

## The Impact of Electronic Human Resource Management (E-HRM) Application on Organizational Performance

An Applied Study in Royal Jordanian

أثر تطبيق أنظمة إدارة الموارد البشرية الإلكترونية على الأداء المنظمي

دراسة تطبيقية في الملكية الاردنية

**Prepared by:** 

Lubna Hussien Al-Hmouze

Supervised by:

Dr. Hanadi Salameh

Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of E-Business

**Business Administrative Department** 

**Faculty of Business** 

**Middle East University** 

May-2016

#### Authorization

I'm Lubna Al-hmouze, authorize Middle East University to provide a hard or electronic copy of my thesis to libraries, organizations, or institutions as they require.

Name: Lubna Hussien Al-Hmouze

Date: 8/6/2016

Signature:

II



This thesis of the student Lubna Hussien Al-Hmouze, which studied "The Impact of Electronic Human Resource Management (E-HRM) application on Organizational Performance", has been defined, accepted and approved on 8/6/2016.

#### **Committee Members:**

No.	Name	Title	Signature
1	Dr. Soud Al-Mahamid	Committee Chairman & Internal Examiner	13
2	Dr. Abeer Al-Faouri	External Examiner	Let se
3	Dr. Hanadi Salameh	Committee Member & Supervisor	Junh

	Sup	CI V1501		
			/	
	the second se			
	And the second se			
A DESCRIPTION OF A	No. of Concession, Name of			

ш

### Acknowledgment

In the name of ALLAH, the most Beneficent, the most Merciful, the most Compassionate. This thesis is dedicated to the soul of my father "HUSSIEN" and my sister "ZAIN" may Allah forgive them and grant them his highest paradise (Ameen).

I am forever indebted to the greatest woman in my life, my beloved mother, whose unconditional love and support at each time of my life, No word can describe what you have done for me. Thank you for your selfless and endless love.

I dedicate this work to my beloved and sweetest brother MOHAMMAD.

I will forever be thankful to my wonderful husband IHAB who has contributed in significant ways to helping and supporting me through this journey.

I dedicate this work to my beloved IHAB'S FAMILY.

*I* am great thankful to my uncle MURAD for supporting me.

I'm grateful to the efforts of my supervisor Dr. Hanadi Salameh who supported me by her knowledge and experience to deliver my thesis in good shape.

## **Table of Content**

Subject	Page
Authorization Statement	li
Discussion committee decision	
Acknowledgment	lv
Table of contents	V
List of Tables	Vi
List of Figures	Vii
Abstract in English	Viii
Abstract in Arabic	Х
Chapter One : General Framework	
1.1 Introduction	1
1.2 Study Problem	3
1.3 Study Purpose and Objective	3
1.4 Study Significance	4
1.5 Study Questions	5
1.6 Study Hypotheses	5
1.7 Study Model	7
1.8 Study Scope and Limitations	7
1.9 Study Operational Definitions	8
Chapter Two: Theoretical Framework and Pocedures	
2.1 Introduction	10
2.2 Background	10
2.3 Theoretical Framework	11
2.4 Review of Previous Studies	32
Chapter Three: Methods and Previous Studies	
<b>3.1</b> Methods of the Study	36
3.2 Study Population	36
3.3 Study Unit of Analysis	36
3.4 Study Data Collection Tools	37
3.5 Data Validity and Reliability	38
<b>3.6</b> Study Statistical Techniques	39
3.7 Descriptive Statistics for Research Constructs	40
Chapter Four: Results and Hypotheses Testing	
4.1 Introduction	41
4.2 Statistical Analysis	41
Description of Demographic Analysis	41
<b>4.3</b> Hypotheses Testing	53
Chapter Five: Results, Conclusions and Recommendations	
5.1 The Main Results of Study	60
5.2 Conclusion	62
5.3 Recommendations	
References	
Appendices	

## **List of Tables**

No.	Subject	Page
1	Levels of E-HRM	20
2	Cronbach' Alpha value for constructs	39
3	Frequency and percent for Demographic variables	42
4	Means and standard deviations for each item of E-HRM Application	44
5	Means and standard deviations for each item of organizational	46
	performance level	
6	Means and standard deviations for each item of Innovation level	47
7	Means and standard deviations for each item of Rapid adaptation level	48
8	Means and standard deviations for each item of Customer satisfaction	50
	level	
9	Means and standard deviations for each item of Time to market level	51
10	Means and standard deviations for each item of HR process	52
11	Simple linear regression analysis to examine effect of the E-HRM	53
	application on organizational performance	
12	Simple linear regression analysis to examine effect of the E-HRM	54
	application on organizational performance from the perspective of	
	innovation	
13	Simple linear regression analysis to examine effect of the E-HRM	55
	application on organizational performance from the perspective of	
	rapid adaptation	
14	Simple linear regression analysis to examine effect of the E-HRM	56
	application on organizational performance from the perspective of	
	customer satisfaction.	
15	Simple linear regression analysis to examine effect of the E-HRM	57
	application on organizational performance from the perspective of	
	faster time to market	-
16	Simple linear regression analysis to examine effect of the E-HRM	58
	application on organizational performance from the perspective of	
	Human resource process.	

No.	Subject	Page
1	Study Model	7
2	Objectives of E-HRM	19

## The Impact of Electronic Human Resource Management (E-HRM) Application on Organizational Performance

An Applied Study in Royal Jordanian

**Prepared by:** 

Lubna Hussien Al-Hmouze

**Supervised by:** 

Dr. Hanadi Salameh

### Abstract

This study aimed to investigate the impact of the application and use of electronic human resource management (E-HRM) within an organization on its organizational performance. In reference to previous studies, the researcher developed the research model to investigate how the application of E-HRM impacts organizational performance in terms of innovation, customer satisfaction, time to market, rapid adaptation and human resources (HR) processes.

This study followed a quantitative methodology by using a questionnaire tool. The study population was all employees in the Royal Jordanian Company. (120) questionnaires distributed as a sample of the study, only (90) questionnaires returned, 11 were excluded due to missing values and incorrect multiple answers to questions; accordingly, only 79 returned questionnaires were valid for data analysis which makes this make (66 %) from the total distributed questionnaires.

Based on data from 79 respondents from a different level of employees, the researcher found that there is a statistical significant impact of e-HRM application on organizational performance.

The results of the study confirm the positive impact of e-HRM on organizational performance; hence, the researcher recommends firms to apply e-HRM within its organizations and invest in e-HRM solutions as it has a high effect increasing organizational performance and efficiency. This is done as e-HRM enable companies to quickly adapt to external changes, and meet the changing needs of customers in short time. The study proved that successful use of e-HRM solutions is not limited to HR staff but shall include all employees of the company, staff and administrators. Finally, the results of the study proved that the use if e-HRM solutions helps organizations reduce costs, improve procedures in order to run faster processes and functions.

**Keywords:** E-HRM application, organizational performance, time to market, innovation, rapid adaptation, HR processes and customer satisfaction.

## أنثر تطبيق أنظمة إدارة الموارد البشرية الإلكترونية على الأداء المنظمي دراسة تطبيقية في الملكية الاردنية إعداد الباحثة لبنى حسين الحموز إشراف د.هنادي سلامة

### ملخص الدراسة

هدفت هذه الدراسة إلى التحقيق فى أثر تطبيق إدارة الموارد البشرية الإلكترونية (E-HRM) داخل المنظمة على الأداء المنظمي. واستناداً إلى الدراسات السابقة، طورت الباحثة نموذج البحث إلى التحقيق في كيفية تأثير تطبيق إدارة الموارد البشرية الإكترونية (E-HRM) داخل المنظمة على الأداء المنظمي من حيث الابتكار، ورضا العملاء، والوقت للسوق، والتكيف السريع وعمليات الموارد البشرية(HR).

اتبعت هذه الدراسة المنهج الكمي باستخدام أداة الاستبيان. وكان مجتمع الدراسة جميع العاملين في شركة الملكية الأردنية. وزعت (١٢) استبانة على عينة الدراسة، فقط (٩٠) استبيان تم استرجاعها، و تم استبعاد (١١) بسبب القيم المفقودة والإجابات المتعددة والغير صحيحة على الأسئلة المطروحة. تبعا لذلك، تم استرجاع (٧٩) استبيانا فقط التي كانت صالحة لتحليل البيانات الأمر الذي يشكل نسبة (٦٦٪) من إجمالي توزيع استبيانات.

استنادا إلى بيانات (٧٩) من المجيبين من مستوى مختلف من الموظفين، وجد الباحث أن هناك تأثير دال إحصائيا من تطبيق إدارة الموارد البشرية الإلكترونية على الأداء المنظّمي.

نتائج الدراسة تؤكد على التأثير الإيجابي لإدارة الموارد البشرية الإلكترونية على الأداء المنظّمي؛ وبالتالي يوصي الباحث الشركات في استخدام إدارة الموارد البشرية الإلكترونية في المنظمات والاستثمار في حلول إدارة الموارد البشرية الإلكترونية لما له من تأثير ارتفاع وزيادة الأداء المنظّمي وكفاءته. ويتم ذلك في تمكين إدارة الموارد البشرية الإلكترونية الشركات على التكيف بسرعة مع التغيرات الخارجية، وتلبية الاحتياجات المتغيرة للعملاء في وقت قصير. أثبتت الدراسة أن الاستخدام الناجح لحلول إدارة الموارد البشرية الإلكترونية لا يقتصر على موظفي الموارد البشرية ولكن يجب أن تشمل جميع العاملين في الشركة والموظفين والإداريين. وأخيرا، أثبتت نتائج الدراسة أن استخدام حلول إدارة الموارد البشرية الإلكترونية يساعد المنظمات على خفض التكاليف، وتحسين الإجراءات من أجل تشغيل العمليات والمهام بشكل أسرع.

الكلمات المفتاحية: تطبيق الموارد البشرية الإلكترونية، الأداء المنظّمي، الوقت الى السوق، الابتكار، التكييف السريع، عمليات الموارد البشرية، و رضاء العملاء.

### **Chapter One: Introduction**

#### **1.1 Introduction**

Business markets, are becoming smaller day by day because of increasing globalization and market competition, this has called for organizations to increase their performance in offering the customer based services. For this reason, organizations are adopting internet human resource based systems called the "Electronic Human Resource Management (E-HRM)" (Coronas, 2005). E-HRM involves the adoption and use of web-based technologies with an aim of providing Human Resource Management (HRM) services for employees within the organization.

In the recent days, e-HRM has advanced in such a way that it has the capacity to incorporate all of HRM policies of an organization. The line managers conduct and arrange the evaluation and development; using desktop computers in the E-HRM system, training, and planning, assess labor cost evaluation, and examination of indicators for each absenteeism and turnover among employees. For employee's personal development planning, the same system can be used for new jobs application and application of promotions for employees who also have access to a range of information pertaining HR policies in a given organization. E-HRM systems are supported by dedicated software that is mainly produced or supplied by a private supplier separated from the owners' organization (Juana. 2012).

Therefore, e-HRM can be defined as the planning, application and implementation of information technology that is important for networking as well as supporting collective actors who must be more than two individuals to perform shared human resource activities (Juana, 2012). However, there is a difference between the use of electronic human resource management systems and Human resource information systems (HRIS), in terms of HRIS refers to the use of information and communication technology (ICT) systems in the human resource department which is different from the use of E-HRM which is the use of internet based Human resource management systems (Rita Bissola and Barbara Imperatori, 2010).

Electronic human resource management (E-HRM) is very important as it facilitates the organization with the execution of HR functions for its employees and managers. Employees can gain access to information through the typical use of internet or channels of web technology. This, in turn, leads to managers and employees empowerment with an aim of increasing their efficiency in performing certain functions of HR and this also relieves some of the burdens on the HR department most of the tasks hence allowing employees to focus more on the strategic elements and less on the operational elements (Heneman, 2002).

This study focuses on analyzing the impact of E-HRM application on organizational performance; this mainly focused on how E-HRM can be applied to increase organizational ability to compete both internally and externally (Schalk, 2013), (Ruel, 2007), and (lawler, 2012). In the study, the researcher analyses the relationship between E-HRM application on organizational performance. Organization performance was measured and evaluated in terms of innovation, rapid adaptation, human resource process, customer satisfaction, and fast time to market (Heneman, 2007), (Boxall & Purcell, 2003

#### **1.2 Study Problem**

With the increased market competition, there is a need that organizations are able to easily and rapidly adapt and adjust to changes in markets as well as to gain a competitive advantage. To do this, organizations need to link electronic human resources application and organizational performance with the overall objectives of the organization. This is achieved by measuring the performance of system and employees where organizations need to identify the most suitable tool or system that increases the organizational performance. The main problem of this research is:

#### "Does e-HRM application impact organizations performance?"

This research is analyzed and considered in terms of organizational performance the use and impact of e-HRM application. Organization performance is evaluated in terms of innovation, rapid adaptation, time to market, human resources process, and customer satisfaction. This helped the researcher to recommend ways in which organizations can adopt e-HRM to achieve organization's objectives and desired performance.

