



## Computerized Management Information Systems Resources and their Relationship to the Development of Performance in the Electricity Distribution Company in Gaza

SAMY S. ABU NASER<sup>1</sup>  
MAZEN J. AL SHOBAKI

Faculty of Engineering & Information Technology  
Al-Azhar University, Gaza, Gaza-Strip, Palestine

### **Abstract:**

*This paper aims to identify computerized management information systems resources and their relationship to the development of performance in the Electricity Distribution Company in Gaza.*

*This research used two dimensions. The first dimension is computerized management information systems and the second dimension the Development of Performance.*

*The control sample was (360). (360) questioners were distributed and (306) were retrieved back with a percentage of (85%). Several statistical tools were used for data analysis and hypotheses testing, including reliability correlation using Cronbach's alpha, "ANOVA", Simple Linear Regression and Step Wise Regression.*

*The overall findings of the current study suggested the presence of a statistically significant relationship between resources (physical, software, and human and organizational) for the computerized*

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<sup>1</sup> Corresponding author: Professor Dr. Samy S. Abu Naser,  
[abunaser@alazhar.edu.ps](mailto:abunaser@alazhar.edu.ps)

*management information systems and the development of performance in the Electricity Distribution Company in Gaza.*

*The study recommended the following: The need to strengthen the company's management interest in the potential of computerized management information systems and using them in the computerization of all the company's activities. And the need to involve workers and users in the design of computerized management information systems and assessment and development process. And strengthen the relationship between users and information systems personnel in the department responsible for the system. And it is essential that the company is developing the infrastructure for information technology in general, and computerized management information systems, in particular for the development of performance. And increase interest in providing resources (physical, software, and human and organizational) for the computerized management information systems.*

*The current study is unique by the virtue of its nature, scope and way of implied investigation, as it is the first study at Electricity Distribution Company in Gaza resources explores the status of Computerized management information systems and their relationship to the development of performance in the Electricity Distribution Company in Gaza increasing interest in Computerized management information systems through continuity, keeping pace with technological means and modern techniques.*

**Key words:** Following the Computerized management information systems, improving performance, the Development of Performance, Electricity Distribution Company in Gaza.

## INTRODUCTION

Modern technology added to the management a new recipe to enable it to perform better than before, prompting them to exploit those scientific breakthroughs in the field of modern technology desiring to improve and develop the performance, by increasing the speed of completion, accuracy of transactions,

provide customer service in line with their needs and desires, help by reporting to support the decision-making process. Thus improve the quality of decisions, increase their value and productivity based on information.

Gad El Rab (2008) believes that accompanying these developments, the expansion in the use of information that computer applications has made one of its components key in order to take advantage of its large abilities which is equal to the increasing size of the organization, where it managed the importance of information systems in the benefits generated by such flexibility and speed of delivery, reduce costs and the possibility of providing useful information Systems in the appropriate time, in addition to being used on the level of administrative processes and activities at different levels. And the preservation and dissemination of information through the various aspects of the organization.

Electricity Distribution Company in Gaza is private and limited joint-stock company, is working on the distribution of electric power in the Gaza Strip, and looks forward to working continuously to improve and raise the efficiency of its performance by relying on computerized management information systems, which are the backbone of the administrative development, to make the results of performance in line with the company's goals.

Computerized management information systems allowed great opportunity for various business organizations in strengthening their competitiveness and achieve their desired objectives, also contributed to the development and improvement of the performance development by these systems rely on modern and sophisticated technology which enables these organizations to draw policies and directions based on real information and enable them to take correct administrative decisions, in addition to that computerized management information systems lead to develop and improve the

performance of employees because of their relationship with the professional development of functional employees, and in the completion of the tasks and functions assigned to employees quickly, efficiently and with high productivity.

The expansion of the business, and the presence of large organizational structures, prompted management to build a database and a larger system of positive interaction and structured to achieve its objectives and general goals, where the pursuit of this research is to identify the weaknesses in the computerized management information system in the Electricity Distribution Company in Gaza, and therefore attempt to treat and then be able to develop and raise the efficiency of the performance of their employees.

So, the researchers tried through this research to answer the following main question: **What is the relationship between the computerized management information systems resources and the development of performance in the Electricity distribution company in Gaza?**

The objective of this study is to:

- To identify the perceptions of employees in the Electricity Distribution Company in Gaza toward computerized management information systems resources.
- To identify the relationship between the main resources for the computerized management information systems and development of Performance in the Electricity Distribution Company in Gaza.
- To identify relationship between personal changes to employees' perceptions about the computerized management information systems and perceptions of employees and the development of performance in the Electricity Distribution Company in Gaza resources.

- To identify the level of performance in the development of the electricity distribution company in Gaza.
- To provide recommendations and suggestions to help improve performance by enhancing the use of computerized management information systems in the Electricity Distribution Company in Gaza.

The current study draws on the literature to explore this topic in depth and then turns to an implied investigation to assess and determine the most influential variables.

In view of the literature review, the study raises the questions of:

**Q1.** Is there a relationship between the computerized management information systems resources and the development of performance in the Electricity Distribution Company in Gaza?

**Q2.** Are there differences between the perceptions of respondents about the computerized management information systems resources related to the development of performance in the Electricity Distribution Company in Gaza, attributed to personal variables (gender, age, educational qualification, years of service)?

As for originality, the current study is unique by the virtue of its nature, scope and way of implied investigation, as it is the first study at the Electricity Distribution Company in Gaza that explores the computerized management information systems resources.

## LITERATURE REVIEW

### Computerized Management Information Systems Resources:

AL-Gharbaoui (2014) reached to a positive relationship between the computerized health information systems and the level of functionality for those working in health centers.

