Abstract:

This research aims to clarify the role of Information Technology Competency (ITC) with dimensions' (IT Usage, IT Knowledge, and IT Operations) as an independent variable in the activation of Human Resources Management Practices (HRM Practices) as a dependent variable with dimensions' (Training and Development, Recruitment, Job Design, and Performance appraisal). Based on this, the correlation and effect relationships between the independent and dependent variables are determined by formulating two main hypotheses. There are a significant relationship and effect of IT competency with HRM practices within the dimensions. Furthermore, the scope and population of this research are the Informatics and Communications Public Company in Iraq. A quantitative design methodology was used to examine the relationships among variables of this research was used and the researcher adopted the descriptive-analytical approach. The questionnaire was distributed to a number of employees and managers (responders'), they were selected randomly and included 76 respondents. The statistical program (SPSS) was used to analyse the data through the use of statistical and descriptive methods such as mean, variation coefficient, and standard deviation, to analyze and describe data for correlation hypothesis testing, and simple linear regression coefficient to test impact hypothesis. The most important of conclusions to this study indicated that is a correlation among the HRM practices are related to IT competencies, Hence, there is an effective relationship positively between research variables.

Keywords: IT competency, HRM Practices, IT usage, IT knowledge, IT operations, Training Program, Job Design, Recruitment, and Performance appraisal.
1. Introduction

Human resource management practices (HRM practices) are referred to as an important means for organizations' success. HRM practices such as Training and Development, Recruitment, Job Design, Performance appraisal, and motivation systems have a significant impact on the organization's results and profitability. It supports' of staff development and motivates them to achieve the organization's goals. This means that the prevailing climate in the organization can affect staff behaviour's and attitudes. Hence, this is leading to the efficient use of IT, and then the effect of the organization's profitability. Therefore, IT has an important role in increasing the effectiveness of human resources.

The purpose of this study is to investigate the role of IT competency in activating of human resource management practices. The justification for choosing this topic is due to the importance of the research variables as well as the importance of the telecommunications sector which was a research community. Moreover, all organizations today depended on technology and human resources, which are the most important elements of success and excellence of organizations. The most important limitation in the theoretical side, there was a cognitive overlap between management and information technology science of the variables of this research. As well as, the limitation's of the practical side was difficulty in the procedures of the company researched, and do not to give any information maybe could benefit the researcher better due to the strict controls of the company. In recent years, organizations have increasingly relied on IT and the HRM practices that have different impacts on the companies' through the use of IT. Therefore, the researcher's is seeking to understand the role of IT usage competency that leads to stimulating the employees and managers on HRM practices of the company.

2. Methodology of Research

2.1. Problem Statement

The human element constitutes the most important resource of organizations in different types and specialities. Therefore, many scholars are seeking in the field of HRM, since the current research seeks to know the role played by IT and use in HRM practices of performance evaluation or training programs, recruitment, job design by strengthening its role through training programs and the IT usage and technical support. It is necessary to support, development, strengthen human resources through the development of management practices and enable them to employ these resources in a manner consistent with the strategy and the organization's technological trends. As well as, technology is a key factor in the success of the organizations of the present century. The Communications and Informatics Public Company in Iraq is a population of this research. According to interviews and cohabitation, the research problem was identified, that is said the HRM officials have some experience their role of human resources management but this is done without
adapting to IT. Some studies are shown that the important of IT usage competency certainly contributes to the implementation of managers and employees' by the IT usage and help of the promotion and activation of HRM practices some studies are shown that the importance of IT usage competency certainly contributes to the implementation of managers and employees' by the IT usage and help of the promotion and activation of HRM practices (Bhatta, et al., 2008: Lee & Lee, 2010 : Crawford., et al., 2011). Accordingly, the following main question can be formulated. Accordingly, the following main question can be formulated:

How can IT competencies contribute to activating of HRM practices?

Through the main question above, the following questions are formulated:

1. What is the level and role of HRM practices in the researched company?
2. What is the level and role of IT competency in the researched company?
3. What is the nature of the relationship between the independent variable (IT competency with dimensions' and the HRM practices with dimensions' as a dependent variable)?

2.2 Research Objectives

The research objectives are as follows:

1. Identify the reality of the dimensions of HRM practices and study the relationship between the IT Competencies in the researched company.
2. Determine the extent of top management’s interest in HRM practices and the use of information technology in the researched company.
3. Testing the nature of correlation and impact relationships between the major research variables in the researched company.

2.3 Significance of the research

Modern technology has become a companion to all businesses, whether at the work level or even at the personal level of individuals. Therefore, the importance of research is highlighted by focusing on two important variables are HRM practices and IT competency to influence of the work of the organizations'. In particular, the company is a vital centre for communication and informatics. Accordingly, the importance can be determined in the following:

1. A theoretical contribution to the knowledge of research variables, by revealing the reality of the use of information technology in the functions of human resources management of the researched company.
2. This research is an attempt to examine the practical side to view and open discussion about how IT competency can affect human resource management practices.
3. The research highlights on the importance in the fact that the use of IT competency to allows for HRM practices to reduce unemployment, planning, organizing, higher capacity of the control and the preparation of reports, appointment, recruitment, selection, and training.
2.4 Justifications' of subject choice:
1. Generation of the researcher's desire to engage in this topic, which is vital for most business organizations in all fields and for most countries of the world, as it is indispensable for the human resource or information technology.
2. To understand the role IT competency can play in HRM practices
3. The communication sector is recently witnessed significant developments in terms of activity, capital, and areas of investment.
4. Human resources and IT are representing the most important resources of the organizations' and the most important feature of the era.
5. Lack of research in such types of research especially for Arabic research.

