain public revenue and donor aid, eroded productive capacity, an array of donor agendas, and limited government and institutional capacity.

Closure feeds a vicious circle whereby the resulting loss in income constrains output from the demand side, while uncertainty and the higher cost of imported inputs, transportation and storage constrain output from

the supply side. Israel's closure policy is widely recognized as one of the most devastating factors limiting the Palestinian economy.

Consequently, little is known of human resource management processes within the Palestinian territories and how modernization has shaped, and is shaping, management philosophies and practices.

2.4 Elements of e-HRM Systems

Actually, the role of information technology (IT) systems in human resources (HR) function primarily seeks to provide support at an administrative level, while IT support for strategic purposes is lacking (Strohmeier, 2007).

Although electronic applications (e-HRM) are being used in various disciplines of HRM such as recruitment (Stoneet al., 2003), selection (Chapman and Webster, 2003), performance management and payroll administration (Teo et al., 2001), organizations do not yet realize the importance of e-HRM systems in make better HR decisions (Stone andLukaszewski, 2005).

The possible components of the HR systems are based on the five HR best practices, namely (1) Selective recruitment and selection, (2) Compensation (3) Appraisal and performance management, (4) Training and development and (5) Employee involvement (Strohmeier, 2007).

Main HR responsibilities is to select and recruit the appropriate employees, this is reflected in e-HRM system through e-recruitment or e-

selection tools. Electronic selection (e-selection) is being used increasingly by organizations. It typically refers to the use of various applications and forms of technology (e.g., web-based job applications, web based tests, videoconference interviews) to help organizations with such tasks as conducting job analyses, gathering applicant data, assessing individuals, and making selection decisions (CedarCrestone, 2010).

E-selection systems are thought to offer a number of important advantages over traditional systems (Kehoe et al., 2005). For instance, they (a) provide organizations with large numbers of recruits, (b) simplify the job analysis process, (c) accelerate the development and assessment of selection procedures, (d) reduce administrative burdens by automatically screening applications to ensure that applicants meet basic job requirements, (e) allow organizations to interview applicants using web-based or videoconference methods, and (f) facilitate the storage and use of applicant information, allowing for the assessment of selection system effectiveness (e.g., by validating inferences made in the selection process).

Often this results in savings of both time and money. Overall, e-selection systems are thought to (a) enhance efficiency, (b) reduce costs, (c) promote the hiring of qualified employees, and (d) manage the flow of new members into the organization.

In addition, compensation and wages is a critical issues relating to employees and managers within organizations which can be controlled

through payment systems or e-Compensation systems through e-HRM technologies.

According to Dulebohn and Marler (2005), the e-compensation systems are those software packages or programs which are bought or developed by companies and are accessible through the company system through specific application or the internet which all the employees would be able to reach and use it.

E-compensation systems primarily contribute to the effectiveness and efficiency in three manners: (1) Easy Accessibility to the information through e-HRM system (2) The availability of the meaningful compensation information in detail for employees, managers and HR professionals in an interactive way (3) Streamlining the cumbersome tasks through the introduction of workflow functionality and real-time information processing in a cost-effective manner (Dulebohn and Marler, 2005).

On the other hand, performance appraisal and measuring work achievement play an important role in achieving the organizations goals. E-performance appraisal is utilized intelligent software instead of traditional methods to capture, store, analyze, rate and report the personals activities inside the companies to let the HR managers be informed about employee strengths and weaknesses, employee performance levels, and take the right decisions about them.

E-performance systems play a significant role in HRM decisions because the importance of the information resulting from the e-HRM systems, which can be used in: (1) Making administrative decisions like pay increase and promotions. (2) Providing feedback to employees about their work and developmental needs (3) and as criteria for the assessment of HR systems like selection procedures or training programs (Farr et al., 2013).

Computerized Performance Monitoring systems (CPM) which are actually software packages able to count the number of wok units completed by employees in a specific time period, record idle time of each terminal, calculate error rates, capture time spent on different tasks or even count the number of times an employee strikes the keys (keystroke), etc. These systems would collect all the information about all the activities done by the employees inside the company and provide feedback to both superiors and subordinates (Irving, 1986).

Cardy and Miller (2005) listed some advantages coming from applying the technology in performance appraisal process such as: (1) Facilitate the process of writing reviews. (2) Greater span of control. (3) More and cheaper feedback.

One of the critical functions of a HR department in the organizations is Training and Development. From organizational point of view employees training is one of the crucial needs through which the overall performance would be improved.

Moreover, most companies start to think of online learning primarily as a more efficient way to distribute training inside the organization, making it available anytime and anywhere to reduce direct costs (instructors, printed materials, training facilities), and indirect costs (travel time, lodging and travel expenses, workforce downtimes).Attracted by these significant and measurable advantages, companies start to look for ways to make the most of their existing core training available online, and to manage and measure the utilization of the new capabilities.

In a study by Welsh et al. (2003) six reasons have been realized which drive organizations to use e-learning systems: (1) Provide consistent and worldwide training. (2) Reduce delivery cycle time because through e-learning the companies are able to deliver training to many people quickly since the courses are not constrained by instructors or classrooms capacity. (3) Increase learner convenience.(4) Reduce information overload. (5) Improve employees tracking. (6) Lower expenses.

2.5 Factors Affecting e-HRM Technology

Numerous studies discuss e-HRM technology and study the usage of information and communication technology (ICT), to identify the factors that influence the adoption of e-HRM systems. Those studies provide theoretical and empirical background about e-HRM technology. Therefore, it is very important to examine those studies to understand, analyze, and highlight the factors that influence e-HRM technology. In addition, those

studies give a significant chance to compare the research findings with others.

Models of e-HRM systems contend that two factors determine their acceptance (i.e., the degree to which individuals react favorably to the system) and system effectiveness: (a) the nature of e-HRM system and (b) the attitudes and abilities of individuals who use them (e.g., applicants). For example, organizations develop e-selection systems to hire highly talented employees who can help them meet their short run (e.g., productivity) and long term goals (e.g., growth, survival). In addition, the values, goals, and abilities of applicants affect system acceptance and use. Ideally, e-selection systems should be designed to be congruent with the values and abilities of applicants (Stone et al., 2006).

Four main factors are influencing the acceptance and implementation of e-HRM technology. These factors are workforce acceptance, organizational features, technological capabilities, and work environmental determinants.

Organization workforces are the most critical factor for applying new technology and system. Without workforces (employees and managers) satisfaction, organizations cannot achieve any profits from adoption the new technology. Workforce satisfaction is important to spread new technologies and innovations. Therefore, organizations should meet workforce needs and expectations to encourage them to achieve organization goals.

Technological issues are the main factors that influence e-HRM technology by workforces and the companies. E-HRM needs specific technological solutions such as equipment (software and hardware), networks, security, and training. Therefore, technology plays the significant role in e-HRM technology adoption.

On the other hand, cultural values, social attributes, norms and habits, beliefs, economic scale, legal regulations, political and governmental issues are influencing the adoption of new technologies like e-HRM systems.

Among innovation adoption studies and research, a huge number of studies follow diffusion of innovation theory which mainly provide by Rogers (1995). E- HRM technology adoption is one part of innovation adoption in any organization. Rogers (2008) link the initial adoption of any new technology decision to five specific attributes: relative advantage, complexity, compatibility, trial ability and observe ability.

Based on previous literature and research models and many conducted interviews, four sets of factors affecting e-HRM technology are categorized as: cultural, managerial and personnel, organizational, technological, and work environmental factors.

2.5.1 Cultural Factors

According to Kluckhohn (1962), “Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by

symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts".

In the literature pertaining to the IT acceptance the researcher noticed that the most used model by Information System academicians and practitioners is the Technology Acceptance Model (TAM) designed by Davis (1989). The TAM takes its roots mainly from the Theory of Reasoned Action explaining behavior across behavioral intentions.

The importance attributed to social norms in determining and predicting behavior varies across cultures (Triandis, 1977), therefore, many researchers expect that integrating subjective norms will strengthen the understanding of differences in behavioral intentions and will allow a better capturing of cultural effect on IT use.

Hofstede (2001) developed the cultural dimensions of uncertainty avoidance, power distance, individualism, masculinity, and long term orientation based on over 116,000 survey responses in approximately 60 countries between 1967 and 1971. The surveys were designed to measure work-related values.

1. Power Distance:

Power distance refers to the degree of inequality that exists among people with and without power. A high Power distance score indicates that society accepts an unequal distribution of power. Low Power distance

means that power is shared and well dispersed. It also means that society members view themselves as equals.

2. Individualism:

Individualism refers to the strength of the ties people have to others within the community. A high individualism score indicates loose connections. In countries with a high individualism score there is a lack of interpersonal connection, and little sharing of responsibility beyond family and perhaps a few close friends. A society with a low individualism score would have strong group cohesion, and there would be a large amount of loyalty and respect for members of the group.

3. Masculinity:

Masculinity refers to how many a society sticks with, and values, traditional male and female roles. High masculinity scores are found in countries where men are expected to be tough, to be the provider, and to be assertive. If women work outside the home, they tend to have separate professions from men. Low masculinity scores do not reverse the gender roles. In a low masculinity society, the roles are simply blurred. You see women and men working together equally across many professions. Men are allowed to be sensitive, and women can work hard for professional success.

4. Uncertainty Avoidance Index:

Uncertainty avoidance relates to the degree of anxiety that society members feel when in uncertain or unknown situations. High Uncertainty avoidance scoring nations try to avoid ambiguous situations whenever possible. They are governed by rules and order and they seek a collective truth. Low Uncertainty avoidance scores indicate that the society enjoys novel events and values differences. There are very few rules, and people are encouraged to discover their own truth.

5. Long Term Orientation:

Long term orientation refers to how much society values longstanding as opposed to short term traditions and values. This is the fifth dimension that Hofstede added in the 1990s, after finding that Asian countries with a strong link to Confucian philosophy acted differently from Western cultures. In countries with a high long term orientation score, delivering on social obligations and avoiding loss of face are considered very important.

The country culture is a very important factor in the adoption of technology in general and using e-HRM system. Technology acceptance differs from one country to other according to different cultural and social habits.

2.5.2 Managerial and Personal Factors

Several studies and interviews focus on e-HRM adoption by employees and managers, and explore many factors that influence e-HRM adoption by organization workforces.

According to Zafer (2012), security concern is the most significant factor influencing workforce's decisions to adopt e-HRM technology, managers and employees influence by information and communication security to ensure reliability of their information.

Information security refers to computers security, is defined as the protection afford to an automat information system in order to attain the applicable objectives of preserving the confidentiality, integrity, and availability of information system resources(Stallings and Brown, 2008).

Confidentiality assures that private information is kept safe from unauthorized individuals. It is critical for maintaining the privacy of the employee personal information (Wong and Thite, 2008).

It is important to assure the integrity of both the data and the system. Availability assures that systems work and service is providing promptly to those who are authorized to use the system.

Reluctance and resistance to change also influence workforces to adopt e-HRM technology. On the other hand, trust in a company is an important factor influencing the system adoption. Trust is not only

connected with security issues, but it is also related to company image, and company reputation.

Personnel transactions and information processing are increasingly more vulnerable to security threats and risks due to the increase use and complexity of e-HRM systems. Accordingly, information security should be a critical important issue of concern for HR personnel.

Davis (1989) developed the Technology Acceptance Model (TAM) in studying the determinants of IT usage. The goal of TAM was to present an explanation of the determination of computer acceptance technologies that is generally capable of explaining user behavior across a broad range of the end-user computing technologies.

Furthermore, Davis (1989) explained many other factors affecting managers and employees acceptance technology, one of these factors is perceived ease of use. Davis (1989) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free from effort". Employees and managers prefer simplicity in e-HRM systems and avoid the complex systems because they fear from errors and information losses.

Besides perceived ease of use, another factor which is perceived usefulness shows influencing action on adoption of e-HRM. Perceived usefulness is defined as “the degree to which a user believes that using the system will enhance his or her performance" (Davis, 1989). Perceived

benefits and perceived usefulness influence employees and managers to adopt e-HRM technology. Perceived usefulness and perceived ease of use are the components of Technology Acceptance Model, which will be discussed later in this section.

Attitude toward using technology and perceived behavioral control are the components of theory of planned behavior. These components influence employees and managers to adopt e-HRM technology. Attitude is either positive or negative evaluation on specific thing or person. Attitude is influenced by beliefs about the results. Organization workforces should realize e-HRM benefits to formulate positive attitude toward using this new system (Liao et al., 1999).

2.5.3 Organizational Factors

Organizational factors are the factors which constitute organizational characteristics which influence adoption of e-HRM within different organizations. Yang et al. (2007) explained that technology adoption can be influence in organizations that show high level of centralizations because the top management can make adoption decision irrespective of resistance from lower level managers or employees.

Furthermore, HRM system expertise or human capability and degree of centralization are also some significant factors influencing the adoption of HRM system. HRIS expertise which refers to employee knowledge to using new technology and technical competences in HRIS was found as an

important factor in the adoption of new technologies by Kwon and Zmud (1987).

Therefore, successful adoption of e-HRM requires availability of skilled professionals in the organizations because if the users have lack of understanding of systems functions and features it can be a major obstacle in e-HRM adoption.

According to Troshani et al. (2011) study which indicated that training is needed for all user levels such as operational and strategic levels to increase their knowledge and skills in using the system effectively. In addition, the authors also argued that degree of centralization effects adoption when decision is made at higher levels in organization.

Many other factors drive organizational decision to adopt new systems, for example: organization size and supporting organization settings including a skilled workforce are important factors in successful innovation adoption.

According to Hendrickson (2003) HRM systems must be varied in types and characteristics in order to suit with different companies sizes. A major HRM systems can be installed in large and small accompanies, but in small companies, for example, the use of this system considered as a huge expensive would be difficult to justify.

Similarly, a large multinational company could create or purchase a database program just to access and perform the functions necessary to

operate, but it would be unmanageable and very limited solution compared with the organization size and number of employees. So, the effective of HR systems requires a balance between technical and critical information needs of the HR responsibilities according to the organizations size. Thereby, the size of the organization can define the needs of the HR function (Hendrickson, 2003).

From what has been stated above, only large companies have tried to implement HRM systems of all three types, naming operational e-HRM, relational e-HRM and transformational e-HRM. On the other hand, smaller and mid-size company only tried to implement operational and relational e-HRM as these two HRM systems do not perform HR activities with a strategic character thus are less costly (Ruël et al., 2011)

In addition, top management support is another important factor shows influencing action on adoption of e-HRM.CEOs attitude and interest towards ICT is important to promote technology adoption within the company (Yang et al., 2007).

However, according to Teo et al. (2007) Technology adoption issues in the organizations not only connected with top management support, but also employee engagement is needed which is also greatly influenced by the management commitment. Many other studies showed that management commitment has a positive influence on e-HRM or IT adoption (Teo et al., 2007; Troshani et al., 2011; Yang et al., 2007).

2.5.4 Technological Factors

Technological factors focus on the technology characteristics which can influence adoption of e-HRM technology.

Technology readiness depends on organizations technology infrastructure and IT expertise resources. Based on IT human skills and knowledge that are used to build a database application and technology infrastructure makes an easier base on which internet technologies can be created and spread within organizations. E-HRM can become an integral part only if the organization has infrastructures and technical skills. These factors allow the technological capacity of an organization to adopt HRM systems (Oliveira and Martins, 2010).

The organizations with superior technology readiness better to adopt e-HRM technology, companies that do not have strong technology infrastructure and wide IT expertise may not take the risk of adopting HRM systems. Many researches recognize technological readiness as a significant factor that influence IT adoption (Kwon and Zmud, 1987; Oliveira and Martins, 2010).

Network security is an important factor which influences the adoption of HRM systems. In the globalization time, there are many risks which can harm all company information. Therefore, advanced infrastructure should be implemented by telecommunication ministry,

communication and Internet companies, and company interested on e-HRM technology to protect all significant data.

Carter and Belanger (2004) Studies show that innovation characteristics adoption match with the technological factors, and pointed out three main influencing factors for e-Government technology adoption namely relative advantage, image and compatibility. These factors influence the decision to adopt a technology innovation.

Similarly, Teo et al., (2001) in their research in Singapore found only relative advantage and compatibility as influencing factors in HRM systems adoption. Rogers (2008) defined complexity as the degree to which an innovation is perceived as relatively difficult to understand and use. Thereby, the institution must choose uncomplicated e-HRM systems to encourage employees to use it.

In addition to these factors, organization strategy fit, HRM system adoption cost, degree of complexity or user friendliness, and systems efficiency were also found as significant influencing factors in Australian public sector organization (Troshani et al., 2011). Thus, it shows various numbers of technological factors contributing in influencing HRIS adoption as it is a type of innovation adoption.

2.5.5 Work Environment Factors

Work environmental factors explain the area where organizations conduct their business, and include industry characteristics, government

regulation, and supporting work infrastructure (Oliveira and Martins, 2010; Troshani et al., 2011).

According to Rogers (2003) in order to adopt innovation, information about them must be available to prospective adopters. Besides infrastructure and technical support, government also can play a vital role for encouraging technology adoption by raising awareness, training, and support, and funding (Troshani et al., 2011).

Moreover, Ruël et al. (2004) in their paper explain six environmental characteristics that influence e-HRM implementation; these are competition, technological development, HRM state of art, labor market, societal developments and governmental regulation.

The competitive advantage aims to reduce cost and serve more strategic role as well as to better manage and organize the employees within organizations. So, the firms must realize that they cannot be competitive if they do not manage their human resources effectively (Teo et al., 2007).

Thus, this need has driven the organizations to use HRM systems as it can help make more informed decision, more efficient HR processes and better allocation of human resources in the organizations. Therefore, competition is counted as an influencing environmental factor in adopting e-HRM. However, Teo et al. (2007) found that competition only influence

the extent of HRIS adoption, further research in different firms or geographical area may show different result.

2.6 Technology Acceptance Models

This research aims to study how to accept new technology within various companies, and to achieve the objectives of this research, it is important to discuss the theories and models of technology acceptance and planned behavior to accept these ideas within employees and managers and then to highlight the most significant factors that can be used to achieve acceptance of e-HRM.

Acceptance terminology is defined as "the demonstrable willingness within a user group to employ Information Technology for the tasks it is designed to support" (Dillon and Morris, 1996). There are several acceptance technology models such as: technology acceptance model (TAM), theory of planned behavior, and Yale model of communication and persuasion.

2.6.1 Technology Acceptance Model (TAM)

TAM model developed by Davis et al. (1986) to study the determination of IT usage, the purpose of TAM was “to provide an explanation of the determination of computer acceptance that is generally capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified” (Davis, 1989). Furthermore,

a key purpose of TAM is to provide a basis for discovering the impact of external variables on internal beliefs, attitudes, intentions, and usage.

TAM model clarifies the prediction of the acceptability of the information system tools, and to identify the modifications which must be brought to the system in order to make it acceptable to users. This model suggests that the acceptability of an information system is determined by two main factors: perceived usefulness and perceived ease of use.

The TAM developed by Davis et al. (1989) is shown in Figure (2-1).

Figure (2-1): Technology Acceptance Model (TAM). Source: Davis et al. (1989).

Perceived ease of use refers to the degree to which a user believes that the use of a system will be effortless. Perceived usefulness is defined as being the degree to which a user believes that the use of a system will improve his/ her performance. Several factorial analyses demonstrated that perceived usefulness and perceived ease of use can be considered as two different dimensions.

TAM based on the theory of reasoned action, and TAM axiom that the use of an information system is determined by the behavioral intention, but on the other hand, that the behavioral intention is determined by the person's attitude towards the use of the system and also by his perception of its interest.

According to Davis (1989), the attitude of an individual is not the only factor that determines his use of a system, but is also based on the

impact which it may have on his performance. Therefore, even if an employee does not welcome an information system, the probability that he will use it is high if he perceives that the system will improve his performance at work. Besides, the Technology Acceptance Model hypothesizes a direct link between perceived usefulness and perceived ease of use. With two systems offering the same features, a user will find more useful the one that he finds easier to use (Dillon and Morris, 1996).

The reason why TAM is chosen in our research is because TAM has been tested empirically and supported through validations, replications, and applications (Venkatesh, 2000; Lee, 2010). TAM is one of the most powerful, strong and parsimonious model for predicting user acceptance especially in information system context (Bueno and Salmeron, 2008). According to Venkatesh (2000), “the parsimony of TAM combined with its predictive power makes it easy to apply to different situations”.

2.6.2 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) developed to predict an individual's intention to engage in a behavior at a specific place and time, and it is based on the Theory of Reasoned Action in 1980. The theory was intended to explain all behaviors over which people have the ability to make self-control (Ajzen, 1988).

The key component to this model is behavioral intent; behavioral intentions are influenced by the attitude about the likelihood that the

behavior will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome.

The following figure explains factors of Planned Behavior Theory (PBT).

Figure (2-2): Planned Behavior Theory (Based on Ajzen, 1988).

According to Taylor and Todd (1995) the TPB has been used successfully to predict and explain a large group of health behaviors and intentions including smoking, and health services utilization. The TPB states that behavioral achievement depends on both motivation (intention) and ability (behavioral control). It distinguishes between three types of beliefs: behavioral, normative, and control. It comprised of six constructs that collectively represent a person's actual control over the behavior:

1. Attitudes: refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior of interest.

2. Behavioral intention: refers to the motivational factors that influence a given behavior where the stronger the intention to perform the behavior, the more likely the behavior will be performed.

3. Subjective norms: refers to the belief about whether most people approve or disapprove of the behavior.

4. Social norms: refers to the customary codes of behavior in a group or people or larger cultural context. Social norms are considered normative, or standard, in a group of people.

5. Perceived power: refers to the perceived presence of factors that may facilitate or obstruct performance of a behavior. Perceived power contributes to a person's perceived behavioral control over each of those factors.

6. Perceived behavioral control: refers to a person's perception of the ease or difficulty of performing the behavior of utility. Perceived behavioral control varies across situations and actions, which results in a person having varying perceptions of behavioral control depending on the situation.