Zinedine and al-Ajrami (2013) reached that electronic programs contribute to raising the performance levels and productivity of the workers at the Deanship of Admission and Registration in Al-Azhar University in Gaza, and that the software used in the deanship contributed to the selection of a qualified elements in the field of information technology.

Al-Murad (2012) in research about Management Information System Characteristics and its impact on the indicators success, the information resource of the important resources of the organization, and came through which Thakbak competitive advantage and superior performance down to the organizational success. And that this information needs to run, no need to plan, organize and control in order to take advantage of them well, and benefit from their use.

Abu Karim (2013) concluded that the devices are the main requirement of computerized management information systems working to improve management performance systems, followed by users who are using information systems, then performance improvement, and software, while the least impact on information systems: technician specialists and databases. The results clarified that the response by the employees in the systems is high, and responding to maintenance by employees in systems is high, the results showed that the devices used are flexible enough, that the devices currently in use is one of the best and latest technology available, the management and operation of the databases is featuring high capability on the addition and modification, the management and operation of databases is characterized by high capacity storage, and there is statistically significant differences between the management information systems and the improvement of administrative performance attributed to years of service.

Al-Araby (2012) showed a statistically significant differences relationship between the use of information technology and (performance size, quality of performance, efficiency, simplify the work). The study also showed no statistically significant differences relationship between the use of information technology and fast task, no statistically significant differences about the impact of the use of information technology on job performance attributable to the variables (gender, educational qualification). In contrast, there were statistically significant differences about the impact of the use of information technology on job performance attributable to the variables (age, seniority, functional category).

AL-Saraireh (2011) showed that the functionality of the faculty level was high, the researchers recommended that the universities to strengthen the functionality of faculty members, to identify their needs and desires to achieve the possible ones to satisfy them, and provide an incentive system, promotive, physical gifts, and moral, as they have a positive impact in maintaining the level of job performance high.

Myeong and Choi (2010) reached a positive change to the impact of information technology on decision-making policies.

Al-Otaibi (2010) concluded that there is clarity in a sample study of the importance of the use of information technology in human resource management, senior management supports the transition to the use of information technology to the management of human resources, provide adequate infrastructure to help in the use of information technology in management human resources, there are no statistically significant differences between the perceptions of the respondents attributed to demographic variables (gender, educational qualification, experience, functional level). Dweik (2010) showed that the computerized information health system currently used in the Gaza European Hospital has good affect on medical and administrative areas of the business as well as

the medical and administrative decisions, and that there are constraints limit the effectiveness of health information systems and most important of them: the weakness of funds required.

Al-Halabi (2010) concluded that the computerized management information systems requirements (physical, software, human and organizational) enjoys a high from the viewpoint of respondents efficiently, as the study found that there is no statistically significant relationship on the impact of computerized management information systems on the decentralization of the Ministry Finance in Gaza Strip due to demographic variables (gender, age, experience, qualification career, the scientific level).

AL-Tahrawi (2010) found that the existence of specialized human resources management departments by (67%), non-governmental organizations provide financial resources to the development of the capacity of its staff internally and externally, and it will help them in the development of educational and academic standing, as well as an existing performance appraisal system on the basis of the bonus system. AL-Omari (2009) found the presence of impact that statistically significant with the requirements of the operation and management information systems (physical, software, human, organizational) on the performance of employees in the telecommunications company, and statistically significant differences between the perceptions of the respondents on the subject of the study are due demographic variables (scientific level, years of experience, the workplace, the functional level), and the presence of good level of material resources, human resources, software resources and organizational resources. Supattra and Boonmak (2007) concluded that the administrative information and information technology increase the organization's effectiveness and efficiency of their performance and improve the strategic work

in systems, when one rely on management information technology and information systems, the greater the efficiency of the Organization and increased effectiveness and the better the culture of workers in the organization about the efficiency of performance and effectiveness. Al-Bshabshah (2005) reached to the presence of significant impact to the quality of information systems on the raising level of functionality, the presence of a strong statistically significant differences between the information systems of various dimensions and functionality of a relationship, the presence of a strong significant impact of software supplies on functionality, and there are significant statistical differences between the perceptions of the respondents attributed to (age, educational qualification, functional level).

## **COMPUTERIZED MANAGEMENT INFORMATION SYSTEMS**

Computerized management information systems are the use of computers in the assembly and operation of the storage and dissemination of information, and notes that computers including content of the hardware and software serves as the tools you use certified information systems at Computer (Sultan, 2000), management information systems is a comprehensive system works to collect all the information necessary for all management functions with the aim of administrative support private managers by providing in time clear and accurate information to help them plan and organize their work and thus take appropriate decisions in order to provide the necessary information, as others added to the definition of computerized information systems (AL-Hassania, 2002).

The importance of computerized management information systems is highlighted in the fact that its main

task is to provide the necessary data and processed to produce useful management information, in a timely manner, accurate and appropriate quantity and commensurate with the needs of decision-makers (Idris, 2007). the information as a storage of the organization, including addressed from the information that allows configures of a historical description of their conditions, discovery of easy errors that might occur, which means that information systems should bring confidence to surveillance to be effective coordination and communication between the various interests through exchange of information and documents associated with the various flows, and because of their role in helping in the decision-making process by finding a basis or foundation for the analysis of the initial warning signs that stand out both internally and externally (Guendlchi and al-Janabi, 2009), as well as helping to improve performance by increasing the speed of completion and accuracy of transactions, provide customer service in line with their needs and desires also help by reporting provided to support the process which make decisions and thus improve the quality of decisions and increase their value and productivity based on the information provided and the associated productivity organization (Al-Bshabshah, 2005).