#### **1.3 Study Purpose and Objective**

The purpose and objective of this study were to investigate the impact of E-HRM application on organizational performance; sub research objectives were:

- Investigate e-HRM application and its impact on organizational performance in terms of innovation
- Investigate the impact of e-HRM application on organizational performance in terms of rapid adaptation
- Investigate the impact of e-HRM application on organizational performance in terms of HR process

- Investigate the impact of e-HRM application on organizational performance in terms of customers satisfaction
- Investigate the impact of e-HRM application on organizational performance in terms of time to market.

#### **1.4 Study significance**

The significance of this study is to investigate the impact of using E-HRM on organizational performance. Organizational performance is measured and evaluated in terms of independent variables which are (innovation, rapid adaptation, human resource process, customer satisfaction, and fast time to market).

The researcher applies this study at Royal Jordanian; the current study reflects the experience of a developing country (Jordan).

The current study determines the effectiveness of electronic human resource management in Jordan's organizations and also explains the effect of implementing technology in the human resource processes and the influence it has on organizational performance.

The importance of the current study is based mainly on the performance of the services and related technological developments which is supported by effective human resources and able of achieving high satisfaction levels for customers and employees to achieve strategic goals.

#### **1.5 Study questions**

This study is all about the impacts of E-HRM application on organizational performance; while organization performance is measured and evaluated in terms of (innovation, rapid adaptation, human resource process, customer satisfaction, and time to market). Regarding to what was mentioned earlier, this study tries to answer the below questions:

- 1. Is there a direct impact of E-HRM application on organizational performance?
- 2. Is there a direct impact of e-HRM application on organizational performance in terms of innovation?
- 3. Is there a direct impact of e-HRM application on organizational performance in terms of rapid adaptation?
- 4. Is there a direct impact of e-HRM application on organizational performance in terms of customer satisfaction?
- 5. Is there a direct impact of e-HRM application on organizational performance in terms of faster time to market?
- 6. Is there a direct impact of e-HRM application on organizational performance in terms of human resource process?

#### **1.6 Study Hypotheses**

The study has one main hypothesis of which five hypotheses are derived:-

#### Main Hypothesis:

**H01:** There is no statistical significant impact of E-HRM application on organizational performance at  $\alpha \le 0.05$ .

#### **Sub-Hypotheses:**

**H01.1**: There is no statistical significant impact of E-HRM application on organizational performance in terms of innovation at  $\alpha \le 0.05$ .

**H01.2**: There is no statistical significant impact of E-HRM application on organizational performance in terms of rapid adaptation at  $\alpha \le 0.05$ .

**H01.3**: There is no statistical significant impact of E-HRM application on organizational performance in terms of customer satisfaction at  $\alpha \le 0.05$ .

**H01.4**: There is no statistical significant impact of E-HRM application on organizational performance in terms of faster time to market at  $\alpha \le 0.05$ .

**H01.5**: There is no statistical significant impact of E-HRM application on organizational performance in terms of human resource process at  $\alpha \le 0.05$ .

#### 1.7 Study Model



Figure 1: Study Model

The study model was developed by the researcher and based on the following studies: Independent variable based on (Schalk, 2012), (Ruel, 2007), and (lawler, 2012) to measure E-HRM application; and Dependent variable based on (Heneman, 2007), (Boxall & Purcell, 2003), in measuring organizational performance.

### **1.8 Study Scope and Limitations**

#### **Study Scope**

- 1- Location Scope: The current study was conducted at Royal Jordanian.
- 2- Respondents' Scope: The study targeted a random sample of employees in different departments in Royal Jordanian.
- 3- Timeline Scope: This study was conducted through the year (2015-2016).

#### **Study Limitations**

There are number of limitations to this study:-

- **1- Human limitation:** This study is carried on employees in all departments in Royal Jordanian.
- **2- Place limitation:** This study is conducted at Royal Jordanian offices in Amman-Jordan.
- 3- Timeline limitation: The time needed for this research is from 2015-2016

#### **Study delimitations**

This study is implemented in Royal Jordanian which limited it's generalizability to other organizations and industries.

1- Study results are restricted only to Royal Jordanian employees and organization.

2- The amount of collected data depended on employees' response to the questionnaires.

3- The employees' response reflects the psychological impression of the company at that point of time.

#### **1.9 Study Operational Definitions**

Human Resource Management (HRM): A variety of processes in all areas of the organization that helps managers to recruit, select, train and develop members for an organization.

**E-HRM:** An electronic information system within the Human Resources department to store and manage HR resources and processes, such as HR planning (recruitment, selecting, hiring, training, promotion, and layoff) performance management, employee relations. This system has to be accessible to all employees within an organization.

**E-HRM Application:** The use of an electronic information system within the Human Resource (HR) department to store and manage HR resources and processes effectiveness, such as HR planning (recruitment, selecting, hiring, training, promotion, and layoff) performance management, and employee relations.

**Organizational Performance:** The analysis of company's progress processes and services compared to goals and objectives in order to achieve sustainability by continuous development.

**Customer Satisfaction:** The degree to which the products and services supplied by a company meet or surpass customer expectations.

**Human Resource Process:** The efficiency of the organization in conducting and performing the processes of HR related to planning, recruitment, selection, training, HR performance management and employee relation.

**Organizational Innovation:** The implementation of new business practices, workplace organization or external relations to achieve organizational performance.

**Organization Rapid adaptation:** It is the ability of an organization or even its components to adapt the changes from the external environment to stay competitive.

**Time to Market:** the time period between first ideas around a product/ services and its availability to consumers.

# Chapter Two: Theoretical Framework and Previous Studies

#### **2.1 Introduction**

This chapter reviews the related literature and previous relevant studies. This includes related literature about E-HRM Application and organizational performance. Moreover, it briefly reviews the background of Royal Jordanian.

Later in this chapter, the study model is introduced and built based on the previous related studies.

#### 2.2 Background

#### **Royal Jordanian Airline**

"I want our national carrier to be the ambassador of goodwill and the bridge across which we exchange culture, civilization, trade, technology, friendship and better understanding with the rest of the world."

#### King Hussein Bin Talal, 1963

Royal Jordanian's role as Jordan's national carrier has now long been established since 1963. Now under the guidance of His Majesty King Abdullah II, RJ has ascended from humble beginnings with three aircraft and four regional destinations, to become one of the elite members of a global alliance, a fleet comprising more than 25 aircraft, and a destination network of 54 global stops. Not only have RJ grown in size, our reputation has been cemented in the public eye through their full membership in oneworld since 2007.

Strategically located in Amman, Royal Jordanian's central hub provides the ideal location through which Europe, Asia, Africa, and anywhere in the Middle East can be

easily reached. Their Amman City Terminal at 7<sup>th</sup> Circle provides a central locale for sales and early boarding services. RJ proud to fly in and out of their main airport, Queen Alia International Airport (*QAIA*), conveniently situated just outside the city. In order to ensure the quality in all areas of service and operations, RJ owns shares in a number of sister companies related to providing the utmost in air travel services. (www.rj.com)

#### **2.3 Theoretical Framework**

#### Human Resource Management (HRM)

Flippo (1984) augured that human resource management is the process of planning, organizing, directing, development, compensation, integration, motivation and maintenance of human resource so that individual, organizational, and social objectives are accomplished.

Decenzo and Robbins (1989) stated that human resource management is concerned with the people dimension to management. Since every organization comprises people, acquiring their services, developing their skills, motivating them to a higher level of performance and ensuring that they continue at the same level of commitment to the organization are essential to achieving organizational goals.

Jackson and Schuler (1997) reported that HRM effectiveness has two essential dimensions. The first, the technical HRM, includes the delivery of HRM basics such as recruiting, compensation, separation etc. The second, strategic HRM involves "delivering those services in a way that directly supports the implementation of the firm's strategy".

Prescott (1999) stated that human resource management referred to the overall management of the human resource functions and to the human resource professionals who work within the department.

Phill Johnson (2009) said that human resource management is one of the organizational functions, designed to improve the employees performance and the way of doing their jobs. As well as human resource management has a number of activities including training, development, recruitment, rewarding, maintaining, and evaluation.

Lloyd and Leslie (2011) stated that human resource management can be defined as the activities designed to provide and coordinate the human resource of an organization.

#### The Objectives of Human Resources Management (HRM)

Equity capital whether it is intellectual capital or human capital agreed with human resource management in the idea that individuals have possibilities that lead to organizational performance (Dubois et al., 2004). Human resource management is the process that enables organizations to find, use, develop, and keep individuals to fulfill their performance of its mission (Dubois et al., 2004; Lado & Wilson, 1994). Traditional human resource management systems have multi-functions including selection, training, recruitment, development, performance management, compensation, development planning (Dubois & Rothwell, 2000; Lucia & Lepsinger, 1999; Schippmann, 1999). Functional analysis in traditional Human resource management system is the most important process in selection, recruitment, training, evaluation, and developing individuals. According to the functional analysis, the human resource function aims to discover the skill, characteristics, and knowledge, which directly connected to the success of the organization (Dubois et al., 2004; Lucia & Lepsinger, 1999; Thompson et al., 1996).

Human resource management controls the most important and most expensive assets of any organization, that's why Human Resource Management is gaining great importance in any organization. In addition, Ho Wilson & Chen (2010) see that interaction between the administrative organization and perception is one the most important factors which Human resource management focused on. Furthermore, Günsel (2006) mentioned that there are five groups affect the company's performance, which are divided from HRM practices. These groups are; use of teams and decentralization, selective recruitment, the exchange of information, training, and performance.

#### **Electronic Human Resource Management (E-HRM)**

The computer was used for the first time in human resources management in the 1940s. The first processes were payroll systems and employees information storage, (Walker, 1980).

In 1943, America faced a problem in payroll clerks with the manual processes which failed to avoid human errors, so the urge to avoid the human errors and increase the efficiency of auditing led to use the automated payroll system in the human resource department which was responsible for it. This revolution in the human resource department reduced the burden of human resource staff and increased their efficiency, (Fletcher, 2005).

In the 1980s the developments accelerate, the companies admit that the using of information technology application causes huge benefits. In that time, there were new areas like finance and accounting were gradually mechanized, (DeSanctis, 1986). Researchers and practitioners are started to use the human resource information system widely. The internet began to emerge in the late of 1980s and shed a spotlight on HRM activities. A survey conducted by CedarCrestone (2006) showed that the organizations

increased their budgets to invest in human resource system and expanded the range of human resource management application. Moreover, the Electronic human resource management (E-HRM) application have become more developed and flexible as a part of enterprise resource planning system and other modules, (Bondarouk & Ruël, 2009). The diffusion of E-HRM in organizations involves an urgent modification among human resource to fulfill the increasing demands of this profession.

#### **Definitions of E-HRM**

Definitions have been suggested to explain the E-HRM which was used interchangeably with human resource information system (HRIS), virtual human resource or web-based human resource management, researchers tried to explain the relationship between human resource management and web-based technologies, (Bondarouk & Ruël, 2009).

In the early 1990s, the term of E-HRM has been officially used referring to conducting human resource management using the internet, (Lengnick-Hall & Moritz, 2003).

The term of E-HRM was initially inspired from the e-commerce and adopted the "e-" prefix, signifying "electronic", even if the e-human resource is very specific to the use of the internet. So Vakola, Panayotopoulou and Galank (2007) recommend and suggested a new term "Online Human Resource Management" as a more accurate term. There is a difference between human resource information system (HRIS) and electronic human resource management (E-HRM), users face the problem of not being able to differentiate between HIRS and E-HRM.

However, E-HRM was designed to serve non-human resource staff such as managers and employees while HRIS involves systems used within human resource department to improve the human resource processes, (Ruël, 2004). There is a difference in usage of electronic human resource (E-HR) and electronic human resource management (E-HRM). E-HR more likely used by information technology (IT) teams and software suppliers while E-HRM has been popular for academic usage (Foster, 2009).

E-HRM has variety of definitions according to specific perspectives that each researcher wants to focus on, but there is little agreement on definitions of E-HRM (Strohmeier 2007, Bondarouk & Ruël 2009).

Some prefer the transactional functionality that simply refers to what the system does. Kettley and Reilly, (2003) defined E-HRM as the using of the internet in the conventional technologies to enhance and improve human resource administration, transactions and process performance. Voermans and Van Veldhoven, (2007) share a similar purpose when stating that the administrative support of the human resource function in organizations by using web technology and emphasize the importance of understanding that the introduction of E-HRM could cause a change in content and positioning of the human resource function.