2.6.3 Yale Model of Communication and Persuasion

Yale Model of Communication and Persuasion was developed by Hovland and his colleagues and constitutes one of the most widely cited models of communication. Hovland defined communication as the “process by which a communicator transmits stimuli (usually verbal) to modify the attitudes and behaviors of other individuals (audience)” (Hovland and Janis, 1959).

The model suggests that three factors influence the degree to which communication influences attitudes and behaviors: source factors, message factors, and audience characteristics. In addition, several message factors may influence the effectiveness of the communication process including

the order of arguments, the explicitness of requests, and the use of emotional appeals (Hovland, 1957).

Likewise, the model argues that recipient characteristics also affect communication effectiveness such as personality, individuals' persuasibility, and intelligence (Hovlandand Janis, 1959).

Although this model includes many of the primary factors thought to affect the acceptance of communication, McGuire (1969, 1985) expanded it with his Communication Persuasion Matrix Model. This model suggests that “attention and comprehension determine the degree to which the recipient will learn from the communicator's message, and the individual's motivation will determine whether he or she accepts or adopts what is learned” (McGuire, 1969).

A graphical depiction of the model (Hovland and Janis, 1959) presented in Figure (2-3).

Figure (2-3): Yale model of Communication and Persuasion (Janis and Hovland, 1959).

Another basic assumption in the model is that the effect of any given communication depends on the extent it influences three processes: attention, comprehension, and acceptance. Thus, for communication to be effective recipients must attend to the information, comprehend what is communicated, and accept it. For instance, individuals may be less likely to attend to communication when sources have low levels of credibility or expertise. Furthermore, recipients may be less likely to comprehend or

understand a message when the source uses one-way rather than two-way communication. Also, the model suggests that recipients may be less likely to accept a message when it does not capture their attention or enable them to understand the information.

This model has been selected in our search in order to reach the impact of the use of e-HRM to communicate between individuals within the organization and how we can develop communication skills among employees and managers through the adoption of new technology in the management.

Chapter Three

Methodology and Data Collection

Chapter Three

Methodology and Data Collection

The chapter presents the research methods that are used in this study. In this chapter we explore research definition, research types, research approach, research strategy, the sampling techniques, and sample size.

In addition this chapter outlines the design of research tool upon the methodology which is selected. Furthermore, it displays the quality standards for research tool and data collection results

Moreover, this chapter involves some main ideas extracted from the interviews conduct with Palestinian IT specialists and some HR managers. In this chapter, the researcher introduces the research framework and presenting the research hypotheses.

3.1 Introduction

Research methodology is the method or style researchers pursue in conducting their research. In fact, researchers select the research methodology according to the nature of the research itself. Each research has its uniqueness and properties (Alhamdani et al. 2006).

3.2 Research Types

Kothari (1990) emphasized that research can be classified from three perspectives:

1. Application of research study.
2. Objectives of the research.
3. Inquiry mode employed.

Application of Research Study

From the application perspective, there are two different categories of research:

1. **Pure Research:** Include formulating, developing and testing theories and hypotheses that are intellectually challenging to the researcher but not necessary to have practical application at the present time or in the future.
2. **Applied Research:** Aims to find solution for specific problem or practical questions at present time or future. This research used widely in universities and industrial institutions.

Based on this classification this research aims to find solutions at the present time to accept e-HRM in the service sector institutions to adopt new management style depending on the technology to organize work force. Hence, applied research is being used in to fulfill this approach.

Objectives of the Research

In terms of objectives, there are four different categories of research:

1. **Descriptive Research:** Is undertaken to describe specific situation, problem, phenomenon, service, or provides information about some scientific cases, or describes attitudes towards different issue. This type includes surveys and fact finding enquiries of different problems kinds.

2. **Correlational Research:** This type aims to test for statistical relationships between variables. In fact, correlational research used to discover or establish the existence of interdependence between two or more aspects of a situation or phenomenon.

3. **Explanatory Research:** Research design in which the major emphasis is on determining cause and effect relationships. This type attempts to clarify why and how there is a relationship between two or more aspects of a situation or phenomenon.

4. **Exploratory Research:** Conducted for a problem that has not been clearly defined. This type of research used to explore an area where little is known or to investigate the possibilities of undertaking a particular research study. Exploratory research helps determine the best research design, data collection method and selection of subjects.

In this research, we conducted several interviews with HR managers, IT specialists, and employees in service sector in order to understand the

research problem accurately, and to reveal its ambiguity. Therefore, exploratory research is used in this area.

Furthermore, this research needs to describe the current situation of the problem, answer the research questions, and to highlight the most important factors that influence the adoption of e-HRM in service sector institutions. Moreover, this research aims to explain the phenomenon and assess the current situation of e-HRM. Therefore, descriptive research is being used in to fulfill this approach.

In addition, this research aims to compute the correlations between factors that influence e-HRM adoption and introduce e-HRM adoption model which join all factors together. Hence, Explanatory research is being used in to fulfill this approach.

Inquiry Mode Employed

From the process adopted to find answer to research questions, there are two approaches of research:

1. **Structured Approach:** The structured approach to inquiry is usually classified as quantitative research. In this type everything that forms the research process, objectives, design, methods, and the questions are predetermined.

2. **Unstructured Approach:** The unstructured approach is classified as qualitative research. This approach allows flexibility in the research process because not all research process is defined. It is more

appropriate to explore the nature of a problem, issue or phenomenon without quantifying it.

In this research the theories, models, and factors that influence e-HRM adoption were chosen from literature and exploratory interviews. Depending on these factors and models, we designed the research model and we created the research hypothesis to be tested to gather data and observations. Structured approach was used in this area.

3.3 Research Approach

Initially, a researcher must decide what approach of research is to be conducted. Researchers follow qualitative approach, quantitative approach, or both of them to realize and explain a specific phenomenon. Researchers choose the right approach depending on the research purpose, the nature of the research, the problem area, research questions, and research hypothesis to determine the appropriate approach in order to reach the desired results (Alhamdani et. al. 2006).

Qualitative Approach is all about exploring issues, understanding phenomena, and answering research questions through using focus groups, interviews, content analysis, and evaluation.

Quantitative Approach is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. In essence, this approach reduces the data into numbers. The

objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to specific phenomena.

To solve the research problem and answer the research questions, the researcher utilized a mixed model approach that combines both qualitative and quantitative approach. We used exploratory interviews to explore and understand the e-HRM phenomenon in service sector institutions. To achieve this purpose, we used flexible questions. Qualitative approach is used in this area.

3.4 Research Strategy

Saunders (2007), illustrate the research strategy as a plan for drawing the research path through reflects the general approach and goals of a research study, researchers determine how they will develop their questions that solve research problem, and how these questions would be answered to achieve research purpose.

Usually there are five kind of research strategy used for the research area to collect data and get results: experiment, survey, archival analysis, history and case study. Types of research questions determine the type of research strategy as the table (3-1) show:

Table (3-1): Choosing a research strategy depends on research question.

Form of Research Question	Research Strategy
How, why	Experiment
Who, what, where, how many, how much	Survey
Who, what, where, how many, how much	Archival Analysis
How, why	History
How, why	Case Study

Source: Yin, 1994.

The survey approach has been chosen in this research because the research questions are: What are the factors influencing the adoption of e-HRM? What is the impression about the benefits that can be obtained as a result of use of electronic administration? So the types of questions are in the form 'WHAT'.

Furthermore, to achieve the descriptive purpose, questionnaire is needed to illustrate the current situation of using e-HRM. An explanatory purpose can be achieved by using survey strategy through data analysis, and then determine the causal correlations between variables. To achieve the exploratory purpose, the survey strategy is also valid by many interviews and meetings with HR managers.

From all the above, the most suitable strategy to follow in this research is the survey strategy.

3.5 Research Tools

The researcher made exploratory interviews with IT specialists and some of HR managers to explore the problem of e-HRM adoption, assess the usage of e-HRM in Palestine, and investigate the factors that influence e-HRM technology adoption in Palestine. The questions of exploratory interviews are mentioned in Appendix B.

Many face-to-face interviews have been held in order to discover the reality of HRM system and determine the level of the application and use of this technology within the companies involved in the research.

All interviewees explained that all factors which discussed in literature are appropriate and influence e-HRM adoption in Palestine. In addition, they focused on the role of company in the adoption of e-HRM.

Most of the Palestinian companies use a lot of the technological aspects in their work, such as: Web sites, e-careers, and electronic database. The trend towards using the HRM system becomes highly prevalent.

Some of interviewees argued that Palestinian companies forced employees to use the e-HRM system because when the managers adopted it the employees do not have the choice to accept or reject it because they must commit to the company laws.

This study is based on survey tools. Two surveys were designed to collect the required data. The first was interviews aimed to collect data from specific IT specialist and HR managers in the target organizations.

The second survey was a questionnaire to get quantified results to answer the research questions and hypotheses.

3.5.1 Interviews

In this research, semi-structured interviews were used because the researcher needs to hear about research problem as much as possible with some restrictions or orders by defining some important. Furthermore, semi-structured interviews enable participants to answer the specific questions without limitations.

The researcher conducted telephone interviews with HR department employees in order to guarantee the existence of electronic system in the organizations to choose a company within the group targeted by this research. These interviews are not the main tool for collecting data; it is just exploratory.

On the other hand, the researcher conducted face-to-face interviews with some IT specialist and specific HR managers in the target organizations which are mentioned in the previous chapter. Furthermore, the number of interviews conducted was with seven participants to collect the required information. In this case should be noted that face-to-face interviews needed a lot of time and effort.

The interviews questions were divided into two parts:

- The first section contains the general information in order to discover the reality of e-HRM technology usage in the organizations,

determine the extent of their utilization, and the acceptance level by employees and managers for this technology. The questions in this filed are refined to be as the following:

1. What are the methods currently prevailing in the management of human resources in the Palestinian institutions?
2. What is the impact of human resource manager's experience using computers and modern methods of communication on the acceptance of electronic administration?
3. What is the definition of e-HRM?
4. What is the impression about the benefits that can be obtained as a result of use of e-HRM?
5. Does the prevailing culture of the use of technology in the community and among employees have great influence on the use of e-HRM?
6. Does the development of ICT tools and networks affect the adoption of the use of e-HRM?
7. What is the impact of manager's fear of safety and confidentiality of electronic information on the trend towards adoption of e-HRM?

8. Does the adoption of e-HRM increasing management effectiveness from the perspective of HR managers? And why?

9. What is the attitude of the senior management, technical managers, and employees toward using e-HRM?

The second section of the interviews was illustrated by the questions relating to the factors that have been drawn from previous studies in e-HRM technology in order to confirm their importance in Palestinian institutions. The main questions in this section are the following:

1. What are the most important external factors that are affecting the using of e-HRM?

2. What is the relationship between each of the following factors on the adoption of e-HRM:

   - Ease of use?
   - Usefulness?
   - Company norms?
   - Attitude toward advancement?
   - Performance time?
   - System security?

3.5.2 Questionnaire

Questionnaire was chosen as a research tool to test the research model which is formulated in Chapter two. Questionnaire is designed with closed questions method to get specific answers, which was designed to achieve the research purpose. Furthermore, the use of the questionnaire provides accurate data and enables to analyze the collected data without ambiguous results.

First draft of the questionnaire is designed as the following:

1. Questionnaire cover, which consists of three parts: purpose of the questionnaire, definition of e-HRM technology, and letter of gratitude to participants with promises not to share their information.

2. Independent variables were chosen that could help in understanding the nature of participants.

3. Questions were set to measure the usage of technology, computers within organization work.

4. Several statements related to the factors that influence e-HRM adoption were selected. These statements aim to measure the factors that are determine in the research model. The source of questionnaire statements depended on specific previous empirical studies, and the viewpoints of experts in e-HRM.

5. A Likert scale was used to measure the statements which are created in step three. Five points of likert scales was selected. "1" strongly disagrees, "2" disagree, "3" neutral, "4" agree, "5" strongly agree.

6. The English Version of the questionnaire was prepared and reviewed to be sure it would achieve the research goals, and then was translated into Arabic Language. The translation process also reviewed to make sure that the meaning of the statements in Arabic corresponds to the meaning in English.

3.6 Research Framework and Hypotheses

Based on the previous literature, models, and exploratory interviews, many significant factors that influence e-HRM technology adoption were identified. These factors include: TAM, TPB, and Yale models factors. In addition, the framework of this research includes other factors, which are perceived risk, company roles, and social risk.

TAM was used to identify the acceptance factors of e-HRM technology in Palestine. Moreover, TPB model could help in understanding and analyzing the determents of e-HRM technology acceptance.

Both TAM and TPB complement each other. And they could significantly predict e-HRM acceptance and determine the factors that influence e-HRM technology adoption (Lee, 2009).

Many studies infer that perceived risk factor is the main factor that influences technology adoption by employees and managers. In addition, perceived risk influences the factors of TAM and TPB (Schmiege, 2009).

Many IT specialists and HR managers in Palestine claim that factors such as company roles and social risk influencing e-HRM technology adoption.

In the current research, and based on the precious discussion, the researcher selected the factors of perceived risk, company roles, and social risk, TAM and TPB to be the most important factors influencing customers to adopt e-HRM technology.

Hypotheses depending on TAM model:

External variables affect using e-HRM: Figure (3-1) illustrates the external factors that are affecting e-HRM technology.

Figure (3-1): External variables affecting e-HRM.

H1: system security has direct and positive effect on perceived usefulness of e-HRM.

H2: performance time has direct and positive effect on perceived usefulness of e-HRM.

H3: performance time has direct and positive effect on perceived ease of using e-HRM.

Hypotheses depending on the relationship between TAM and Perceived Risk: Figure (3-2) illustrates the relationship.

Figure (3-2): Perceived Risk relationship.

H4: system security has direct and negative effect on perceived risk.

H5: IT experience (Employee training and Availability of IT resources) has direct and negative effect on perceived risk.

Perceived usefulness of using e-HRM: Figure (3-3) illustrates the relationship.

Figure (3-3): Perceived Usefulness relationship.

H6: Perceived usefulness has direct and positive effect on attitude to using e-HRM.

H7: Perceived usefulness has direct and positive effect on behavioral intention to use e-HRM.

Perceived Ease of use: Figure (3-4) illustrates the relationship.

Figure (3-4): Perceived Ease of use relationship.

H8: Perceived ease of use has positive effect on perceived usefulness to use e-HRM.

H9: Perceived ease of use has positive effect on attitude toward using e-HRM.

Perceived Risk: Figure (3-5) illustrates the relationship.

Figure (3-5) Perceived Risk relationship.

H10: Perceived Risk has negative effect on perceived ease of use e-HRM.

H11: Perceived Risk has negative effect on attitude to use e-HRM.

H12: Perceived Risk has negative effect on perceived usefulness to use e-HRM.

The relationship between Attitude toward using e-HRM and behavioral intention to use it: Figure (3-6) illustrates this relation.

Figure (3-6): Perceived Usefulness and attitude toward e-HRM relationship.

H13: Attitude toward using e-HRM has direct and positive effect on behavioral intention to use e-HRM.

Hypotheses depending on TPB model:

Figure (3-7): Perceived Usefulness and attitude toward e-HRM relationship.

H14: Social risk has negative influence on intention to use e-HRM.

H15: company role has positive influence on intention to use e-HRM.

Hypotheses depending on the relationship between TAM and TPB: Figure (3-8) illustrates this relation.

Figure (3-8): Company role and Social risk relation with perceived risk.

H16: company role has positive influence on perceived usefulness to use e-HRM.

H17: Social risk has positive influence on perceived risk to use e-HRM.

Hypotheses depending on Yale model:

H18: Communication has direct and positive influence on employee intention to use e-HRM.

The following diagram explains hypothesis relationship network.

Figure (3-9): Hypothesis Relationship Network.

3.7 Sampling Technique

Researchers are interested in how they will choose research samples, so, it is important to determine the methods that suit with research purposes, then define research population and sample size.

3.7.1 Study Population:

Palestinian service sector is the research population in this study, the primary motivation to choose this sector because is more interesting than others sectors on employee satisfaction and providing them with more facilities to guarantee better productivity to achieve service sectors goals by focusing on increasing customer satisfaction and this can be achieved through efficiently work forces.

In addition, the service sector defined as high labor intensive sector which accommodates workforce in the local market where employed 33.3% of Palestinian workers, the total number of work force is 1.194 million divided to 780 thousand in West Bank and 414 thousand in Gaza (PCBS, 2013).

Furthermore, the importance of the services sector demonstrates in the contribution of its various activities in Palestinian Gross Domestic Product (GDP).

Table (3-2) illustrates some service activities and its percentage of GDP.

Table (3-2): GDP percentage of service activates in Palestine.

GDP Percentage	Economic Activity	No.
2.1%	Transport and storage	1
3.3%	Financial and insurance activity	2
6.3%	Information and communication	3
7.9%	Education	4
3.7%	Health and teamwork	5
19.9%	Other services	6
43.2%	Total	

Source: PCBS, 2013.

3.7.2 Study Sample

This research deals with four categories of participants to understand the problem area, to determine the factors that influence e-HRM adoption, and to find the correlations between these factors. So, the sample divided into HR mangers, IT and technical support mangers, top managers, and employees.

In quantitative approach, probability sampling was chosen to get random sample where each employee in Palestine service sector can participate. Therefore, we can represent all population.

Based on Table (3-2) classification, the researcher chooses research sample by taking partial sample of the service sector and divide to eight different specialties which are: banking, hospitals, telecommunication, internet providers, universities, government, logistic, and insurance.

To form a research model, data were collected from twenty one firms from different trends and location, three companies were selected from

each specialty through web search and interviews in order to ensure that the companies which selects have available web sites and electronic database.

Due to the limited number of firms the study focused on large and medium-sized companies because these companies are more interested in HRM. So, when the numbers of employees increase the motivation factors to adopt new electronic systems becomes more useful.

The cost of these systems constitutes a burden on small businesses, but large and medium companies have the ability to buy and utilize electronic system because the increase in the employee number increases the complexity and difficulty of work and need for a flexible system to manage them efficiently. Table (3-3) shows there search sample companies.

Table (3-3): Choosing a research sample companies.

Selected Companies Names	Total No. of Employees	Sectors	No
Bank of Palestine	6051	**Banks**	**1**
Arab Bank			
Palestinian Islamic Bank			
General Personnel Council	2050 [1]	**Government**	**2**
Palestinians Land Registration			
Palestinian Central of Statistics			
Nablus Specialist Hospital	4188 [2]	**Hospital**	**3**
Rafidia Specialist Hospital			
Al_Razi Hospital			
Trust International Insurance	2050	**Insurance**	**4**
Global United Insurance			
National Insurance Company			
Hadara	2470	**Internet Providers**	**5**
Zaytona			
Super Link			
Wassel	1670	**Logistics**	**6**
FedEx			
Aramex			
Paltel	4769	**Telecommunication**	**7**
Jawwal			
Wataniya Mobile			
Arab American University	5426 [3]	**Universities**	**8**
An-Najah National University			
Birzeit University			

Source: PCBS, 2010.

[1] Including employees in General Personnel Council, Palestinians land Registration, and Palestinian Central of Statistics.
[2] Including only private hospitals.
[3] Excluding public universities employees.

3.7.3 Sample Size

The sample size should fit with appropriate confidence level, and appropriate confidence interval. Therefore, the confidence interval will be 4% with 95% confidence level. The population size is 259740 employees in West Bank (PCBS, 2013). So, the sample size of this research is 600.

Here is the formula used in our Sample Size Calculator (Cochran, 1963). Sample Size:

…….. (1)

Where:

n = the sample size.

Z = Z value (e.g. 1.96 for 95% confidence level).

p = percentage picking a choice, expressed as decimal (0.5 used for sample size needed) and q = (1- p).

e = confidence interval.

From what has been stated above, in order to ensure that the sample was distributed evenly, the researcher distributed the questionnaires based on the percentage of employees in each specialization. Consequently, the total number for each specializations how in Table (3-4).

Table (3-4): The number of respondents for each sector.

Number of surveys	Number of Employees	Sectors	No.
110	6051	**Banks**	**1**
122	6823	**Government**	**2**
75	4188	**Hospitals**	**3**
37	2050	**Insurance**	**4**
44	2470	**Internet Providers**	**5**
30	5426	**Logistics**	**6**
86	4769	**Telecommunication**	**7**
96	5426	**Universities**	**8**
600	33447	**Total**	**9**

Source: PCBS, 2010.

3.8 Quality Standards for the Research Tool

Several procedures were performed to test the questionnaire, and insure its quality to ensure the correctness of the information and make sure of its ability to achieve the goals of research.

3.8.1 Pilot Experiment

A pilot experiment, also called a pilot study, is a standard scientific tool for research, allowing researchers to conduct a preliminary analysis before committing to a full-blown study or experiment in order to evaluate feasibility, time, cost, adverse events, and effect size (statistical variability).

Pilot study aims to refine and improve the questionnaire, in order to ensure the ability of participants to understand the questions without facing any problems, and give their answers clearly. Generally, the number of participants should be at least ten participants (Saunders, 2000).

Research tool was reviewed by group of experts and arbitrators (Table A1 in Appendix B has the names of experts and arbitrators). Experts and arbitrators made comments on the contents, and the format of the questionnaire.

Questionnaire was refined, and discussions were made about: repeated questions, clarity of the questions, order of the questions, and if the questions are directed the participants toward a specific alternative.

Participants made comments on the contents of the questionnaire. The participants in pilot study are excluding from the research sample and the final analysis.

All these comments from experts, arbitrators, and participants were discussed with the supervisor, and then adjustments were made.

The number of statements for each variable was reduced, in order to reduce the repeated questions which can cause boredom for the participants. Questionnaire was refined and became ready for distribution.

3.8.2 Reliability and Validity

One of the most important issues is to make research questionnaire consistent, clear, and understandable by all participants. In addition, the questionnaire should be achieved research goals and objectives. Therefore, reliability and validity should be measured.