The importance of management information systems for organizations classified into three main roles: support pilot operations, support decision making by managers, and support the development and implementation of strategies to achieve competitive advantage , also the importance of management information systems lies in the support of the organization and supporting basic operations (Kurdish and Al- Adel, 2003).

## **COMPUTERIZED MANAGEMENT INFORMATION SYSTEMS AND THE DEVELOPMENT OF PERFORMANCE:**

The development of performance in organizations is linked to the optimal use of financial and human resources available in

the organization through the use of appropriate methods to achieve the objectives of the organization and therefore based on clear and objective goals doable to achieve the best level of performance (Al-Othman, 2003), it is not limited to the use of this organization on a field without the other but are used in organizations at the senior management level are strategic and competitive dimension, used on the middle management level, where useful in processes of implementation and described the information here as a tactical dominated by the character of repetition, also used on the lower level of management so as to enhance the monitoring process of direct and supervise the conduct of repeated operations (Al-Salem, and Makkawi 2004).

Therefore, the researchers believe that the computerized management information systems help in the development of performance where they help to speed decision-making on a sound basis provided real information, adequate and in timely manner, and provide information to the various administrative levels and help departments in operations planning, control, regulation, facilitate administrative communication between all administrative levels, and help the organization in strategic planning, opening of new markets, working to increase the efficiency of the performance of staff development the development of management techniques, make the best investment of the available data, the speed of completion of transactions and accuracy, reduce cost, and improve the level of service, as well as take advantage of the electronic devices in the analysis, display and save information.

Computerized management information systems resources and their relationship to the development of performance in the Electricity Distribution Company in Gaza leads to the following main hypothesis in this study:

**H1:** There is statistically significant relationship between the computerized management information systems resources and

the development of performance in the Electricity Distribution Company in Gaza.

**This leads to the following first sub-hypothesis in this study:**

**h1-1:** There are significant relationship differences between the physical resources to computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

**h1-2:** There are significant relationship differences between software resources to computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

**h1-3:** There are significant relationship differences between human resources management information systems and the development of computerized performance in the Electricity Distribution Company in Gaza.

**h1-4:** There are significant relationship differences between the organizational resources to computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

## **RESEARCH DESIGN**

### **Study population and sampling**

This study conducted at Electricity Distribution Company in Gaza. It is highly reputable one and established in 1991. The population is (1022) employees, the control sample (733). The usable sample was (520), which makes response rate (71%).

The sample of the study was selected using random sampling from different management levels where all levels are affected by computerized management information systems resources, the study sample size was (360) questionnaires, (360) questionnaires were distributed on study participants, (306) were returned back with a percentage of (85%).

### **Research instrument**

The first dimension referring to the model used in the study is computerized management information systems resources and the second dimension of the instrument is the development of performance. The authors with the help of other research literature (Naser, and Al Shobaki, 2016), (Shobaki and Naser, 2016), (Abu Naser, and Al Shobaki, 2016), (Alfoazin, 2003), (Naser et. al., 2016) ,(AL-Gharbaoui, 2014), (Al-Halabi, 2010), (Al-Othman, 2003), (Al-Quds Open University, 2007), (Muasher, 2006), (Suwailem, 2003), (Zinedine and al-Ajrami, 2013), (Naser et. al., 2010), (Naser and ALmursheidi, 2016), (Abu Naser et. al., 2016) prepared the questionnaire.

A five-point Lekert scale of agreement was used for measurement, running from "Strongly Agree" to "Strongly Disagree", with a Neutral category for scale midpoint.

### **Search Tools**

The researchers prepared a questionnaire for the "computerized management information systems resources and their relationship to the development of performance in the Electricity Distribution Company in Gaza."

### **Structural validity**

The degree to which a test measures what it claims, or purports, to be measuring. It shows the relevance of each field of study to the overall degree of the questionnaire paragraphs.

Table 1 shows that all correlation coefficients in all fields of the questionnaire are statistically significant at the level of significance ( $\alpha \leq 0.05$ ) and therefore the questionnaire fields are considered to be valid to what it was supposed to measure.

### **Validity and reliability assessment:**

The study adopted Cronbach's  $\alpha$  to measure the internal consistence reliability of the questionnaire. The results showed that Cronbach's  $\alpha$  values for all dimensions were  $> (0.05)$ . It indicated that the design of the questionnaire had a high internal consistency.

The researchers used Alpha Cronbach method to measure the stability of the questionnaire, and the results were as shown in Table 2.

Table 2 showed that the value of Cronbach's alpha coefficient was high for each field of the questionnaire ranging from 0.803 to 0.926. As well as the value of the alpha coefficient for all the paragraphs of the questionnaire was (0.958). This means that the reliability coefficient is high, so that the researchers were certain about the reliability and validity of the questionnaire, which made them confident about suitability of questionnaire for analyzing the results and answering questions of the study and testing of the hypotheses.

### **Statistical procedures:**

The researchers used the questionnaire data for analysis through statistical analysis software (SPSS). Nonparametric statistical tests were used because Lekert scale is a main statistical measure which used the following tools:

1. Percentages, frequencies, and relative arithmetic average are mainly used for the purpose of knowing repeated variable categories, and benefit researchers in the description of the study sample.
2. Cronbach's Alpha Test was used to determine the stability of the paragraphs of the questionnaire.

3. Spearman Correlation Coefficient to measure the degree of correlation. This test is used to study the relationship between the variables in the case of nonparametric data.
4. Sign Test to see whether the average degree of responsiveness has reached a degree of neutrality, a 3 or not.
5. Mann-Whitney Test to see whether there were statistically significant differences between two fields of ordinal data.
6. Kruskal-Wallis Test to see whether there were statistically significant differences between the three fields or more of the ordinal data.
7. Multi-linear regression model.