Strohmeier (2007) see that E-HRM as the "planning, implementation and application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities". There is an agreement among definitions, as Foster (2009) views E-HRM as a "fully integrated, organization-wide electronic network of HR related data, information, services, databases, tools, applications, and transactions".

Finaly, Bondarouk and Ruël, (2009) recapitulate the meaning of E-HRM as "an umbrella term covering all possible integration mechanisms and contents between HRM and information technologies, aiming at creating value within and across organizations for targeted employees and management". E-HRM practices and policies are strongly growing within organizational life. This definition will be used in this thesis because it includes all previous definitions; it also achieves the requirements of the thesis, as this definition shows the importance of the use of electronic human contained in the organization system and targeted employees and managers.

The implementing of human resource strategic policies and practices within the organizations E-HRM refers to the application of information and communication technology (ICT). Therefore, E-HRM can be discussed as planning, implementation, and application of information systems for both networking and supportive actors in their common activities that related to human resource activities.

Nowadays, all human resource departments are changing them to E- HRM around the world due to rapid innovations within the web- based technologies. So that, traditional activities of all HRM functions replaced to E-HRM to be transformational activities; this lead to increase organizational performance.

The implementing of E-HRM within the strategic design of their main businesses. While some organizations require the use of standard HR management tools such as employee benefits, payroll, recruitment, and training... etc. These organizations mainly refer to off-the-shelf E-HRM solutions offered by the third party such as Oracle, PeopleSoft, SAP, or IBM. Where they perceive efficiency and fulfillment in these ready-made systems. Others require customized Human Resources Information Systems (HRIS) tailored to best fit their business's needs. One of the main advantages of in-house developed HRIS is that they save HR staff time in dealing with the elements of the application and understand the parameters of their own software (Thaler-Carter, 1998).

#### Application of electronic human resource management

A variety of human resource activities that provided in E-HRM application increases the organizational performance due to flexibility and ease of using human resource functions.

Strohmeier, (2007) Stated that E-HRM extends outside the human resources department to the whole organization. Due to the E-HRM application of information technology (IT) for both interacting and supporting a minimum of two individual and collectives actors in their common performance of human resource activities.

Wyatt, (2002) defined E-HRM application as a technology that allow managers and employees to access HR and other services such as performance, communication, team management, reporting, knowledge management, and administrative applications.

In Addition Olivas-Lujan, Ramirez, & Zapata-Cantu, (2007) defined E-HRM application as a technology that enables managers and employees to have direct access to human resource and other workplace services for communication, performance appraisal, reporting, team management and knowledge management

According to Hopkins and Markham, (2003) defined E-HRM application as a strategic of web-based technologies to HR-related systems that are linked with other organizational changes, will lead to more broadly-based access to human resource information and wider opportunities for managing that information.

#### **Objectives of E-HRM application**

The aim of creating Human resource management science is to reduce the costs, improve the procedures in order to run faster processes and functions. E-HRM is a new topic added to human resource management science (Kariznoee, 2012).

There are important requests to be considered in the electronic human resource management (E-HRM) so as to achieve its goals; first, all units and departments of human resources must focus on the strategic questions; second of all, human resources units should be flexible in applied actions and policy making; third point these units need to be aware of costs, work effectively, and to serve the managers and employees. The summary of the previous points is all units of human resources should be efficient and flexible, customer-oriented and focus on the strategy altogether. Figure 2 illustrates the objectives of E-HRM.

Figure 2: Objectives of E-HRM



Source: (Kaur, 2013)

#### **Levels of E-HRM Application**

By reviewing the relevant literature, Lepak and Snell,1998;Swaroop, (2012) suggested three levels of E-HRM as summarized in Table (1) below;

Table.1: Levels of E-HRM

Levels of E-HRM	Description
<b>Operational E-HRM</b>	E-HRM is concerned with administrative function like
	payroll, employee personal data, etc.
<b>Relational E-HRM</b>	E-HRM is concerned with supportive business process by
	the means of training, recruitment, performance
	management, and so forth.
Transformational E-	E-HRM is concerned with strategic HR activities such as
HRM	knowledge management, strategic reorientation, etc.

**Source:** (Rawash & Saydam; & Swaroop,2012)

#### The Goals of E-HRM

The general purpose of E-HRM is to support the achievement of HRM goals .HR goals have traditionally been divided into three types: cost-effectiveness; improving services for internal clients and addressing the strategic objectives of the business Martin, (2008); Lepak and Snell, (1998). And to improve the global orientation of HRM is the fourth type of goals for E-HRM added by Ruel, Bondarouk, and Looise, (2004), while Martin, (2008) suggested that the achievement of the HR functions transactional or transformational goals through the drivers who provide assistance of E-HRM.

Ulrich, 1997; Paauwe, (2004) divided E-HRM goals as transactional goals that focused on improving the production, reducing cost and the importance of services in human resource function, while transformational goals are the second goal that meets the strategic needs of the business and can be considered as sub-goals of the overall goal of human resource function, which focused on the allocation of time for HR professionals that addressing more strategic issues.

These studies clarified the goals which provided; summaries of E-HRM goals and examined whether each goal is actually realized as an outcome of E-HRM use.

#### **Benefits of E-HRM:**

Strohmeier, (2007) explained that E-HRM application systems lead to better information responsiveness and more information autonomy and find out the benefits of using E-HRM application which reduces the administrative burden and improves the accuracy of the results and the quality of human resources activities, Ruël, (2004) observed signs of a shift in responsibility from HR staff to line managers and employees.

E-HRM helps in improving efficiency, reduce cost and get things done on time which reduces the use of paper and reduces the administrative burden for people. It has the ability to allow Human resource management to become more strategic by giving the HR managers the authority to have an effective impact on business decision making and giving more time to decisions making rather than transactional procedures. It provided the HR managers with accurate, reliable data about their management which feeds in business decisions. (Hopkins, B. & Markham, J., 2003).

According to various studies, Benefits of E-HRM are as follow:

 Support strategic decision making through the generation of human resource metrics (Hendrikson, 2003; Lengnick-Hall & Moritz, 2003; Lawler et al., 2004; Hussain et al., 2007; Bondarouk & Ruël, 2009; Swaroop, 2012 ). 2. Automates the processes, kill the routine of HR tasks, and replacing the filing cabinets with filing system (Brown, 2002; Parry et al., 2007).

3. Reducing costs while maintaining the quality of data.

4. Implementing the tasks related to the strategic people-management activities and releasing human resource staff from the administrative loads (Lepak & Snell, 1998; Ruel, 2004; Shrivastava & Shaw, 2004; Martin, 2008).

5. Electronic human resource management (E-HRM) allows improving talent management of the HR department through e-performance management, e-selection, and self-evaluation (Martin, 2008).

6. Converting HR experts and professionals from traditional paper handlers to strategic partners (Broderick & Boudreau, 1992, Burbach & Dundon, 2005; Bell, 2006; Voermans and Veldhoven, 2007; Keegan & Francis, 2008; Haines and Lafleur, 2008).

#### **Organizational Performance**

Steve Bonadio, (2010) stated that automation and improving performance processes and aligns employee's development and the common goals with corporate objectives. Performance Management enables organizations to plan employee efforts in support of organizational goals and strategic initiatives and to evaluate outcomes, performance, and core competencies.

Haworth, (2007) defined organizational performance as the result of several business factors, including work processes, team/group communication and interaction, leadership, and climate that promotes innovation, creativity, corporate culture and image, policies, and loyalty.

Cardy and Miller (2005) said that the level of performance made possible by technological advancement has changed the standard for acceptable performance.

Satisfaction assessment remains a relevant concern for organizations even when technology is either basic mechanism for the feedback process, or already become the evaluation process because high-quality performance feedback is a critical factor that helps organization retain, motivate, and the development of their employees, Ilgen, Fisher, & Taylor, (1979). These results are more likely to satisfy the evaluation of employee performance process, treated fairly, and supporting the system.

#### **Organizational Performance Measurement**

Kanji and Sá, (2002) found "Effective management depends on the effective measurement of performance and results", U.S. Department of Energy, (2005) defined performance measurement as a method of assessing progress processes toward achieving predetermined goals, including information on the efficiency with that resources are transformed into products and services (outputs), the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied), outcomes (the results of a program activity compared to its intended purpose), and the effectiveness of government operations in terms of their specific contributions to program objectives".

Andrews, (1996) stated that there are financial and nonfinancial aspects of the measuring organizational performance. The financial aspects of organizational performance, such as (net earnings and returns on investment) are related to pursuing short-term fixes over long-term strategic goals. While nonfinancial aspects are related to product quality, work processes, and customer satisfaction. Nonfinancial aspects usually would be subjective and susceptible, so it is difficult to control and manage those.

#### **Customer Satisfaction**

Customer satisfaction is a fundamental concept in marketing and its pursuit an important goal for businesses (Leavitt, 1983; Webster, 1994). Jobber, (2007) defined customer satisfaction as the central pillar of modern marketing thought, which focused on the meet and exceed customer needs, and their expectations in a better way than competition. Management must think of itself, not as products production, but also, create the value of customer's satisfaction, Successful companies and others seeking to satisfy consumers and put this goal at the heart of their business goals and mission.

Chatura and Jaideep, (2003) stated that customer satisfaction has traditionally been regarded as a fundamental determinant of the long-term consumer. The more satisfied customers are, the greater is their retention, the generate of positive word of mouth and the financial benefits to the firms. Therefore, fundamental aims to seek to manage and increase customer satisfaction of firms. While Oliver, (1997) defined customer satisfaction as an effective response reflecting the extent to which a service is providing a pleasurable level of fulfillment of customer's needs and goals.

Oliver, (1997) stated that Customer satisfaction in general means customer reaction in the context of the state of fulfillment, and customer judgment of the fulfilled state. While Woodruff, (1997) defined Customer satisfaction as an overall positive or negative feeling about the net value of services received from a supplier. Moreover, Kotler (2000) described satisfaction as a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance or outcome in relation to their expectations.

Various studies indicated that satisfaction depends in general on perceived quality of goods and services. While other studies considered customer value is the main driver in achieving customer satisfaction. As a matter of fact, customers evaluate what they buy

continuously, and determined satisfaction or dissatisfaction by their attitude about what they bought. Satisfaction or dissatisfaction is developed after the consumption experience in which the customer compares perceived quality with prior expectations (Sivadas and Prewitt, 2000).

Seddon, (1997) said in terms of E-HRM and its relationship with customer satisfaction, there is a direct correlation between customer satisfaction and attitude towards of E-HRM system. Customer satisfaction is a subjective evaluation of different uses of experiences of an information system based on a pleasant or unpleasant continuance.

#### **Human Resource Process:**

Due to the rapid changes in organizations manufacturing-based industries are seeking to gain competitive advantage and are turning to more innovative through human resource management practices sources (Sparrow, Schuler, & Jackson, 1994). As the world is becoming more competitive and unstable than ever before, manufacturingbased industries are seeking to gain competitive advantage at all cost and are turning to more innovative sources through HRM practices (Sparrow, Schuler, & Jackson, 1994). It has been identified human resource management practices in several aspects. Schuler and Jackson, (1987) defined human resource management practices as a system that attracts, develops and motivates, and retains staff to ensure the effective implementation and the survival of the organization and its members. Moreover, Minbaeva (2005) viewed HRM practices a set of practices used by an organization to manage human resources through facilitating the development of competencies that are firm-specific, produce complex social relations and generate organization knowledge to sustain competitive advantage. Against this backdrop, the researcher concluded that HRM practices relate to specific practices, formal policies, and philosophies that are
designed to attract, develop, motivate, and retain employees who ensure the effective functioning and survival of the organization.

While Delery and Dottie, (1996) define HR processes are also conceptualized as a set of internally consistent policies and practices designed and implemented to ensure that a firm's human capital contribute to the achievement of its business objectives.

HR processes are the basis for the management of human resources customer satisfaction. When customers understand HR processes and how they are connected, and how the HR processes interact, they feel comfort and the satisfaction level increases, (SimpleHRGuide, 2016).

Ellen Ensher, (2002) mentioned that because of the importance of HRM to executives and to their organizations future successes, and for providing managers with a better understanding of the unique challenges and opportunities related to human resource during this time of rapid technological changes. Ellen, Troy, Elisa, (2002) examined five key HR processes and their major activities are:

(1) Acquiring HR (recruitment and selection)

(2) Rewarding HR (performance, evaluation, compensation and benefits)

(3) Developing HR (training and development, career management)

(4) Protecting HR (health and safety, employee relations/ legal issues)

(5) Retaining HR (retention and work-family balance).