Reliability is the quality of measurement and the consistency of responses. Reliability is the consistency or repeatability of research tools

measures and used to insure internal consistency and to achieve high degree of homogeneity between questionnaire statements.

Reliability can be computed through different methods like test-retest reliability, internal consistency reliability, and equivalent forms reliability.

In this research, questionnaire reliability was checked by choosing internal consistency method. By using this method, the researcher can measure the correlation between each item in the questionnaire and others. Likert scale questionnaires use Cronbach alpha method as Alhamdaniet. al. (2006) argued.

The researcher used all received questionnaires to measure the reliability of the questionnaire.

All the factors that affect e-HRM technology adoptions are above 70%, as well as the total reliability of the questionnaires are around 84%. Therefore, the research tool is reliable.

Cronbach's alpha was calculated for all statements in the questionnaire as shown in Table (3-5):

Table (3-5): Reliability statistics of factors affecting e-HRM adoption.

Cronbach's Alpha	Factor Influencing E-banking Adoption	No.
.749	**Perceived Usefulness**	**1**
.873	**Perceived Ease of Use**	**2**
.877	**Attitude**	**3**
.756	**IT Experience**	**4**
.861	**Intention**	**5**
.789	**System Security**	**6**
.769	**Performance Time**	**7**
.714	**Perceived Risk**	**8**
.879	**Organization Roles**	**9**
.808	**Social Risk**	**10**
.862	**Communication**	**11**
.840	**Total**	

3.9 Distribution of the Questionnaire

The proportional stratified sampling was adopted to collect data from all organizations in Palestine. The questionnaire was distributed in the organizations, each specializations considered as one stratum as discussed in Chapter Three. The number of questionnaires in each specialization fit with the number of working employees in it.

Table (3-6) shows how all questionnaires were distributed throughout all specializations in Palestine. Also, it shows all details about data collection.

Table (3-6): Distribution and Collection of Data.

Response Rate	Valid Surveys	Received Surveys	Distributed Surveys	Specialization
75.4%	83	89	110	**Banks**
70.5%	86	103	122	**Government**
78.6%	59	61	75	**Hospitals**
97.3%	36	37	37	**Insurance**
95.4%	42	44	44	**Internet Providers**
96.6%	29	29	30	**Logistics**
91.8%	79	81	86	**Telecommunication**
79.1%	76	79	96	**Universities**
81.66%	490	523	600	**Total**

Chapter Four

Results and Discussion

Chapter Four

Results and Discussion

This chapter presents and discusses the results that is collected via the questionnaire and show the results of descriptive statistics and hypotheses testing in order to determine the factors that affecting e-HRM adoption in Palestine. Furthermore, this chapter presents e-HRM adoption framework in Palestine using the factors that have been obtained.

4.1 Introduction

In order to obtain the research results, Statistical Package for the Social Sciences (SPSS) software was used to analyze the questionnaires. SPSS has been chosen in this research because it has many features and properties which can provide appropriate results, these results lead to achieve research purpose by providing several statistics for each element in the research questionnaire. Hence, SPSS is useful to get the causal relationships between questionnaire elements.

4.2 Demographic and Descriptive Statistics

According to the questionnaire design, respondents have different personal information; these differences lead to different responses toward technology usage, e-HRM usage, and the factors that affecting e-HRM technology adoption within different organization. The following discussion shows these differences.

4.2.1 Personal Information

The total number of participants is490 with response rate of 81.6%.

Gender

The sample includes 332 male or 67.8% of the participants and 158 female or 32.2% of the participants. Figure 1 in Appendix A shows the gender distribution in this study.

Age

Table (4-1) shows the details of age. Figure 2 in Appendix A shows the age distribution in this study.

Table (4-1): Distribution of Age.

Percent	Frequency	Characteristic of the Variable	Variable
12.9%	63	Less than 25 years	**Age**
45.7%	224	25 – 35 years	
24.1%	118	35 – 45 years	
15.3%	75	45 – 55 years	
2.0%	10	55 – 65 years	
0%	0	More than 65 years	
100%	490	Total	

Job Title

Job title was divided into six options. Table (4-2) shows the details of the job title included in the questionnaire. Figure 3 in Appendix A shows the distribution of job title in this study.

Table (4-2): Distribution of Job Title.

Percent	Frequency	Characteristic of the Variable	Variable
62.7%	307	Employee	Job Title
3.9%	19	HR Manager	
5.5%	27	Top Manager	
2.9%	14	IT and a Technical Manager	
25.1%	123	Department Manager	
0%	0	Other Option	
100%	490	Total	

Educational Level

Educational Level was divided into five options. Table (4-3) shows the details of educational levels. Also, Figure 4 in Appendix A shows the distribution of educational levels in this study.

Table (4-3): Distribution of Educational Level.

Percent	Frequency	Characteristic of the Variable	Variable
1.2%	6	High School or Less	Educational Level
11.0%	54	Diploma	
69.2%	339	Bachelor	
15.3%	75	Master	
3.1%	15	PhD	
99.8%	489	Total	
.2%	1	Missing	

Specialization Sector

Specialization sector was divided into eight options. Table (4-4) shows the details of work specialization sector. Figure 5 in Appendix A shows the distribution of specialization sector in this study.

Table (4-4): Distribution of Specialization Sector.

Percent	Frequency	Characteristic of the Variable	Variable
15.5%	76	University	**Specialization Sector**
16.9%	83	Bank	
12.0%	59	Hospital	
16.1%	79	Communication	
8.6%	42	Internet Provider	
17.6%	86	Governmental	
5.9%	29	logistics	
7.3%	36	Insurance	
100%	490	Total	

4.2.2 Technology and e-HRM Usage

Respondents on computer usage and e-HRM technology part have converged responses. The following discussion contains two parts.

- **Computer usage in work**

Research results included 488 of employees who use computer around 99.6% of the participants, and 2 employees did not use computer who form around .4% of the participants.

- **Organization Website**

In the second part, the researcher asked the employees if the organization having website or not. Research results included 483 of employees answered yes but 7 employees answered no.

4.3 Statistical Differences among Survey Respondents

This section outlines the statistical differences between participants in this research according to received questionnaires. Independent Samples Test (t-test for Equality of Means) and one-way ANOVA Test are used to explain these differences; these two tests are used because correlations between qualitative and quantitative factors will be tested.

T-test method compares means of qualitative independent variable which has two levels, whereas one-way ANOVA compares means of qualitative independent variable which has more than two levels. In this case, the dependent variables are quantitative.

- **Statistical Differences According to Gender**

This study included both genders males and females, both participated in the survey; therefore this variable has two levels so T-test method is used. Statistical differences between males and females described as the following:

Perceived Usefulness: there is statistical difference between males and females in recognizing the usefulness of e-HRM technology ($P< 0.05$). Males consider e-HRM technology to be useful more than females (the mean for males is 4.24 and for females is 4.13).

System Security: there is statistical difference between males and females ($P < 0.05$) about the role of system security in affecting e-HRM acceptance. Males consider system security importance in e-HRM technology

acceptance more than females (the mean for males is 4.07 and for females is 3.90).

Perceived Risk: there is statistical difference between males and females ($P < 0.05$) in the perceived risk. Males realize the effects of perceived risk in e-HRM technology acceptance more than females (the mean for males is 3.98 and for females is 3.87).

Table (4-5) and (4-6) show full details about these differences.

Table (4-5): Statistical differences among participants according to their gender

Std. Deviation	Mean	N	Gender	Factors
.442	4.24	332	Male	**PU**
.502	4.13	158	Female	
.525	4.34	332	Male	**PEOU**
.551	4.24	158	Female	
.475	4.27	332	Male	**ATT**
.510	4.19	158	Female	
.552	4.10	332	Male	**ITA**
.554	4.08	158	Female	
.503	4.41	332	Male	**INT**
.477	4.33	158	Female	
.529	4.07	332	Male	**SS**
.537	3.90	158	Female	
.551	4.17	332	Male	**TIME**
.919	4.28	158	Female	
.489	3.98	332	Male	**PR**
.475	3.87	158	Female	
.618	4.07	332	Male	**OR**
.620	4.16	158	Female	
.608	4.19	332	Male	**SR**
.650	4.22	158	Female	
.778	4.23	332	Male	**COMM**
.815	4.22	158	Female	
.320	4.19	332	Male	**Total Score**
.347	4.15	158	Female	

Table (4-6): Independent Samples Test for gender differences among participants

t-test for Equality of Means		Factors
p	t	
.019	2.351	**PU**
.053	1.936	**PEOU**
.097	1.660	**ATT**
.632	.479	**ITA**
.078	1.768	**INT**
.001	3.321	**SS**
.088	-1.712-	**TIME**
.015	2.433	**PR**
.141	-1.474-	**OR**
.610	-.510-	**SR**
.796	.259	**COMM**
.185	1.328	**Total Score**

- **Statistical Differences According to Age**

According to this study age was collected as interval, therefore the researcher used One-way ANOVA test to determine the correlation between participant age and other dependent variables. There are statistical differences between ages as the following:

Perceived Usefulness: ANOVA test shows statistical differences between ages ($P<.05$). When age becomes older the perceived usefulness becomes high. Ages between 55 – 65 years are more certainly about the usefulness of e-HRM technology (mean equals 4.36) than other age groups, whereas Ages less than 25 years have the lowest certainty about the usefulness of e-HRM technology (mean equals 4.09).

The results return to employee experience; when ages become older employee experience year's increases, thus increase their knowledge of e-HRM technology and the benefits of using it within the organization.

Intention: Statistical differences are found ($P< 0.05$), 35-45 years old participants have higher intention to use e-HRM Technology (mean equals 4.51) more than other age groups, whereas ages less than 25 years has the lowest intention to use of e-HRM technology (mean equals 4.28).

This results return to employee ability for using technology, participants with ages between 35-45 years old more able to use e-HRM Technology because they have more experience and time in the work this

increase their intention toward technology compared with participants who are less than 25 years.

System Security: ANOVA test shows statistical differences between ages ($P < .05$). Participants who are ages between 35 – 45 years believe that security system is very important to adopt e-HRM (mean equals 4.17) more than other age groups. Whereas ages less than 25 years and between 55- 56 years have the lowest concern about the importance of system security for using e-HRM technology (mean equals 3.87 and 3.88).

Participants having age less than 25 years old are interested in learning e-HRM system more than system security and system confidentiality, as well as that participant who ages range from 55-56 years old interested in the system usefulness more than other issues because they want to facilitate work tasks and they have full confidentiality in e-HRM system because they use the system from long time.

From what has been stated above, perceived risk does not constitute a significant burden on the adoption of e-HRM technology because 82.7 % of participants ages are ranged less than 45 years old.

Most of participants are young who are familiar with technology usage and its solutions. Whereas young ages become older, the recognition, the awareness, experience and knowledge will be increased, and then the fear of unknown and social will be reduced.

All details about statistical differences among ages are found in Appendix B (from Table 1 to Table 5).

- **Statistical Differences According to Job Title**

One-way ANOVA test is also used to outline the statistical differences between participants according to their job title. There are statistical differences as shown in the following:

Perceived Usefulness: ANOVA test shows statistical differences between job titles (P< .05). HR managers have the highest percentage toward perceived usefulness of using e-HRM technology (mean equals 4.46), but employees have the lowest percentage toward the perceived usefulness of e-HRM technology (mean equals 4.15).

The reason behind this refers to the importance of e-HRM technology for HRM department and realization to the use fullness of technical progress in facilitating and managing HR practices within Palestinian organizations.

Perceived Ease of Use: statistical differences are found (P< 0.05).Top managers recognize that e-HRM technology is easy to use and facilitate work tasks and responsibilities (mean equals 4.48) more than other groups. Whereas employees have less recognition about the ease of use (mean equals 4.18).

Top management support plays a significant role for adoption e-HRM technology, the high proportion of top management recognition that

e-HRM technology is easy to use leads to develop and promote the use of the e-HRM in the organizations.

Attitude: ANOVA test shows statistical differences between participants according to their job titles (P< 0.05). IT and Technical managers have the highest attitude toward using e-HRM technology (mean equals 4.38). Whereas employees have the lowest attitude toward e-HRM technology (mean equals 4.18).

Intention: statistical differences are found (P< 0.05). IT and Technical managers have highest intention to use e-HRM technology (mean equals 4.6). Whereas employees have lowest intention to use e- HRM technology (mean equals 4.32).

The reason behind the high percentage of IT and technical support managers in attitude and intention toward using e-HRM refers to their background ability to deal with new technology and their eagerness to deploy the technology within the organizations.

System Security: ANOVA test shows statistical differences between job titles (P < .05). Department managers believe that security system is very important to adopt e-HRM (mean equals 4.14)more than other job titles groups. Whereas employees have the lowest concerned to system security important to adopt e-HRM technology (mean equals 3.95).

Organization Roles: statistical differences are found (P< 0.05). Top managers argued that Palestinian organizations play significant role toward

using e-HRM technology (mean equals 4.41). Whereas IT and technical managers argued that Palestinian organizations plays less significant role toward e-HRM technology (mean equals 4.04).In addition, LSD test shows a significant difference between employees and HR managers favor to HR managers.

Social Risk: statistical differences are found (P< 0.05). Department managers believe that social risk is a significant factor affecting the adoption of e-HRM (mean equals 4.14) more than other job titles groups. Whereas HR managers have less consideration about the effecting of social risk in adoption e-HRM technology (mean equals 3.82).

Department managers deal with daily work and interested in accomplishment of routine tasks. So, system security and social risk issues constitute their greatest interest to adopt e-HRM technology because it could hinder the completion of their responsibilities. On the other hand, top managers interested on the organizations rules to be able to achieve organization strategy and objective through adoption new technologies which can facilitates and eliminate work , while IT and technical managers focused on providing technical tools and adequate training to employees more than focused on organizations roles.

Appendix B shows full details about these differences (Table 6 to Table 14).

- **Statistical Differences According to Educational Levels**

There are statistical differences between participants according to their educational level. In this study the researcher focus on five educational level options and the relation between it and the factors affecting e-HRM technology acceptance. These statistical differences are toward Perceived Usefulness (P< 0.05), Perceived Ease of Use (P< 0.05), Attitude (P< 0.05), Intention (P< 0.05), and System Security (P< 0.05).

Table (4-7) and (4-8) show full details about the mean and standard deviation and ANOVA Test according to participants education for all factors.

Table (4-7): Descriptive of statistical differences according to participants Education.

Std. Deviation	Mean	N	Educational Level	Factors
.501	4.07	6	High School or Less	PU
.425	4.17	55	Diploma	
.466	4.16	339	Bachelor	
.452	4.36	75	Master	
.392	4.49	15	PhD	
.464	4.20	490	Total	
.534	3.72	6	High School or Less	PEOU
.564	4.38	55	Diploma	
.529	4.26	339	Bachelor	
.513	4.45	75	Master	
.349	4.56	15	PhD	
.535	4.31	490	Total	
.671	3.75	6	High School or Less	ATT
.453	4.29	55	Diploma	
.485	4.20	339	Bachelor	
.473	4.38	75	Master	
.356	4.55	15	PhD	
.488	4.24	490	Total	

Table (4-7) Descriptive of statistical differences according to participants Education (cont.)

Std. Deviation	Mean	N	Job Title	Factors
.652	4.00	6	High School or Less	ITA
.562	4.01	55	Diploma	
.565	4.08	339	Bachelor	
.481	4.17	75	Master	
.441	4.35	15	PhD	
.552	4.10	490	Total	
.344	4.11	6	High School or Less	INT
.494	4.45	55	Diploma	
.509	4.35	339	Bachelor	
.436	4.51	75	Master	
.371	4.56	15	PhD	
.496	4.39	490	Total	
.459	3.29	6	High School or Less	SS
.591	3.94	55	Diploma	
.508	3.98	339	Bachelor	
.551	4.20	75	Master	
.408	4.42	15	PhD	
.537	4.01	490	Total	
.518	4.38	6	High School or Less	TIME
.537	4.18	55	Diploma	
.745	4.21	339	Bachelor	
.584	4.19	75	Master	
.578	4.18	15	PhD	
.693	4.20	490	Total	
.592	3.75	6	High School or Less	PR
.452	3.96	55	Diploma	
.490	3.93	339	Bachelor	
.487	3.98	75	Master	
.438	4.23	15	PhD	
.487	3.95	490	Total	
.641	3.96	6	High School or Less	OR
.640	4.17	55	Diploma	
.630	4.07	339	Bachelor	
.573	4.16	75	Master	
.504	4.23	15	PhD	
.619	4.10	490	Total	

Table (4-7) Descriptive of statistical differences according to participants Education (cont.)

Std. Deviation	Mean	N	Educational Level	Factors
.501	4.07	6	High School or Less	PU
.425	4.17	55	Diploma	
.466	4.16	339	Bachelor	
.452	4.36	75	Master	
.392	4.49	15	PhD	
.464	4.20	490	Total	
.534	3.72	6	High School or Less	PEOU
.564	4.38	55	Diploma	
.529	4.26	339	Bachelor	
.513	4.45	75	Master	
.349	4.56	15	PhD	
.535	4.31	490	Total	
.671	3.75	6	High School or Less	ATT
.453	4.29	55	Diploma	
.485	4.20	339	Bachelor	
.473	4.38	75	Master	
.356	4.55	15	PhD	
.488	4.24	490	Total	

Table (4-8): ANOVA Test for educational level differences among participants

P	F		Factors
.001	4.605	Between Groups	PU
.001	4.988	Between Groups	PEOU
.000	5.416	Between Groups	ATT
.182	1.565	Between Groups	ITA
.021	2.906	Between Groups	INT
.000	8.226	Between Groups	SS
.974	.123	Between Groups	TIME
.126	1.807	Between Groups	PR
.494	.850	Between Groups	OR
.604	.684	Between Groups	SR
.315	1.188	Between Groups	COMM
.001	4.563	Between Groups	Total Score

Whereas educational level becomes high, the recognition of the previous factors becomes more. The statistical differences describe as the following:

Perceived Usefulness: PhD participants have the highest percentage toward perceived usefulness of using e-HRM technology (mean equals 4.49), but employees have the lowest percentage toward the usefulness of using e-HRM technology (mean equals 4.07).

Table (4-9): LSD Test for educational differences among participants (Perceived Usefulness)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.609	-.101-	Diploma	High School or Less	PU
.604	-.098-	Bachelor		
.128	-.296-	Master		
.054	-.427-	PhD		
.609	.101	High School or Less	Diploma	
.968	.003	Bachelor		
.017	-.195-*	Master		
.015	-.326-*	PhD		
.604	.098	High School or Less	Bachelor	
.968	-.003-	Diploma		
.001	-.198-*	Master		
.007	-.329-*	PhD		
.128	.296	High School or Less	Master	
.017	.195*	Diploma		
.001	.198*	Bachelor		
.313	-.131-	PhD		
.054	.427	High School or Less	PhD	
.015	.326*	Diploma		
.007	.329*	Bachelor		
.313	.131	Master		

*. The mean difference is significant at the 0.05 level.

Perceived Ease of Use: PhD participants recognize that e-HRM technology is easy to use and facilitate work tasks and responsibilities (mean equals 4.56) more than other groups. Whereas high school or less participants have less recognition about the ease of use (mean equals 3.72).

Table (4-10): LSD Test for educational differences among participants (Perceived Ease of Use)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.004	-.660-*	Diploma	High School or Less	PEOU
.013	-.541-*	Bachelor		
.001	-.731-*	Master		
.001	-.833-*	PhD		
.004	.660*	High School or Less	Diploma	
.123	.118	Bachelor		
.445	-.072-	Master		
.258	-.174-	PhD		
.013	.541*	High School or Less	Bachelor	
.123	-.118-	Diploma		
.005	-.190-*	Master		
.036	-.292-*	PhD		
.001	.731*	High School or Less	Master	
.445	.072	Diploma		
.005	.190*	Bachelor		
.493	-.102-	PhD		
.001	.833*	High School or Less	PhD	
.258	.174	Diploma		
.036	.292*	Bachelor		
.493	.102	Master		

*. The mean difference is significant at the 0.05 level.

Attitude: PhD participants have the highest attitude toward using e-HRM (mean equals 4.55). Whereas high school or less participants have the lowest attitude toward e-HRM technology (mean equals 3.75).

Table (4-11): LSD Test for educational differences among participants (Attitude)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.009	-.541-*	Diploma	High School or Less	ATT
.022	-.452-*	Bachelor		
.002	-.630-*	Master		
.001	-.800-*	PhD		
.009	.541*	High School or Less	Diploma	
.203	.089	Bachelor		
.295	-.089-	Master		
.064	-.259-	PhD		
.022	.452*	High School or Less	Bachelor	
.203	-.089-	Diploma		
.004	-.178-*	Master		
.006	-.348-*	PhD		
.002	.630*	High School or Less	Master	
.295	.089	Diploma		
.004	.178*	Bachelor		
.210	-.170-	PhD		
.001	.800*	High School or Less	PhD	
.064	.259	Diploma		
.006	.348*	Bachelor		
.210	.170	Master		

*. The mean difference is significant at the 0.05 level.

Intention: PhD participants have highest intention to use e-HRM technology (mean equals 4.35). Whereas high school or less participants have lowest intention to use e- HRM technology (mean equals 4.00).

Table (4-12): LSD Test for educational differences among participants (Intention)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.111	-.337-	Diploma	High School or Less	INT
.247	-.235-	Bachelor		
.056	-.400-	Master		
.062	-.444-	PhD		
.111	.337	High School or Less	Diploma	
.153	.102	Bachelor		
.474	-.063-	Master		
.455	-.107-	PhD		
.247	.235	High School or Less	Bachelor	
.153	-.102-	Diploma		
.009	-.165-*	Master		
.107	-.209-	PhD		
.056	.400	High School or Less	Master	
.474	.063	Diploma		
.009	.165*	Bachelor		
.750	-.044-	PhD		
.062	.444	High School or Less	PhD	
.455	.107	Diploma		
.107	.209	Bachelor		
.750	.044	Master		

*. The mean difference is significant at the 0.05 level.