2.5 Theoretical Framework and Hypotheses
- Theoretical Framework
The researcher adopted the proposed research model below for the purpose of clarifying the correlation and effect between research variables as follows:
1. The main variables that were chosen in the formulation of the model contain the most important major and sub-variables that have related to the researched company.
2. Trying to test the model within the Arab context, specifically (the Iraqi environment).
3. The possibility of measuring each variable in its sub-dimensions, HRM practices in for four dimensions (training programs, recruitment, job design, performance appraisal of employees) as a dependent variable, IT Competency (IT usage, IT training, IT knowledge) as an independent variable.

- Hypotheses
For the purpose of completing the requirements of conducting the research, and answering the questions raised by determined of the research problem, the following hypotheses have been formulated:
1. There is a significant relationship between HRM practices and IT competency in terms of dimensions.
2. There is a significant effect of IT competency in terms of dimensions on HRM practices.

2.6 Approach of research, population, and sample

- Approach of research
  According to the research objectives and questions, the descriptive analytical approach was chosen. This approach is used to collect and analyse data for the purpose of clarifying the relationships between the independent variable and its dimensions and the dependent variable with interpreting the results.

- Population and sample research
  The population of the research was represented by the Informatics and communications public Company in Iraq. The research sample was selected random and included the human resources department and other sections of the company, including the Internet and computer units and communication units. The sample included 76 respondents from of 93 respondents were according to a sample of D.Morgan (Krejcie & Morgan, 1970). The 76 questionnaires were distributed and 75 questionnaires were retrieved. As shown in table (1):

<table>
<thead>
<tr>
<th>No. of questionnaires distributed</th>
<th>No. of questionnaires recovered</th>
<th>Percentage of questionnaires recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>75</td>
<td>98%</td>
</tr>
</tbody>
</table>

2.6 Data and information collection methods

A questionnaire was built to measure all the variables. Measures and instruments from previous researches were adapted. A series of interviews were conducted with some managers and employees of Informatics and Communications Public Company to get a good idea about the research problem and explain the questionnaire paragraphs. This research depended on the five responses of Likert Scale; Assessment categories are (Strongly Disagree, Disagree, Neither Disagree or Agree, Agree, and Strongly Agree). The questionnaire was submitted to the arbitrators. The (Cronbach’s alpha) scale was used to identify the validity of the scale and stability of the questionnaire, a total level is an amount (0.95), it’s a good percentage. As well as, the questionnaire was tested to the measurement of stability ratio through the use of the (Split-Half) method. The coefficient of stability was calculated as (82%) and was corrected by the formula (Spearman-Brown) to become (89%) This indicates a high stability ratio. The questionnaire was designed according to the criteria was used in previous studies that are related to research variables. The questionnaire included demographic information about the sample, In the other part, the questionnaire contained the dependent variable that is related to the dimensions of HRM practices (training programs included 8 items, recruitment included 6 items, job design included 7 items, performance appraisal included 7
The Role of Information Technology Competency in Activating Human Resources Management Practices: An Applied Study in the Informatics and Communications Public Company in Iraq

The independent variable that is related to the dimensions of IT competency (IT usage included 5 items; IT knowledge included 5 items, IT operations included 6 items). Pre-approved measures were used for these paragraphs. Table 2, shown the arrangement of the paragraphs of questionnaire and measures.

Table 2, shown the arrangement of questionnaire and scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>No. of Items</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Info</td>
<td>Gender, Experience, age,</td>
<td>4</td>
<td>Tippins, M. &amp; Sohi, R. (2003)</td>
</tr>
<tr>
<td>IT competency</td>
<td>IT Usage</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT knowledge</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT operations</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recruitment</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job design</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

2.8 Statistical methods used
A number of statistical methods have been used to analyse the data, the percentage has been calculated, Frequency, Median, Standard Deviation to illustrate the homogeneity or dispersion of values from the median, Simple linear correlation (Spearman), Simple Regression Coefficient, T-test to test the correlation coefficient, and F to test the correlation coefficient. The results were extracted using the statistical program (SPSS).

3. previous studies
The previous studies are related to the current research variables, as follows:

<table>
<thead>
<tr>
<th>N</th>
<th>Study Address</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lee, C. S. and Lee. C. H. (2010). Effects of HRM Practices on IT Usage.</td>
<td>HRM practices may have different impacts on the use of IT under the influence of different sources of IT capabilities. The study examines the moderate effects of the IT capability source (internal and external). The results indicated that organizations with internal IT capacity, HRM practices such as employee participation, clearly defined extensive, formal training were important in predicting the IT usage.</td>
</tr>
<tr>
<td>2</td>
<td>Boone, Rosemond., (2011). The Effect of HRM practices on corporate performance:</td>
<td>The study aims to verify the evaluation of HRM practices (Selection, Recruitment, Performance Appraisal, and wages), addition the seeking of the</td>
</tr>
<tr>
<td></td>
<td>A Study</td>
<td></td>
</tr>
</tbody>
</table>
The Role of Information Technology Competency in Activating of Human Resources Management Practices/ Applied Study in the Informatics and Communications Public Company in Iraq


impact of these practices on the company's performance. Data were obtained through the questionnaire and the case study (Checklist) method was adopted to reach the results. The questionnaire was distributed to 100 employees in the main office of Graphic Communications Group Limited. The most important results of the study there is a positive correlation between effective practices and company performance.


The study focused on the relationship between IT competency through its dimensions (IT knowledge, IT training, IT usage) and knowledge management processes. The study is present an understanding of this relationship. A study was conducted for 162 Spanish companies. The findings showed that no direct relationship between ITC and KMP, and this relation show best when using the empowerment as a mediate.


The study attempts to address the gap with regard to the relationship between HRM practices and employee competency goal and to highlight the importance of employee competency outcomes. The basis of the study is derived from the general systems theory, which states that some HRM practices if implemented, will lead to positive results. The theory suggests that HRM practices are a set of processes that contribute to improving human capital capacities.