#### **Organizational Innovation**

Vacek, (2009) stated that innovation includes many types of research, technological, organizational, financial and commercial activities. Vacek defined innovation as new processes or products, major technological modifications to products and processes. (Product innovation) considered performed if it is introduced to the market includes

significant improvements in technical specifications, components, and materials, software in the product, user friendliness or other functional characteristics. While (Process innovation) implements in the production of processes includes significant changes in techniques, equipment or software. Innovation includes many researches, technological, organizational, financial and commercial activities (Vacek, 2009).

Damanpour, (1991) stated that innovation should adapt to change through processes, services, products, programs, system and policies.

According to Coopey, Keegan, & Emler, (1998) innovation is a particular form of change characterized by the introduction of something new. This something may relate to a product, service or a technology or it may involve the introduction of new managerial or administrative practices or changes in other elements of the organization. Ultimately innovation brings about beneficial change.

Flood and Olian, (1995) stated four main aspects to implement innovation efforts; first of all, the difference in the level of proficiency and type of the employees' skills, It gives a great value for human resources and that's the point, employees are no longer perfectly substitutable. Second of all, HR of an organization should be rare to obtain success and become competitive, while finding a high quality of employees is difficult even in time of high unemployment. Third, HR processes must be unique to avoid the imitation, which means that human resource should be hard to imitate. And fourth, HR is very important for the firm and it is non-substitutable unless the firm is to face damages and costs.

#### **Time to Market:**

VentureLines, (2015) defined Time to market as the length of time it takes to develop a new product from an early initial idea for a new product to initial market sales. Precise

definitions of the start and end point vary from one company to another, and may vary from one project to another within the company.

According to Afonso et al. (2008) denoted to the importance of time to market of new products as a source of competitive advantage. That's why companies are working to reconsider increasingly fundamental ways in reducing time to market of new products.

#### **Organization Rapid Adaptation:**

The term was used to imply the alterations and modifications made by the organization or even its components to allow it adjust to changes from the external environment (Kim S. Cameron, 1984).

Kamoche (1991), Pfeffer (1994), Becker and Gerhart (1996) mentioned that due to globalization and technological innovation and rapid change in the business environment, the traditional sources of competitive advantage are not enough to succeed in the current situation.

The increased competitions require developing internal capabilities, and therefore are paying a great attention to the business systems emphasizes that individuals enable these systems to operate. Therefore, human resources and their management have recently been viewed vital to achieving a sustainable competitive advantage.

Customer expectations are changing quickly and they expect rapid responses. And as organizations are being forced to become more lean, it is increasingly important to have employees with the right competencies to be effective. Competency-based HR can help and focus selection, training, and evaluation systems based on current future needs (Dubois et al.,2004; Lucia & Lepsinger, 1999).

According to Byham and Moyer (2005); Dubois (2004) and Lucia and Lepsinger (1999) organizations anticipate and react to change and they must have individuals capable of dealing with the associated challenges where jobs change and roles change

frequently. Competency-based HR management moves the traditional focus on work to individual competencies that may underpin all required roles, align with organizational problems and strategic issues. In an environment with jobs in flux, competency models provide a tool for describing skills required now and in the future as needs change.

#### **Relationship between E-HRM application and organizational performance:**

1- Relationship between HR process and organizational performance:

Nowadays, the dynamic change in environments called sustainability is the most desired element for all organizations. While sustainability was the new element added to the tasks of HRM (Wesley, Charbel, and Fernando, 2011). And to achieve sustainability, it needs to be out in the center of organizational strategy. There is the need to integrate an environment within the organization that leads to sustainability. Higher management needs to help HRM department in creating a sustainable environment.

All departments need to be integrated completely as it affects all in the organization. To make the process flow faster and smoother, the introduction of technology in the organization is important. Technology developments can play a major role towards contribution to organizational performance and sustainability.

With the development of technology, HR functions will become more digitized. So technology can support all processes. Now, HRM has become e-HRM was developed with the objective to achieve high competencies, high commitment, cost-effectiveness and higher congruence for an organization towards sustainable society (Mahisha Suramardhini, 2012).

Information and communication technologies (ICT) help companies to access and communicate all information within firms through internal network by keeping the privacy and security of the confidential information. This will carry HRM towards sustainable society.

2- Relationship between time-to-market and organizational performance:

Select the appropriate performance measures is challenging (Chen and Paulraj, 2004) proposed that financial performance is the main measure of organizational performance because the primary goal of any organization is to make profits. However, other researchers describe several limitations on financial performance. (Vickery, 2003) and (Sousa and Voss, 2008) argued that organizational performance measurement includes operational indicators, such as customer responsiveness, the speed of delivery, and customer service. Chen, Damanpour, and Reilly, (2010) suggested that time to market of new products is one of the most important measures of the product development performance. Therefore, introducing new products to market rapidly has become increasingly important to manage product development in organizations due to continuous reduction in the product life cycle time and the increase in competition. Through the introducing of new products on the market quickly, organizations achieve five major benefits:

- Quick and efficient access to products in the market, increase profits and the sustainability of goods in the markets (Karagozoglu and Brown 1993).
- Introduce a new product to market more rapidly than competitors lead to improve customer satisfaction and develop customer loyalty which will result in the purchase of sequential sales increase (Zhao et al. 2008).
- Companies that have a shorter time to market of new products have a great chance to develop industry standards and produce technological edge (Dumaine 1989).

- Organizations can significantly improve the timeline of products entry and market share through the capability of introducing products rapidly and quickly respond to customer demands (Chen, Reilly, and Lynn 2005).
- Some customers pay attention to firms which are being first in introducing new products. Being the first firm in supplying new product to the market allows charging a premium price. Meet customer needs as quickly, pushing them to pay a higher price. successful organizations translating time into profits by responding to customers more rapidly than competitors (Brown and Eisenhardt 1995).

According to Laursen and Salter, (2006) organizations often invest considerable time, money and other resources in their product development activities. While Rosenau, (1988) said that reduce the time to market used to introduce new products and it is likely to reduce the cost of product development. Therefore Droge, Jayaram, and Vickery (2004); Carbonell and Rodriguez, (2006) suggested that the decrease in time to market of new products can enhance both operational and business performance.

**3-** Relationship between innovation and organizational performance:

Kaplan & Norton, (1992) stated that the intense global competition requires that "companies make continual improvements to their existing products and processes and have the ability to introduce entirely new products with expanded capabilities". Therefore, the ability to innovate, improve, and learn is directly related to the company's value, and this ability leads to the launch of new products, creates more values for customers, and improves operating efficiencies, which can lead to penetrating new markets and increasing revenues and margins.

**4-** Relationship between innovation and HRM:

The relationship between innovation and HRM has been analyzed from the organization's strategic point of view. Kossek, (1987) said that the development of

human resources management policies along with the strategic growing interest in encouraging innovation in order to be more competitive. Moreover Wright, Dunford and Snell, (2001) said that the increasingly apparent that innovations are not only a new idea but also the implementing of innovative idea leads to effective organizations. The resulting effect is granting human resource a competitive advantage, which summarizes that individuals are strategically important for firm success.

#### 2.4 Review of Previous Studies

Ichniowski (1997) study titled: **"The Effects of Human Resource Management Practices on Productivity"** explained that when the combination of human resources management practices in various forms, the effects on organizational performance are much greater than when practices are explored individually.

A study by Sivadas and Prewitt (2000) study titled: "An Examination of the Relationship between Service Quality, Customer Satisfaction, and Store Loyalty", the study aimed to examine the relationship between service quality, customer satisfaction, and store loyalty. The study was conducted by testing two complementary models that examine this interrelationship. The findings indicated that service quality influences relative attitude and satisfaction with department stores as well as satisfaction influences relative attitude , repurchase, and recommendation, but has no direct effect on store loyalty.

According to Hosmer (2001) study titled: "Foster employee customers and hold on to your best ones ", because human resources are characterized by the highest degree of restraint, attracting and retaining employees "quality" is a critical issue for competitive advantage and organizational performance.

Heneman (2002) study titled: "human resource management in virtual organizations", found that there is a relationship between E-HRM and efficiency of

organizations when it comes to team management and their performance management. E-HRM provides avenues where each member of the teams and each team can access information upon request, what is required of them and how they can achieve that and reward systems that are set by management. This allows employees to get it right the first time without repetitions repeating tasks and this is important when it comes to increasing the competitive advantage of the organization.

Coronas (2005) study titled: **"E-human resources management managing knowledge people"** states that customer satisfaction is very important, which is the primary source for this is how the organization be able to manage their operations in order to ensure that they are smooth and allow high-quality products and services. E-HRM played a great role in ensuring that each individual and teams perform their tasks as required. Therefore, the organization is able to ensure quality, and this is the quality of customer's satisfaction and this is important in customer retention. E-HRM has a unique role in doing profiling customers and employees can use this information in performing their tasks and to ensure that meet customer requirements.

Runy (2006) study titled: "**HR information systems**" said that E-HRM helps to eliminate a lot of the administrative burden and makes managers and staff focus on more important tasks. This not only reduces cost but also enhance employee satisfaction and financial performance.

Ruel (2007) study titled: "**The contribution of e-HRM to HRM effectiveness**" He pointed out that E-HRM can help to moderate the working relationship. Changing labor market, such as in supply shortage, individualization and higher educational level, and causes the transfer of power from the employer to the employee. The progress of E-HRM and better service to employees who are internal clients increases employee satisfaction and commitment.

Ruel (2007) study titled: "The Contribution of E-HRM to HRM Effectiveness" they examined the contribution of E-HRM to HRM effectiveness and they found that individual assessment of E-HRM application affects HRM technical and strategic effectiveness. This is especially so in the perceived quality of the content and the structure of E-HRM application which have a significant and positive effect on technical and strategic HRM effectiveness. They also discovered that the basic expectations are that using E-HRM will reduce costs, will enhance the HR service level and will supply the HR department space to become a strategic partner.

Bondarouk (2009) study titled: "organizational outcomes and challenges" In his research he tried to relate e-transformation and human resource management technologies; conclusively it is evident from this research of organizational flexibility especially in terms of HRM management. It becomes easier for managers to monitor team and individual tasks without having to supervise the staff manually, with the use of e-HRM staff updates their tasks, what they have achieved on a daily basis, and this is important mainly when it comes to HRM performance management establishment and reward systems.

Lawler (2012) study titled: "effective human resource management a global analysis" notes the relationship between electronic human resource management and employee motivation, the fact that E-HRM encourages transparency and allows employees to review evaluation of their performance, they are in a better position to be driven up to work hard to take this encourages rational and transparent way reward systems and performance management in the organization.

Rahman (2014) study titled: **"Information systems and technology for organizational agility, intelligence, and resilience** ", found that it is evident that there is a link between application of online technology and the agility of organization,

which is the ability of organization to adapt to the external business environment changes. Application of e-HRM helps organization to monitor the changes from external business environment especially in labor markets and hiring the qualified staff that can help in adapting with changes in the competitive markets. This is an important element as adaptation to change has played a key role for organization profitability and competence.

#### **Chapter Three: Methods and Procedures**

This chapter presented methods and procedures, and the study population and its sample. Then, designed the study model and explain the study tools and the way of data collection. After that, the researcher discussed the validation of the questionnaire and the reliability analysis is applied. In the final section, the researcher discussed the statistical treatment that used in the analysis of the collected data.

#### 3.1 Methodology of the study

This study deployed the quantitative methodology through investigating the related prior studies, and by using questionnaires presented to the unit of analysis. The questionnaire validity was examined by panel of judgment includes 6 academics whom field of specialty is connected to the subject of the current study (shown in appendix number 2). The questionnaire was constructed by three sections which are demographic section that aimed to collect some demographic data about research respondents, E-HRM Application section, and organizational performance section.

#### **3.2 Study Population**

The study population includes all employees in Royal Jordanian. As the population of the current research is relatively large, the study opted for random sampling.

#### **3.3 Study Unit of Analysis**

The research unit of analysis contained a random sample of employees in different levels (Top, Middle, and Operational) because it is believed that they have good knowledge of the impact of E-HRM application on organizational performance. The questionnaire was sent to a contact point within the company who assigned by the top management and knows who utilized the E-HRM application system and 120 questionnaires were handed in to the contact point and this number was determined according to company's permission. Only 90 responded to the questionnaire. Out of the returned questionnaires, 11 responses were excluded due to missing values and multiple answers to questions. Accordingly, only 79 responses were valid for data analysis marking 66% of response rate.

#### **3.4 Study Data Collection Tools**

#### **First: Secondary Data**

Secondary sources: the secondary data was collected from books, journals, researches, dissertations, articles, working papers, and the worldwide web. This way facilitated building strong theoretical background to clarify the problem definition, testing, and comparing study results with literature results.