System Security: PhD participants believe that security system is very important to adopt e-HRM (mean equals 4.42) more than other groups. Whereas high school or less group participants have the lowest concerned to system security important to adopt e-HRM technology (mean equals 3.29).

Table (4-13): LSD Test for educational differences among participants (System Security)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.004	-.649-*	Diploma	High School or Less	SS
.001	-.688-*	Bachelor		
.000	-.912-*	Master		
.000	-1.125-*	PhD		
.004	.649*	High School or Less	Diploma	
.612	-.038-	Bachelor		
.005	-.262-*	Master		
.002	-.476-*	PhD		
.001	.688*	High School or Less	Bachelor	
.612	.038	Diploma		
.001	-.224-*	Master		
.002	-.437-*	PhD		
.000	.912*	High School or Less	Master	
.005	.262*	Diploma		
.001	.224*	Bachelor		
.149	-.213-	PhD		
.000	1.125*	High School or Less	PhD	
.002	.476*	Diploma		
.002	.437*	Bachelor		
.149	.213	Master		

*. The mean difference is significant at the 0.05 level.

- **Statistical Differences According to Work Specialization**

One- way ANOVA test is also used to outline the statistical differences between participants according to their work specialization. In this study the researcher focus on eight specialization options and the relation between it and the factors affecting e-HRM technology acceptance. There are statistical differences as the following:

Perceived Usefulness: statistical differences are found (P< 0.05).Participants who works on insurance companies have the highest

percentage toward perceived usefulness of using e-HRM technology (mean equals 4.42), but participants who work on logistics companies have lowest percentage toward the usefulness of using e-HRM technology (mean equals 3.98).

Also, LSD test shows a significant difference between participants who work on internet providers companies and participants who work on hospitals which illustrate that internet providers companies participants have better understand for the usefulness of e-HRM technology.

Attitude: statistical differences are found ($P < 0.05$). Participants who work on insurance companies have the highest attitude toward using e-HRM technology (mean equals 4.42). Whereas participants who work on logistics companies have the lowest attitude toward e-HRM technology (mean equals 4.07). In addition, LSD test shows other significant differences between participants according to specializations as the following:

- Participants who work on universities have high attitude to use e-HRM technology compared with participants who work on hospitals and communications companies.
- Participants who work on governmental organizations have high attitude to use e-HRM technology compared with participants who work on communications companies.

These results describe the explicit of universities attitude toward using technology dramatically and illustrate a clear evolution on the education sector in Palestinian.

IT Experience: ANOVA test shows statistical differences between participants according to their work specializations ($P < .05$). Participants who work on internet providers companies realize the importance of the availability of IT experience in order to adopt e-HRM technology (mean equals 4.37). Whereas participants who work on hospitals and insurance companies have the lowest percentage about the important of IT experience to adopt e-HRM technology (mean equals 3.8 and 3.92).

In addition, LSD test shows other significant differences between participants according to specializations as the following:

- Participants who work on banks realize the importance of the availability of IT experience in order to adopt e-HRM technology more than participants who work on university and governmental organizations.

- Participants who work on communications companies have a great interest in the availability of IT experience to adopt e-HRM technology compared with participants who work on governmental organizations.

These results indicate the interest of the banks to provide technical tools to adopt e-HRM technology, because of the sensitive nature of their

work which need more concern about safety and secrecy. On the other hand, the results indicate the lack of technical infrastructure to adopt e-HRM technology in the governmental organizations.

Intention: ANOVA test shows statistical differences between work specializations ($P < .05$). Participants who work on internet provides have highest intention to use e-HRM technology (mean equals 4.55). Whereas participants who work on government sector have lowest intention to use e-HRM technology (mean equals 4.29).Also, LSD test shows a significant difference between participants who work on hospitals and participants who works on communications companies which illustrate that hospitals participant have better intention to use e-HRM technology.

Social Risk: statistical differences are found ($P< 0.05$). Participants who work on insurance and internet providers specializations believe that social risk is a significant factor affecting the adoption of e-HRM (mean equals 4.39 and 4.39). Whereas participants who work on logistics and communication specializations have less consideration about the effecting of social risk in adoption e-HRM technology (mean equals 4.6 and 4.6).

All details about statistical differences among Work Specialization are found in appendix B (from Table 15 to Table 21).

The following points summarize the most important results that have been discussed above:

1. Males are most interested on the issues related to the adoption of e-HRM compared with females, where the results showed that males are more realized of the usefulness from using e-HRM and the impact of system security and perceived risk to adopt electronic system within organizations.

2. When participant age becomes older the awareness of the importance of e-HRM becomes clearer, in addition the employees who are age between 35-45 years are the most awareness about the impact of system security in e-HRM adoption and they have the most intention to use it.

3. HR managers are most interested in e-HRM systems, while IT and technical managers have the biggest intention and attitude to use it. On the other hand, employees have the lowest attention about all the factors affecting the adoption of e-HRM technology.

4. When employee educational level becomes high, the employees attention about the impact of the factors which affecting the adoption of e-HRM becomes more.

5. Insurance companies are more realize the important of e-HRM technology compare with other work specializations. Whereas the logistics companies have the lowest consideration about using e-HRM technology.

6. Telecommunications companies are the most companies that using e-HRM in correctly and integrated manner and they having the necessary

technical resources to using it compared with other Palestinian companies. Despite the widespread using of e-HRM within telecommunication companies they did not get a high score in realize the importance of e-HRM because the using of technology is a part of the company rules so it's mandatory.

7. The banking sector is the largest sector which cares about employees training and provides necessary tools and equipment to using technology because the banking characterized as high risky sector compare with other companies.

8. Universities are witnessing a great development to accept technology usage through employed different technology aspects to achieve educational goals. On the other hand, government organizations are more Palestinian organizations which need to be developed in order to increase employee technology acceptance in general and e-HRM technology.

9. Some hospital does not have a special human resources department separately from other departments, because hospitals focus on their core business only which depend on providing good medical services without any care about different employees and using simple electronic system to accomplish some tasks such as monitoring employees attendance.

The results obtained from analysis the survey respondents illustrate the following facts:

1. The results indicate that 77% of the participants recognize that the concept of e-HRM technology is clear. In addition, 86.2% of the participants pointed that using e-HRM technology reduces work mistakes.

2. 85.6% of the participants recognize that e-HRM technology system is easy to use and facilitate working processes. On the other hand, 87% of the participants want to use e-HRM system.

3. Regarding to IT experience factor 79.2% of the participants believe that ICT devices which are available in the organizations enough to use e-HRM system. Also 72.2% of the participants believe that the employees have the necessary skills and ability to use e-HRM system.

4. 88.2% of respondents have a high intention to use e-HRM system and 86.8% of respondents realize that their adoption of the e-HRM system will encourage their colleagues to use it. In addition, 81.4% of the participants admit that they need more training in usinge-HRM system.

5. 78.4% of respondents expected that learning e-HRM system does not require a lot of time.

6. The results indicate that 81.4% of the participants recognize that e-HRM system within the organization is clear and highly secure.

7. 83.8% of the respondents perceive that organization in which they work supports and encourages the using of e-HRM. On the other hand, 73.8% of respondents recognize that the organization in which they work depends on e-career system to attract new employees.

All details about statistical results obtained from analysis the survey respondents are found in appendix B (from Table 22 to Table 32).

Table (4-14) summarizes the results of the previous discussion.

Table (4-14): Summary of the Results.

Factors				Differences Elements	No.
PR	SS	PU		**Gender**	**1**
Male	Male	Male			
SS	INT	PU		**Age**	**2**
35-45 years	35-45 years	55-65 years			
OR	ATT	PEOU	PU	**Job Title**	**3**
Top managers	IT mangers	Top managers	HR managers		
SR	INT	SS			
Department managers	IT managers	Department managers			
ATT	PEOU	PU		**Education Level**	**4**
PhD	PhD	PhD			
SS	INT				
PhD	PhD				
ITA	ATT	PU		**Work Specialization**	**5**
Internet Providers	Insurance	Insurance			
SR	INT				
Insurance and Internet Providers	Internet Providers				

4.4 Hypotheses Testing

To test the research hypotheses Pearson Correlation was used as the following tables show the hypotheses and their results:

Table (4-15): Results of Hypothesis Testing

p	Type of correlation	Pearson correlation	Hypotheses	No.
.000	positive	.298**	System security has direct and positive effect on perceived usefulness of e-HRM.	**H1**
.001	positive	.155**	Performance time has direct and positive effect on perceived usefulness of e-HRM.	**H2**
.000	positive	.199**	Performance time has direct and positive effect on perceived ease of using e-HRM.	**H3**
.000	negative	.336**	System security has direct and negative effect on perceived risk.	**H4**
.205	negative	.057**	IT experience (Employee training and Availability of IT resources) has direct and negative effect on perceived risk.	**H5**
.000	positive	.413**	Perceived usefulness has direct and positive effect on attitude to using e-HRM.	**H6**
.000	positive	.353**	Perceived usefulness has direct and positive effect on behavioral intention to use e-HRM.	**H7**
.000	positive	.406**	Perceived ease of use has positive effect on perceived usefulness to use e-HRM.	**H8**
.000	positive	.453**	Perceived ease of use has positive effect on attitude toward using e-HRM.	**H9**
.000	negative	.196**	Perceived Risk has negative effect on perceived ease of use e-HRM.	**H10**
.000	negative	.248**	Perceived Risk has negative effect on attitude to use e-HRM.	**H11**
.000	negative	.166**	Perceived Risk has negative effect on perceived usefulness to use e-HRM.	**H12**

Table (4-15): Results of Hypothesis Testing (Cont.).

p	Type of correlation	Pearson correlation	Hypotheses	No.
.000	positive	.413**	Attitude toward using e-HRM has direct and positive effect on behavioral intention to use e-HRM.	**H13**
.000	negative	.311**	Social risk has negative influence on intention to use e-HRM.	**H14**
.000	positive	.303**	Company role has positive influence on intention to use e-HRM.	**H15**
.000	positive	..352**	Company role has positive influence on perceived usefulness to use e-HRM.	**H16**
.000	positive	.174**	Social risk has positive influence on perceived risk to use e-HRM.	**H17**
.000	positive	.328**	Communication has direct and positive influence on employee intention to use e-HRM.	**H18**

**Correlation is significant at the .01 level (2-tailed).
*Correlation is significant at the .05level (2-tailed).

Most of hypotheses are supported and significant at 99%. In addition, these hypotheses derived from TAM, TPB, Yale and pervious empirical studies, therefore results supporting all these models and empirical studies. All results are logical and can be adopted.

- **Perceived Usefulness Discussion**

The results of Pearson Correlation of hypotheses show that perceived usefulness is jointly predicted by perceived ease of use ($\rho = 0.406$, $P < 0.05$), attitude ($\rho = 0.413$, $P < 0.05$), IT experience ($\rho = 0.390$, $P < 0.05$), intention ($\rho = 0.353$, $P < 0.05$), system security ($\rho = 0.298$, $P < 0.05$), perceived risk($\rho = 0.166$, $P < 0.05$), organization role ($\rho = 0.352$, $P <$

0.05), social risk (ρ = 0.223, P < 0.05), and communication (ρ = 0.378, P < 0.05).

Attitude to use e-HRM technology has a strong relationship with perceived usefulness which is significant at 99% (ρ = 0.413). Hence, **Hypothesis 6 is supported.**

Intention to use e-HRM technology has a relationship with perceived usefulness which is significant at 99% (ρ = 0.353). This indicates that perceived usefulness is an important factor which influences employee intention to use e-HRM systems. Hence, **Hypothesis 7 is supported.**

- **Perceived Ease of Use Discussion**

Based on Pearson Correlation analysis of hypotheses perceived ease of use is predicted by perceived usefulness (ρ = 0.406, P < 0.05), attitude (ρ = 0.453, P < 0.05), IT experience (ρ = 0.303, P < 0.05), intention (ρ = 0.452, P < 0.05), system security (ρ = 0.452, P < 0.05), time performance(ρ = 0.199, P < 0.05), organization role (ρ = 0.292, P < 0.05), social risk (ρ = 0.224, P < 0.05), and communication (ρ = 0.334, P < 0.05).

Perceived usefulness from using e-HRM technology has a relationship with perceived ease of use which is significant at 99% (ρ = 0.406). This indicates that perceived usefulness is an important factor which influences employee to use e-HRM systems. Hence, **Hypothesis 8 is supported.**

Attitude to use e-HRM technology has a strong relationship with perceived ease of use which is significant at 99% ($\rho = 0.453$). Hence, **Hypothesis 9 is supported.**

- **Attitude Discussion**

The results of Pearson Correlation of hypotheses show that attitude is jointly predicted by perceived usefulness ($\rho = 0.413$, $P < 0.05$), perceived ease of use ($\rho = 0.453$, $P < 0.05$), IT experience ($\rho = 0.287$, $P < 0.05$), intention ($\rho = 0.413$, $P < 0.05$), system security ($\rho = 0.337$, $P < 0.05$), performance time ($\rho = 0.241$, $P < 0.05$), perceived risk($\rho = 0.248$, $P < 0.05$), social risk ($\rho = 0.216$, $P < 0.05$), and communication ($\rho = 0.332$, $P < 0.05$).

Attitude to use e-HRM technology has a strong relationship with employee intention which is significant at 99% ($\rho = 0.413$). This indicates that attitude is an importance factor influence the intention, i.e. attitude has a significant influence on employee intention to adopt the e-HRM technology. Hence, **Hypothesis 13 is supported.**

- **IT Experience Discussion**

IT Experience factor contains two main significant elements, the first is focus on employee training which measure the impact of companies attentions to provide employees with necessary training courses to guarantee their ability to using e-HRM technology which help adoption processes of technology within organizations, the second element is the

availability of IT resources which measure company ability to provide equipment and tools needed to implement e-HRM system.

Based on Pearson Correlation analysis of hypotheses the IT experience is predicted by perceived usefulness ($\rho = 0.390$, $P < 0.05$), perceived ease of use ($\rho = 0.303$, $P < 0.05$), attitude ($\rho = 0.287$, $P < 0.05$), intention ($\rho = 0.267$, $P < 0.05$), system security ($\rho = 0.235$, $P < 0.05$), time performance($\rho = 0.166$, $P < 0.05$), organization role ($\rho = 0.477$, $P < 0.05$), and communication ($\rho = 0.235$, $P < 0.05$).

IT experience do not significantly influence the perceived risk to use e-HRM technology ($\rho = 0.057$, $P > 0.05$. Hence, **Hypothesis 5 is not supported.**

On the other hand, IT experience has a strong relationship with organization roles which is significant at 99% ($\rho = 0.477$). This indicates that organization role is an importance factor influence IT experience, i.e. the model must include the relationship between organization roles and IT experience instead of the relationship between perceived risk and IT experience.

- **System Security Discussion**

The results of analysis data explained that there is a relationship between system security and perceived usefulness ($\rho = 0.298$, $P < 0.05$), perceived ease of use ($\rho = 0.396$, $P < 0.05$), attitude ($\rho = 0.337$, $P < 0.05$), IT experience ($\rho = 0.235$, $P < 0.05$), intention ($\rho = 0.436$, $P < 0.05$), time

performance(ρ = 0.194, P < 0.05), perceived risk (ρ = 0.336, P < 0.05), organization role (ρ = 0.191, P < 0.05), social risk (ρ = 0.278, P < 0.05), and communication (ρ = 0.356, P < 0.05).

Perceived usefulness from using e-HRM technology has a relationship with system security which is significant at 99% (ρ = 0.298). This indicates that system security is an important factor which influences employee perceived usefulness from using e-HRM systems. Hence, **Hypothesis 1 is supported.**

Also, system security is significantly influence the perceived risk from using e-HRM technology (ρ = 0. 336, P < 0.05). Hence, **Hypothesis 4 is supported.**

- **Performance Time Discussion**

The results of Pearson Correlation of hypotheses show that performance time is jointly predicted by perceived usefulness (ρ = 0.155, P < 0.05), perceived ease of use (ρ = 0.199, P < 0.05), attitude (ρ = 0.241, P < 0.05), IT experience (ρ = 0.166, P < 0.05), intention (ρ = 0.253, P < 0.05), system security (ρ = 0.194, P < 0.05), perceived risk(ρ = 0.166, P < 0.05), social risk (ρ = 0.165, P < 0.05), and communication (ρ = 0.205, P < 0.05).

Perceived usefulness from using e-HRM technology has a relationship with performance time which is significant at 99% (ρ = 0.155). Hence, **Hypothesis 2 is supported.**

In addition, perceived ease of use has a relationship with performance time which is significant at 99% (ρ = 0.199). Hence, **Hypothesis 3 is supported.**

- **Perceived Risk Discussion**

The results explained that there is a relationship between perceived risk and perceived usefulness (ρ = 0.166, P < 0.05), perceived ease of use (ρ = 0.196, P < 0.05), attitude (ρ = 0.248, P < 0.05), intention (ρ = 0.255, P < 0.05), system security (ρ = 0.336, P < 0.05), time performance(ρ = 0.194, P < 0.05), perceived risk (ρ = 0.336, P < 0.05), organization role (ρ = 0.191, P < 0.05), social risk (ρ = 0.278, P < 0.05), and communication (ρ = 0.356, P < 0.05).

Perceived usefulness from using e-HRM technology has a relationship with perceived risk which is significant at 99% (ρ = 0.166). Hence, **Hypothesis 12 is supported.**

In addition, perceived ease of use has a relationship with perceived risk which is significant at 99% (ρ = 0.196). Hence, **Hypothesis 10 is supported.**

Also, attitude to use e-HRM technology has a relationship with perceived risk which is significant at 99% (ρ = 0.248). This indicates that attitude is an importance factor which reduces perceived risk, i.e. perceived risk has a significant influence on perceived risk to adopt the e-HRM technology. Hence, **Hypothesis 11 is supported.**

- **Organization Role Discussion**

Based on Pearson Correlation analysis of hypotheses the organization roles is influenced by perceived usefulness ($\rho = 0.352$, $P < 0.05$), perceived ease of use ($\rho = 0.292$, $P < 0.05$), attitude ($\rho = 0.163$, $P < 0.05$), IT experience ($\rho = 0.477$, $P < 0.05$), intention ($\rho = 0.303$, $P < 0.05$), system security ($\rho = 0.191$, $P < 0.05$), social risk ($\rho = 0.176$, $P < 0.05$), and communication ($\rho = 0.283$, $P < 0.05$).

Perceived usefulness from using e-HRM technology has a strong relationship with organization roles which is significant at 99% ($\rho = 0.352$). This indicates that organization roles are significantly influences perceived usefulness from using e-HRM systems. Hence, **Hypothesis 16 is supported.**

Intention to use e-HRM technology has a relationship with organization roles which is significant at 99% ($\rho = 0.303$). This indicates that organization roles influence employee intention to use e-HRM systems. Hence, **Hypothesis 15 is supported.**

- **Social Risk Discussion**

The results of Pearson Correlation of hypotheses show that social risk is jointly predicted by perceived usefulness ($\rho = 0.223$, $P < 0.05$), perceived ease of use ($\rho = 0.224$, $P < 0.05$), attitude ($\rho = 0.216$, $P < 0.05$), IT experience ($\rho = 0.093$, $P < 0.05$), intention ($\rho = 0.311$, $P < 0.05$), system security ($\rho = 0.278$, $P < 0.05$), performance time ($\rho = 0.165$, $P < 0.05$),

perceived risk(ρ = 0.174, P < 0.05), organization role (ρ = 0.176, P < 0.05), and communication (ρ = 0.342, P < 0.05).

Intention to use e-HRM technology has a relationship with social risk which is significant at 99% (ρ = 0.311). This indicates that social risk is an important factor which influences employee intention to use e-HRM systems. Hence, **Hypothesis 14 is supported.**

Also, social risk is significantly influence the perceived risk from using e-HRM technology (ρ = 0. 336, P < 0.05). Hence, **Hypothesis 17 is supported.**

- **Communication Discussion**

The results explained that there is a relationship between communication and perceived usefulness (ρ = 0.378, P < 0.05), perceived ease of use (ρ = 0.334, P < 0.05), attitude (ρ = 0.332, P < 0.05), IT experience (ρ = 0.235, P < 0.05), intention (ρ = 0.328, P < 0.05), system security (ρ = 0.356, P < 0.05), time performance(ρ = 0.205, P < 0.05), perceived risk (ρ = 0.137, P < 0.05), organization role (ρ = 0.283, P < 0.05), and social risk (ρ = 0.342, P < 0.05).

Intention to use e-HRM technology has a relationship with communication which is significant at 99% (ρ = 0.328). This indicates that communication can influence employee intention to use e-HRM systems. Hence, **Hypothesis 18 is supported.**

4.5 e-HRM Adoption Framework in Palestine

Based on the results of hypotheses, the researcher explains the e-HRM technology adoption framework in Palestine. The following table summarizes the results of hypotheses between factors:

Table (4-16): Correlations between Factors Influencing e-HRM Technology.

OR	PR	INT	ATT	EOU	PU	
		H7 *	H6 *			**Usefulness**
		H--	H9 *		H8 *	**Ease of use**
		H13 *				**Attitude**
H--	H5					**IT experience**
						Intention
	H4 *	H--			H1 *	**System security**
				H3 *	H2 *	**Time**
			H11 *	H10 *	H12 *	**Perceived risk**
		H15 *			H16 *	**Organization roles**
	H17 *	H14 *				**Social risk**
		H18 *				**Communication**

*: Supported hypothesis. H--: Strong relationship.

Appendix B shows full details about these relationships between factors (Table 33).

Depending on the previous table, e-HRM Technology Adoption Framework in Palestine is:

Figure (4-1): e-HRM Technology Adoption Framework in Palestine.

Chapter Five

Conclusion and Recommendations

Chapter Five

Conclusions and Recommendations

This chapter summarizes the research results and presents the conclusion. It also presents the recommendations are on the research findings in order to develop and adopt e-HRM technology in Palestine. In addition, this chapter discusses the research contribution to current literature and the suggestions of conducting future studies.