The objective of the study is to analyse the impact of Information Technology Competency (ITC) on the internal and external learning competency and the Commercial Success Innovation (CSI). The survey method was used, and the study population consisted of 186 companies. Data and relationships were analysed through Structural Equation Model (SEM). The results have proven that ITC has a crucial role to play in internal and external learning competency and human resource learning competency. This study contributes to the research of organizational learning and analysis of the relationship between internal and external learning competencies with CSI. Furthermore, this study is relevant to IT competency literature.
4. Research background

4.1 Information Technology Competency

The literature has shown a variety of specialized concepts in information technology. Information technology is referred to a new way of produce, process, retrieve, distribute information and analyze activity more effectively (O’Brien & Marakas, 2007), (Laudon & Laudon, 2002). IT is the development and management of hardware, software, networks, databases, information management personnel and other technologies needed by the company and used in order to achieve its objectives (Turban et al., 2008). Some researchers have pointed out that technical skills are not a valuable source of creativity and excellence, because the characteristics of those skills cannot be distributed across institutions (Anabel et al., 2014; Turban et al., 2008), but (Bhatt & Grover, 2005) have been suggested that organizations' excellence and creativity are largely due to the technical skills of IT groups and top management. Many studies assume that increased investment in IT improves the value of the company’s IT (Bapna et al., 2013). However, the obsolescence of equipment or the rapid decline in hardware prices leads to a noticeable of rapid decline in the value of much of the IT materials owned by the companies. In this study, a competency approach is followed. Hence, we are suggesting competency development through the tools and processes used by information management which is a relevant initiative.

ITC is defined as the ability to control IT-related costs, provide appropriate systems when needed, and improve business strategy through the application of IT (Ross et al., 1996). Bharadwaj (2000) refers to it as a company's ability to manage IT resources compared with other resources and capabilities. Sambamurthy & Zmud (2000) pointed of IT competency as an asset, skills, knowledge, processes and relationships that enable companies to acquire, deploy and manage information technology. IT Competency is the ability of a company to manage IT Competency in order to enhance the knowledge flowing from a corporate inside (Tippins & Sohi, 2003; Tanriverdi, 2005). The information technology competency was measured by three-dimensional construct are related to different types (IT usage, IT training, IT knowledge) of supporting management, organization and training (Tippins & Sohi, 2003; Tanriverdi, 2005).

- **IT Usage:**

  The IT usage has been identified as an infrastructure that effects on the value of business resulting from IT (Bhatta charge, A. & Hikmet, N., 2008). Information technology can be used to improve the quality of organizational intelligence and improve organizational performance, as well as to gain competitive advantages (Pavlou, P. A. & El. Sawy, O. A., 2006). In addition, IT has become an essential means of managing and reducing uncertainties surrounding management processes because IT allows of employees to perform tasks at a higher level and improving their ability to collect and analyses data.
The availability of a wide range of technologies in the workplace indicates that different types of IT are able to provide a wide range of resources to employees. Rather than focusing on the particular type of platform or software used in organizations, this research adopts the broad concept of using information technology to include many different types of platforms and software systems that are generally available in organizations. Therefore, the use of IT is defined as the application of IT within the operational and strategic activities of the organization (Bhatta charge, A. & Hikmet, N., 2008). Furthermore, the use of IT can be defined as a strategic tool of assistance and support in various fields, whether administrative, economic, social or political.

**IT Knowledge**

IT knowledge is the degree to which a company acquires technical knowledge of objects through computer systems. Likewise, this dimension describes the degree to which a company understands current and emerging IT capabilities, and reveals awareness of the possibilities of the information world about the options available to the organization. Thus, the providing of the flexibility to quickly adapt to emerging market opportunities (Crawford et al., 2011). The IT infrastructure provides the firm's members with a speedy and effectively facilitates the knowledge process transfer. Technology is enabling managers to access the right select of Individuals to the employee in the company and improve knowledge sharing (Al-Hawamdeh, 2002). Moreover, IT infrastructure provides facilitates the transformation of tacit knowledge into explicit knowledge (Alavi & Leidner, 2001).

**IT Operations**

IT Operations represent the extent to which the company uses information technology to market management and customer information. In addition, includes many factors such as software, support personnel, and computer-based hardware (Pe’rez-Lopez & Junquera, 2013). IT Operations: this concept is referred to IT-related methods, processes and technologies that may be necessary if they are intended to create value. In the context, can define IT operations as the extent to which the company uses to improve IT competency and decision-making (Mishra et al., 2013). IT infrastructure is referred to the tools and resources that contribute to the acquisition, processing, storage, dissemination and use of information. According to this definition, IT infrastructure includes elements such as hardware, software, and support personnel (Pe’rez-Lopez & Junquera, 2013).
4.2 Human Resources Management Practices

Organizations are managing human capital by establishing a variety of human resources management and business practices. These practices can effect of the results of job performance and profitability of performance (Lee, C. S., & Lee. C. H., 2010). Specifically, HRM practices are strongly influenced executives and employees behaviour. However, very few attempts have been made to demonstrate that these practices effect of the skills or behaviour of the workforce, some studies found that evaluation and training practices were linked to executives (Wright, P. M., et.al. 2001). Some studies have attempted to examine the relationship between HRM practices for IT staff through a wide range of HRM practices was used in past pilot studies, and found that is including the provision of training programs, incentive systems, and employee participate, clearly defined roles (Delery, J.E., & Doty, D.H., 1996). Previous research has indicated that HRM practices impact on IT innovation and adoption (Tafti, A., Mithas, S., & Krishnan, M.S., 2007). HRM practices have been identified and investigated by empirical studies in past literate and they consist of compensation, training and development, recruitment and selection, compensation, and training (Mohammed & Hazril Izwar, 2019). The HRM practices typically investigated in empirical studies are compensation, training and development, recruitment and selection, and performance appraisal (Soomro, Gill., & Jatoi., 2011).