### **Data analysis and discussion of results:**

**H1:** There are statistically significant relationship between the computerized management information systems resources and the development of performance in the Electricity Distribution Company in Gaza.

Ensuing the following sub-hypotheses:

**h1-1:** There are significant relationship differences between the physical resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

This hypothesis was tested through paragraphs of the field of physical resources for computerized management information systems, the test signal have been used to see if the average degree of responsiveness has been reached, the degree of neutrality, namely, (3), or not, and the results are shown in the following table.

Table 3 argued that the arithmetic average of all field paragraphs equal to (4.04) means that the relative arithmetic average equals (80.87%), the value of the sign test (16:48) and that the probability value (Sig.) equal to (0.000), so the field

"material resources for computerized Management Information Systems" statistically significant at the level of significance ( $\alpha \leq 0.05$ ), which shows that the average degree of responsiveness to this area is fundamentally different from the degree of neutrality, namely, (3) this means that there is approval by the respondents on this field.

As a result of the first sub-hypothesis: there are significant relationship differences between the physical resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

The study coincided with a study Al-bshabshah (2005) which found a significant effect of the physical requirements for information systems on job performance of Jordanian insurance organization, and coincided well with the study of Abu Karim (2013) which concluded that the devices currently used are flexible enough, the best and latest technology available, and Al-Halabi (2010) study concluded that the physical requirements of the computerized management information systems has a high efficiency from the perspective of the respondents, AL-Tahrawi (2010) study found that non-governmental organizations provide financial resources for the development of the capabilities of its staff internally and externally, and also agrees with AL-Omari (2009) study that found the presence of impact statistically significant of the physical requirements of management information systems on the performance of employees in the telecommunications company, and the existence of a good level of physical resources, and disagreed with the findings of a study of Dweik (2010) which reached to lake of the required funds.

**h1-2:** There are significant relationship differences between software resources of computerized management information

systems and the development of performance in the Electricity Distribution Company in Gaza.

This hypothesis was tested through paragraphs of software resources field, and sign test was used to determine whether the average degree of responsiveness has reached a degree of neutrality, namely, (3) or not. The results are shown in the following table 4.

Table 4 shows that the arithmetic average of all field paragraphs equal to (4.03) which means that the arithmetic average equals (80.55%), the value of sign test (16:35) and that the probability value (Sig.) Equal to (0.00), so it is considered that the field " software resources of computerized management information systems" statistically significant at the level of significance ( $\alpha \leq 0.05$ ), which shows that the average degree of responsiveness to this field fundamentally different from the degree of neutrality (3), this means that there is approval by the respondents on this field.

Table 4 shows that the correlation coefficient generally between software resources of computerized management information systems and performance development in the Electricity Distribution Company in Gaza equal to (0.278), and that the probability value (Sig.) Equal to (0.000) which is less than the significance level ( $\alpha \leq 0.05$ ) and this indicates the presence of statistical significant effect between software resources of computerized management information systems and the development of performance in the electricity distribution company in Gaza.

**As a result of sub-second hypothesis:** There are significant relationship differences between software resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

AL-Gharbaoui (2014) study reached a high degree of approval by the members of the study population in terms of

the possibilities for the use of computerized health information systems, (Zinedine and al-Ajrami, 2013) study concluded that the software used in the deanship contributed the selection of a qualified elements in the field of information technology, also agreed with the study of Abu Karim which concluded that the management and operation of databases featuring high on the addition, modification capacity and storage, also agreed with the study of Al-Araby (2012), which reached significant relationship differences between the use of information technology and functionality of employees, as well as the study of Al-Otaibi (2010) which reached a sufficient infrastructure to help in the use of information technology in human resources management, also agreed with the study of Al-Halabi (2010) which concluded that the requirements of (physical, software, human and organizational resources) computerized management information, systems has a high efficiency from the perspective of the respondents, the study of AL-Omari (2009) reached a good level of software resources, the study of Al-bshabshah (2005) reached a significant impact of software supplies on job performance.

**h1-3:** There are significant relationship differences between human resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

This hypothesis was tested through paragraphs of human resources field, and sign test was used to determine whether the average degree of responsiveness has reached a degree of neutrality, namely, (3) or not. The results are shown in the following table 5.

Table 5 argued that the arithmetic average of all field paragraphs equal to (3.92) which means that the relative arithmetic average equals (0.00), so the field "human resources computerized management information systems " statistically

significant at the level of significance ( $a \leq 0.05$ ). Thus, the average degree of the response to this field is fundamentally different from the degree of neutrality (3), this means that there is approval by the respondents on this field.

Table 5 shows that the correlation coefficient in general between computerized human resources management information systems and performance development in Electricity Distribution Company in Gaza equal to (0.0365), and that the value of probability (Sig) equal to (0.000) which is less than the significance level ( $a \leq 0.05$ ), this indicates the presence of a statistically significant effect of computerized human resources management information systems and the development of performance in Electricity distribution company in Gaza.