5.1 Conclusions

This research aims to investigate Factors Affecting e-HRM Technology Adoption in Palestine Service Sector, and then introduce e-HRM technology adoption framework which can assess the service sector to spread this developed technology among Palestinian organizations and companies.

Research framework was conceptualized via reviewing related Literature and experts opinions in the design process. The research framework depends on Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Yale model of Communication and Persuasion.

The research utilized both qualitative and quantitative research methodology. Qualitative data were collected via interviews with IT specialists and specific HR managers. Furthermore, the quantitative data were gathered from a random sample of n=600 from Palestinian HR managers, IT managers, department managers, and employees via a survey

that was developed for this purpose. We retrieved n=490 questionnaires with a response rate of 82%.

In addition, this study covers eight specializations in Palestinian service sector namely Banks, Government, Hospitals, Insurance, Internet Providers, Logistics, Telecommunication, and Universities.

The research questionnaire was collected, coded, and entered in to (SPSS v 21) in order to examine factors affecting the adoption of e-HRM technology in service sector companies in Palestine. Various statistical analysis tools were employed such as frequency, means, percentages, in order to answer and test the research questions and hypotheses.

Results indicate that perceived ease of use, attitude, intention, and communication are the most significant factors influencing e-HRM adoption in Palestine. Whereas perceived risk, system security, organizations role, and availability of resources are influencing e-HRM technology adoption in less degree.

Based on the research findings, Palestinian organizations should work on formulating new strategies, developing their operational process, introducing services with high quality, and coordinating with other entities such as ICT companies and government that would be helpful in achieving employees and managers trust in order to spreading e-HRM technology among Palestinian society.

5.2 Recommendations

The service sector in Palestine needs more effort in order to adopt different technology aspects to complete work in efficiency manner. Organizations and companies should focus on four main fields to develop and spread technology usage among employees. These fields include formulating and implementing new strategies seeking benefit from technology advancement, developing the operational process and technology background and promoting telecommunication and information sector in Palestine, and introducing high quality e-HRM systems. Each field is discussed on follows:

Formulating and Implementing e-HRM Technology Strategies

Depending on research results the Palestinian organizations do not have clear strategies to adopt e-HRM technology. Also, organizations roles are limited in defining and offering suitable e-HRM services and should adopt new rules to motivate and encourage employees to use technology effectively. It worth mentioning that formulating e-HRM technology strategy is an important objective for organizations in order to improve company position and implementing new technology ideas to spread e-HRM technology in Palestine.

Formulating new strategy aims to adopt significant processes which focus on technology adoption within organization; formulation strategy depends on studying the internal and external factors affecting e-HRM

technology. External factors include governmental regulations, environmental issues, technological capabilities, economic scale, establishing cost, etc. Perceiving the factors that affect e-HRM adoption will help the companies determine and study all external factors affecting technology adoption.

On the other hand, this research contains company roles which are an example of internal factors which can help companies to understand their weaknesses and strengths according to managers and employees viewpoints. In addition, employees training and availability of necessary IT resources constitute part of internal factors that affecting e-HRM technology adoption .It is an important to establish legal, legislative, and enforcement system that protect the process of implementing e-HRM strategies in Palestine.

In addition, many of Palestinian organization do not have separated HRM department and technical department, this affecting the interest on issues related to HR and technical aspects within the organization. For example, hospital and logistics companies do not care about HR and technical issues and they only focused on their core business and their customer more than their employees.

As a result the companies should balance between the interest of customers and employees, because the employees constitute an important part of the working processes not less than the importance of customers in achieving company goals.

Research and development processes play a significant role in creating an environment that is able to accept the technology and able to evolve rapidly, this can be accomplished through focusing on the long-term objectives by inculcating a culture of development within the organization.

From the above ,Palestinian organizations must restructure and redesign some departments, and provide greater priority and attention to HRM and IT and technical part in order to organize work effectively in order to ensure the ability of the company to explain the e-HRM technology adoption in an integrated manner.

Developing the Operational Processes for e-HRM Technology

Dissemination new technology needs effort from all organization levels, operation managers should work and cooperate with top level management to support the following issues:

1. Companies should increase their role to achieve high level of e-HRM technology adoption, companies cannot be regarded technology usage as mandatory laws, involving employees in the development process become important to decline rejection and resistance to use new technology because employees invent the obstacles that make e-HRM system difficult to use, therefore organization should keep pace with technological advancement that benefit their business and not just imitate all the technical tools used in the similar companies only for fame and reputation.

2. Companies should explain to their employees the benefits of using e-HRM technology and make employees feel more secure.

3. Companies should focus on change employee's culture toward using technology, especially to use e-HRM technology even if their core business focuses on other aspects. Companies can use different tools to achieve this purpose by reward, seminars, media, incentives, advertising, newsletters, emails, etc.

4. Organizations should emphasize on young employees, and educated employees, beside their interest on completing their core business top-level managers should be thinking in innovative ways to facilitate the work through using appropriate technology. In addition, organizations should have more interest in females through providing them the necessary information and knowledge to use e-HRM system, where results show that the attitude of males toward e-HRM technology more than females.

5. Companies should emphasize on internet services and the provision of tools and adequate equipment, as well as employees training and continuous training courses.

6. Palestinian organizations should adopt all e-HRM services, it is notable from the research that many companies emphasis only on e-career and attendance monitoring systems.

7. Companies should adopt e-HRM system as an integrated system with all other existing electronic systems, such as accounting, payroll, and vacations system to ensure that all systems reconcile with each other and with the labor laws within the companies.

8. Strong relationship should be established between organizations and IT companies, create a partnership between these companies contributes significant diffusion of technology usage, so that they become able to get the new electronic systems from local companies with low prices and good quality.

9. Establish legal, legislative, and enforcement system that enforces employees to carry out all instructions and laws which is related to e-HRM services. Reward and punishment policy should be implemented.

Promoting Telecommunication and Information Sector

Telecommunications and information sector plays an effective and important role to adopt e-HRM technology in Palestinian service organizations. The importance of telecommunications and information sector demonstrate by establishing infrastructure that encourage companies to adopt new technological tools and building technological culture among society.

Telecommunication and information sector should promote efforts aiming to spread technology usage and should be accompanied by legal

framework to regulate relations between the various stakeholders and people.

Companies should focus on establishing strong partnership with Ministry of Telecommunication and Information to increase technological progress and discuss ways of development through mutual cooperation between them.

The emergence of new IT and software companies with distinctive capabilities contributes significantly to encourage a lot of companies to adopt e-HRM technology and other useful technical tools.

Introducing High Quality e-HRM Systems

Companies should pay more attention to technical issues beside operational issues; the technical issues should be suitable with organization objectives and goals because it plays a significant effort in e-HRM technology usage. The results indicate that perceived risk, perceived usefulness, perceived ease of use are affecting the adoption of e-HRM technology. Therefore, the company must consider all the things that affect the use of e-HRM system. Based on these findings, organization should focus on creating and adopting e-HRM systems which includes the following features:

1. User-friendly and simple.

2. Secure and reliable.

3. Available all the time.
4. Accessible from anywhere, and achieve the privacy for employees.
5. Support Arabic Language.
6. Not require a lot of effort and time.
7. Not requiring special software to be installed on computers.
8. Free of errors and risk.

Companies should focus on technical issues by working on the following area:

- Companies should play more attention to finding technical staff capable of handling with devices and systems and solving the problems that could face employees during work.
- Companies should keep e-HRM servers up all the time. In addition, companies should have backup servers and databases, if a malfunction occurs in the main server, there must be alternative to perform the same functions.
- Palestinian organizations should cooperate with Palestine Telecommunications Company (Paltel) and Ministry of Telecommunication and Information Technology to assist them to implement the necessary electronic systems.

- Organizations should establish comprehensive security system to protect e-HRM servers from viruses and hackers. Security systems should be announced to all employees to trust e-HRM technology
- Organizations should use advanced technologies for authentication process by determining the respective powers of employees and managers to access the information to ensure system confidentiality.

- **General Recommendations**

1. Palestinian Authority and donors have to increase funds and resources allocated to develop Palestinian ICT sector and other technological innovations like e-HRM technology.
2. Ministry of Telecommunication and Information should work on legislating and enforcing regulations and laws regarding the application of e-HRM technologies to ensure the existence of legal action to protect organizations information.
3. Intensify efforts that aim toward increasing Palestinian citizen's awareness and understanding regarding Information Technology tools and innovations like e-HRM technology.
4. Universities should focus on technical specialties (such as information technology, computer science, telecommunication and computer engineering, etc.) to ensure the existence of employees who are able to set up programs and technical tools to help organizations in their work.

5. Encourage service sector employees to participate in local, regional and international workshops and events in the field of technology usage and e-HRM technology adoption.

6. Organizations have to increase funds and resources allocated in technical research and development to keep pace with technological advancement in the business areas.

5.3 Research Contribution

The results of this research are of great importance to researchers, Palestinian service sector organizations, universities, and Ministry of Telecommunication and Information in developing e-HRM technology in Palestine from many aspects. Therefore, this research is considered to be a significant contribution in many areas such as Information Technology adoption, these contributions are:

1. Giving a clear assessment for e-HRM technology adoption level in Palestinian service sectors organizations.

2. Giving a clear understating of employees and managers perceptions and awareness toward e-HRM technology in Palestine.

3. Understanding the acceptance behavior toward e-HRM technology

4. Determining factors influencing e-HRM adoption in Palestine.

5. Introducing e-HRM adoption framework in Palestine which can effectively improve the rate of usage

6. Confirming Technology Acceptance Model, Theory of planned Behavior, and Yale Model of Communication and Persuasion results.

7. Confirming that Perceived Ease of Use, Attitude, Intention, and Communication as the most significant factors affecting e-HRM adoption in Palestine.

8. Clarifying the universities roles in providing employees with high capability and efficiency to lead the technological development in modern enterprises.

9. Advising the Palestinian organizations in formulating the right strategies which will increase e-HRM technology adopted in Palestine.

5.4 Future Studies

The following topics could be studied in the future, which may contribute in development of e-HRM technology in Palestine:

1. Studying the Adoption of e-HRM separately by each work specialties like bank, hospital, universities, etc.
2. Studding the Role of Ministry of Telecommunications and Information Technology, Palestine Telecommunications Company (Paltel), IT and software companies, and the government in improving and encouraging e-HRM Technology in Palestine.
3. Studding specific parts of e-HRM technology services, especially e-learning and e-recruitment.

References

Ajzen, I.: **The Theory of Planned Behaviour**, Organizational Behavior and Human Decision Processes, 1991.

Ajzen, I.: **Attitudes, personality and behavior**, Milton Keynes: Open University Press. 1988.

Alleyne, C., Kakabadse, A., &Kakabadse, N.: **Using the HR intranet: an exploratory analysis of its impact on managerial satisfaction with the HR function**, 2007.

Alleyne, C., Kakabadse, A., &Kakabadse, N.:" ***Using the HR intranet: an exploratory analysis of its impact on managerial satisfaction with the HR function***", **Pers**. Rev., 36, 2, 2007/ 295 – 310.

Armstrong, M.: **A Handbook of Human Resources Management Practice**, 8th edition. Praha: Grada, 2002.

ASAL Technologies Clients. Retrieved 15 Feb 2014 from http://www.asaltech.com/web/main.php?id=3.

Becker, B., &Huselid, M. A.: ***High performance work systems and firm performance,*** **Research in Personnel and Human Resources Management**, 16, 1998/ 53–101.

Braddy, P. W., Meade, A. W., &Kroustalis, C. M.:***Organizational recruitment website effects on viewers' perceptions of organizational culture***, **Journal of Business and Psychology**, 20, 2009/ 525–543.

Bueno, S., Salmeron, J., L.:" ***TAM-based success modeling in ERP***", **Interact**. Comp. 20, 6, 2008/ 515 – 523.

C. R. Kothari.: **Research Methodology: Methods and Techniques**. Second Edition, India. Collage of Commerce University of Rajasthan. 1990.

Cardy R. L. and Miller J. S.:**e-HR and Performance Management**. **The Brave New World of e-HR: Human Resources in the Digital Age**, San Francisco.2005.

Carter, L., & Belanger, F.:"***The influence of perceived characteristics of innovating on e-government adoption"***. **Electronic Journal of E-government**, 2, 2004/11-20.

Cascio, W.F., & Boudreau, J.W.: ***Investing in people: Financial impact of human resource initiatives***, **Upper Saddle River**, NJ: Financial Times: Pearson Education. 2008.

CedarCrestone, **HR technologies, service delivery approaches, and metrics**, Available at www.cedarcrestone.com/ research.php. Retrieved Feb, 2014.

Chapman, D. S., &Webster, J.:***The use of technologies in the recruiting, screening, and selection processes for job candidates***, **International Journal of Selection and Assessment**, **11**, 2003/ 113−120.

Cochran, W. G.: **Sampling Techniques**, Second Edition. New York: John Wiley and Sons, Inc.1963.

Davis, F. D., Bagozzi, R. P., &Warshaw, P. R.: ***User acceptance of computer technology: a comparison of two theoretical models***, **Management Science**, 35, 8, 1989/ 982-1003.

Davis, F. D.: ***Perceived usefulness, perceived ease of use, and user acceptance of information technology***, **MIS Quarterly,** *13*, 3, 1989/319-340.

Davis, F.D.: **A Technology Acceptance Model for empirically testing new end-user information systems: theory and results**, Doctoral Dissertation Thesis. 1986.

Dillon, A., & Morris, M.: **User acceptance of information technology: theories and models**, 1996.

Ding D., &Aktar S.: ***Organizational differences in managerial compensation and benefits in Chinese firms***, **The International Journal of Human Resource Management**, 17, (4). 2006.

Dulebohn J. H. and Marler J. H.: ***e-Compensation the Potential to Transform Practice***. **The Brave New World of eHR: Human Resources Management in the Digital Age**, San Francisco: Jossey Bass. 2005/ 166-189.

Dulebohn, J. H., &Marler, J. H.: ***E-Compensation: The potential to transform practice***, **the brave new world of e HR: Human resources management in the digital age**, San Francisco, 2005/ 166–189.

Eddy, E. R., Stone, D. L., Stone-Romero, E. F.: ***The effects of information management policies on reactions to human resource information systems: An***

integration of privacy and procedural justice perspectives, **Personnel Psychology,** 52, 1999/ 335–358.

Elizabeth T. Welsh E. T., Wanberg C. R., Brown K. G., and Simmering M. J., ***E-learning: emerging uses, empirical results and future directions***, **International Journal of Training and Development**, 7, 2003/ 245–258.

Farr J. L., Fairchild J., and Cassidy S. E., **Technology and Performance Appraisal**. The Psychology of Workplace Technology (eBook), East sussex: Routledge, 2013.

Gloet M, Berrell M.: **The dual paradigm nature of knowledge management: implications for achieving quality outcomes in human resource management**.2003.

Gueutal, H. G., Stone, D. L.: **The brave new world of e HR: Human resources management in the digital age**, San Francisco. 2005.

Harris, M. M., Van Hoye, G., &Lievens, F.: ***Privacy and attitudes toward Internet-based selection systems: A cross-cultural comparison,*** **International Journal of Selection and Assessment,** 11, 2003/ 230–236.

Hendrickson, A. R. ***Human resource information systems: Backbone technology of contemporary human resources.*** **Journal of Labor Research**, 24, 2003/ 382-394.

Hofstede, G. **Cultures and organizations: software of the mind**. London: McGraw Hill.1997.

Hovland, C. I., & Janis, I. L.: **Personality and persuasibility**, New Haven, CT: Yale University Press. 1959.

Hovland, C. I.: **Order of presentation in persuasion**, New Haven, CT: Yale University. 1957.

Irving R. H., Higgins C. A., and Safayeni F. R., ***Computerized Performance Gordon B. Davis Editor Monitoring Systems: Use and Abuse***, **Communications of the ACM**, 29, 1986/ 794-801.

Jaeger, A.M., Kanungo, R.N. and Srinivas, N. **A Review of Human Resource Management Successes in Developing Countries**, pp. 243–255. 1995.

Kavanagh, M. J., Thite, M., & Johnson, R. D.: ***Human resource information systems: basics, applications, and future directions***, **United States of America: Thousand Oaks: SAGE**. 2012.

Kehoe, J. F., Dickter, D. N., Russell, D. P., Sacco, J. M.: ***E-selection***, **The brave new world of e-HR: Human resource management in the digital age,** San Francisco: Jossey-Bass. 2005/ 54–103.

Keim, M., and Fritsch, K.: ***Extending relationship marketing to human resource management using the CaRM approach to personnel recruitment***, **Encyclopedia of human resource information systems**, 2008/406–412.

Kluckhohn, C., **Culture and Behavior**. New York: The Free Press of Glencoe.1962.

Kwon, T. H., &Zmud, R. W. ***Unifying the fragmented models of information systems implementation***. **Critical issues in information systems research**, 1987/ 227-251.

Lee, CH. S.: ***Effects of HRM practices on it usage*** .**Journal of Computer Information Systems**. 2009.

Lee, M., C.: ***Explaining and predicting users continuance intention toward e-learning: an extension of the expectation-confirmation model***, **Comp. Edu**., 54, 2010/ 506 – 516.

Lengnick-Hall, M. L., & Moritz, S.: ***The impact of e-HR on the human resource management function***, **Journal of Labor Research**, **24**, 3, 2003/ 365-379.

Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., Drake, B.: ***Strategic human resource management: The evolution of the field***, **Human Resource Management Review**, 19, 2, 2009/ 64–85.

Lengnick-Hall, ML., Moritz, S.: ***The impact of e-HR on the human resource management function*****, J. Lab.** Res., 24, 3, 2003/ 365 – 379.

Lepak D. P. and Snell S. A.: ***Virtual HR: Strategic human resource management in the 21st century***, **Human Resource Management Review**, 8(3): 215−234, 1998.

Liao, S., Shao, Y.P, Wang, H. Chen, A.: ***The adoption of virtual banking: an empirical study*****, International Journal of Information Management**, 19, 1999/63 – 74.

Liu, Y., Combs, J. G., Ketchen, D. J., Ireland, R. D.: ***The value of human resource management for organizational performance*.** **Business Horizons,** 2007/ 503–511.

Marler, J. H.: ***Making human resources strategic by going to the Net: reality or myth?***, **The International Journal of Human Resource Management**, 20, 515–527, 2009.

Martinsons, M. G.: ***Human resource management applications of knowledge-based systems***, **Int. J. Info. Manage**, **17**, 1, 1994/ 35 – 53.

McGuire, W. J.: ***Attitudes and attitude change***, **The handbook of social psychology**, **New York: Random House**. 1985/ 223−346.

McGuire,W. J.:***The nature of attitudes and attitude change***. **The handbook of social psychology**, 1969/ 136−314.

Ministry of Telecom amd Information Technology. National Strategy for Information Technology, Telecommunication, and Mail in Palestine. Ramallah – Palestine. 2013.

Olivas-Lujan, MR., Raminez, J., Zapata-Cantu, L.: ***E-HRM in Mexico: Adapting innovations for global competitiveness***, **Inter. J. Manpower**, **28**, 5, 2007/ 418-434.

Oliveira, T., & Martins, M. F. ***Understanding e-business adoption across industries in European countries*.** **Industrial Management and Data Systems**, 110, 2010/ 1337-1354.

Palestine Cellular Communications Co. (Jawwal). Business – Services. Retrieved 15 Feb 2014 from http://www.jawwal.ps./business/cat_services.php?langid=2.

Palestinian Central Bureau of Statistics. Ramallah – Palestine. 2013. Retrieved 17 March 2014 from http://www.pcbs.gov.ps/DesktopDefault.aspx?lang=ar.

Paltel Corporation. Business Services. Retrieved 23 Feb 2014 from http://www.paltel.ps/index.php?lang=en&page=F1136677126.

Reiter-Palmon, R., Brown, M., Sandall, D. L., Buboltz, C., &Nimps, T.: ***Development of an O*NET web-based job analysis and its implementation in the U.S. Navy: Lessons learned***, **Human Resource Management Review**, 16, 2006/ 294–309.

Rogers, J.: ***The birth of employee relationship management: Maximization of talent***. **Banker**, 11, 2008/ 48–49.

Ruël, H., Bondarouk T., and Looise J.: ***E-HRM: innovation or irritation. An explorative empirical study in five large companies on web-based HRM***, **Management Revue** 15(3): 364–381, 2004.

Ruel, H., Magalhaes, R., Chiemeke, C.: ***Human Resource Information System: An Integrated Research Agenda. Electronic HRM in Theory and Practice***. **Advanced Series in Management,** Emerald Group Publishing Limited, 8, 2011/ 21-39.

Ruel, HJM.,Bondarouk, TV., Van der Velde, M.: ***The contribution of e-HRM to HRM effectiveness: results from a quantitative study in a Dutch Ministry***. **Emp**.,29, 3, 2007/ 280 - 291.

Saunders, M.: **Research Methods for business students.** Second Edition. Essex: Pearson Educations.2007.

Schmiege, S. J., Bryan A, Klein W. M. P.: ***Distinctions between Worry and Perceived Risk in the Context of the Theory of Planned Behavior***, **Journal of Applied Social Psychology**, 39, 1, 2009/ 95–119.

Schuler, R. S., and Jackson, S. E. : ***Organizational strategy and organization level as determinants of human resource management practices***, **Human Resource Planning**, 10, 3, 1987.

Snell S. A., Stueber D., and Lepak D. P.: ***Virtual HR departments: Getting out of the middle***, **Center for Advanced Human Resource Studies**, Ithaca, NY: Cornell University, 01-08, 2001.

Stallings, W., & Brown, L.: **Computer Security: Principles and Practice**. Upper Saddle River, NJ: Pearson Prentice Hall.2008.

Stone, D. L., Lukaszewski, K. M., &Isenhour, L.: ***E-recruiting: Online strategies for attracting talent***, **The brave new world of e-HR**, San Francisco, CA: Jossey-Bass. 2005/22−53.