Recruitment is involved access to a selection of human resources, recruitment procedures and put the right person in the right place. Recruitment has been defined as how to obtain the human resources required ensuring the continuity of the organization's operations, including the search for qualified and suitable individuals to work within the organization who are expected to do the best work requirements of the organization (DeNisi & Griffin, 2001). Recruitment is the first and most important function of HRM as it is a process to discover the sources of the workforce and how to meet the requirements of the work through the use of means to attract a sufficient number of qualities and characteristics that apply with the organization needs (Macky & Johnson, 2003). Recruitment can be defined as the process by which the largest possible number of individuals is attracted to apply for the job and then there are options for the organization to choose the most suitable and best for the job (Naveen & Raju, 2014). E-recruitment has become the way in which job vacancies are advertised to organizations to try to attract the best human resources through the use of the Internet. E-recruitment is characterized by a short time, low costs, and as well as the availability of wide opportunities for the organization to attract and select the best competencies and as quickly as possible (Greiner, 2003).
Training Program

Formal training is a form of the learning experience in an organization provided by an employer to enhance the performance and personal growth of employees. Formal training is an enables staff to identify and acquire new skills and competencies that allow them to move to new positions, both within and outside these organizations (Obisi, 2011). In addition, formal training enables staff to feel worthwhile achievement in difficult tasks and staff who have received extensive formal training are likely to be willing to take on challenging tasks and more committed to the goals of the organization (Dessler, 2003). Specifically, training can be effective in increasing staff morale and improving their job performance. Moreover, training helps in the process of absorbing employees and facilitates to acquire tacit knowledge in organizations (Tafti, et al., 2007). Training is a planned activity that aims to bring about changes in the experience and knowledge of employees through training programs to acquire the necessary skills in doing a job (Dessler, 2003). Training is a process by which the skill, talent and knowledge of the staff are improved (Obisi, 2011). In general, previous studies are suggested that intensive training does not only increase the knowledge and skills of employees, but may actually motivate employees to learn and use IT systems in their work, and thus develop them.

Job Design

Job design is the process by which the managers are: to customize, define the content, modalities, relationships of specific functions, and tasks in order to satisfy all organizational and individual requirements (Ivancevich & Mattesom, 2002). Job design is the process of identifying and defining jobs by assigning specific work tasks to individuals and groups, leading to high performance and job satisfaction (Schmermerhorn, 2001). Job design is the process of defining and assigning the powers and functions of the job to individuals working in the organization (Ivancevich & Mattesom, 2002). The job design is a process to determine the way in which work is done since there is more than one possible way to do the work, should choose the way that is characterized by quality, low cost, and increase customer and worker satisfaction (Noe et al, 2006). Job design is a mental activity that defines the roles and behaviours of the members of the organization according to a attributes and properties set by the management to choose the best way through which work is done based on its expectations and perceptions of the needs of employees, and the objectives of the organization to achieve satisfaction, high performance, efficiency and effectiveness of the organization.
• **Performance Appraisal**

The evaluation of human resources performance forms is the core of performance management systems and is a formal systematic process for identifying, monitoring, measuring, recording and developing jobs that are relating to staff strengths and weaknesses (Mohammed & HazrillIzwar, 2019). Performance appraisal is the process used to determine an employee’s performance in his or her job, and it provides input to the training, and development needs of employees, as well as provides inputs to validate HR selection and planning procedures. The formal assessment is required to justify a wide range of HR-related decisions such as wage increases, promotions, exclusion, termination of employment, and identification of training needs (Boohene, 2011).

5. **Data Analysis and Results**

The results have been reviewing and analysing for the purpose of analysing the sample answers and examining of researches' hypotheses of the correlation relationships and effect between the research variables in the researched company.

5.1 **Description of the study sample**

The first part of the questionnaire included the personal information of the respondent’s Table (3), refers to the results that have been related to demographic characteristics, The number of male respondents reached a total of (54) by 72%, while the number of females (21) by 28%. As for age, the highest percentage was recorded for the age group 36 - 45 with a ratio of (0.36). The level of education was 3% of PhD, 7% of Masters, 10% Higher Diploma, 59% of the bachelor's degree and 16% has a diploma. The highest percentage was 51% of 10 -15 years’ experience.

<table>
<thead>
<tr>
<th>AGE</th>
<th>N</th>
<th>%</th>
<th>Experience</th>
<th>N</th>
<th>%</th>
<th>Education Level</th>
<th>N</th>
<th>%</th>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 at least</td>
<td>17</td>
<td>.22</td>
<td>3-9</td>
<td>26</td>
<td>.34</td>
<td>Doctorate</td>
<td>2</td>
<td>.03</td>
<td>Male</td>
<td>54</td>
<td>.72</td>
</tr>
<tr>
<td>26-35</td>
<td>25</td>
<td>.35</td>
<td>10-15</td>
<td>39</td>
<td>.51</td>
<td>Master</td>
<td>5</td>
<td>.07</td>
<td>Female</td>
<td>21</td>
<td>.28</td>
</tr>
<tr>
<td>36-45</td>
<td>27</td>
<td>.36</td>
<td>16-21</td>
<td>9</td>
<td>.12</td>
<td>Higher Diploma</td>
<td>8</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-55</td>
<td>6</td>
<td>.08</td>
<td>22-30</td>
<td>2</td>
<td>.03</td>
<td>bachelor</td>
<td>45</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56 and above</td>
<td>1</td>
<td>.01</td>
<td>31 and above</td>
<td>-</td>
<td></td>
<td>Diploma</td>
<td>16</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>100</td>
<td></td>
<td>76</td>
<td>100</td>
<td></td>
<td>76</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2 **Diagnosis and analysis of research variables**

The diagnosis of the respondents' responses about the questionnaire paragraphs through the diagnosis of the reality of the IT competency in its dimensions, and the diagnosis of the reality of HRM practices in its dimensions, as shown in Table 4, and 5.
5.2.1 Diagnose and analysis the Dimensions of IT competency