**As a result of sub-third hypothesis:** There are significant relationship differences between human resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

Which explains the result of this hypothesis is that the skill and efficiency of workers in the department responsible for the information system has led to the raising of efficiency of the system works, and this is consistent with the study of Al-Gharbaoui (2014) which reached the following findings and a high degree of approval by the members of the study population in terms of the possibilities for the use of applications of computerized health information systems, as well as the study of Zinedine and al-Ajrami (2013) which concluded that the software used in the deanship contributed to the selection of a qualified elements in the field of information technology, the identification of training needs electronically to improve the performance of career employees at the Deanship of Admission and Registration, the study of Abu Karim (2013) concluded that the response by the system workers and system

maintenance workers are high, also agreed with the study of (Myeong and Choi, 2010) which found a positive change of the impact of information technology on the process of decision-making among government users policies, also agreed with the study of Al-Otaibi (2010) which reached the importance of the use of information technology in human resource management, supporting the academic management transformation to the use of information technology for the human resources management, provide adequate infrastructure to help in the use of information technology in human resources management, as well as the study of Al-Halabi (2010) which concluded that requirements of computerized human management information systems has a high efficiency from the perspective of the respondents, the study of AL-Tahrawi (2010) which found the existence of specialized departments of human resources management by (67%), as well as the study of AL-Omari (2009) which reached to the existence of the statistical significance effect of the requirements of human management information systems on the performance of employees in the telecommunications company, and the existence of a good level of human resources.

**h1-4:** There are significant relationship differences between organizational resources of computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

This hypothesis was tested through paragraphs of organizational resources field, and sign test was used to determine whether the average degree of responsiveness has reached a degree of neutrality, namely, (3) or not. The results are shown in the following table 6.

Table 6 can be argued that the arithmetic average of all field paragraphs equal to (3.78) which means that the relative arithmetic average equals (75.67%), the sign test value (15.66)

and that the probability value (Sig) equal to (0.00), so the field "organizational resources of computerized management information systems" statistically significant at the level of significance ( $\alpha \leq 0.05$ ) which indicates that the average temperature of the response to this field is fundamentally different from the degree of neutrality, namely (3), this means that there is approval by the respondents on this field.

The table shows that the link is generally coefficient between organizational resources of computerized management information systems and performance development in the Electricity Distribution Company in Gaza equal to (0.386), and that the probability value (Sig) equal to (0.000) which is less than the significance level ( $\alpha \leq 0.05$ ) and this shows the presence of a statistically significant effect of organizational resources of the computerized management information systems and the performance development in Electricity distribution company in Gaza.

**As a result the fourth sub-hypothesis:** There are significant relationship differences between organizational resources of computerized management information systems and the performance development in the Electricity Distribution Company in Gaza.

The result of this hypothesis is due to the attention of resources of computerized management information systems, which contributed to the rapid provision of appropriate information to all management levels commensurate with the nature of the work of each level.

The study coincided with Al-Salem and Makkawi (2004) study which found a relationship between organizational resources of computerized management information systems and the performance development in the Jordanian industrial companies, also agreed with the study of Al-Halabi (2010) and the study of AL-Omari (2009) which concluded that the requirements (physical, software, human and organizational) of

computerized management information systems have a high viewpoint from the respondents efficiently, AL-Tahrawi (2010) study found the existence of specialized human resources management departments, as well as agreed with the study of Supattra and Boonmak (2007) which found that whenever an organization rely on management information systems and information technology the greater the efficiency and increased effectiveness. also agreed with the study of Al-bshabshah (2005) which reached to the existence of a significant impact of the quality of information systems to raise the level of functionality, and the presence of a statistically significant relationship between powerful information systems with the various dimensions and functionality of performance development.

While disagreed with the study of Myeong and Choi (2010) which found an increase in the barriers to sharing information due to some environmental changes, including the mandate to provide the information with complex ways to manage data, and negative attitudes to share information requirements.

## MULTIPLE LINEAR REGRESSION MODEL

The use of multiple regression model to test the relationship between management requirements and operation of management information systems and the development of performance and creating an equation linking them.

Stepwise was used to find the best equation of the line multi-regression. It was found that the three dimensions listed by their effect on development of performance: human resources for computerized management information systems, organizational resources for computerized management information systems, and Physical resources for computerized management information systems. But software resource for

computerized management information systems has been excluded from the form because it is ineffective on the development of performance according to Stepwise, and can be explained by the existence of many variables which have greater influence resource for computerized management information systems and the development of performance.

The coefficient of determination is equal to 29%. This means that 29% of the variation in the development of performance can be explained by the previous regression multiple linear equation and this ratio is considered acceptable in human studies. The remaining 71% perhaps go back to other variables that may affect independent of the organization in the development of performance.

Notes from the former table: probability value of each of the three dimensions are: 0.00, 0.008, 0.008, respectively, which is less than the significance level ( $\alpha \leq 0.05$ ) and so there is substantial relationship for each of the three dimensions and the Development of Performance.

## **CONCLUSION:**

The results showed that the computerized management information systems resources have a positive relationship on the development of performance in the Electricity Distribution Company in Gaza.

The results revealed the presence of a statistically significant relationship between resources (physical, software, and human and organizational) for the computerized management information systems and the development of performance in the Electricity Distribution Company in Gaza.

Based on previous results, researchers suggest a set of recommendations that could lead to the development of performance through computerized management information

systems in the Electricity Distribution Company in Gaza are as follows:

The need to strengthen the company's management interest in the use of computerized management information in all its components and elements of systems being an important variable which contributes to the development of performance. Exploit the potential of computerized management information systems and using them in the computerization of all the company's activities in terms of software design that covers all activities undertaken by the company.

The need to aware staff of the importance of computerized management information systems and their relationship to the development of performance, because of their importance in the conduct of the company's business, and raise the efficiency of job performance, and help the company to improve the quality of services provided to customers through faster completion of management transactions, reduce errors, and speed of response to customer requests.

The need to involve staff and users in the design and assessment of computerized management information systems and development process, given their importance in achieving high morale, and inform staff of their importance in the company.

Strengthening the relationship between the users of information system and personnel systems in the department responsible for the system so that employees understand the technological and technical information needs of all users of information systems.

Training administrators in the Department of Information system for certain periods to equip them with technical expertise to increase their understanding of the work, networks and the complete system.