Stone, D. L., Stone-Romero, E. F., Lukaszewski, K.:***The functional and dysfunctional consequences of human resource information technology for organizations and their employees***, **Advances in human performance and cognitive engineering research**, Greenwich, CT: JAI Press. 2003/ 37−68.

Strohmeier, S.: ***Employee relationship management—realizing competitive advantage through information technology***, **Human Resource Management Review**. 2012.

Strohmeier, S.: ***Research in e-HRM: Review and implications*****, Human Resource Management Review, 17**, 2007/ 19−37.

Taylor, s., & Todd, P.A.: ***Understanding information technology usage: a test of competing Models*****, Information system research**, 6, 2,1995/144 – 176.

Teo, T. S. H., Lim, G. S., Fedric, S. A.: ***The adoption and diffusion of human resources information systems in Singapore***, **Asia Pacific Journal of Human Resources**, **45**, 1, 2001/ 44-62.

Triandis, H. C.: **Interpersonal behavior**. Monterey: Brooks/Cole.1977.

Troshani, I., Jerram, C., Hill, S. R. ***Exploring the public sector adoption of HRIS***, **Industrial Management and Data Systems,** 111(3), 2011/ 470- 488.

VarmaShiloa and Gopal R.: **The Implications of Implementing Electronic- Human Recourse**, 2011.

Venkatesh, V.: ***Determinants of perceived ease of use: integrating control, intrinsic Motivation, and Emotion into the Technology Acceptance Model***, **Info. Syst. Res**., **11**, 4, 2000/ 342–365.

Voermans, M., van Veldhoven, M.:***Attitude towards E-HRM: An empirical study at Philips***, **Personnel. Rev**., **36**, 6, 2007/ 887-902.

Wataniya Mobile. Products and Services. Retrieved o17 Feb 2014 from http://www.wataniyapalestine.com/Business/Services/?PageID=151&TemplateID=25.

Wong, Y.,Thite, M..: ***Information Security and Privacy in HRIS***, **Human Resource Information Systems. Basics, Applications, and Future Directions**, 1, 2008/ 395-407.

Wright, P. M., Dunford, B. B., and Snell, S. A.: ***Human resources and the resource-based view of the firm***, **Journal of Management**, **27**, 2001/ 701–721.

Yang, K. H., Lee, S. M., Lee, S. G. (). ***Adoption of information and communication technology: impact of technology types, organization resources and management style,*** **Industrial Management and Data Systems**, 107(9), 2007/ 1257-1275.

Yin, R.K.: **Case Study Research-Design and Methods**. Second Edition. Thousand Oaks, CA: sage publications.1994.

Zafar, J.: ***An Analysis of E-Human Resource Management Practices: A Case Study of State Bank of Pakistan***, **European Journal of Social Sciences** .Vol. 15, Number 1.2012.

Zheng. G & Morrison. M,: ***Enhancing Chinese SME performance through innovative HR practices***. **Personnel Review**, 38 (2). 2009.

Appendices

Appendix A: Personal Information Figures

Figure 1: Distribution of Gender.

Figure 2: Distribution of Age.

Figure 3: Distribution of Job Title.

Figure 4: Distribution of Educational Level.

Figure 5: Distribution of Educational Level.

Appendix B: Tables

Table (A1): Arbitrators and experts who reviewed the questionnaire

Organization Name	Position	Name
An-Najah University	Assistant Professor	**Dr. Mohammed Othman**
An-Najah University	Doctor	**Dr. Ayham Jaaron**
An-Najah University	Doctor	**Dr. Abdulfattah Shamleh**
Jawwal	HR Manager	**Rana Awaad**
Super Link	Sales and IT Dept.	**Rami Abu Duhair**
AL-Zaytona	HR Manager	**Tareq Sbouh**

Table (1): Descriptive of statistical differences among participants according to their ages

Std. Deviation	Mean	N	Age	Factors
.467	4.09	63	Less than 25 years	PU
.480	4.16	224	25 – 35 years	
.445	4.29	118	35 – 45 years	
.418	4.27	75	45 – 55 years	
.470	4.36	10	55 – 65 years	
.464	4.20	490	Total	
.588	4.21	63	Less than 25 years	PEOU
.534	4.28	224	25 – 35 years	
.478	4.41	118	35 – 45 years	
.542	4.34	75	45 – 55 years	
.704	4.23	10	55 – 65 years	
.535	4.31	490	Total	
.513	4.25	63	Less than 25 years	ATT
.487	4.20	224	25 – 35 years	
.484	4.30	118	35 – 45 years	
.448	4.31	75	45 – 55 years	
.635	4.18	10	55 – 65 years	
.488	4.24	490	Total	
.532	4.16	63	Less than 25 years	ITA
.548	4.11	224	25 – 35 years	
.550	4.08	118	35 – 45 years	
.589	4.04	75	45 – 55 years	
.553	4.00	10	55 – 65 years	
.552	4.10	490	Total	
.502	4.28	63	Less than 25 years	INT
.478	4.34	224	25 – 35 years	
.513	4.51	118	35 – 45 years	
.477	4.41	75	45 – 55 years	
.568	4.43	10	55 – 65 years	
.496	4.39	490	Total	
.610	3.87	63	Less than 25 years	SS
.513	3.96	224	25 – 35 years	
.496	4.17	118	35 – 45 years	
.537	4.07	75	45 – 55 years	
.626	3.88	10	55 – 65 years	
.537	4.01	490	Total	

Table (1): Descriptive of statistical differences among participants according to their ages (cont.)

Std. Deviation	Mean	N	Age	Factors
1.358	4.34	63	Less than 25 years	TIME
.479	4.17	224	25 – 35 years	
.565	4.22	118	35 – 45 years	
.585	4.18	75	45 – 55 years	
.731	4.03	10	55 – 65 years	
.693	4.20	490	Total	
.493	3.85	63	Less than 25 years	PR
.476	3.92	224	25 – 35 years	
.491	4.00	118	35 – 45 years	
.492	4.02	75	45 – 55 years	
.528	3.83	10	55 – 65 years	
.487	3.95	490	Total	
.572	4.16	63	Less than 25 years	OR
.593	4.11	224	25 – 35 years	
.598	4.10	118	35 – 45 years	
.744	3.96	75	45 – 55 years	
.671	4.28	10	55 – 65 years	
.619	4.10	490	Total	
.564	4.15	63	Less than 25 years	SR
.636	4.15	224	25 – 35 years	
.578	4.30	118	35 – 45 years	
.645	4.24	75	45 – 55 years	
.872	4.07	10	55 – 65 years	
.622	4.20	490	Total	
.639	4.29	63	Less than 25 years	COMM
.793	4.19	224	25 – 35 years	
.823	4.28	118	35 – 45 years	
.807	4.25	75	45 – 55 years	
1.039	3.95	10	55 – 65 years	
.789	4.23	490	Total	
.361	4.15	63	Less than 25 years	Total Score
.328	4.14	224	25 – 35 years	
.312	4.24	118	35 – 45 years	
.307	4.19	75	45 – 55 years	
.424	4.11	10	55 – 65 years	
.329	4.18	490	Total	

Table (2): ANOVA Test for age differences among participants

Sig.	F		Factors
.018	3.019	Between Groups	**PU**
.116	1.864	Between Groups	**PEOU**
.249	1.353	Between Groups	**ATT**
.684	.570	Between Groups	**ITA**
.012	3.234	Between Groups	**INT**
.001	4.829	Between Groups	**SS**
.436	.948	Between Groups	**TIME**
.139	1.744	Between Groups	**PR**
.257	1.333	Between Groups	**OR**
.212	1.465	Between Groups	**SR**
.559	.750	Between Groups	**COMM**
.095	1.991	Between Groups	**Total Score**

Table (3): LSD Test for age differences among participants (Perceived Usefulness)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.252	-.075-	25 – 35 years	Less than 25 years	**PU**
.006	-.199-*	35 – 45 years		
.024	-.178-*	45 – 55 years		
.084	-.271-	55 – 65 years		
.252	.075	Less than 25 years	25 – 35 years	
.018	-.124-*	35 – 45 years		
.096	-.102-	45 – 55 years		
.189	-.196-	55 – 65 years		
.006	.199*	Less than 25 years	35 – 45 years	
.018	.124*	25 – 35 years		
.752	.021	45 – 55 years		
.636	-.072-	55 – 65 years		
.024	.178*	Less than 25 years	45 – 55 years	
.096	.102	25 – 35 years		
.752	-.021-	35 – 45 years		
.547	-.093-	55 – 65 years		
.084	.271	Less than 25 years	55 – 65 years	
.189	.196	25 – 35 years		
.636	.072	35 – 45 years		
.547	.093	45 – 55 years		

*. The mean difference is significant at the 0.05 level.

Table (4): LSD Test for age differences among participants (Intention)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.401	-.059-	25 – 35 years	Less than 25 years	INT
.003	-.231-*	35 – 45 years		
.114	-.133-	45 – 55 years		
.361	-.153-	55 – 65 years		
.401	.059	Less than 25 years	25 – 35 years	
.002	-.172-*	35 – 45 years		
.259	-.074-	45 – 55 years		
.554	-.094-	55 – 65 years		
.003	.231*	Less than 25 years	35 – 45 years	
.002	.172*	25 – 35 years		
.178	.098	45 – 55 years		
.630	.078	55 – 65 years		
.114	.133	Less than 25 years	45 – 55 years	
.259	.074	25 – 35 years		
.178	-.098-	35 – 45 years		
.904	-.020-	55 – 65 years		
.361	.153	Less than 25 years	55 – 65 years	
.554	.094	25 – 35 years		
.630	-.078-	35 – 45 years		
.904	.020	45 – 55 years		

*. The mean difference is significant at the 0.05 level.

Table (5): LSD Test for age differences among participants (System Security)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.235	-.090-	25 – 35 years	Less than 25 years	SS
.000	-.303-*	35 – 45 years		
.024	-.204-*	45 – 55 years		
.974	-.006-	55 – 65 years		
.235	.090	Less than 25 years	25 – 35 years	
.000	-.213-*	35 – 45 years		
.105	-.115-	45 – 55 years		
.624	.084	55 – 65 years		
.000	.303*	Less than 25 years	35 – 45 years	
.000	.213*	25 – 35 years		
.209	.098	45 – 55 years		
.089	.297	55 – 65 years		
.024	.204*	Less than 25 years	45 – 55 years	
.105	.115	25 – 35 years		
.209	-.098-	35 – 45 years		
.266	.198	55 – 65 years		
.974	.006	Less than 25 years	55 – 65 years	
.624	-.084-	25 – 35 years		
.089	-.297-	35 – 45 years		
.266	-.198-	45 – 55 years		

*. The mean difference is significant at the 0.05 level.

Table (6): Descriptive of statistical differences among participants according to their Job Title

Std. Deviation	Mean	N	Job Title	Factors
.461	4.15	307	Employee	PU
.406	4.46	19	HR Manager	
.412	4.32	27	Top Manager	
.448	4.33	14	IT and Technical Manager	
.473	4.26	123	Department Manager	
.464	4.20	490	Total	
.540	4.24	307	Employee	PEOU
.498	4.44	19	HR Manager	
.518	4.48	27	Top Manager	
.402	4.31	14	IT and Technical Manager	
.518	4.43	123	Department Manager	
.535	4.31	490	Total	
.502	4.19	307	Employee	ATT
.444	4.37	19	HR Manager	
.447	4.26	27	Top Manager	
.498	4.38	14	IT and Technical Manager	
.450	4.34	123	Department Manager	
.488	4.24	490	Total	
.551	4.08	307	Employee	ITA
.586	4.12	19	HR Manager	
.438	4.32	27	Top Manager	
.704	3.84	14	IT and Technical Manager	
.543	4.11	123	Department Manager	
.552	4.10	490	Total	
.499	4.32	307	Employee	INT
.524	4.46	19	HR Manager	
.434	4.56	27	Top Manager	
.396	4.60	14	IT and Technical Manager	
.483	4.47	123	Department Manager	
.496	4.39	490	Total	
.557	3.95	307	Employee	SS
.438	4.05	19	HR Manager	
.534	4.06	27	Top Manager	
.488	4.13	14	IT and Technical Manager	
.484	4.14	123	Department Manager	
.537	4.01	490	Total	

Table (6): Descriptive of statistical differences among participants Job Title (cont.)

Std. Deviation	Mean	N	Job Title	Factors
.761	4.22	307	Employee	TIME
.604	3.95	19	HR Manager	
.826	4.05	27	Top Manager	
.472	4.20	14	IT and Technical Manager	
.479	4.24	123	Department Manager	
.693	4.20	490	Total	
.490	3.91	307	Employee	PR
.427	3.86	19	HR Manager	
.590	4.06	27	Top Manager	
.475	3.93	14	IT and Technical Manager	
.456	4.04	123	Department Manager	
.487	3.95	490	Total	
.613	4.05	307	Employee	OR
.669	4.37	19	HR Manager	
.476	4.41	27	Top Manager	
.825	4.04	14	IT and Technical Manager	
.606	4.12	123	Department Manager	
.619	4.10	490	Total	
.633	4.18	307	Employee	SR
.670	3.82	19	HR Manager	
.637	4.01	27	Top Manager	
.509	4.26	14	IT and Technical Manager	
.562	4.33	123	Department Manager	
.622	4.20	490	Total	
.809	4.21	307	Employee	COMM
.769	4.29	19	HR Manager	
.746	4.04	27	Top Manager	
1.046	3.96	14	IT and Technical Manager	
.707	4.35	123	Department Manager	
.789	4.23	490	Total	
.338	4.14	307	Employee	Total Score
.292	4.20	19	HR Manager	
.313	4.23	27	Top Manager	
.333	4.18	14	IT and Technical Manager	
.301	4.26	123	Department Manager	
.329	4.18	490	Total	

Table (7): ANOVA Test for job title differences among participants

Sig.	F		Factors
.007	3.561	Between Groups	**PU**
.003	4.002	Between Groups	**PEOU**
.041	2.518	Between Groups	**ATT**
.096	1.985	Between Groups	**ITA**
.005	3.722	Between Groups	**INT**
.015	3.133	Between Groups	**SS**
.354	1.103	Between Groups	**TIME**
.079	2.109	Between Groups	**PR**
.012	3.256	Between Groups	**OR**
.005	3.761	Between Groups	**SR**
.184	1.560	Between Groups	**COMM**
.014	3.138	Between Groups	**Total Score**

Table (8): LSD Test for job title differences among participants (Perceived Usefulness)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.004	-.311-*	HR Manager	Employee	**PU**
.071	-.167-	Top Manager		
.160	-.177-	IT and Technical Manager		
.035	-.103-*	Department Manager		
.004	.311*	Employee	HR Manager	
.294	.145	Top Manager		
.406	.135	IT and Technical Manager		
.067	.208	Department Manager		
.071	.167	Employee	Top Manager	
.294	-.145-	HR Manager		
.947	-.010-	IT and Technical Manager		
.518	.063	Department Manager		
.160	.177	Employee	IT and Technical Manager	
.406	-.135-	HR Manager		
.947	.010	Top Manager		
.572	.073	Department Manager		
.035	.103*	Employee	Department Manager	
.067	-.208-	HR Manager		
.518	-.063-	Top Manager		
.572	-.073-	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (9): LSD Test job title differences among participants (Perceived Ease of Use)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.107	-.202-	HR Manager	Employee	PEOU
.021	-.245-*	Top Manager		
.614	-.073-	IT and Technical Manager		
.001	-.191-*	Department Manager		
.107	.202	Employee	HR Manager	
.787	-.043-	Top Manager		
.489	.129	IT and Technical Manager		
.936	.010	Department Manager		
.021	.245*	Employee	Top Manager	
.787	.043	HR Manager		
.324	.172	IT and Technical Manager		
.635	.053	Department Manager		
.614	.073	Employee	IT and Technical Manager	
.489	-.129-	HR Manager		
.324	-.172-	Top Manager		
.427	-.119-	Department Manager		
.001	.191*	Employee	Department Manager	
.936	-.010-	HR Manager		
.635	-.053-	Top Manager		
.427	.119	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (10): LSD Test for job title differences among participants (Attitude)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.126	-.175-	HR Manager	Employee	ATT
.496	-.066-	Top Manager		
.170	-.182-	IT and Technical Manager		
.006	-.142-*	Department Manager		
.126	.175	Employee	HR Manager	
.452	.109	Top Manager		
.969	-.007-	IT and Technical Manager		
.782	.033	Department Manager		
.496	.066	Employee	Top Manager	
.452	-.109-	HR Manager		
.469	-.116-	IT and Technical Manager		
.460	-.076-	Department Manager		
.170	.182	Employee	IT and Technical Manager	
.969	.007	HR Manager		
.469	.116	Top Manager		
.772	.040	Department Manager		
.006	.142*	Employee	Department Manager	
.782	-.033-	HR Manager		
.460	.076	Top Manager		
.772	-.040-	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (11): LSD Test for job title differences among participants (Intention)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.253	-.133-	HR Manager	Employee	INT
.019	-.232-*	Top Manager		
.043	-.272-*	IT and Technical Manager		
.005	-.148-*	Department Manager		
.253	.133	Employee	HR Manager	
.499	-.099-	Top Manager		
.421	-.139-	IT and Technical Manager		
.899	-.015-	Department Manager		
.019	.232*	Employee	Top Manager	
.499	.099	HR Manager		
.806	-.040-	IT and Technical Manager		
.421	.084	Department Manager		
.043	.272*	Employee	IT and Technical Manager	
.421	.139	HR Manager		
.806	.040	Top Manager		
.372	.124	Department Manager		
.005	.148*	Employee	Department Manager	
.899	.015	HR Manager		
.421	-.084-	Top Manager		
.372	-.124-	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (12): LSD Test for job title differences among participants (System Security)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.420	-.101-	HR Manager	Employee	SS
.329	-.104-	Top Manager		
.232	-.174-	IT and Technical Manager		
.001	-.193-*	Department Manager		
.420	.101	Employee	HR Manager	
.985	-.003-	Top Manager		
.700	-.072-	IT and Technical Manager		
.485	-.092-	Department Manager		
.329	.104	Employee	Top Manager	
.985	.003	HR Manager		
.692	-.069-	IT and Technical Manager		
.433	-.089-	Department Manager		
.232	.174	Employee	IT and Technical Manager	
.700	.072	HR Manager		
.692	.069	Top Manager		
.898	-.019-	Department Manager		
.001	.193*	Employee	Department Manager	
.485	.092	HR Manager		
.433	.089	Top Manager		
.898	.019	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (13): LSD Test for job title differences among participants (Organization Roles)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.027	-.322-*	HR Manager	Employee	OR
.004	-.361-*	Top Manager		
.949	.011	IT and Technical Manager		
.262	-.074-	Department Manager		
.027	.322*	Employee	HR Manager	
.832	-.039-	Top Manager		
.124	.333	IT and Technical Manager		
.101	.249	Department Manager		
.004	.361*	Employee	Top Manager	
.832	.039	HR Manager		
.066	.372	IT and Technical Manager		
.028	.287*	Department Manager		
.949	-.011-	Employee	IT and Technical Manager	
.124	-.333-	HR Manager		
.066	-.372-	Top Manager		
.627	-.084-	Department Manager		
.262	.074	Employee	Department Manager	
.101	-.249-	HR Manager		
.028	-.287-*	Top Manager		
.627	.084	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level.

Table (14): LSD Test for job title differences among participants (Social Risk)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.014	.360*	HR Manager	Employee	SR
.163	.172	Top Manager		
.645	-.077-	IT and Technical Manager		
.033	-.141-*	Department Manager		
.014	-.360-*	Employee	HR Manager	
.308	-.188-	Top Manager		
.044	-.437-*	IT and Technical Manager		
.001	-.501-*	Department Manager		
.163	-.172-	Employee	Top Manager	
.308	.188	HR Manager		
.218	-.250-	IT and Technical Manager		
.017	-.313-*	Department Manager		
.645	.077	Employee	IT and Technical Manager	
.044	.437*	HR Manager		
.218	.250	Top Manager		
.715	-.063-	Department Manager		
.033	.141*	Employee	Department Manager	
.001	.501*	HR Manager		
.017	.313*	Top Manager		
.715	.063	IT and Technical Manager		

*. The mean difference is significant at the 0.05 level

Table (15): Descriptive of statistical differences according to the sectors.

Std. Deviation	Mean	N	Job Title	Factors
.463	4.24	76	University	PU
.451	4.23	83	Bank	
.489	4.10	59	Hospital	
.424	4.25	79	Communication	
.434	4.33	42	Internet Provider	
.506	4.21	86	Governmental	
.405	3.98	53	logistics	
.430	4.42	12	Insurance	
.464	4.20	490	Total	
.519	4.37	76	University	PEOU
.550	4.34	83	Bank	
.556	4.30	59	Hospital	
.502	4.19	79	Communication	
.466	4.48	42	Internet Provider	
.529	4.30	86	Governmental	
.587	4.23	53	logistics	
.594	4.31	12	Insurance	
.535	4.31	490	Total	
.446	4.38	76	University	ATT
.456	4.23	83	Bank	
.477	4.19	59	Hospital	
.518	4.15	79	Communication	
.528	4.27	42	Internet Provider	
.466	4.33	86	Governmental	
.499	4.07	53	logistics	
.456	4.42	12	Insurance	
.488	4.24	490	Total	
.590	4.05	76	University	ITA
.511	4.22	83	Bank	
.592	3.80	59	Hospital	
.452	4.21	79	Communication	
.501	4.37	42	Internet Provider	
.560	4.03	86	Governmental	
.509	4.06	53	logistics	
.547	3.92	12	Insurance	
.552	4.10	490	Total	

Table (15): Descriptive of statistical differences according to the sectors (cont.)