The IT competency is measured by three dimensions (IT operations, IT knowledge, IT usage). It was measured by 16 items distributed on the three dimensions, based on the scale by (Tippins, M., & Sohi, R., 2003). The results of the sample responses were determined according to the importance. It is clear that the IT competency is receiving good attention of the researched company. The percentage was (77%), and the mean (3.86), which is higher than the hypothetical mean of the scale which is the amount of (3). This indicates the interest and effective role of IT in business performance. As well as, the measuring of the variation coefficient for each dimension of IT competency, it shows arrange IT usage first, IT Knowledge at the second arrange, while IT operations at arrange of third, these means do not receive the attention from the management compared of the other dimensions. The following is shown the analysis of each dimension of the IT competency as in Table (4):

Table 4, Diagnose and analysis the Dimensions of IT competency

<table>
<thead>
<tr>
<th>Dimension of IT competency</th>
<th>SA</th>
<th>A</th>
<th>N.DA</th>
<th>DA</th>
<th>SDA</th>
<th>M</th>
<th>%</th>
<th>S.D</th>
<th>V.C</th>
<th>A G</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT usage</td>
<td>5</td>
<td>.07</td>
<td>4</td>
<td>.05</td>
<td>17</td>
<td>.23</td>
<td>23</td>
<td>.31</td>
<td>26</td>
<td>.34</td>
</tr>
<tr>
<td>IT operations</td>
<td>2</td>
<td>.03</td>
<td>5</td>
<td>.07</td>
<td>15</td>
<td>.20</td>
<td>30</td>
<td>.40</td>
<td>23</td>
<td>.31</td>
</tr>
<tr>
<td>IT knowledge</td>
<td>6</td>
<td>.08</td>
<td>4</td>
<td>.05</td>
<td>10</td>
<td>.13</td>
<td>26</td>
<td>.34</td>
<td>29</td>
<td>.388</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>.18</td>
<td>13</td>
<td>.17</td>
<td>42</td>
<td>.56</td>
<td>79</td>
<td>1.05</td>
<td>78</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Strongly Agree= SA, Agree=A, Neither Disagree or Agree= N.DA, Disagree=DA, Strongly Disagree=SDA.
Mean = M, Standard Deviation =SD, Variation Coefficient= V.C, Arrange= AG

IT operations

The IT operations dimension was measured by six items including the first item (our company has the ability to collect and analyse information about the customers through the computer-based systems). The second item (the company is used the computer-based systems to access market information from external databases). The third item (our company emphasizes the procedures by which data and information are collected based on Internet sources). The fourth item (our company use computer-based systems to analyse customer data). The fifth item (our company relies on the computer-based systems to obtain, store and process customers information). The sixth item (the company frequently use decision support systems when it comes to customer information management). This dimension achieved a mean of (3.92), which is larger than the hypothetical mean by a good percentage, and this indicates that there is an interesting from the company researched in the availability of jobs with a variety of performance required to accomplish, where the percentage was 78%. The standard deviation, which shows the degree of dispersion of this variable was (0.365), which is indicates a small dispersion of the answers of the study sample in this area.
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- **IT Knowledge**
  This dimension was measured by five items, the first (the company has a technical support team is knowledgeable with respect to computer-based systems. The second item (our company has a high degree of computer-based technical expertise). The third item (the company is knowledgeable with new computer-based innovations). The fourth (the company has the knowledge to the development and maintaining computer-based communications links with customers). Fifth item (the company has human resources that possess the knowledge, skills and can able to deal with global developments). The five items achieved a mean of (3.88), which is a good mean compared to the hypothetical mean. The percentage was 77%, the standard deviation of this variable was (0.365), which indicates a small dispersion of the answers to the study sample in this area.

- **IT usage**
  This dimension was measured by five items, the first item (our company employs a manager whose main functions include our IT department). The second item (our company employs the employees on the basis of possessing experience in our IT management). The third item (our company members are connected to an internal and external computer network). Fourth item (the company can create a software application whenever needed). The fifth (our company allocates a large amount of money to new IT hardware and software and how to use it). The five items achieved a mean of 3.80, which is larger than the hypothetical mean is by a good percentage. This shows that the jobs held by the research sample individuals are based mainly on the competency and use of information technology. The percentage was 76%, the standard deviation of this variable was (0.353), which indicates a small dispersion of the answers of the research sample in this area.

5.2.2 Diagnose and analysis the Dimensions of HRM practices

The HRM practices were measured by four dimensions (performance appraisal, training programs, recruitment, and job design). These practices were measured through (28) items which were distributed to the sub-dimensions of HRM practices by relying upon the scale of (Hellrigel, Slocum & Woodman, 2001) (Chang & Chen, 2002) (Edgar, F., & Geare, A. 2005). Table (5) shows that the dimensions of HRM practices in the company researched and according to the responses received of sample these practices have a medium attention from the management of the company researched, The percentage of these dimensions was 66%, which is equivalent of a mean (3.34), which is higher than the hypothetical mean of 3 but with a small percentage. This indicates that the limited attention from the researched company about the role of HRM practices. Moreover, when was calculated of the variation coefficient for each dimensions of the HRM practices, this practices have shown to according of the perceptions of the research sample, the recruitment is the first arrange, training and development is the second arrange, third arrange is a performance appraisal,
and the job design in the fourth arrange. This indicates that the company researched did not pay enough attention to the design of the work. The following is an analysis of the dimensions of HRM practices that have been selected as being consistent with the independent variable as follows:

<table>
<thead>
<tr>
<th>The dimension of HRM practices</th>
<th>SA</th>
<th>A</th>
<th>N.DA</th>
<th>DA</th>
<th>SDA</th>
<th>M</th>
<th>%</th>
<th>S.D</th>
<th>V.C</th>
<th>A.G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>14</td>
<td>.19</td>
<td>16</td>
<td>.21</td>
<td>18</td>
<td>.24</td>
<td>19</td>
<td>.25</td>
<td>8</td>
<td>0.11</td>
</tr>
<tr>
<td>Job Design</td>
<td>16</td>
<td>.21</td>
<td>20</td>
<td>.27</td>
<td>20</td>
<td>.27</td>
<td>10</td>
<td>.13</td>
<td>9</td>
<td>0.12</td>
</tr>
<tr>
<td>Recruitmen t</td>
<td>21</td>
<td>.28</td>
<td>16</td>
<td>.21</td>
<td>23</td>
<td>.31</td>
<td>7</td>
<td>0.09</td>
<td>8</td>
<td>0.11</td>
</tr>
<tr>
<td>performance appraisal</td>
<td>22</td>
<td>.29</td>
<td>21</td>
<td>.28</td>
<td>22</td>
<td>.29</td>
<td>6</td>
<td>0.08</td>
<td>4</td>
<td>0.05</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>.97</td>
<td>73</td>
<td>.97</td>
<td>83</td>
<td>1.1</td>
<td>42</td>
<td>.55</td>
<td>29</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Strongly Agree= SA, Agree=A, Neither Disagree or Agree= N.DA, Disagree=DA, Strongly Disagree=SDA.

Mean = M, Standard Deviation =SD, Variation Coefficient= V.C, Arrange= AG

**Performance appraisal**

The dependent variable was measured by seven items, the first item (the company's management focuses on the personal characteristics of individuals working as important criteria to measure their performance). The second item (the management of the company applies the important criteria that measure the performance of the employed individuals). The third (the management of the company depends on the opinion of the direct supervisor in appraisal performance of employees). The fifth item (the modern assessment system uses the latest technology). The six-item (promotions and training testing are based on evaluation information). The seventh (the company's evaluation system is based on growth and development). The eighth (performance is measured based on objectives and quantitative results).

**Recruitment**

This variable was measured by six items are: (1) the management of the company gives attention and focus of hiring individuals for the right job, (2) the management of the company develops programs and incentives to hire people successfully,(3) the company's management focuses on recruiting and testing highly qualified and diverse skills to improve its services, (4) the company relies on qualified personnel from abroad when it expects that there is a lack of competencies within the company to continue to improve its business, (5) recruitment processes in the company take the needs of the departments to fill
Training programs

This variable was measured by eight items are: (1) the company has role in nominating employees for training courses that contribute to their preparation and development, (2) the company trains new employees on the nature of work before gives the employees of duties, (3) the company has plans to continually identify training needs according to the requirements of each job, (4) the training courses to which employees are subject that related to the nature of their work, (5) the company adopts multiple training methods to develop the capabilities and qualifications of individuals according to the technology, (6) the company employees are trained as needed, (7) the training is increasing the performance of employees in the company, (8) the company encourages employees to improve the academically and professionally level. The eight items achieved a mean of 3.00 it is equal to the hypothetical mean. This level of answers gives an explanation that the researched company does not pay much attention to this process and does not takes into account the content of the training program with individuals speciality. Most of the respondents complained, and the role of HR officials and managers are limited, the selection of employees for training courses inside and outside the country without reference to special criteria in this regard, therefore, the percentage reached (60%). The standard deviation of this variable was (0.278), which indicates the consistency of the study sample answers, and the lack of dispersion of those answers around most paragraphs, and their awareness of the importance of training programs at one stage of their career development, as well as the importance of continuing training courses to increase their competencies and retain their jobs.

Job Design

This variable was measured by seven items are: (1) The management of the company is seeking to provide jobs that give the occupant it a chance of the independence and freedom of performance to creativity, (2) the management of the company is concerned with making individuals feel that they belong to the job and affect each other to get to a good performance, (3) the company management is to provide feedback for each job within the company to the employees of tasks, duties, and their performance, (4) the management of the company is concerned with offering positive feedback to employees for their good performance, (5) the company is concerned with providing opportunities for employees to develop their skills, (6) the company is concerned with providing opportunities for employees to develop their skills, (7) the company management is to provide feedback for each job within the company to the employees of tasks, duties, and their performance.
extent that the employee can work with all the quality, (4) the company management is provides jobs of high diversity in the job of the employee, (5) the company management is concerned with the regular job to the extent that the occupant is waiting for the opportunity to complete it best, (6) The company follows the method of employee mobility between jobs in several directions to in order to increase expertise and efficiency, (7) the role of the direct officer to providing the employee with information that facilitates the process of career development. The seven items were achieved a mean of (3.37) it is larger than the hypothetical mean by (0.37), which indicates that there is a middle tendency of the management of the company researched of the process job design and employee, the percentage was 67%. The standard deviation of this variable was (0.313), which indicates a low dispersion of the answers to the study sample in this area.

5.3 Results and Test hypotheses

5.3.1 Analyse the correlation between IT competency with its dimensions and HRM practices

Table (6) shows the relationships of correlations between dimensions of IT competency on total with HRM practices. There is a strongly significant relationship between them overall. The calculated t (2.64) is greater than the tabular value under the level of significant (0.05), and the critical degree of (1.68). The value of the correlation (0.85), there is a strong positive correlation supports the validity the first major hypothesis which is (there is a significant relationship between the IT competency and HRM practices in terms of dimensions). It is pointed out that the IT competency, which is well used and is utilized in the conduct of all work, and to accord with the three basic dimensions will lead to an increase the effective role of HRM practices.