#### Second: Primary Data

The primary data was collected through questionnaires which were divided into three sections representing demographics and study variables. The first section is meant to collect demographic data of research respondents to be able to understand the characteristics of respondents and give further information to the reader about the research respondents. The second section presented E-HRM application, the measurement items for E-HRM application were adopted from (Schalk, 2012), (Ruel, 2007), and (lawler, 2012). The third section covered the organizational performance variable, the measurement items for organizational performance were adopted from (Heneman, 2007), (Boxall & Purcell, 2003), (Jobber, 2007), (Vacek, 2009), and (VentureLines, 2015).

The questionnaire items were anchored according to the Five Point Likert Scale (5 strongly agree, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree). The questionnaire instrumental sections are as follows:

**Section One: Demographic variables.** The demographic information was collected with closed-ended questions, through (5) factors (Gender, Age, Education, Years in Current position, and Years of experience with in the current organization).

**Section Two: (Independent Variable) E-HRM Application.** This Section was measured through (11) statements, statements on a 5 point Likert-type scale.

Section Three: (Dependent Variable) Organizational performance : This section measured the organizational performance components through (5) dimensions (Innovation was measured through (3) statements, Rapid Adaptation was measured through (4) statements, Customer Satisfaction was measured through (4) statements, Time to Market was measured through (3) statements and HR Processes was measured through (6) statements on a 5 point Likert-type scale.

#### **3.5 Data Validity and Reliability**

#### **Data Validity**

To validate the data collection instrument used in this study in terms of its readability, format, and ability to measure the study's constructs; the researcher distributed the questionnaire instrument to a number of professors in different universities in Jordan as shown in Appendix 2; those who have specializations and expertise in the field of this study. The questionnaire instrument was then updated and refined to reflect the comments and suggestions received by the domain experts. Moreover, the experts

showed interest and interacted with the researcher concerning the questionnaire instrument which adds to its validity.

#### **Data Reliability**

In order to measure the internal consistency and reliability of the study's constructs. Cronbach's alpha ( $\alpha$ ) measure was used. The scales' reliabilities were measured and the Cronbach's alphas of all scales in Table (2) ranged from 0.63 to 0.84, and for total questionnaire items was (0.90), this indicate an acceptable Cronbach' Alpha value for each domain, whenever Cronbach' Alpha value is acceptable if it's more than (0.60).

Variables	Cronbach' Alpha value	Number of items
E -HRM Application	0.84	11
Organizational Performance.	0.72	4
Innovation	0.63	3
Rapid Adaptation	0.65	4
Customer Satisfaction	0.64	4
Time-To-Market	0.65	3
HR Processes	0.76	6
Total	0.90	35

Table (2) Cronbach' Alpha value for each domain

#### 3.6 Study Statistical Techniques

The researcher used the suitable statistical methods that consisted of:

- Percentage and Frequencies.
- Cronbach's Alpha reliability ( $\alpha$ ) to measure strength of the correlation and coherence between questionnaire items.

- Arithmetic Mean to identify the level of response of study sample individuals to the study variables.
- Standard Deviation to Measure the responses spacing degree about Arithmetic Mean.
- Simple Regression analysis to Measure the impact of study variables on testing the direct effects.

#### **3.7 Descriptive Statistics for Research Constructs**

In this section, the researcher relied mainly on the descriptive analysis to get the means and the standard deviations for the study constructs along with their items. The items were measured using a Likert-type scale as follows.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

Based on the aforementioned details, the means of the study's constructs were dealt with according to the following formula.

Interval Length = (Highest Value – Lowest Value) / Number of Levels

Interval Length = (5-1) / 3 = 4/3 = 1.33 and thus;

- **Low Level** = 1+1.33 = 2.33 and Less
- Medium Level = 2.34+1.33 = 3.67 so this level range is from 2.34 to 3.67
- High Level = 3.68 and above

We have calculated the means and the standard deviations for the study constructs along with the items based on the responses the researcher has collected from the study's sample who actually are users of E-HRM systems.

#### **Chapter Four: Results and Hypotheses Testing**

#### **4.1 Introduction**

According to the research purpose and the research framework presented in a previous chapter, this chapter describes the results of the statistical analysis for the data collection according to the research questions and research hypotheses. The data analysis included the description of the Means and Standard Deviations for questionnaire results; Simple Regression analysis was used also to answer study questions and test study hypotheses.

#### **4.2 Statistical Analysis**

In order to answer the research questions and test the hypotheses, the researcher utilized a First generation statistical package; that is a Statistical Package for Social Sciences (SPSS). To answer research questions, the researcher utilized means, frequencies, and standard deviations. The Cronbach's Alpha test was also utilized to test the reliability and consistency of the data collection tool (i.e. questionnaire). To test the research hypotheses, the researcher utilized simple regression analysis.

#### **Description of Demographic Analysis**

**Table** (3) shows the nature of respondents and demographic variables of the study sample (Gender, Age, Education, Years in current position, and Years of Experience with the current organization).

Variable		Frequency	Percent %
Gender	Male	56	70.9
Genuer	Female	23	29.1
	20-25 years old	14	17.7
	26-30 years old	23	29.1
Age	31-35 years old	6	7.6
8-	36-40 years old	30	38.0
	More than 40 years old	6	7.6
	Collage	8	10.1
Education	Bachelor	70	88.6
Luucution	Master	1	1.3
	PhD	0	0
	Less than 5 years	44	55.7
Years in current	5-10 years	5	6.3
position	11-15 years	26	32.9
	More than 15 years	4	5.1
	Less than 5 years	43	54.4
Years of experience with the current	5-10 years	8	10.1
organization	11-15 years	24	30.4
	More than 15 years	4	5.1

 Table (3) frequency and percent for demographic variable

**Table (3)** shows the demographic variables of the study through 5 sections about the Gender, Age, Educational Level, Years in the current position, and years of experience in the current organization. First section (Gender) reflects that the majority of respondents (70.9%) were Males, whilst only (29.1%) were Females in the sampled organization. Second section (Age) concerned about reflecting the age categories of respondents; while the "36-40" category represented the highest percentage of employees (38.0%), The second level of the respondents which reached (29.1%) from

the sample size. while the "20-25" category represented the third percentage of employees (17.7%), the "26-30" category ranked. Whereas both "41 and above" category and "31-35" category represented the same percentage (7.6%) of the sample size.

Third section (Educational Level) concerned about reflecting the educational background of the sample, and it reflects that the majority (88.6 %) of respondents had bachelor degree, whilst (10.1 %) of respondents had collage degree, and only (1.3 %) of respondents had master's degree, there were no PhD degree holders in the sampled organizations.

Forth section concerned about the years spent in current position and the majority (55.7 %) of the sample spent round less than 5 years in the current position, whilst (32.9 %) spent round 11-15 years, and (6.3 %) spent round 5-10 years, only (5.1 %) spent more than 15 years in the researched organization.

Last but not least, fifth section concerned about the years of experience in the current organization and reflected that the majority (54.4%) of the sampled organization spent less than 5 years, when (30.4 %) of respondents spent round 11 to 15 years, while percentage (10.1 %) represented employees spent round 5 to 10 years, and percentage (5.14%) represented the employees who spent more than 15 years in the sampled organization.

#### **Description Analysis of Study Variables**

#### **E-HRM Application**

The E-HRM application construct is measured by eleven statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 4 below:

No.	Statement	Mean	Std .Deviation	Order	Level
1	E-HRM application are similar across all business units/departments /divisions.	3.27	.983	10	Medium
2	E-HRM application supports the routine day to day tasks of HRM. <b>For example,</b> supporting payroll, administration practices and/or report preparation for personnel data.	3.73	.873	2	High
3	E-HRM application supports the decision making of HRM. <b>For example,</b> personnel policy/procedure development, employees hire processing and/or employee award programs.	3.62	.951	3	Medium
4	E-HRM application supports the forecasting of HRM. <b>For example,</b> personnel recruitment strategies, analysis and review of personnel budget, approach in reclassifications of jobs and/or develop job content of new staff positions.	3.58	1.116	5	Medium
5	E-HRM application aims at increasing the performance of HR forecasting for employee needs, <b>Such as</b> training, needed skills, and career development.	3.57	1.140	6	Medium

Table 4: means and standard deviations for each item of E-HRM Application level

6	E-HRM application aims at reducing the inconsistent practices across different HR functions.	3.59	.927	4	Medium
7	E-HRM applications aim at enabling HR practices to serve self-servicing for employees, HR staff and/or managers.	3.75	.940	1	High
8	E-HRM application aims at reducing the organizational costs of HR practices.	3.56	1.008	7	Medium
9	E-HRM enables electronic candidate identification, filtering, and interviewing for the purposes of employment.	3.30	1.170	8	Medium
10	E-HRM enables evaluating the performance of employees electronically by managers and administrators.	3.18	1.059	11	Medium
11	E-HRM helps the identification of training needs in the company.	3.28	1.097	9	Medium
	Total	3.49	.638		

Table (4) presents the means and standard deviations of E-HRM application, where the means ranged between (3.18 - 3.75) compared with the total instrument mean for the domain (3.49). The item (1) "E-HRM application aim at enabling HR practices to serve self-servicing for employees, HR staff and/or managers." ranked first with a mean and standard deviation (M=3.75, SD=  $\cdot$ ,940) compared with the total instrument mean and

the standard deviation. The item (10) "E-HRM enables Evaluating the performance of employees electronically by managers and administrators" ranked on the eleventh and last reached a mean (3.18) and the standard deviation was (1.059) compared with the mean and standard deviation of the total instrument.

#### **Organizational Performance**

The organizational performance construct is measured by four statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 5 below:

#### Table 5: means and standard deviations for each item of Organizational

No.	Statement	Mean	Std .Deviation	Order	Level
1	RJ automates and optimizes HR processes and aligns employee development and goals with corporate objectives.	3.28	.816	4	Medium
2	RJ achieves organizational performance by reducing the production and operating costs.	3.54	.748	1	Medium
3	RJ pursues an organizational performance by ensuring high- quality production.	3.35	.833	3	Medium
4	RJ pursues a competitive strategy through product and/or process development with other firms.	3.53	.917	2	Medium
	Total	3.43	.610		

#### Performance

Table (5) demonstrates the means and standard deviations of the organizational performance, where the means ranged between (3.28 - 3.54) compared with the total instrument mean for the domain (3.43). The item (2) "RJ achieves organizational

performance by reducing the production and operating costs." ranked first with a mean and standard deviation (M=3.54, SD=  $\cdot$ .748) compared with the total instrument mean and the standard deviation. The item (1) "RJ automates and optimizes HR processes and aligns employee development and goals with corporate objectives." ranked on the fourth and last reached a mean (3.28) and the standard deviation was (0.816) compared with the mean and standard deviation of the total instrument.

#### Innovation

The innovation construct is measured by three statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 6 below:

No.	Statement	Mean	Std .Deviation	Order	Level
1	RJ initiated certain procedures, <b>such</b> <b>as</b> opening new and promising markets, intensifying marketing activities on various routes, in addition to controlling expenses without affecting the quality of services provided for passengers.	3.61	.898	2	Medium
2	RJ made electronic travel services available for its passengers to enable easy management of their personal travel procedure, <b>such as</b> e-booking of flights, enquiring about reservations and flights and getting boarding passes online.	3.75	1.019	1	High
3	RJ continuously reviews and adjusts its products and services to ensure competitive customer and market advantage.	3.49	.959	3	Medium
	Total	3.61	.726		

Table 6: means and standard deviations for each item of Innovation

Table (6) shows the means and standard deviations of the innovation items, where the means ranged between (3.49 - 3.75) compared with the total instrument mean for the domain (3.61). the item (2) " RJ made electronic travel services available for its passengers to enable easy management of their personal travel procedure, **such as** ebooking of flights, enquiring about reservations and flights and getting boarding passes online. " ranked first with a mean and standard deviation (M=3.75, SD= 1.019) compared with the total instrument mean and the standard deviation. The item (3) "RJ continuously reviews and adjusts its products and services to ensure competitive customer and market advantage." ranked on the third and last reached a mean (3.49) and the standard deviation was (0.959) compared with the mean and standard deviation of the total instrument.