Std. Deviation	Mean	N	Job Title	Factors
.471	4.43	76	University	INT
.499	4.43	83	Bank	
.554	4.47	59	Hospital	
.477	4.30	79	Communication	
.504	4.55	42	Internet Provider	
.496	4.29	86	Governmental	
.451	4.33	53	Logistics	
.426	4.33	12	Insurance	
.496	4.39	490	Total	
.596	4.15	76	University	SS
.471	3.98	83	Bank	
.551	3.97	59	Hospital	
.480	3.93	79	Communication	
.545	4.18	42	Internet Provider	
.548	4.01	86	Governmental	
.585	3.93	53	Logistics	
.361	4.02	12	Insurance	
.537	4.01	490	Total	
.587	4.14	76	University	TIME
.478	4.19	83	Bank	
.582	4.21	59	Hospital	
.504	4.22	79	Communication	
.533	4.30	42	Internet Provider	
1.151	4.33	86	Governmental	
.566	4.02	53	Logistics	
.708	4.06	12	Insurance	
.693	4.20	490	Total	
.508	4.07	76	University	PR
.472	3.92	83	Bank	
.579	3.95	59	Hospital	
.406	3.89	79	Communication	
.501	3.80	42	Internet Provider	
.494	3.98	86	Governmental	
.453	3.93	53	Logistics	
.401	4.06	12	Insurance	
.487	3.95	490	Total	

Table (15): Descriptive of statistical differences according to the sectors (cont.)

Std. Deviation	Mean	N	Job Title	Factors
.709	4.03	76	University	OR
.543	4.11	83	Bank	
.668	3.92	59	Hospital	
.514	4.22	79	Communication	
.730	4.29	42	Internet Provider	
.622	4.08	86	Governmental	
.571	4.04	53	logistics	
.469	4.17	12	Insurance	
.619	4.10	490	Total	
.667	4.25	76	University	SR
.569	4.22	83	Bank	
.613	4.32	59	Hospital	
.625	4.06	79	Communication	
.565	4.39	42	Internet Provider	
.632	4.14	86	Governmental	
.626	4.06	53	logistics	
.566	4.39	12	Insurance	
.622	4.20	490	Total	
.893	4.25	76	University	COMM
.690	4.21	83	Bank	
.883	4.16	59	Hospital	
.813	4.12	79	Communication	
.681	4.50	42	Internet Provider	
.728	4.31	86	Governmental	
.802	4.12	53	logistics	
.722	4.21	12	Insurance	
.789	4.23	490	Total	
.360	4.22	76	University	Tale Score
.308	4.19	83	Bank	
.304	4.13	59	Hospital	
.311	4.14	79	Communication	
.331	4.31	42	Internet Provider	
.327	4.18	86	Governmental	
.337	4.07	53	logistics	
.349	4.21	12	Insurance	
.329	4.18	490	Total	

Table (16): ANOVA Test for differences among the sectors

Sig.	F		Factors
.002	3.254	Between Groups	**PU**
.178	1.465	Between Groups	**PEOU**
.003	3.145	Between Groups	**ATT**
.000	5.765	Between Groups	**ITA**
.037	2.150	Between Groups	**INT**
.085	1.802	Between Groups	**SS**
.274	1.249	Between Groups	**TIME**
.131	1.607	Between Groups	**PR**
.063	1.932	Between Groups	**OR**
.033	2.204	Between Groups	**SR**
.265	1.266	Between Groups	**COMM**
.022	2.360	Between Groups	**Total Score**

Table (17): LSD Test for sector differences among participants (Perceived Usefulness)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.853	.013	Bank	University	PU
.072	.143	Hospital		
.963	-.003-	Communication		
.314	-.089-	Internet Provider		
.669	.031	Governmental		
.002	.260*	logistics		
.226	-.172-	Insurance		
.853	-.013-	University	Bank	
.096	.130	Hospital		
.815	-.017-	Communication		
.239	-.102-	Internet Provider		
.805	.017	Governmental		
.002	.246*	logistics		
.190	-.185-	Insurance		
.072	-.143-	University	Hospital	
.096	-.130-	Bank		
.063	-.146-	Communication		
.012	-.232-*	Internet Provider		
.147	-.112-	Governmental		
.178	.117	logistics		
.030	-.315-*	Insurance		
.963	.003	University	Communication	
.815	.017	Bank		
.063	.146	Hospital		
.329	-.085-	Internet Provider		
.632	.034	Governmental		
.001	.263*	logistics		
.234	-.169-	Insurance		
.314	.089	University	Internet Provider	
.239	.102	Bank		
.012	.232*	Hospital		
.329	.085	Communication		
.166	.119	Governmental		
.000	.348*	logistics		
.578	-.083-	Insurance		
.669	-.031-	University	Governmental	
.805	-.017-	Bank		
.147	.112	Hospital		
.632	-.034-	Communication		
.166	-.119-	Internet Provider		
.004	.229*	logistics		
.151	-.203-	Insurance		

Table (17): LSD Test for sector differences among participants (Perceived Usefulness) (Cont.)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.002	-.260-*	University	logistics	PU
.002	-.246-*	Bank		
.178	-.117-	Hospital		
.001	-.263-*	Communication		
.000	-.348-*	Internet Provider		
.004	-.229-*	Governmental		
.003	-.432-*	Insurance		
.226	.172	University	Insurance	
.190	.185	Bank		
.030	.315*	Hospital		
.234	.169	Communication		
.578	.083	Internet Provider		
.151	.203	Governmental		
.003	.432*	logistics		

*. The mean difference is significant at the 0.05 level

Table (18): LSD Test for sector differences among participants (Attitude)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.055	.147	Bank	University	ATT
.020	.195*	Hospital		
.002	.236*	Communication		
.219	.114	Internet Provider		
.532	.047	Governmental		
.000	.311*	logistics		
.814	-.035-	Insurance		
.055	-.147-	University	Bank	
.554	.048	Hospital		
.237	.089	Communication		
.718	-.033-	Internet Provider		
.179	-.099-	Governmental		
.052	.164	logistics		
.221	-.182-	Insurance		
.020	-.195-*	University	Hospital	
.554	-.048-	Bank		
.621	.041	Communication		
.402	-.081-	Internet Provider		
.069	-.148-	Governmental		
.204	.116	logistics		
.131	-.230-	Insurance		
.002	-.236-*	University	Communication	
.237	-.089-	Bank		
.621	-.041-	Hospital		
.183	-.122-	Internet Provider		
.012	-.189-*	Governmental		
.381	.075	logistics		
.069	-.271-	Insurance		
.219	-.114-	University	Internet Provider	
.718	.033	Bank		
.402	.081	Hospital		
.183	.122	Communication		
.463	-.066-	Governmental		
.048	.197*	logistics		
.344	-.149-	Insurance		
.532	-.047-	University	Governmental	
.179	.099	Bank		
.069	.148	Hospital		
.012	.189*	Communication		
.463	.066	Internet Provider		
.002	.264*	logistics		
.578	-.082-	Insurance		

Table (18): LSD Test for sector differences among participants (Attitude) (Cont.)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.000	-.311-*	University	logistics	ATT
.052	-.164-	Bank		
.204	-.116-	Hospital		
.381	-.075-	Communication		
.048	-.197-*	Internet Provider		
.002	-.264-*	Governmental		
.025	-.346-*	Insurance		
.814	.035	University	Insurance	
.221	.182	Bank		
.131	.230	Hospital		
.069	.271	Communication		
.344	.149	Internet Provider		
.578	.082	Governmental		
.025	.346*	logistics		

*. The mean difference is significant at the 0.05 level.

Table (19): LSD Test for sector differences among participants (Availability of IT Resources)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.041	-.174-*	Bank	University	ITA
.008	.245*	Hospital		
.058	-.163-	Communication		
.002	-.323-*	Internet Provider		
.894	.011	Governmental		
.873	-.015-	logistics		
.436	.129	Insurance		
.041	.174*	University	Bank	
.000	.419*	Hospital		
.896	.011	Communication		
.141	-.149-	Internet Provider		
.025	.185*	Governmental		
.092	.159	logistics		
.067	.303	Insurance		
.008	-.245-*	University	Hospital	
.000	-.419-*	Bank		
.000	-.408-*	Communication		
.000	-.568-*	Internet Provider		
.010	-.234-*	Governmental		
.010	-.260-*	logistics		
.494	-.116-	Insurance		
.058	.163	University	Communication	
.896	-.011-	Bank		
.000	.408*	Hospital		
.117	-.160-	Internet Provider		
.037	.174*	Governmental		
.120	.148	logistics		
.078	.292	Insurance		
.002	.323*	University	Internet Provider	
.141	.149	Bank		
.000	.568*	Hospital		
.117	.160	Communication		
.001	.334*	Governmental		
.005	.308*	logistics		
.010	.452*	Insurance		
.894	-.174-*	University	Governmental	
.025	.245*	Bank		
.010	-.163-	Hospital		
.037	-.323-*	Communication		
.001	.011	Internet Provider		
.777	-.015-	logistics		
.473	.129	Insurance		

Table (19): LSD Test for sector differences among participants (Availability of IT Resources) (Cont.)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.873	.015	University	logistics	ITA
.092	-.159-	Bank		
.010	.260*	Hospital		
.120	-.148-	Communication		
.005	-.308-*	Internet Provider		
.777	.026	Governmental		
.397	.145	Insurance		
.436	-.129-	University	Insurance	
.067	-.303-	Bank		
.494	.116	Hospital		
.078	-.292-	Communication		
.010	-.452-*	Internet Provider		
.473	-.118-	Governmental		
.397	-.145-	logistics		

*. The mean difference is significant at the 0.05 level.

Table (20): LSD Test for sector differences among participants (Intention)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.995	.000	Bank	University	INT
.636	-.040-	Hospital		
.079	.139	Communication		
.231	-.113-	Internet Provider		
.058	.147	Governmental		
.224	.107	logistics		
.509	.101	Insurance		
.995	.000	University	Bank	
.626	-.041-	Hospital		
.074	.138	Communication		
.222	-.114-	Internet Provider		
.053	.147	Governmental		
.218	.107	logistics		
.509	.100	Insurance		
.636	.040	University	Hospital	
.626	.041	Bank		
.035	.179*	Communication		
.462	-.073-	Internet Provider		
.024	.188*	Governmental		
.114	.148	logistics		
.365	.141	Insurance		
.079	-.139-	University	Communication	
.074	-.138-	Bank		
.035	-.179-*	Hospital		
.007	-.252-*	Internet Provider		
.911	.009	Governmental		
.717	-.032-	logistics		
.803	-.038-	Insurance		
.231	.113	University	Internet Provider	
.222	.114	Bank		
.462	.073	Hospital		
.007	.252*	Communication		
.005	.261*	Governmental		
.030	.221*	logistics		
.184	.214	Insurance		
.058	-.147-	University	Governmental	
.053	-.147-	Bank		
.024	-.188-*	Hospital		
.911	-.009-	Communication		
.005	-.261-*	Internet Provider		
.640	-.040-	logistics		
.759	-.047-	Insurance		

Table (20): LSD Test for sector differences among participants (Intention) (Cont.)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.224	-.107-	University	logistics	ITA
.218	-.107-	Bank		
.114	-.148-	Hospital		
.717	.032	Communication		
.030	-.221-*	Internet Provider		
.640	.040	Governmental		
.968	-.006-	Insurance		
.509	-.101-	University	Insurance	
.509	-.100-	Bank		
.365	-.141-	Hospital		
.803	.038	Communication		
.184	-.214-	Internet Provider		
.759	.047	Governmental		
.968	.006	logistics		

*. The mean difference is significant at the 0.05 level.

Table (21): LSD Test for sector differences among participants (Social Risk)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.735	.033	Bank	University	SR
.501	-.072-	Hospital		
.060	.187	Communication		
.242	-.139-	Internet Provider		
.272	.107	Governmental		
.080	.193	logistics		
.468	-.139-	Insurance		
.735	-.033-	University	Bank	
.317	-.105-	Hospital		
.113	.154	Communication		
.141	-.172-	Internet Provider		
.439	.073	Governmental		
.140	.160	logistics		
.367	-.172-	Insurance		
.501	.072	University	Hospital	
.317	.105	Bank		
.015	.259*	Communication		
.591	-.067-	Internet Provider		
.087	.179	Governmental		
.023	.265*	logistics		
.732	-.067-	Insurance		
.060	-.187-	University	Communication	
.113	-.154-	Bank		
.015	-.259-*	Hospital		
.006	-.326-*	Internet Provider		
.405	-.080-	Governmental		
.951	.007	logistics		
.089	-.326-	Insurance		
.242	.139	University	Internet Provider	
.141	.172	Bank		
.591	.067	Hospital		
.006	.326*	Communication		
.035	.245*	Governmental		
.009	.332*	logistics		
1.000	.000	Insurance		
.272	-.107-	University	Governmental	
.439	-.073-	Bank		
.087	-.179-	Hospital		
.405	.080	Communication		
.035	-.245-*	Internet Provider		
.420	.087	logistics		
.197	-.245-	Insurance		

Table (21): LSD Test for sector differences among participants (Social Risk) (Cont.)

Sig.	Mean Difference (I-J)	(J)	(I)	Factors
.080	-.193-	University	logistics	SR
.140	-.160-	Bank		
.023	-.265-*	Hospital		
.951	-.007-	Communication		
.009	-.332-*	Internet Provider		
.420	-.087-	Governmental		
.092	-.332-	Insurance		
.468	.139	University	Insurance	
.367	.172	Bank		
.732	.067	Hospital		
.089	.326	Communication		
1.000	.000	Internet Provider		
.197	.245	Governmental		
.092	.332	logistics		

*. The mean difference is significant at the 0.05 level.

Table (22): Describe perceived usefulness statistics.

Percentage	Std. Deviation	Mean	
77%	.969	3.85	**The concept of e-HRM is clear.**
83.6%	.607	4.18	**Perceived usefulness from using e-HRM increase staff attitude to use it.**
85%	.623	4.25	**Perceived usefulness of e-HRM increase staff behavior intention to use it.**
86.2%	.721	4.31	**Using e-HRM reduce employee mistakes in the work.**
88.8%	.611	4.44	**When e-HRM is ease of use this will increase work efficiency**
84%	.464	4.20	**Total score**

Table (23): Describe perceived ease of use statistics.

Percentage	Std. Deviation	Mean	
85.6%	.753	4.28	**E-HRM is easy to use, so i can follow all the useful information.**
86.4%	.618	4.32	**Ease of use of e-HRM increase Perceived usefulness of it.**
86.4%	.687	4.32	**E-HRM is easy to use increase staff attitude to use it.**
86.2%	.535	4.31	**Total score**

Table (24): Describe attitude statistics.

Percentage	Std. Deviation	Mean	
85.8%	.642	4.29	**Perceived usefulness of e-HRM increases the interest to use it.**
82.8%	.773	4.14	**Staff adoption of e-HRM is proof that the system is easy to use.**
84%	.791	4.20	**Staff adoption of e-HRM is a proof to their intention to achieve institution goals.**
87%	.722	4.35	**I would like to use e-HRM system within the organization.**
84.8%	.488	4.24	**Total score**

Table (25): Describe IT experience statistics

Percentage	Std. Deviation	Mean	
79.2%	1.068	3.96	**ICT devices which are available in the institution enough to use e-HRM.**
72.2%	1.093	3.61	**The employees have the ability and skills to use e-HRM system.**
89.2%	.596	4.46	**Employees must be trained continuously to reduce perceived risk of e-HRM system.**
87%	.720	4.35	**The availability of computers and modern communications tools can reduce the risk of e-HRM.**
82%	.552	4.10	**Total score**

Table (26): Describe intention statistics.

Percentage	Std. Deviation	Mean	
88.2%	.577	4.41	**Perceived usefulness of e-HRM increases my desire to use it.**
88.2%	.630	4.41	**I intend to use or continue to use the e-HRM system.**
86.8%	.601	4.34	**Employee adoption of e-HRM increase colleague intention to use it.**
87.8%	.496	4.39	**Total score**

Table (27): Describe system security statistics.

Percentage	Std. Deviation	Mean	
86.6%	.768	4.33	**High level of system security increase perceived usefulness of e-HRM.**
52.8%	1.242	2.64	**E-HRM system threatens my information, so I don't feel safe when using it.**
86%	.774	4.30	**High level of system security reduces the risk of e-HRM.**
81.4%	.938	4.07	**I need more training on the e-HRM system to reduce mistakes and increase my knowledge of the tools available in it.**
80.2%	.537	4.01	**Total score**

Table (28): Describe performance time statistics.

Percentage	Std. Deviation	Mean	
87.4%	.646	4.37	**E-HRM system should not take time to accomplish tasks through it to increase system efficiency.**
84.4%	.802	4.22	**Few time needed to use e-HRM increases system usefulness.**
78.4%	.867	3.92	**Learning e-HRM system does not require a lot of time.**
86%	1.934	4.30	**Few time needed to use e-HRM proof system ease of use.**
84%	.693	4.20	**Total score**

Table (29): Describe perceived risk statistics.

Percentage	Std. Deviation	Mean	
51%	1.266	2.55	**E-HRM must be difficult and complex to reduce perceived risk.**
81.8%	.888	4.09	**My attitude decline if e-HRM system is not secured.**
83.6%	.666	4.18	**Perceived usefulness of e-HRM increase when perceived risk is decrease.**
81.4%	7.98	4.07	**E-HRM system within organization is clear and highly secure.**
79%	.4.87	3.95	**Total score**

Table (30): Describe organization role statistics.

Percentage	Std. Deviation	Mean	
83.8%	.890	4.19	**The organization supports and encourages the using of e-HRM.**
84.8%	.698	4.24	**The organization supports to use e-HRM system increases employees intention to use it**
85.4%	.680	4.27	**The organization decisions to adoption of e-HRM affects employees attitude to use it.**
73.8%	1.126	3.69	**The organization depends on e-career system to attract employees**
82%	.619	4.10	**Total score**

Table (31): Describe social risk statistics.

Percentage	Std. Deviation	Mean	
89.4%	.698	4.47	**Using technology and modern communication tools became social significant needs.**
82.4%	.831	4.12	**The lack in using communication tools reduces employees intention toward e-HRM**
80%	.944	4.00	**The lack in using communication tools increase e-HRM perceived risk.**
83.6%	.329	4.18	**Total score**

Table (32): Describe all factors statistics

Percentage	Std. Deviation	Mean	
84%	.464	4.20	**Perceived Usefulness (PU)**
86.2%	.535	4.31	**Perceived Ease of Use (PEOU)**
84.8%	.488	4.24	**Attitude (ATT)**
82%	.552	4.10	**IT Experience (ITE)**
87.8%	.496	4.39	**Intention (INT)**
80.2%	.537	4.01	**System Security (SS)**
84%	.693	4.20	**Performance Time (TIME)**
79%	.487	3.95	**Perceived Risk (PR)**
82%	.619	4.10	**Organization Roles (OR)**
84%	.622	4.20	**Social Risk (SR)**
84.6%	.789	4.23	**Communication (COMM)**
83.6%	.329	4.18	**Tale Score**

Table (33): Describe Pearson Correlation between all factors.

COMM	SR	OR	PR	TIME	SS	INT	ITE	ATT	PEOU	PU		
.378**	.223**	.352**	.166**	.155	.298**	.353**	.390**	.413**	.406**	1	Pearson Correlation	PU
.000	.000	.000	.000	.001	.000	.000	.000	.000	.000		Sig. (2-tailes)	
.334**	.224**	.292**	.196	.199**	.396**	.452**	.303**	.453**	1	.406**	Pearson Correlation	PEOU
.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	Sig. (2-tailes)	
.332**	.216**	.163	.248**	.241**	.337**	.413**	.287**	1	.453**	.413**	Pearson Correlation	ATT
.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	Sig. (2-tailes)	
.235**	.093*	.477**	.057	.166**	.235**	.267**	1	.287**	.303**	.390**	Pearson Correlation	ITE
.000	.041	.000	.205	.000	.000	.000		.000	.000	.000	Sig. (2-tailes)	
.328	.311**	.303**	.255**	.253**	.436**	1	.267**	.413**	.452**	.353**	Pearson Correlation	INT
.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	Sig. (2-tailes)	
.356**	.278**	.191**	.336**	.194**	1	.436**	.235**	.337**	.396**	.298**	Pearson Correlation	SS
.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	Sig. (2-tailes)	
.205**	.165**	.085	.166**	1	.194**	.253**	.166**	.241**	.199**	.155**	Pearson Correlation	TIME
.000	.000	.059	.000		.000	.000	.000	.000	.000	.001	Sig. (2-tailes)	
.137**	.174	.056	1	.166**	.336**	.255**	.057	.248**	.196**	.166**	Pearson Correlation	PR
.002	.000	.213		.000	.000	.000	.205	.000	.000	.000	Sig. (2-tailes)	
.283**	.176**	1	.056	.085	.191**	.303**	.477**	.163**	.292**	.352**	Pearson Correlation	OR
.000	.000		.213	.059	.000	.000	.000	.000	.000	.000	Sig. (2-tailes)	
.342**	1	.176**	.174**	.165**	.278**	.311**	.093*	.216**	.224**	.223**	Pearson Correlation	SR
.000		.000	.000	.000	.000	.000	.041	.000	.000	.000	Sig. (2-tailes)	
1	.342**	.283**	.137**	.205**	.356**	.328**	.235**	.332**	.334**	.378**	Pearson Correlation	COMM
	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	Sig. (2-tailes)	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Questionnaire of

Factors Affecting the Acceptance of e-HRM Technology

Dear Sir/ Mrs.

This research aims to investigate Factors Affecting the Adoption of Electronic Human resource Management (e-HRM) Technology in Palestine, and then introduce e-HRM adoption framework which can help the institutions in the serves sector to spread this developed technology among Palestinian society.

Electronic management recognize as the electronic system integrated with Information and Communication Technologies (ICT) to transform the administrative work of manual work to be implemented by modern digital technologies. E-HRM defines as: all IT-based information system and application, for the human resource management purpose, be it for facilitating HR practices, policies or strategies.