Test of the hypotheses emanating from the first main hypothesis is as follows:

Table 6, Relationships of Correlations between Total Dimensions of IT competency and HRM Practices

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Correlation coefficient</th>
<th>calculated (t) value</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT usage $x_1$</td>
<td>HRM practises</td>
<td>0.876</td>
<td>3.008</td>
<td>support</td>
</tr>
<tr>
<td>IT operations $x_2$</td>
<td></td>
<td>0.769</td>
<td>2.086</td>
<td>support</td>
</tr>
<tr>
<td>IT knowledge $x_3$</td>
<td></td>
<td>0.854</td>
<td>2.846</td>
<td>support</td>
</tr>
<tr>
<td>X</td>
<td>Y</td>
<td>0.833</td>
<td>2.646</td>
<td>support</td>
</tr>
</tbody>
</table>

Value (t) Tabular under significance level (0.05), Freedom degree = (1.68).
a. The results showed that there was a significant correlation between the uses of technology and human resources management practices, where the calculated value of t was (3.008), which is greater than its tabular value under the level of significance (0.05), and the degree of freedom of (1.68). The correlation value is (0.876), a high positive correlation supports the validity of the first sub-hypothesis emanating from the first main hypothesis (There is a significant relationship between the use of technology and HR practices). This is a strong relationship indicates that work that allows employers to use diverse skills have increased the effectiveness and role of HRM by increasing the willingness and high interest of individuals in carrying out these activities and urging their departments to the support.

b. The results showed that there is a significant correlation between IT operations and HRM practices. Whereas the calculated value (t) was (2.086), which is greater than the tabular value under of significant level (0.05), degree of freedom of (1.68), The correlation value of (0.769), is a good positive correlation supports the validity of the second sub-hypothesis emanating from the first main hypothesis (There is a significant relationship between IT operations and HRM practices). This is a good relationship of indicates that the more IT operations in a researched company can contribute to the effectiveness of individuals' practices.

c. The results showed that there is a strong significant correlation between IT knowledge and HRM practices, since the calculated value of t is (3.758), which is greater than the tabular value under of significant level (0.05), the degree of freedom of (1.68). The correlation value (0.908) is a high positive correlation supports to the validity and validation of the third sub-hypothesis emanating from the first main hypothesis (There is a significant relationship between IT knowledge and HRM practices). This is a strong relationship of indicates that more attention is given to the organizing of jobs held by individuals in terms of having access to technical knowledge opportunities, the HRM practices will be more effective.

5.3.2 Analyse the impact of IT competency with its dimensions on HRM practices

Table 7 shows the results of the regression analysis between IT competencies in overall on HRM practices. That there is a good sign of IT competency with its dimensions in overall on HRM practices. The calculated value of (F) was (7.17) which is greater than its tabular value under the significant level (0.05) of (3.95). From the observation of the beta coefficient (β) of (0.465) which is indicates that the change of one unit in IT is accompanied by a change of (0.46) in human resources management practices, and this indicates the importance of IT to increase the effectiveness of HRM practices. The value of the R² was (0.691), which is a high percentage, indicates that the amount of (0.691) of the total variation in HRM practices is determined by the perception
of employees of the importance of the study sample of IT competency and how effects on management practices. That the remaining is (0.226) the impact ratio represents other unknown variables. The value of the regression curve (α) which indicates the value of the dependent variable if the value of the independent variable is 0. It differs for 0 which means a good relationship between IT competency and HRM practices. Hence, there is a great interest in human resources management practices in the researched company is (8.028). This result confirms the validity and validation of the second main hypothesis (There is a significant effect of IT competency in terms of dimensions on HRM practices). Thus, the regression equation can be formulated as follows (Y= 8.028 + 0.465X).

Table 7, Analyse the impact of IT competency with its dimensions on HRM practices

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>R²</th>
<th>F</th>
<th>α</th>
<th>β</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT usage x₁</td>
<td>HRM practises</td>
<td>0.750</td>
<td>9.06</td>
<td>7.559</td>
<td>0.494</td>
<td>significance</td>
</tr>
<tr>
<td>IT operations x₂</td>
<td></td>
<td>0.599</td>
<td>4.35</td>
<td>9.333</td>
<td>0.382</td>
<td>significance</td>
</tr>
<tr>
<td>IT knowledge x₃</td>
<td></td>
<td>0.729</td>
<td>8.11</td>
<td>7.187</td>
<td>0.522</td>
<td>significance</td>
</tr>
<tr>
<td>X</td>
<td>Y</td>
<td>0.692</td>
<td>7.17</td>
<td>8.024</td>
<td>0.466</td>
<td>significance</td>
</tr>
</tbody>
</table>

Value (F) Tabular under significance level (0.05), Freedom degree = (3.95).

The test hypotheses emanating from the second main hypothesis are as follows:

a. Analysis of results was shown in Table 7, that there was a significant effect of the use of IT on HRM practices, where the calculated value (F) of (9.06), which is greater than its tabular value at a significant level (0.05), and the degree of freedom (3.95). From the observation of the beta coefficient (β) of (0.494), which indicates that the change of one unit in the use of information technology is accompanied by a change of (0.494) in HRM practices. This shows the importance of IT using to increase the effectiveness of HRM practices. The value of (R²) was (0.750) which is a high percentage. This means, there is a great interest in human resources management activities in the researched company of the value of (α) is (7.559). These results have confirmed the validity and validation of the first sub-hypothesis emanating from the second main hypothesis (there is a great significance of IT usage on HRM practices). The regression equation can be formulated as follows (Y= 7.559 + 0.494).
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b. Analysis of results was shown in Table 7, that there was a significant effect of IT operation on HRM practices, where the calculated value (F) of (4.54), which is greater than its tabular value at a significant level (0.05), and the degree of freedom (3.95). From the observation of the beta coefficient (β) of (0.382), which indicates that the change of one unit in the IT operation is accompanied by a change of (0.382) in HRM practices. This shows the importance of IT operation to increase the effectiveness of HRM practices. The value of (R2) was (0.599) which is a high percentage. This means, there is a great interest in HRM practices in the researched company of the value of (α) is (9.333). These results have confirmed the validity and validation of the second sub-hypothesis emanating from the second main hypothesis (there is a great significance of IT operation on HRM practices). The regression equation can be formulated as follows (Y= 9.333+ 0.382).