#### **Rapid Adaptation**

The rapid adaptation construct is measured by four statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 7 below:

No.	Statement	Mean	Std .Deviation	Order	Level
1	E-HRM applied to keep up with rapid changes in a business environment through rapid and quick decision.	3.47	.814	1	Medium
2	A higher level of success is noticeable in the contribution of HR to strategic activities like competitor analysis, coupling of HR practices to the value chain and understanding of the requirements of external customers.	3.29	.774	4	Medium

Table 7: means and standard deviations for each item by Rapid Adaptation level

3	RJ enhances its servicing, hiring, and training of its resources to face the challenge faced by the emergence of low-cost airlines.	3.30	.882	3	Medium
4	In light of the great and accelerating development in the field of electronic systems. RJ systems are continuously updated to ensure their efficiency and ability to keep up with new requirements especially in the field of aviation.	3.35	.769	2	Medium
	Total	3.35	.519		

Table (7) shows the means and standard deviations of the items of rapid adaptation construct, where the means ranged between (3.29 - 3.47) compared with the total instrument mean for the domain (3.35). The item (1) "E-HRM applied to keep up with rapid changes in a business environment through rapid and quick decision" ranked first with a mean and a standard deviation (M=3.47, SD=  $\cdot$ ,814) compared with the total instrument mean and the standard deviation. The item (2) " A higher level of success is noticeable in the contribution of HR to strategic activities like competitor analysis, coupling of HR practices to the value chain and understanding of the requirements of external customers" ranked on the fourth and last reached a mean (3.29) and the standard deviation was (0.774) compared with the mean and standard deviation of the total instrument.

#### **Customer Satisfaction**

The customer satisfaction construct is measured by four statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 8 below:

No.	Statement	Mean	Std .Deviation	Order	level
1	RJ objectives are driven primarily by customer satisfaction.	3.61	.869	1	Medium
2	RJ supports the need of up-to- date development and utilization of new processes and services to enhance and increase customer satisfaction.	3.53	.731	3	Medium
3	RJ pays close attention to after- sales services.	2.95	.999	4	Medium
4	RJ pursues a competitive strategy by customizing processes/ products for customers.	3.43	.843	2	Medium
	Total	3.37	.575		

#### Table 8: means and standard deviations for each item of Customer Satisfaction

Table (8) shows the means and standard deviations of the items of customer satisfaction, where the means ranged between (2.95 - 3.61) compared with the total instrument mean for the domain (3.37). The item (1) "RJ objectives are driven primarily by customer satisfaction." ranked first with a mean and standard deviation (M=3.61, SD= 0.869) compared with the total instrument mean and the standard deviation. The item (3) "RJ pays close attention to after-sales services." ranked on the

#### level

fourth and last reached a mean (2.95) and the standard deviation was (0.999) compared with the mean and standard deviation of the total instrument.

#### **Time-To-Market**

The time to market construct is measured by three statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 9 below:

No.	Statement	Mean	Std .Deviation	Order	Level
1	RJ continued with investment in advanced technology in order to improve its services, simplify travel procedures and reduce the time of the process.	3.44	.764	3	Medium
2	Electronic Human Resources Management contributes in reducing the time of implementation of processes.	3.49	.904	2	Medium
3	Electronic Human Resources Management contributes to the rapid implementation of completed transactions.	3.52	.860	1	Medium
	Total	3.48	.648		

Table (9) shows the means and standard deviations of the items of time to market construct, where the means ranged between (3.44 - 3.52) compared with the total instrument mean for the domain (3.48). The item (3) "Human Resources Management contributes to the rapid implementation of completed transactions." ranked first with a mean and standard deviation (M=3.5, SD=0.860) compared with the total instrument mean and the standard deviation. The item (1) " RJ continued with investment in

advanced technology in order to improve its services, simplify travel procedures and reduce the time of the process " ranked on the third and last reached a mean (3.44) and the standard deviation was (0.764) compared with the mean and standard deviation of the total instrument.

#### **HR Processes**

The HR processes construct is measured by six statements in the research instrument (the questionnaire). The mean and standard deviation for each item is shown in table 10 below.

No.	Statement	Mean	Std .Deviation	Order	Level
1	E-HRM application are based on company-wide standard HR processes and practices.	3.52	.845	3	Medium
2	RJ employees can access information they need from websites set by the organization.	3.61	.912	2	Medium
3	RJ provides and enhances employees with necessary knowledge, skills and competencies to do their job.	3.51	.890	4	Medium
4	RJ offer straining courses through E-HRM to meet the needs of all employees to improve their performance on an ongoing basis.	3.33	1.095	5	Medium
5	RJ E-HRM software supports payroll issues.	3.70	1.017	1	High
6	RJ E-HRM supports decision making processes by middle and high level management.	3.29	1.040	6	Medium
	Total	3.49	.656		

#### Table 10: means and standard deviations for each item of HR Processes level

Table (10) presents the means and standard deviations of the items of the HR processes, where the means ranged between (3.29 - 3.70) compared with the total instrument mean for the domain (3.49). The item (5) "RJ E-HRM software supports payroll issues." ranked first with a mean and standard deviation (M=3.70, SD= 1.017) compared with the total instrument mean and the standard deviation. The item (6) " RJ E-HRM supports decision making processes by middle and high level management " ranked on the sixth and last reached a mean (3.29) and the standard deviation was (1.040) compared with the mean and standard deviation of the total instrument.

#### **4.3 Hypotheses Testing**

H01: There is no statistical significant impact of E-HRM application on organizational performance at  $\alpha \leq 0.05$ .

To test hypothesis, simple linear regression analysis was used, table (11) shows that.

#### **Table (11)**

## Simple linear regression analysis of the effect of E-HRM application on organizational performance

Var	iable	R	$R^2$	F	Sig.F	Adjusted R Square
	zational rmance	.529 <sup>a</sup>	.280	29.947	.000 <sup>b</sup>	.271

The previous table shows the impact of E-HRM application on organizational performance, then the results of the statistical analysis showed the presence of statistically significant impact of E-HRM application on organizational performance, with a correlation coefficient R (0.529) at the level of significance ( $\alpha \le 0.05$ ).

The coefficient of determination  $R^2$  has reached (0.280%), which means that the value of 28% of changes in the organizational performance resulted from changes in the E-HRM application, and confirms this conclusion F value calculated, which amounted to (29.947), which function at the level of significance ( $\alpha \le 0.05$ ). This confirms that the regression statistically significant, and a statistically significant impact of E-HRM application on organizational performance.

## H01.1: There is no statistical significant impact of e-HRM application on organizational performance from the perspective of innovation at $\alpha \leq 0.05$ .

To test hypothesis, the researcher used simple linear regression analysis, table (12) shows that.

#### **Table (12)**

## Simple linear regression analysis of the effect of E-HRM application on organizational performance from the perspective of innovation.

Variable	R	$\mathbb{R}^2$	F	Sig.F	Adjusted R
					Square
organizational performance from the perspective of innovation	.283 <sup>a</sup>	.080	6.724	.011 <sup>b</sup>	.068

The previous table shows the impact of E-HRM application on organizational performance from the perspective of innovation. The results of the statistical analysis showed the presence of statistically significant impact of E-HRM application on organizational performance from the perspective of innovation with a correlation coefficient R (0.283) at the level of significance ( $\alpha \le 0.05$ ).

The coefficient of determination  $R^2$  has reached (0.080%), which means that the value of 8% of changes in the organizational performance from the perspective of innovation resulted from changes in the E-HRM application, and confirms this conclusion F value calculated which amounted to (6.724), which functions at the level of significance ( $\alpha \leq$ 0.05). This confirms that the regression statistically significant, and a statistically significant impact of E-HRM application on organizational performance from the perspective of innovation.

H01.2: There is no statistical significant impact of e-HRM application on organizational performance from the perspective of rapid adaptation at  $\alpha \leq$  0.05.

To test hypothesis, the researcher used simple linear regression analysis, table (13) shows that.

#### **Table (13)**

## Simple linear regression analysis of the effect of E-HRM application on organizational performance from the perspective of rapid adaptation

Variable	R	$\mathbb{R}^2$	F	Sig.F	Adjusted R
					Square
organizational performance from the perspective of rapid adaptation	.499ª	.249	25.475	.000 <sup>b</sup>	.239

The previous table shows the impact of E-HRM application on organizational performance from the perspective of rapid adaptation. The results of the statistical analysis showed the presence of statistically significant impact of E-HRM application

on organizational performance from the perspective of rapid adaptation with a correlation coefficient R (0.499) at the level of significance ( $\alpha \le 0.05$ ).

The coefficient of determination  $\mathbb{R}^2$  has reached (0.249%), which means that the value of 24.9% of changes in the organizational performance from the perspective of rapid adaptation results from changes in the E-HRM application, and confirms this conclusion F value calculated which amounted to (25.475), which functions at the level of significance ( $\alpha \le 0.05$ ). This confirms that the regression statistically significant, and a statistically significant impact of E-HRM application on organizational performance from the perspective of rapid adaptation.

# H01.3: There is no statistical significant impact of e-HRM application on organizational performance from the perspective of customer satisfaction at $\alpha \leq 0.05$ .

To test hypothesis, the researcher used simple linear regression analysis, table (14) shows that.

#### **Table (14)**

## Simple linear regression analysis of the effect of E-HRM application on organizational performance from the perspective of customer satisfaction

Variable	R	$\mathbb{R}^2$	F	Sig.F	Adjusted R Square
organizational performance from the perspective of customer satisfaction	.332 <sup>a</sup>	.110	9.544	.003	.099

The previous table shows the impact of E-HRM application on organizational performance from the perspective of customer satisfaction. The results of the statistical

analysis showed the presence of statistically significant impact of E-HRM application on organizational performance from the perspective of customer satisfaction with a correlation coefficient R (0.332) at the level of significance ( $\alpha \le 0.05$ ). The coefficient of determination R<sup>2</sup> has reached (0.11%), which means that the value of 11% of changes in the organizational performance from the perspective of customer satisfaction resulted from changes in the E-HRM application, and confirms this conclusion F value calculated which amounted to (9.544), which functions at the level of significance ( $\alpha \le 0.05$ ).

This confirms that there is a statistically significant impact of E-HRM application on organizational performance from the perspective of customer satisfaction.

## H01.4: There is no statistical significant impact of e-HRM application on organizational performance from the perspective of faster time to market at $\alpha \leq$ 0.05.

To test hypothesis, simple linear regression analysis has been used, table (15) shows that.

#### **Table (15)**

Simple linear regression analysis of the effect of E-HRM application on organizational performance from the perspective of faster time to market

Variable	R	$\mathbb{R}^2$	F	Sig.F	Adjusted R Square
organizational performance from the perspective of faster time to market	.423 <sup>a</sup>	.179	16.792	.000 <sup>b</sup>	.168

The previous table shows the impact of E-HRM application on organizational performance from the perspective of faster time to market. The results of the statistical analysis showed the presence of statistically significant impact of E-HRM application

on organizational performance from the perspective of faster time to market with a correlation coefficient R (0.423) at the level of significance ( $\alpha \le 0.05$ ).

The coefficient of determination  $R^2$  has reached (0.179%), which means that the value of 17.9% of changes in the organizational performance from the perspective of faster time to market resulted from changes in the E-HRM application, and confirms this conclusion F value calculated, which amounted to (16.792), which function at the level of significance ( $\alpha \le 0.05$ ).

This confirms that there is a statistically significant impact of E-HRM application on organizational performance from the perspective of faster time to market is found.

H01.5: There is no statistical significant impact of e-HRM application on organizational performance from the perspective of human resource process at  $\alpha \leq 0.05$ .

To test hypothesis, simple linear regression analysis has been used, table (16) shows that.

#### **Table (16)**

Simple linear regression analysis of the effect of E-HRM application on organizational performance from the perspective human resource process

Variable	R	$\mathbb{R}^2$	F	Sig.F	Adjusted R
					Square
organizational performance from the perspective of human resource process	.633 <sup>a</sup>	.401	51.598	.000 <sup>b</sup>	.393

The previous table shows the impact of E-HRM application on organizational performance from the perspective of human resource process. The results of the statistical analysis showed the presence of statistically significant impact of E-HRM application on organizational performance from the perspective of human resource process with a correlation coefficient R (0.633) at the level of significance ( $\alpha \le 0.05$ ).

The coefficient of determination  $R^2$  has reached (0.401%), which means that the value of 40.1% of changes in the organizational performance from the perspective of human resource process resulted from changes in the E-HRM application, and confirms this conclusion F value calculated, which amounted to (51.598), which function at the level of significance ( $\alpha \le 0.05$ ).

This confirms that there is a statistically significant impact of E-HRM application on organizational performance from the perspective of human resource process exists.

### Chapter Five: Results, Conclusion and Recommendations

#### **5.1 The Main Results of the Study**

Based on the data analysis and hypotheses testing in chapter 4, the research results generated from this piece of work can be summarized as follows:

- **1.** E-HRM application, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **2.** Organizational performance, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **3.** Innovation, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **4.** Rapid adaptation, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **5.** Customer satisfaction, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **6.** Time-To-Market, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- **7.** HR Processes effeciency, within the sampled organization, is considered in medium level indicating a medium level of implementation.
- 8. There is a statistical significant impact of E-HRM application on organizational performance at  $\alpha \leq 0.05$ . This result is in accordance with the results of (Heneman, 2002) in a study titled: "human resource management in virtual organizations".