Emphasize on the importance of Information Technology Department existence, with a specialized computerized

management information systems, clear technical responsibilities, and work in a team to implement the mechanisms of computerized management information systems, be in direct contact with employees in the departments to provide best quality services and Technical support as soon as possible.

It is essential that the company develop the infrastructure for information technology in general, and computerized management information systems, in particular for the development of performance.

Increased attention to provide material resources of equipment and devices used in the computerized management information system, and the interest in providing technical resources for management information systems keeping pace with technological means and modern techniques and work on the training of personnel to use those systems.

Greater attention to computerized human resource management information systems "specialists technicians and end-users" through a variety of disciplines working in the field of computerized management information systems.

## REFERENCES

1. Abu Karim, Ayman Mohammed Ahmed (2013), relationship management information systems to improve administrative performance - a field study on the application of non-governmental organizations in the Gaza Strip, Master Thesis (unpublished), Faculty of Economics and Administrative Sciences, Al-Azhar University, Gaza, Palestine.
2. Abu Naser, Samy S, Mazen J Al Shobaki, Youssef M Abu Amuna, (2016). Knowledge Management Maturity in Universities and its Impact on Performance

- Excellence "Comparative study"., Journal of Scientific and Engineering Research 3.
3. Abu Naser, Samy S. and Al Shobaki, Mazen J.(2016), Requirements of using Decision Support Systems as an Entry Point for Operations of Re-engineering in the Universities ( Applied study on the Palestinian universities in Gaza Strip), World Wide Journal of Multidisciplinary Research and Development, Issue 4.
  4. Abu Sheikha, Nader (2000), Human Resource Management, Dar Al Safa for publication and printer, Jordan, the first edition.
  5. Ahearne Michael, Schillewaert Niels (2001), "the effect of Information Technology on Salesperson Performance", E Business Research Center.
  6. Al-Araby, Attia (2012), the impact of the use of information technology on the job performance of workers in the local government field study at the University of Rqlh- Algeria, Faculty of economic and business sciences easing, magazine researcher, Tenth Issue.
  7. Al-bshabshah, Samer (2005), The impact of the quality of management information systems to raise the performance of the functional level of the Jordanian Social Security Corporation, Accounting and Management magazine, insurance, Oman, First Issue, Volume 10.
  8. Alfoazin, Rashid (2003), Modern information systems and their impact on the performance of employees, a survey in the Customs Authority in the Kingdom of Saudi Arabia, the study of MS, Jamvh Nayef Security Sciences, Riyadh, Saudi Arabia.
  9. AL-Gharbaoui, Mahmoud Hassan (2014), computerized health information and its relationship to performance Alozivy- field study systems on UNRWA primary health

- centers in the Gaza Strip, a study Master (unpublished), Al-Azhar University, Gaza, Palestine.
10. Al-Halabi, Dia Al-Haq (2010), "computerized management information systems and their impact on the decentralization Empirical Study on the Finance Ministry in the Gaza Strip," Master Thesis (unpublished), the Islamic University, Gaza, Palestine.
  11. AL-Hassania, Salim Ibrahim (2002), "Management Information Systems", Second Edition, Warraq Foundation Publishing and Distribution, Amman, Jordan.
  12. Al-Murad, N. (2012). Management Information System Characteristics and its impact on the indicators success, Journal of Management and Economics, 43(9).
  13. AL-Omari, Ayman (2009), impact of computerized management information systems personnel in the performance of the Palestinian telecommunications company, Master Thesis (unpublished), the Islamic University, Gaza, Palestine.
  14. Al-Otaibi, Aziza (2010), The impact of the use of information technology on the performance of human resources at the Australian Academy in Melbourne, and the impact on job performance, the study of MS (unpublished), the British Arab Academy for Higher Education, London.
  15. Al-Othman, Mohamed (2003), the delegation of authority and its impact on the adequacy of performance, Master Thesis (unpublished), Naif Arab University for Security floated, Riyadh, Saudi Arabia.
  16. Al-Quds Open University (2007), Management Information Systems, Al-Quds Open University Press, Jordan.
  17. Al-Salem, Saeed, and Makkawi Nazem Mahmoud (2004): The impact of the structural characteristics in

- the effectiveness of information systems "field study in Jordan's contribution to industrial companies," Jordan Journal of Applied Sciences, First Issue, Volume 7.
18. AL-Saraireh, Dr. Khalid Ahmed (2011), job performance among faculty members in the Jordanian public universities from the perspective of the department heads, Mutah University, the University of Damascus magazine -alcild 27 - First Issue + II of Jordan.
19. AL-Tahrawi, Abdel Moneim (2010), The role of human resources development strategies in the institutional development of performance in the non-governmental organizations in Gaza, Master Thesis (unpublished), Faculty of Commerce, the Islamic University, Gaza, Palestine.
20. Dweik, Musbah (2010), The impact of computerized health information systems on administrative and medical decisions - Empirical Study on the Gaza European Hospital, Master Thesis (unpublished), Faculty of Commerce, the Islamic University, Gaza, Palestine.
21. Gad El Rab, Said (2008), Information Systems Management- basics and administrative applications, Press Ashri, Ismailia, Egypt.
22. Guendlchi, Amer al-Janabi, Aladdin (2009), Management Information Systems, ninth edition, Dar march publishing, distribution and printing, Amman, Jordan.
23. Guendlchi, Amer and Ibrahim al-Janabi, Aladdin (2005), Management Information Systems, the first edition, Dar march for Publishing and Distribution, Amman, Jordan.
24. Guendljugi Amer al-Janabi, Aladdin (2005), Management Information Systems, Dar march for printing and publishing, Oman, the first edition.