c. Analysis of results was shown in Table 7, that there was a significant effect of IT knowledge on HRM practices, where the calculated value (F) of (8.11), which is greater than its tabular value at a significant level (0.05), and the degree of freedom (3.95). From the observation of the beta coefficient (β) of (0.522), which indicates that the change of one unit in the IT knowledge is accompanied by a change of (0.522) in HRM practices. This shows the importance of IT knowledge to increase the effectiveness of HRM practices. The value of (R2) was (0.729) which is a high percentage. This means, there is a great interest in HRM practices in the researched company of the value of (α) is (7.187). These results have confirmed the validity and validation of the third sub-hypothesis emanating from the second main hypothesis (there is a great significance of IT knowledge on HRM practices). The regression equation can be formulated as follows (Y= 7.187+ 0.522).

6. Conclusion

Recently, there has been a global trend in the field of IT as well as, the human resource as the main elements of most international companies and institutions. Thus, the study focused on a number of conclusions, for example, the results have indicated that the use of IT is relevant to improving employee performance. Moreover, the jobs have held by the employees of the surveyed company are appropriate due to the availability of good IT competency dimensions, which results from the interest of the company management. The company responses to the changes in the factors associated with the efficiency and use of technology, through the continuous use and modernization of hardware and software, thus increase the training of employees to improve the performance. Recruitment variable is first arranged in terms of the importance, which indicates that the jobs in the company have granted to the person who has the competence, excellence, skills, and experience. The responses of the study sample showed a medium tendency towards the HRM practices by
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The management of the researched company. The Human Resources Department is carrying out some activities under other names as one of its tasks. The company is serious of practising training programs due it relies on technology in performance. As well as, the study sample answers have shown the inequity of training opportunities in the researched company. Performance appraisal of the study sample individuals is contributing to defining the goals and commensurate with the abilities and skills, owned by employees. This is a good indicator shows the awareness of employees and management of the importance of performance appraisal to achieve future goals. Finally, the members of the surveyed company are realized the important role that the efficiency of IT can play in the activation of HRM practices by promoting outstanding performance via technology and human resource that they are characteristics of the current era.

7. Recommendations for future research
7.1 Recommendations
The researched company should give more importance to HRM practices by delegating some powers to manage human resources. In addition, justice in the nomination of employees' for training courses, especially in the out country. It is necessary of the researched company has scientifically methods as needed in the distribution of staff on jobs in terms of their abilities, qualifications and competencies, in order to achieve the principle of placing the right person in the right place. The human resources management in the company should be aware of the nature and dimensions of the efficiency of information technology and the active role in enhancing its performance and choose the appropriate method for the nature of its activity, the skills and abilities of its employees.

7.2 Future Research
The present study suggests some future research that is related to the subject of this research, including the following:
1. It is necessary to study of dimensions and practices related to human resource management practices and information technology.
2. It is possible to use other sub-variables and combine them with one of the variables mentioned in the research.
3. Given the importance of the study variables, we find it is necessary to apply the study in other organizations.
4. It is necessary to conduct a broad study on the subject of the competency and capabilities of IT and its impact or role in many practices and in most institutions or organizations.
5. There are many studies that can be carried out by taking the variables of technology and integrating them on several different topics and from different aspects.
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References


29. S. Naveen & D. N. M. Raju, (2014), “A study on recruitment & selection process with reference to three industries, cement industry, electronics industry,
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دور كفاءة تكنولوجيا المعلومات في تفعيل ممارسات إدارة الموارد البشرية
دراسة تطبيقية في الشركة العامة للاتصالات والمعلوماتية في العراق

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كلية الإدارة والاقتصاد/ جامعة بغداد

المستخلص:
يهدف هذا البحث إلى توضيح دور كفاءة تكنولوجيا المعلومات وفق الأفكار "استخدام تكنولوجيا المعلومات ومعرفة تكنولوجيا المعلومات وعمليات تكنولوجيا المعلومات" كمثير مستقل في تفعيل ممارسات إدارة الموارد البشرية كمثير تابع مع أبعاده (التدريب والتطوير والتوظيف وتصميم الوظائف وتقييم الأداء). بناءً على ذلك، يتم تحديد علاقات الارتباط والتأثير بين المتغيرات المستقلة والتابعة من خلال صياغة فرضيات رئيسية. هناك علاقة وتأثير بين كفاءة تكنولوجيا المعلومات وممارسات إدارة الموارد البشرية مع أبعادها. علاوة على ذلك، فإن نطاق وسكان هذا البحث هو الشركة العامة للمعلوماتية والإتصالات في العراق. استخدم البحث منهج التحليل الورشي والمسح الكمي في تصميم البحث لاختبار العلاقات بين متغيرات البحث. تم توزيع الاستبان على عدد من الموظفين والمديرين (المستجيبين)، وقد تم اختيارهم بشكل عشوائي وشملت 76 المستجيب. تم استخدام البرنامج الإحصائي (SPSS) لتحليل البيانات من خلال استخدام الأساليب الإحصائية والوصفيّة مثل الوسيط، معايير التباين، والاحتراف المعنوي، لتحليل ووصف البيانات لاختبار فرضية الارتباط. أشادت الأبحاث بأهم الاستنتاجات التي توصلت إليها هذه الدراسة إلى وجود علاقة ارتباط بين ممارسات إدارة الموارد البشرية بكفاءات تكنولوجيا المعلومات.

المصطلحات الرئيسة للبحث/ كفاءة تكنولوجيا المعلومات، ممارسات إدارة الموارد البشرية، استخدام تكنولوجيا المعلومات، معرفة تكنولوجيا المعلومات، عمليات تكنولوجيا المعلومات، برامج التدريب، تصميم العمل، التوظيف (الاستجابة)، وتقييم الأداء.