- 9. There is a statistical significant impact of E-HRM application on organizational performance in terms of innovation at  $\alpha \leq 0.05$ . This result is in accordance with the results of Wright, Dunford, and Snell, (2001). Said that the increasingly apparent that innovations are not only a new idea but also the implementation of innovative idea leads to effective organizations. The resulting effect is granting human resource a competitive advantage, which summarizes that individuals are strategically important for firm success.
- 10. There is a statistical significant impact of E-HRM application on organizational performance in terms of rapid adaptation at  $\alpha \leq 0.05$ . This result is in accordance with the results of Dubois et al., (2004); Lucia & Lepsinger, (1999). Customer expectations are changing quickly and they expect rapid responses. And as organizations are being forced to become leaner, it is increasingly important to have employees with the right competencies to be effective. Competency-based HR can help and focus selection, training, and evaluation systems based on current future.
- 11. There is a statistical significant impact of E-HRM application on organizational performance in terms of customer satisfaction at  $\alpha \leq 0.05$ . This result is in accordance with the results of (Coronas, 2005). Study titled:" *E-human resources management managing knowledge people*".
- 12. There is a statistical significant impact of E-HRM application on organizational performance in terms of faster time to market at  $\alpha \leq 0.05$ . This result is in accordance with the results of Afonso et al. (2008).
13. There is statistical significant impact of E-HRM application on organizational performance in terms of human resource process at  $\alpha \leq 0.05$ . This result is in accordance with the results of Wesley, Charbel, and Fernando, (2011) and Mahisha Suramardhini, (2012).

#### **5.2 Conclusion**

This research aimed to study the impact of E-HRM application on organizational performance. Organizational performance measured and evaluated in terms of innovation, rapid adaptation, HR process, customer satisfaction and time to market.

On the basis of the results of this study, the researcher concludes the following points:

- 1. E- HRM played a great role in ensuring that individuals and teams perform their tasks as required. Therefore, the organization is able to ensure quality in processes and services, and this is the quality of customer's satisfaction and this is important in customer retention.
- 2. Through this study, it is showed that the application of electronic human resources has a positive effect on raising the efficiency of companies, and this gives the human resources a great importance.
- 3. The implementation of the E-HRM system is not limited to human resources staff, but it also includes all the elements of the company, staff and administrators.
- 4. The application of E-HRM in the companies, gives the company a competitive advantage, through quickly adapt to external changes, and meet the changing needs of customers in a short time.

5. Electronic Human resource management reduces the costs, improves the procedures in order to run faster processes and functions.

#### **5.3 Recommendations**

According to the results and the drawn conclusions of study, the researcher here offers some recommendations which would like to be taken seriously into consideration so as to enhance the perceived benefits of utilizing E-HRM application system across the whole organization levels. The researcher presents through the following points the most important recommendations based on the results and conclusions of this study:

- Royal Jordanian company and similar companies, should enhance the culture of quality performance of employees; reflecting the company's vision and its future orientations.
- 2. Firms should invest in E-HRM system, because of its importance to increase organizational performance.
- Organizations should adapt the rapid change in business environment by using E-HRM application system to enhance their performance and to achieve the competitive advantage.
- Organizations should use E-HRM application to improve organizational performance through providing all needs and wants of customer services to reach customer satisfaction.
- 5. Organizations should use E-HRM application to improve organizational performance through providing all needs and wants of customer services to reach customer satisfaction.

- 6. Organizations should use E-HRM application to improve organizational performance through faster time to market for the products or services to make them available to consumers at the right time.
- 7. Organizations should use the E-HRM application to improve the performance of the organization by creating new ways of innovation in products or processes to improve the effectiveness and efficiency of the Organization.
- 8. E-HRM is the root of organizations which identifies all tasks and procedures in the organization; therefore, organizations must develop and enhance the system and use E-HRM system to increase their performance.
- 9. Conducting new studies which seek to understand the impact E-HRM application on organizational agility and the factors of this impact.
- 10. This study depended mainly on questionnaire to collect relevant data, and it's not free of bias. Thus, future work is recommended to use other approaches like interviews or focus group for a better understanding of the study phenomenon.

## References

- Afonso, P., Nunes M., Paisana A., & Braga A. (2008). The Influence of Time-tomarket and Target Costing in the New Product Development Success. *International Journal of Production Economics 115*, 559–568.
- 2- Santos, A.(2011). Continuing the evolution: towards sustainable HRM and sustainable organizations. *Business Strategy Series*, 12(5), 226-234.
- 3- Andrews, K. Z. (1996). Two kinds of performance measures. Harvard Business Review, 74(1), 8-9.
- 4- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. Academy of Management Journal, 39(4), 779-801.
- Brown, D. (2002). E-HR victim of unrealistic expectations. *Canadian HR Reporter*, 15(5), 1.
- 6- Bondarouk, T., Ruël, H. & Looise, J. (2011). *Electronic HRM in theory and practice*. Bingley, U.K: Emerald.
- 7- Bondarouk, T., Ruel, H. & van der Heijden, B. (2009). E-HRM effectiveness in a public sector organization: A multi-stakeholder perspective. *International Journal of Human Resource Management*, 20, 578-590.
- 8- Bondarouk, T. (2009). Handbook of research on e-transformation and human resources 65 management technologies: organizational outcomes and challenges. Hershey, PA: Information Science Reference.
- 9- Bondarouk, T. V. & Ruël, H. J. M. (2009). Electronic human resource management: Challenges in the digital era, *Int. J. Hum. Resour. Manag.*, 20(3), 505–514.

- 10-Brown, S. L., & Eisenhardt, K. M. (1995). Product Development: Past Research, Present Findings, and Future Directions. *Academy of Management Journal* 20, 343– 378.
- 11-Burbach, R., & Dundon, T. (2005). The strategic potential of Human Resource Information Systems: Evidence from the Republic of Ireland. International Employment Relations Review, 11, 97-117.
- 12-Cardy, R. L. & Miller, J. S. (2005). E-HR and Performance Management: A consideration of positive potential and the dark side. In Greutal and Stone (Eds.). *The Brave New World of e-HR*, 138-165.
- 13- CedarCrestone (2006). Workforce Technologies and Service DeliveryApproaches Survey. Retrieved from:

https://www.shrm.org/hrdisciplines/Documents/CedarCrestone\_2006\_HCM\_Survey.pd

- 14- Chen, J., Damanpour, F., & Reilly, R. R. (2010). Understanding Antecedents of New Product Development Speed: A Meta-analysis. *Journal of Operations Management* 28, 17–33.
- 15- Chen, J., Reilly, R. R., & Lynn, G. S. (2005). The Impacts of Speed-to-market on New Product Success: *The Moderating Effects of Uncertainty*. 52, 199–212.
- 16- Chen, I. J., & Paulraj, A. (2004). Towards a Theory of Supply Chain Management: The Constructs and Measurements. *Journal of Operations Management 22*, 119– 150.
- 17- Carbonell, P., & Rodriguez, A. I. (2006). The Impact of Market Characteristics and Innovation Speed on Perceptions of Positional Advantage and New Product Performance. *International Journal of Research in Marketing 23*, 1–12.

- 18-Coopey, J., Keegan, O., & Emler, N. (1998). Managers' innovations and the structuration of organizations. *Journal of Management Studies*, 35, 263-284.
- 19-Coronas, T. & Oliva, M. (2005). *E-Human resources management managing knowledge people*. Hershey, PA: Idea Group Pub.
- 20-Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, *34*, 555-590.
- 21-Decenzo, D. A. & Stephens, P. R. (1989) *Personnel/HRM*. (3<sup>rd</sup> Ed.), Prentice Hall, New Delhi.
- 22- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions, *Academy of Management Journal*, 39, 802-835.
- 23-DeSanctis, G. (1986). Human Resource Information Systems: A Current Assessment. *MIS Quarterly 10*, 15-27.
- 24-Droge, C., Jayaram, J. & Vickery S. K. (2004). The Effects of Internal Versus External Integration Practices on Time-based Performance and Overall Firm Performance. *Journal of Operations Management* 22 (6), 557–573.
- 25-Dubois, D. D., Rothwell, W. J., Stern, D. J., & Kemp, L. K. (2004). *Competencybased human resource management*. Palo Alto, CA: Davies-Black Publishing.
- 26-Dumaine, B. (1989). How Managers can Succeed Through Speed. *Fortune 119* (4), 54–59.
- 27-Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR functions. *International journal of human Resource Management, 22*, 1146-1162.
- 28-Fletcher P. A. K. (2005). Gueutal, H.G. & Stone, D.L. JosseyBass (Ed.), From Personnel Administration to Business-Driven Human Capital Management: *The*

Transformation of the Role of HR in the Digital Age. In: The brave new world of her, San Francisco, CA.

- 29-Flippo, E.B. (1984). *Personnel Management*. (6<sup>th</sup> Ed.) New York: McGraw Hill Book Co.
- 30-Florowski G. & Olivasalujan- Lujan M. (2006). The diffusion of human resource information-technology innovations in US and non-US firms. *Personnel Review*, 35(6), 684-710.
- 31-Foster, S. (2009). Making Sense of e-HRM: Transformation, Technology and Power Relations. In: Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges, 1-19.
- 32- Günsel, O. E. (2006). Relationships between human resource management practices, business strategy fit and firm performance. *Gebze Institute of Technology*, Turkey, 97-107.
- 33-Haines III, V. Y., and Lafleur, G. (2008). Information Technology usage and Human Resource roles and effectiveness. *Human Resource Management*, 47(3), 525-540.
- 34- Haworth. (2007). Organizational performance. Retrieved from http://www.haworth.com/Brix?pageID=242.
- 35-Hendrikson, A. R. (2003). Human Resource Information Systems: backbone technology of contemporary human resources. *Journal of Labor Research*, 24(3), 381-394.
- 36- Heneman. (2002). Human resource management in virtual organizations. Greenwich, Conn: Information Age Pub.

- 37-Ho, M., Wilson, M., & Chen, S. (2010). HRM in New Zealand biotechnology SMEs: emergence of employment systems through entrepreneurship. *International Journal of Human Resource Management*, 313-336.
- 38-Hopkins, B. & Markham, J. (2003). *E-HR: using intranets to improve the effectiveness of your people*. England: Gower Publishing Limited.
- 39-Hosmer, B.E. (2001), Foster employee customers and hold on to your best ones. *Strategy and Leadership*, 29(6), 34-36.
- 40-Hussain, Z., Wallace, J., & Cornelius, N. E. (2007). The use and impact of human resource information systems on human resource management professionals.
  *Information & Management*, 44(1), 74-89.
- 41-Ichniowski, C., Shaw, K. (1997). The Effects of Human Resource Management Practices on Productivity: a Study of Steel Finishing Lines. *American Economic Review*.
- 42-Johnson, P. (2009). In D. G. Collings & G. Wood (Eds.), *Human Resource Management: A Critical Approach*. HRM in Changing Organizational Contexts.
- 43-Juana, (2012). Human resource management in the digital economy: creating synergy between competency models and information. *Hershey, PA: Information Science Reference*.
- 44-Kamoche, K. (1991). Human Resource Management. Personnel Review, 20(4), 3-14.
- 45-Kanji, G. K., & Sá, P. M. (2002). Kanji's business scorecard. *Total Quality* Management, 13(1), 13-27.
- 46- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard Measures that drive performance. *Harvard Business Review*, *70*(1), 71-79.

- 47-Karagozoglu, N., and W. B. Brown. (1993). Time-based Management of the New Product Development Process. *Journal of Product Innovation Management*, 10(3), 204–215.
- 48-Kettley, P. & Reilly, P. (2003). An introduction to e-HR. Institute of Employment Studies, Brighton.
- 49-Cameron, K. S. (1984). Organizational Adaptation and Higher Education. *Journal of Higher Education*.
- 50-Kotler, P. & Armstrong, G. (2008). Principles of Marketing. London: Prentice Hall.
- 51-Kossek, E. E. (1987). Human resource management innovation. *Human Resource Management*, 71-92.
- 52-Laursen, K., & A. Salter. (2006). Open for Innovation: The Role of Openness in Explaining Innovation Performance Among UK Manufacturing Firms. *Strategic Management Journal*, 27(2), 131–150.
- 53-Lawler, E. & Boudreau, J. (2012). Effective human resource management a global analysis. Stanford, Calif: Stanford Business Books, an imprint of Stanford University Press. Organizations for superior performance. San Francisco, CA: Jossey-Bass.
- 54-Lawler, E. E., Levenson, A., & Boudreau, J. W. (2004). HR metrics and analytics: use and impact. *Human Resource Planning*, 27(4), 27-35.
- 55-Lawler, E. E., & Mohrman, S. A. (2003). HR as a strategic partner: What does it take to make it happen? *Human Resource Planning*, *26*, 15-29.
- 56-Lengnick-Hall, M.L. & Moritz, S. (2003). The Impact of e-HR on the Human Resource Management Function. *Journal of Labour Research*, 24(3), 365-379.
- 57-Lepak, D. & Snell, S. (1998). Virtual HR: Strategic human resource management in the 21st century. *Human Resource Management Review*, 8(3), 215-234.