25. Idris, Thabet (2007), management information systems in contemporary organizations, Dar University, the first edition, Alexandria, Egypt.
26. Kurdish, Manal Mohammed, and Jalal Ibrahim Al- Adel (2003), Introduction to Management Information Systems, the new University House, Egypt.
27. Muasher, Ziad, fertile Mohammed (2006), The impact of organizational and technical factors Ge administrative information systems applications in the Jordanian banking sector, Jordan Journal of Business Administration, Oman, the fourth issue, Volume 2.
28. Myeong ,Seunghwan and Choi, Younghoon (2010), "Effects of Information Technology on Policy Decision-Making Processes", Some Evidences Beyond Rhetoric , Administration & Society July 2, 2010 vol. 42 no. 4 441-45.
29. Naser S.S.A., Mazen J Al Shobaki, Youssef M Abu Amuna, (2016). Measuring knowledge management maturity at HEI to enhance performance-an empirical study at Al-Azhar University in Palestine. International Journal of Commerce and Management Research, 2(5), pp. 55-62.
30. Naser, S S.A. and ALmursheidi, S.H., (2016). A Knowledge Based System for Neck Pain Diagnosis. World Wide Journal of Multidisciplinary Research (WWJMRD), 2(4), pp.12-18.
31. Naser, S.A., Al-Dahdooh, R., Mushtaha, A. and El-Naffar, M., (2010). Knowledge Management in ESMDA: Expert System for Medical Diagnostic Assistance. AIML Journal. 10(1). pp.31-40.
32. Naser, S.S.A., and Al Shobaki, Mazen J.(2016), Enhancing the Use of Decision Support Systems for Re-Engineering of Operations and Business-Applied Study on the Palestinian Universities, Journal of

- Multidisciplinary Engineering Science Studies (JMESS), July 26, 2016, P: (505-512).
33. Naser S. S. A. and Shobaki M. J. A. (2016), The Impact of Management Requirements and Operations of Computerized Management Information Systems. to Improve Performance. (Practical Study on the employees of the company of Gaza Electricity Distribution). First Scientific Conference for Community Development 5-6 November, 2016, Faculty of Economics and Administrative Sciences, Al-Azhar University of Gaza, Palestine.
34. Naser, Samy S. Abu; Shobaki, Mazen J. Al; Amuna, Youssef M. Abu; ,Promoting Knowledge Management Components in the Palestinian Higher Education Institutions - A Comparative Study, ILSHS, 73, 42-53, 2016, SciPress Ltd.
35. Naser, Samy S. Abu; Shobaki, Mazen J. Al. (2016)., Computerized Management Information Systems Resources and their Relationship to the Development of Performance in the Electricity Distribution Company in Gaza, European Academic Research, 4(8).
36. Shobaki, M. J. A., & Naser, S. S. A. (2016). Performance development and its relationship to demographic variables among users of computerized management information systems in Gaza electricity Distribution Company. IJHSSR, 2(10), 21-30.
37. Shobaki, M. J. A., & Naser, S. S. A. (2016). The reality of modern methods applied in process of performance assessments of employees in the municipalities in Gaza Strip. IJASR, 1(7), 14-23.
38. Shobaki, M. J. A., & Naser, S. S. A. (2016). Decision support systems and its role in developing the universities strategic management: Islamic university in Gaza as a case study., IJARD, 1(10), 33-47.

## **Tables:**

**Table 1: The correlation coefficient between each value of every field of the questionnaire and the total value of the questionnaire**

No.	The field	Spearman correlation coefficient	Statistical value (Sig.)
1.	Physical resources for the computerized management information systems	0.816	0.000*
2.	Software resources for computerized management information systems	0.690	0.000*
3.	Human Resources Computerized Management Information Systems	0.801	0.000*
4.	Organizational resources to computerized management information systems	0.828	0.000*
5.	The performance of employees	0.756	0.000*

Correlation statistically significant at the level of significance ( $\alpha \leq 0.05$ ).

**Table 2: Alpha Cronbach test results to measure the stability of the questionnaire**

No.	The field	Cronbach's alpha coefficient
1.	Physical resources for computerized management information systems	0.863
2.	Software resources for computerized management information systems	0.895
3.	Human resources computerized Management Information Systems	0.803
4.	Organizational resources for computerized management information systems	0.897
5.	The performance of employees	0.926
6.	All areas of the questionnaire	0.958

**Table 3: The arithmetic mean value of probability and correlation coefficient for each paragraph of the field of physical resources**

No.	Paragraph	SMA		The correlation coefficient			
		SMA	SMA relative	Selection value	Probability value (Sig.)	The value of the correlation coefficient	Probability value (Sig.)
1.	Provide adequate computers to accomplish the work required.	4.64	92.88	16.63	0.000*	0.167	0.002*
2.	The system provides enough space to store information	4.42	88.37	17.06	0.000*	0.278	0.000*
3.	Provide tools for data entry fits business needs.	4.38	87.52	16.75	0.000*	0.247	0.000*
4.	Output means of information fits the business needs.	4.34	86.86	16.19	0.000*	0.220	0.000*
5.	Speed of the hardware fits the required workload to be accomplished.	3.61	72.16	8.47	0.000*	0.280	0.000*
6.	Match the available network with business needs.	3.79	75.82	10.32	0.000*	0.273	0.000*
7.	Characterized by fast network connection.	3.67	73.40	9.92	0.000*	0.245	0.000*
8.	Rarely happens an interruption in the network used.	3.59	71.88	7.49	0.000*	0.153	0.000*

9.	Information network used provides sufficient capacity to achieve the goals of the information system.	3.94	78.89	14.25	0.000*	0.204	0.000*
10.	Resolve the imbalance in the network quickly.	4.04	80.79	14.48	0.000*	0.189	0.000*
All field vertebrae together		4.04	80.87	16.48	0.000*	0.340	0.000*

\* The difference between the averages is statistically significant at the level of significance ( $\alpha \leq 0.05$ ).