We believe that you are the best source to reach the required information, which serve our community and its development. We all hope to find cooperation from you through answering the questions contained in this survey. We pledge not to enclose the identity of participants, as well as only use this information in scientific research.

Best Regards,

Researcher

❖ **Part One: Personal Information**

Gender ☐ Male ☐ Female

Age ☐ Less than 25 years ☐ 25 – 35 years ☐ 35 – 45 years

☐ 45 – 55 years ☐ 55 – 65 years ☐ More than 65 years

HR Manager ☐ Employee ☐

IT and a Technical Manager ☐ Top Manager ☐ **Job Title**

Other: …….. ☐ Department Manager ☐

Bachelor ☐ Diploma ☐ High School or Less ☐ **Educational level**

PhD ☐ Master ☐

Communication ☐ Hospital ☐ Bank ☐ University ☐ **Sector**

Insurance ☐ logistics ☐ Governmental ☐ Internet Provider ☐

❖ **Part Two : Technology Usage**

Do you use a computer inside your business? ☐ Yes ☐ No

Does your organization have a website? ☐ Yes ☐ No

❖ **Part Three: Please select the appropriate choice that best describe your perception.**

Factor		Strongly Agree	Agree	Natural	Disagree	Strongly Disagree
PU	The concept of e-HRM is clear.					
	Perceived usefulness of e-HRM increase staff attitude to use it.					
	Perceived usefulness of e-HRM increase staff behavior intention to use it.					
	Using e-HRM reduce employee mistakes in the work					
	Ease of use of e-HRM increase doing business within the institution.					
PEOU	E-HRM is easy to use, so I can follow all the useful information.					
	Ease of use of e-HRM increase usefulness that expected of it.					
	If e-HRM is easy to use this will increase staff admission to use it.					

ATT	Perceived usefulness of e-HRM increases the interest to use it.					
	Staff acceptance of e-HRM is proof that system is easy to use.					
ATT	Staff acceptance of e-HRM is a proof to their intention to achieve institution goals.					
	I would like to use e-HRM system within the organization.					
ITA	ICT devices which are available in the institution enough to use e-HRM.					
	The employees have the ability and skills to use e-HRM system.					
	Employees must be trained continuously to reduce perceived risk of e-HRM system.					
	The availability of computers and modern communications tools can reduce the risk of e-HRM.					
INT	Perceived usefulness of e-HRM increases my desire to use it.					
	I intend to use or continue to use the e-HRM system.					
	Employees adoption of e-HRM increase colleagues intention to use it.					
SS	High level of system privacy & security increase perceived usefulness of e-HRM					
	E-HRM system causes a risk to the privacy of my information, so I don't feel safe when using it.					
	High level of system security reduces the risk of e-HRM.					
	I need more training on the e-HRM system to					

	reduce mistakes and increase my knowledge of the tools available in it.					
TIME	E-HRM system should not take time to perform tasks through it to increase system efficiency.					
	Few time needed to use e-HRM increases system usefulness.					
	Learning e-HRM system does not require a lot of time.					
	Few time required to use e-HRM proof its ease of use.					
PR	E-HRM must be difficult and complex to reduce perceived risk.					
	My attitude decline if e-HRM system is not secured.					
	Perceived usefulness of e-HRM increase when perceived risk is decrease.					
	E-HRM system within organization is clear and highly secure.					
OR	The organization supports and encourages using of e-HRM.					
	The organization supports to use e-HRM system increases employees intention to use it					
	The organization decisions to adoption of e-HRM reinforce employees attitude to use it.					
	The organization depends on e-career system to attract employees					
SR	Using technology and modern communication tools became social significant needs.					

	The lack in using communication tools reduces employees intention toward e-HRM					
	The lack in using communication tools increase e-HRM perceived risk.					
COMM	Dependence on e-HRM increase communication between employees within organization.					
	E-HRM simplifies the connecting in the organization to deliver employees needs to managers.					

❖ **Part Four: Please answer the following questions:**

1. **What are the most barriers Facing use thee-HRM within the organization?**

……

……

2. **If you want to add any other information please writes it below.**

……

……

استبانة حول

العوامل المؤثرة في تبني الإدارة الإلكترونية للموارد البشرية

الاخ الفاضل / الاخت الفاضلة: تحية طيبة وبعد،

تسعى الباحثة في هذه الاستبانة الى الوصول لنموذج تبني الإدارة الإلكترونية للموارد البشرية في فلسطين ، من خلال التعرف على العوامل المؤثرة في تبني الإدارة الإلكترونية للموارد البشرية ومن ثم تحليلها والخروج بتوصيات ونتائج تساعد قطاع الخدمات في تطوير الإدارة الإلكترونية وزيادة مستوى تقبل التكنولوجيا الحديثة داخل هذه المؤسسات.

تعرف الإدارة الإلكترونية بأنها منظومة إلكترونية متكاملة تعتمد على تقنيات الاتصالات والمعلومات لتحويل العمل الإداري اليدوي إلى أعمال تنفذ بواسطة التقنيات الرقمية الحديثة. ويقصد بالإدارة الإلكترونية للموارد البشرية: تبادل الأعمال والمعاملات بين الأطراف من خلال استخدام الوسائل الإلكترونية بدلا من الاعتماد على استخدام الوسائل القديمة الأخرى كوسائل الاتصال وبالتالي الإستغناء عن المعاملات الورقية في التخطيط والتوجيه والرقابة على الموارد والقدرات الجوهرية للشركة والموظفين بدون حدود من أجل لتحقيق أهداف الشركة.

وحيث نؤمن انكم خير مصدر للوصول الى المعلومات المطلوبة، نتوجه اليكم وكلنا أمل ان نجد التعاون من قبلكم، وذلك من خلال الإجابة على الاسئلة المحتواه في هذه الاستبانة والتى نتعهد لكم بالمحافظة على عدم اظهار هوية المجيب عنها وعدم استخدامها في اي مجال غير مجال البحث العلمي.

ولكم جزيل الشكر والتقدير.

الباحثة : مها صالح.

جامعة النجاح الوطنية – ماجستير إدارة هندسية.

❖ **الجزء الاول: المعلومات الشخصية**

الجنس : ☐ ذكر ☐ انثى

العمر : ☐ أقل من 25 سنة ☐ 25 – أقل من 35 سنة ☐ 35–أقل من 45 سنة

☐ 45–أقل من 55 سنة ☐ 55 – أقل من65 سنة ☐ أكثر من 65 سنة

المسمى الوظيفي : ☐ موظف ☐ مدير دائرة الموارد البشرية

☐ مدير تنفيذي ☐ مدير قسم أنظمة المعلومات والشبكات

☐ رئيس قسم ☐ غير ذلك (حددها رجاءً):.....

المؤهل العلمي: ☐ ثانوية عامة و أقل ☐ دبلوم ☐ بكالوريوس ☐ ماجستير ☐ دكتوراه ☐

قطاع العمل: ☐ جامعة ☐ بنك ☐ مستشفى ☐ الاتصالات ☐ مزود انترنت ☐ حكومي ☐ شركة شحن ☐ تأمين

❖ **الجزء الثاني: استخدام التكنولوجيا**

هل تستخدم الحاسوب داخل عملك؟ ☐ نعم ☐ لا

هل لدى مؤسستك موقع الكتروني؟ ☐ نعم ☐ لا

❖ **الجزء الثالث: أرجو اختيار الدرجة التي تتناسب مع تصوراتك للإدارة الإلكترونية للموارد البشرية.**

		أوافق بشدة	أوافق	محايد	أعارض	أعارض بشدة
الفائدة	مفهوم الإدارة الإلكترونية للموارد البشرية واضح لدى الموظفين.					
	تعزز الفائدة المتوقعة من النظام الإلكترونيللإدارة الإلكترونية للموارد البشرية موقف الموظفين لإستخدامه.					
	تعزز الفائدة المتوقعة مناستخدام النظام الإلكتروني للموارد البشرية نية الموظفين لاستخدامه.					
	يقلل استخدام الإدارة الإلكترونية للموارد البشرية من الاخطاء التي يمكن ان يقع بها الموظفين داخل المؤسسة.					
	تزيد سهولة استخدام النظام الإلكتروني للموارد البشرية من اداء الاعمال داخل المؤسسة.					
سهولة الاستخدام	يعتبر النظام الإلكتروني لإدارة الموارد البشرية سهل الإستخدام حيث استطيع متابعة جميع المعلومات المفيدة من خلاله.					
	تزيد سهولة النظام الإلكتروني لادارة الموارد البشرية من الفائدة المتوقعة من استخدامه.					
	تعزز سهولة استخدام النظام الإلكتروني قبول الموظفين به.					
الموقف	تزيد الفائدة المتوقعة لإستخدام النظام الإلكتروني من اهتمامي به داخل المؤسسة.					
	قبول الموظفون لإستخدام النظام الإلكتروني دليل على ان النظام سهل الاستخدام وغير معقد.					

	قبول الموظفون للنظام الإلكتروني لإدارة الموارد البشرية هو دليل على نيتهم لتحقيق أهداف المؤسسة.					
	أرغب في استخدام النظام الالكتروني لادارة الموارد البشرية داخل المؤسسة.					
البنية التحتية	اجهزة الاتصالات والحاسوب المتوفرة داخل المؤسسة كافية لاستخدام النظام الالكتروني لإدارة الموارد البشرية.					
	يملك الموظفون القدرة والمهارة على استخدام النظام بشكل جيد.					
	يجب تدريب الموظفين بشكل مستمر على النظام الإلكتروني لتقليل الخطورة المتوقعة منه.					
	يمكن تقليل الخطورة المتوقعة من النظام الإلكتروني من خلال توفر اجهزة الحاسوب والاتصالات الحديثة داخل المؤسسة.					
النية	تزيد الفائدة المتوقعة من استخدام النظام الإلكتروني من رغبتي في استخدامه والاستفادة منه.					
	أنوي استخدام او الاستمرار في استخدام النظام الالكتروني لادارة الموارد البشرية.					
	يعزز قبول الموظفين لاستخدام النظام الإلكتروني لإدارة الموارد البشرية من نية زملائهم لإستخدامه داخل المؤسسة.					
السرية والأمان	يزيد مستوى السرية والأمان للنظام الإلكتروني من الفائدة المتوقعة من استخدامه داخل المؤسسة.					
	يشكل النظام الإلكتروني خطورة على معلوماتي في العمل لذلك لا اشعر بالأمان عند استخدامه.					
	ارتفاع مستوى امان النظام الإلكتروني لادارة الموارد البشرية يقلل من الأخطار المتوقعة نتيجة استخدامه.					
	أعتقد انني بحاجة للتدريب اكثر على النظام لتقليل اخطائي وزيادة معرفتي بالادوات المتوفرة فيه.					
الوقت	لإستخدام النظام الإلكتروني بكفاءة كبيرة يجب ان لا يستغرق النظام وقت كبير لإنجاز المهام من خلاله.					
	قلة الوقت اللازم لاستخدام النظام الالكتروني يزيد من فائدته داخل المؤسسة.					
	تعلم استخدام النظام الالكتروني لا يتطلب الكثير من الوقت.					
	كلما كان الوقت اللازم لاستخدام النظام قليل كان هذا دليل على سهولة استخدامه وسرعة الحصول على المعلومات.					
الخطورة المتوقعة	يجب ان يكون النظام الالكتروني صعب ومعقد لتقل المخاطر الناتجة عن الاخطاء والاعطال فيه.					
	يقل موقفي اتجاه استخدام النظام الالكتروني اذا كان النظام غير أمن.					
	تزداد الفائدة المتوقعة من استخدام النظام الإلكتروني كلما قلت الخطورة المتوقعة من استخدامه.					

	يتميز النظام الالكتروني لإدارة الموارد البشرية المتوفر في المؤسسة بمستوى أمان جيد.					
دور المؤسسة	تدعم المؤسسة وتشجع استخدام النظام الالكتروني لادارة الموارد البشرية فيها.					
	يزيد تشجيع المؤسسة لاستخدام النظام الالكتروني من نية الموظفين لاستخدامه.					
	تؤثر قرارات المؤسسة في تبني النظام الالكتروني على تعزيز قدرة الموظفين في استخدامه داخل العمل.					
	تعتمد المؤسسة على النظام الالكتروني لإستقطاب المهارات اللازمة للعمل فيها ومتابعة العمل داخلها.					
المخاطر الاجتماعية	اصبح استخدام وسائل الاتصالات والتكنولوجيا الحديثة ضرورة اجتماعية كبيرة.					
	عدم انتشارالاستخدام الواسع لوسائل الاتصالات والتكنولوجيا الحديثة يقلل من نية الموظفينلإستخدام النظام الالكتروني.					
	قلةاستخداموسائلالاتصالاتوالتكنولوجياالحديثةتزيدمنالمخاطرا لمتوقعةمناستخدامالنظامالالكتروني.					
التواصل	الاعتماد على النظام الالكتروني لادراة الموارد البشرية يزيد من التواصل بين الموظفين داخل المؤسسة.					
	وجود النظام الالكتروني لإدارة الموارد البشرية يسهل عملية توصيل احتياجات الموظفين للمسؤولين داخل المؤسسة.					

❖ **<u>الجزء الرابع: يرجى الاجابة عن الإسئلة التالية بما يتناسب مع وجهة نظرك الخاصة بالإدارة الالكترونية للموارد البشرية.</u>**

1. ما هي اكثر المعيقات لإستخدام الادارة الإلكترونية للموارد البشرية داخل المؤسسات؟

.....

.....

.....

.....

.....

2. اذا كنت ترغب بإضافة اي معلومات اخرى تساعد في عملية البحث يمكنك كتابتها هنا

.....

.....

<u>نشكركم على حسن تعاونكم،،</u>

Al-Najah National University

Faculty of Graduate Studies

Engineering Management Program

Thesis Title

Factors Affecting the Acceptance of Electronic Human Resource Management System in Palestinian Service Sector

Student Name	Student Number
Maha M. Saleh	11255773

This interview is submitted in Fulfillment of the Requirements for the Degree of Masters of Engineering Management, Faculty of Graduate Studies at An-Najah National University, Nablus-Palestine.

This interviews aims to answering the following questions:

1. What are the methods currently prevailing in the management of human resources in the Palestinian institutions?
2. What is the impact of human resource manager's experience using computers and modern methods of communication on the acceptance of electronic administration?
3. What is the definition of Electronic Human Resource Management (e-HRM)?

4. What is the impression about the benefits that can be obtained as a result of use of electronic administration?
5. Does the prevailing culture of the use of technology in the community and among employees have great influence on the use of electronic administration?
6. Does the development of Information and Communication Technologies (ICT) tools and networks affect the adoption of the use of this new technology for Human Resource Management?
7. What is the impact of manager's fear of safety and confidentiality of electronic information on the trend towards adoption of e-HRM?
8. What are the most important external factors that are affecting the using of e-HRM?
9. Does the adoption of e-HRM increasing management effectiveness from the perspective of HR managers? And Why?
10. What is the attitude of the senior management, technical managers, and employees toward using e-HRM?
11. What is the relationship between each of the following factors on the adoption of e-HRM:
    - Ease of use?
    - Usefulness?
    - Company norms?
    - Attitude toward advancement?
    - Performance time?
    - System security?
    - Employee training?

Thank You

جامعة النجاح الوطنية – نابلس

كلية الدراسات العليا

برنامج ماجستير الادارة الهندسية

عنوان الاطروحة

العوامل المؤثرة على قبول نظام الإدارة الإلكترونية للموارد البشرية في قطاع الخدمات الفلسطيني

اسم الباحثة

مها محمد صالح

هذه المقابلة هي جزء من المتطلبات اللازمة للقيام باعداد اطروحة الماجستير – برنامج ماجستير الادارة الهندسية ، جامعة النجاح الوطنية – نابلس

تهدف هذه المقابلة الى الاجابة عن الاسئلة التالية :

1. ما هي الطريقة المستخدمة حاليا لادارة الموارد البشرية داخل الشركة؟ (هل هي الطريقة التقليدية ام طريقة تعتمد على وجود نظام محوسب واضح الاستخدام؟)
2. ما هو تأثير خبرة مديري الموارد البشرية في استخدام أجهزة الحاسوب وأساليب الاتصال الحديثة على قبول الإدارة الالكترونية؟
3. ما هو تعريف ادارة الموارد البشرية الكترونيا e-HRM (electronic human resource management) ؟ (حسب ما هو مطبق داخل الشركة)
4. ما هو الانطباع حول الفوائد التي يمكن الحصول عليها نتيجة لاستخدام الإدارة الإلكترونية e-HR ؟
5. هل الثقافة السائدة من استخدام التكنولوجيا في المجتمع وبين الموظفين لديها تأثير كبير على استخدام الإدارة الإلكترونية؟
6. هل التطور في ادوات تكنولوجيا المعلومات والاتصالات (ICT) يؤثر على اعتماد استخدام التكنولوجيا الجديدة لإدارة الموارد البشرية e-HRM؟

7. ما هو تأثير خوف مديري الموارد البشرية على سلامة وسرية المعلومات الإلكترونية على الاتجاه نحو اعتماد e–HRM؟

8. ما هي العوامل الخارجية الأكثر أهمية التي تؤثر على استخدام إدارة الموارد البشرية الكترونيا؟

9. هل اعتماد e–HRM يؤثر على زيادة فعالية الإدارة من وجهة نظر مديري الموارد البشرية؟ و لماذا؟

10. ما هو موقف الإدارة العليا، المديرين الفنيين(التقنيين)، والموظفين نحو استخدام e–HRM؟

11. ما هي العلاقة بين كل من العوامل التالية واعتماد e–HRM:

- سهولة استخدام النظام؟
- الفائدة المتوقعه من النظام الجديد؟
- قواعد الشركة؟
- الموقف اتجاه النهوض والتطور داخل الشركة ؟
- وقت الأداء الازم لاداء العمل؟
- أمن النظام وضمان سلامة المعلومات؟
- تدريب الموظف لاستخدام النظام الحديث والاستفاده منه؟

جامعة النجاح الوطنية
كلية الدراسات العليا

العوامل المؤثرة على قبول نظام الإدارة الإلكترونية للموارد البشرية في قطاع الخدمات الفلسطيني

إعداد
مها محمد صالح

إشراف
د. يحيى صالح

قدمت هذه الأطروحة استكمالاً لمتطلبات درجة الماجستير في الإدارة الهندسية بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس، فلسطين.

2014

العوامل المؤثرة على قبول نظام الإدارة الإلكترونية للموارد البشرية في قطاع الخدمات الفلسطيني

إعداد

مها محمد صالح

اشراف

د. يحيى صالح

الملخص

يهدف هذا البحث إلى تحديد العوامل المؤثرة في تبني تكنولوجيا الإدارة الإلكترونية للموارد البشرية (e-HRM) في فلسطين، ووضع نموذج تبني الإدارة الإلكترونية للموارد البشرية الذي سوف يساعد منظمات قطاع الخدمات الفلسطيني في استخدام التكنولوجيا بشكل فعال في عملياته.

اعتمدت هذه الدراسة على عينة تم توزيعها في كل من القطاع الحكومي ، البنوك، المستشفيات، التأمين، مقدمي خدمات الإنترنت، والخدمات اللوجستية، الاتصالات السلكية واللاسلكية والجامعات في فلسطين. واستند تطوير النموذج المقترح على مراجعة ما توصل اليه العلم في هذا المجال لتحديد نموذج البحث الذي هو امتداد لنموذج قبول التكنولوجيا (TAM) ونظرية السلوك المخطط (TNB)، بالاضافة الى نموذج Yale للتواصل والإقناع ، مع اضافة بعض العوامل الهامة والمؤثرة مثل الخطورة المتوقعة من استخدام النظام الالكتروني، والمخاطر الاجتماعية المتوقعة من استخدام التكنولوجيا في هذه المؤسسات ودور المنظمات في اعتمادها داخل العمل.

استخدمت الباحثة منهجيات البحث الكمية والنوعية على حد سواء. حيث قامت الباحثة بجمع المعلومات عبر مقابلات مع المتخصصين في تكنولوجيا المعلومات ومدراء الموارد البشرية لفهم طبيعة المشكلة بشكل دقيق ومناقشة العوامل المؤثرة في تبني الادارة الالكترونية للموارد البشرية داخل هذه المؤسسات والشركات. الى جانب ذلك، تم استخدام طريقة الاستبيانة لجمع البيانات الكمية حيث تم تصميمها وتوزيعها على عينة عشوائية من ستمائة مشارك يمثلون

مدراء الموارد البشرية ومدراء تكنولوجيا المعلومات ومدراء الإقسام والموظفين في المنظمات المستهدفة. وقد أعيدت 487 استبانة مكتملة، حيث بلغت نسبة الاستجابة 81.16 % من العينة المستهدفة.

بعد تحليل المعلومات الواردة من خلال الاستبانة عن طريق برنامج الحزم الإحصائية (SPSS)للعلوم الاجتماعية، أظهرت النتائج أن سهولة الاستخدام، والموقف، والنية، والتواصل هي أهم العوامل المؤثرة على تبني الإدارة الإلكترونية للموارد البشرية في فلسطين. كما بينت النتائج ان المخاطر المتوقعة، أمن النظام، دور المؤسسات، وتوافر البنية التحتيه تؤثر في اعتماد تكنولوجيا إدارة الموارد البشرية الكترونيا ولكن بدرجة أقل درجة من العوامل الاخرى.

قامت الباحثة بتقديم مجموعة من التوصيات للمؤسسات في قطاع الخدمات الفلسطيني تتعلق بصياغة استراتيجيات جديدة وتطوير عملياتها التشغيليه والتركيز على تقديم خدمات ذات جودة عالية، بالاضافة الى التنسيق مع الجهات الأخرى مثل شركات تكنولوجيا المعلومات والاتصالات والحكومة التي من شأنها أن تكون مفيدة في كسب ثقة الموظفين والمدراء من أجل نشر تكنولوجيا الإدارة الإلكترونية للموارد البشرية بشكل اكبر في قطاع الخدمات الفلسطيني.