- 58-L., Vakola, M. & Galanaki, E. (2007). E-HR adoption and the role of HRM: evidence from Greece. *Personnel Review* 36(2), 277-294.
- 59-Lucia, A. D., & Lepsinger, R. (1999). The art and science of competency models: Pinpointing critical success factors in organizations. San Francisco: Jossey-Bass/Pfeiffer
- 60- Suramardhini, M. (2012, August). E-HRM, paper presentation studies.
- 61-Martin, G., Reddington, M., & Alexander, H. (2008): Technology, Outsourcing and Transforming HR. *Elsevier*, Amsterdam.
- 62- Minbaeva, D. B. (2005). HRM practices and MNC knowledge transfer, *Personal Review*, 34(1), 125- 144.
- 63-Olivas-Lujan, M., Ramirez, J. & Zapata-Cantu, L. (2007). E-HRM in Mexico: Adapting innovativeness for global competitiveness. *International Journal of Manpower* 28(5), 418–434.
- 64-Oliver, R.L. (1997). Customer Satisfaction *A Behavioral Perspective on the Consumer*, McGraw –Hill, New York, NY.
- 65-Paauwe, J. (2004). HRM and Performance. Oxford University Press.
- 66-Parry, E., Tyson, S., Selbie, D., & Leighton, R. (2007). *HR and Technology: Impact and Advantages*. London: Charted Institute of Personnel and Development.
- 67-Pfeffer, J. (1994). Competitive advantage through people. *California Management Review*, 36, 9–28.
- 68-Rahman, H. & Sousa, R. (2014). Information systems and technology for organizational agility, intelligence, and resilience. Hershey, PA: Business Science Reference.

- 69-Bissola R. & Imperatori B. (2010). Generation Y at work: the role of e-HRM in building positive work attitudes, *Proceedings of Third European Academic workshop on electronic human resource management*, 570, 378-399.
- 70- Rosenau, M. D., Jr. (1988). Speeding Your Product to Market. Journal of Consumer Marketing 5(2), 23–40.
- 71-Ruël, H., Bondarouk, T., & Looise, J. (2004). E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. *Management Revue*, 15, 364-380.
- 72-Ruel, H.J., Bondarouk, T.V. & Van der Velde, M. (2007). The Contribution of E-HRM to HRM Effectiveness: Results from a Quantitative Study in a Dutch Ministry. *Employee Relations*, 29, 280-291.
- 73-Runy, L.A. (2006). HR information systems. *Hospital & Health networks*, 5(2), 24-30.
- 74-Schalk, R., Timmerman, V., & Heuvel, S. (2013). How strategic considerations influence decision making on e-HRM applications, *Human Resource Management Review*, 23(1), 84-92.
- 75-Shrivastava, S., & Shaw, J. B. (2004). Liberating HR through technology. *Human Resource Management, 42*, 201-222.
- 76-Sivadas, E. & Baker –Prewitt,F.L. (2000). An Examination of the Relationship between Service Quality, Customer Satisfaction, and Store Loyalty, *International Journal of Retail and Distribution Management*, 28(2), 73-82.
- 77- Sparrow, P., Schuler, R. S. & Jackson, S. E. (1994). Convergence or divergence: Human resource practices and policies for competitive advantage worldwide, *The International Journal of Human Resource Management*, 5(2), 267-299.

- 78- Sousa, R., & Voss, C. A. (2008). Contingency Research in Operations Management Practices. *Journal of Operations Management*, 26(6), 697–713.
- 79- Swaroop, K. R. (2012). E-HRM and how IT well Reduce the cost in organization, Journal of Marketing & Management Review, 1(4), 133-139.
- 80- SimpleHRGuide (2016). HR Management Guide. Retrieved from http://www.simplehrguide.com/hr-processes.html.
- 81- Steve Bonadio (2010). *Top Five HR Process Integrations That Drive Business Value (white paper)*. Softscope People Management.
- 82- Strohmeier, S. (2007). Research in E-HRM: Review and Implications. *Human Resource Management Review*, 17, 19–37.
- 83- Thaler, & Carter, R. E. (1998). The HRIS in Small Companies: Tips for Weighing the Options, *HR magazine*.
- 84-Ulrich, D. (1997). Human Resource Champions, Boston: Harvard Business School Press.
- 85-U.S. Department of Energy. (2005). Balanced scorecard: Performance measurement and performance management program. Retrieved from http://management.energy.gov/documents/BSCProgramDescriptionDocumentJan20 05.pdf.
- 86- Vacek, J. (2009). Department of Management, Innovations and Projects, innovation management. uwb, *Faculty of Economics*.
- 87-Venture Lines. (2015). Retrieved from www.ventureline.com/accountingglossary/T/time-to-market-definition/.
- 88- Vickery, S. K., Jayaram, J., Doge, C., & Calantine, R. (2003). The Effects of an Integrative Supply Chain Strategy on Customer Service and Financial Performance:

An Analysis of Direct versus Indirect Relationships. *Journal of Operations* Management 21, 523–539.

- 89-Voermans, M., & Van Veldhoven, M., (2007). Attitude towards E-HRM: an empirical study at Philips, *Personnel Review*, *36*(6), 887-902.
- 90-Walker, J.W. (1980). What's new in HR development? Personnel 67(7), 1-6.
- 91-Wyatt, W., (2002). E-HR: Getting Results along the Journey, survey report.
- 92-Wesley, R. S. F., Charbel, J. C. J., & Fernando, C. A. S., (2011). Continuing the evolution: towards sustainable HRM and sustainable organizations. *Business Strategy Series*, 12(5), 226-234.
- 93-Woodruff, R. A., (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153.
- 94-Wright, P. M., Dunford, B. B., & Snell, S. A., (2001). Human resources and the resource based view of the firm. *Journal of Management*, 701-721.
- 95-Zhao. (2008). The Impact of Power and Relationship Commitment on the Integration between Manufacturers and Customers in a Supply Chain. *Journal of Operations Management* 26 (3), 368–388.

## **Appendix 1: The Questionnaire**

#### Dear Participant;

We are currently conducting a research project aiming to identify the impact of Electronic Human Resource Management (e-HRM) application on Organizational performance.

Your participation means a lot to us, the success of this study depends on your response, your authenticity will add value to our study and your response will be used for academic purpose only. We assure you that your answers will be highly confidential and will not be used outside of the scope of this graduate study research. Please answer the questions below. However, if you are unsure of a question or your response to a response, I ask that you leave the question unanswered.

Thank you in advance for your kind cooperation.

Lubna Al-Hmouze

#### **First Section: General Background**

Gender:						
□Male	□Female					
Age:						
□20-25 years old	□ 26-30 ye	ars old				
□31-35 years old	ears old $\Box$ 36-40 years old					
□More than 40 years old						
Education:						
□ Collage	□ Bachelor	□ Master	□ PhD			

#### Years in current position:

 $\Box$ Less than 5 years.  $\Box$  5-10 years.

 $\Box$  11-15 years.  $\Box$  More than 15 years.

### Years of experience with the current organization:

 $\Box$ Less than 5 years.  $\Box$  5-10 years.

 $\Box$  11-15 years.  $\Box$  More than 15 years

#### Second Section: Study Variables:

This section is focused on the inquiring your feedback and input with regards to the

study variables. Based on your experience and knowledge; please insert ( $\sqrt{}$ ) in the

appropriate column. The options range from 1 (Strongly Disagree), 2 (Disagree),

3(Neutral), 4 (Agree), and 5 (Strongly Agree).-

1. E-HRM Application ( Use of E-HRM)		Strongly Agree			Strongly Disagree	
	5	4	3	2	1	
<b>Q1.</b> E-HRM application are similar across all business units/departments /divisions.						
<b>Q2.</b> E-HRM application supports the routine day to day tasks of HRM.						
<b>For example,</b> supporting payroll, administration practices and/or report preparation for personnel data.						
<b>Q3.</b> E-HRM application supports the decision making of HRM.						
<b>For example,</b> personnel policy/procedure development, employees hire processing and/or employee award programs.						

<b>Q4.</b> E-HRM application supports the forecasting of HRM.		
<b>For example,</b> personnel recruitment strategies, analysis and review of personnel budget, approach in reclassifications of jobs and/or develop job content of new staff positions.		
<b>Q5.</b> E-HRM application aims at increasing the performance of HR forecasting for employee needs,		
<b>such as</b> training, needed skills, and career development.		
<b>Q6.</b> E-HRM application aims at reducing the inconsistent practices across different HR functions.		
<b>Q7</b> .E-HRM application aims at enabling HR practices to serve self-servicing for employees, HR staff and/or managers.		
<b>Q8</b> .E-HRM application aims at reducing the organizational costs of HR practices.		
<b>Q9.</b> E-HRM enables electronic candidate identification, filtering, and interviewing for the purposes of employment.		
<b>Q10.</b> E-HRM enables Evaluating the performance of employees electronically by managers and administrators.		
<b>Q11.</b> E-HRM helps the identification of training needs in the company.		
2. Organizational Performance.		
<b>Q12.</b> RJ automates and optimizes HR processes and aligns employee development and goals with corporate objectives.		
<b>Q13.</b> RJ achieves organizational performance by reducing the production and operating costs.		
<b>Q14.</b> RJ pursues an organizational performance by ensuring high-quality production.		
<b>Q15.</b> RJ pursues a competitive strategy through product and/or process development with other firms.		

2.1 Innovation			
Q16. RJ initiated certain procedures,			
<b>such as</b> opening new and promising markets, intensifying marketing activities on various routes, in addition to controlling expenses without affecting the quality of services provided for passengers.			
<b>Q17.</b> RJ made electronic travel services available for its passengers to enable easy management of their personal travel procedure,			
<b>such as</b> e-booking of flights, enquiring about reservations and flights and getting boarding passes online.			
<b>Q18.</b> RJ continuously reviews and adjusts its products and services to ensure competitive customer and market advantage.			
2.2 Rapid Adaptation			
<b>Q19.</b> E-HRM applied to keep up with rapid changes in a business environment through rapid and quick decision.			
<b>Q20.</b> A higher level of success is noticeable in the contribution of HR to strategic activities like competitor analysis, coupling of HR practices to the value chain and understanding of the requirements of external customers.			
<b>Q21</b> . RJ is enhanced its servicing, hiring, and training of its resources to face the challenge faced by the emergence of low-cost airlines.			
<b>Q22</b> . In light of the great and accelerating development in the field of electronic systems. RJ systems are continuously updated to ensure their efficiency and ability to keep up with new requirements especially in the field of aviation.			
2.3 Customer Satisfaction			
<b>Q23.</b> RJ objectives are driven primarily by customer satisfaction.			
<b>Q24</b> . RJ supports the need of up-to-date development and utilization of new processes and services to enhance and increase customer satisfaction.			

<b>Q25</b> . RJ pays close attention to after-sales services.		
<b>Q26</b> . RJ pursues a competitive strategy by customizing processes/ products for customers.		
2.4 Time-To-Market		
<b>Q27</b> .RJ continued with investment in advanced technology in order to improve its services, simplify travel procedures and reduce the time of the process.		
<b>Q28</b> .Human Resources Management contributes in reducing the time of implementation of processes.		
<b>Q29</b> .Human Resources Management contributes to the rapid implementation of completed transactions.		
2.5 HR Processes		
<b>Q30.</b> E-HRM application are based on company-wide standard HR processes and practices.		
<b>Q31</b> . RJ employees can access information they need from websites set by the organization.		
<b>Q32.</b> RJ provides and enhances employees with necessary knowledge, skills and competencies to do their job.		
<b>Q33.</b> RJ offer training courses through E-HRM to meet the needs of all employees to improve their performance on an ongoing basis.		
<b>Q34</b> . RJ E-HRM software supports payroll issues.		
<b>Q35.</b> RJ E-HRM supports decision making processes by middle and high level management.		

No.	Prof. Name	University	Faculty
1	Ahmad Ali Saleh	Middle East University	Business admin
2	Nahla Al-Nather	Middle East University	Business admin
3	Haytham Hjazi	Middle East University	Business admin
4	Sadeq Al-Hmouze	Middle East University	IT
5	Tawfiq Abd Al-Hadi	Al-Ahliyya Amman	Business admin
		University	
6	Ra'ed Hanandeh	Petra university	Business admin

# **Appendix 2: Professors' Questionnaire Jury**