**Table 4: The arithmetic mean value of probability and correlation coefficient for each paragraph of the software resources for computerized management information systems**

No.	Paragraph	SMA			The correlation coefficient		
		SMA	SMA relative	Selection value	Probability value (Sig.)	The value of the correlation coefficient	Probability value (Sig.)
1.	Software used commensurate with the job requirements.	4.07	81.37	15.36	0.000*	0.221	0.000*
2.	Software is updated in line with business needs.	3.99	79.80	13.99	0.000*	0.025	0.333*
3.	Software used is in agreement with devices used	4.08	81.50	15.85	0.000*	0.171	0.001*
4.	Software used is in agreement with the network used in the business	3.95	79.08	13.66	0.000*	0.278	0.000*
5.	Software used cover all activities	3.87	77.32	12.26	0.000*	0.225	0.000*
6.	Computer software and applications are easy to use	4.14	82.81	15.75	0.000*	0.206	0.000*
7.	All instructions needed to run the software is available	4.03	80.66	13.59	0.000*	0.243	0.000*
8.	Programs provide information with the right quantity and precision	4.01	80.13	14.32	0.000*	0.284	0.000*
9.	Programs used to retrieve information quickly	4.05	80.92	13.36	0.000*	0.175	0.001*
10.	There is control over the programs used in order to ensure operational safety	4.10	81.96	13.70	0.000*	0.342	0.000*
All field vertebrae together		4.03	80.55	16.35	0.000*	0.278	0.000*

\*The difference between the averages is statistically significant at the level of significance ( $\alpha \leq 0.05$ ).

**Table 5: The arithmetic mean value of probability and correlation coefficient for each paragraph of the field of computerized human resources management information systems**

No.	Paragraph	SMA			The correlation coefficient		
		SMA	SMA relative	Selection value	Probability value (Sig.)	The value of the correlation coefficient	Probability value (Sig.)
1.	Technical Section of computerized system answer quickly my queries	3.77	75.34	11.18	0.000*	0.218	0.000*

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	Specialized section of computerized system resolve the problems that we face while using the network or the system	20.	83.92	15.54	0.000*	0.114	0.024*
2.	It is contacted with the department responsible for the computerized information system directly.	4.13	82.68	13.77	0.000*	0.186	0.001*
3.	I have good relations with the personnel department in charge of the computerized information system.	4.38	87.68	16.85	0.000*	0.270	0.000*
4.	Staff in department of computerized information system understands my different needs	4.05	81.07	15.15	0.000*	0.344	0.000*
5.	The concerned department of computerized information system is committed to promises on time.	3.53	70.59	8.23	0.000*	0.27	0.000*
6.	The concerned department of computerized information system offer the same level of service at all times.	3.57	71.50	7.88	0.000*	0.305	0.000*
7.	The concerned department of computerized information system have sufficient skills	4.05	81.05	15.40	0.000*	0.308	0.000*
8.	Employees the concerned department of computerized information system and users of the system are involved in the system design and development	3.48	69.61	7.2	0.000*	0.178	0.001*
9.	Users of computerized information system qualified to work on the system.	3.99	79.74	15.29	0.000*	0.193	0.000*
All field vertebrae together		3.92	78.32	16.16	0.000*	0.365	0.000*

\*The difference between the averages is statistically significant at the level of significance ( $\alpha \leq 0.05$ ).

**Table 6: The arithmetic mean value of probability and correlation coefficient for each paragraph of the field of organizational resources of the computerized management information systems**

No.	Paragraph	SMA		The correlation coefficient			
		SMA	SMA relative	Selection value	Probability value (Sig.)	The value of the correlation coefficient	Probability value (Sig.)
1.	The available information Fits with the job needs	4.08	81.57	16.11	0.000*	0.272	0.000*
2.	You can get the information available to senior management easily	3.08	61.50	1.08	0.000*	0.178	0.001*
3.	Any organizational level can get the information obtained by any other level	3.06	61.25	0.67	0.000*	0.267	0.000*

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	The development of a computerized information system needs a decision of the senior management	4.11	82.16	15.09	0.000*	0.159	0.003*
4.	It senior management provides the necessary financial support for the use of a computerized information system	4.06	81.18	15.02	0.000*	0.132	0.011*
5.	Senior management follows the course of action based on the use of computerized information system	94.3	78.75	15.29	0.000*	0.206	0.000*
6.	Senior management encourages the use of computerized information system	4.24	84.71	15.83	0.000*	0.260	0.000*
7.	Senior management provide training programs on the use of computerized information system	3.95	79.00	14.44	0.000*	0.243	0.000*
8.	Senior management concerned with the views and suggestions on the use of computerized information system	3.50	69.77	8.86	0.000*	0.357	0.000*
9.	Senior management provide necessary requirements to improve the use of the computerized information system	3.84	76.77	13.81	0.000*	0.248	0.000*
10.	All field vertebrae together	3.78	75.67	15.66	0.000*	0.386	0.000*

\*The difference between the averages is statistically significant at the level of significance ( $\alpha \leq 0.05$ ).

**Table 7: Results of Stepwise- multiple linear regression**

Dimensions	The parameter value	The value of t	Potential value
Fixed amount	2.167	10.983	0.000
Human Resources Computerized Management Information Systems	0.188	3.805	0.000
Organizational resources to computerized management information systems	0.152	2.678	0.008
Physical resources for the computerized management information systems	0.130	2.660	0.008