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## Testing the Impact of Electronic Information System on Employees' Performance in Jordanian Industrial Companies

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### Abstract

Despite the significant contributions of electronic information system that were highlighted by literature, yet studies investigating the impact of electronic information system on employees' performance in Jordan industrial context are quite limited. Hence, this study is conducted to examine the Impact of Electronic Information System on Employees' Performance in Jordanian Industrial Companies. The data was collected from 63 industrial companies in Amman Stock Exchange, whereas simple random sampling was used to select 433 administrative employees who served as respondents in the survey. Exploratory factor analysis EFA and CFA were conducted on the constructs before proceeding to run the Structural Equation Modeling in AMOS 24. The results of the study of Structural Equation Model revealed that electronic information system has a statistically significant positive direct effect on employees' performance. Conclusively, it could be deduced that the application of electronic information system in Jordanian industrial companies was quite high. This is logical because of increased competition in the industrial sector, both internally and externally, as well as the widespread availability and low cost of the electronic information system in Jordan, compared to other countries and the government initiatives, which encourage the use of technology in different sectors

**Keywords:** *Information System, Employee Performance, Industrial Companies, Administration, Electronic Information System*

### Introduction

Rapid developments in the business environment has facilitated new administrative functions to emerge in the process of adjustment of some factors in the administrative work, especially in the private sectors. Essentially, the information system is considered one of these major factors that contribute to the development of the business organizations either administratively or

technically. It is also considered as a major factor in presentation in organizations because information systems function as tools for facilitating the administrative procedures in making decisions. The tremendous development in information systems has equally helped the companies that adopted the application of the information systems in their organizations by moving away from the traditional procedures used in the work and embrace the modern ones in developing the administrative procedures. (Abu Qa'oud, 2016)

Researches and practical applications did prove that companies using administrative control to improve employees' performance has enabled them to conduct their work professionally and effectively which contribute to the achievement of their aims in the economic unit they work through their ability to keep in mind the recent development in the business environment. (Sultan, 2010)

The performance of employees is considered as the main indicator in distinguishing between successful and unsuccessful organizations based on of the discipline and determination of its human resources functions, which are considered as integral part of an organization. Similarly, it was found that some organizations that compete in the form of providing human resources in both quantity and quality have increased their efficiency. The outputs of two competing organizations may be different even though they may be similar in their financial assets as well as information and technological resources due to the differences in the performance of their human resources. (Balel & Abu Sen, 2016)

The rapid development in the world today has led to the emergence of new management orientations in the area of modification in the elements of organizational works, which represent a different philosophy of the management from its old ideas. This philosophy is equally being reflected in the institutions and methods used in meeting the challenges and changes surrounding them, through the emphasis on the importance of the availability of distinctive force of the human elements, which form the foundation for the building and development of the organizations. Hence, the needs of companies for information have grown enormously, such that many information systems seem to be showing these organizations of their informational needs. Since, the mid-twentieth century, which was the starting point for the emergence of information systems which came with the advent of computer-based information technology, and thus it marked the era of one of the most important electronic discoveries. (Abu Qa'oud, 2016)

However, one of the biggest challenges facing companies today is their ability to adapt and harmonize the resulting changes and transformations in their environment, whether in terms of environmental, technological or socio-economic aspects. Like the different sectors of the society, and as one of the most important pillars for adaptation and ensuring the survival and development of the organization, this highlighted the need to operationalize the role it plays in creating harmony with the changes that surround it by activating the intellectual, mental and cognitive capabilities it possesses. To make use of this resource, the role of management oversight as an effective tool and contribution to the creation of disciplined firms is essential which is able to keep abreast of these different changes through the efficient and effective management of the human element. (Al-Mahadeen, 2012)

Studies did explore the effect of information system on employees' performance, but mostly in developed western world or elsewhere than Jordan (Al-Ramahi & Al-Deeba, 2010). However, despite the significance of the information system towards the enhancement of employees' performance, there has been dearth of studies examining this important relationship in Jordanian

Industrial sector. It is quite imperative that a study is taken to understand the effect of this significant relationship in order to bridge the gap in terms of literature and provide a better outlook on practical implications. Hence, this research is aimed at testing the impact of information system on the employees' performance in Jordanian industrial companies.

The next sections of this paper discuss the literature review, including the empirical review, after which the methodology adopted in collecting data and analysis followed, hence, the results were presented and lastly discussions of the findings ensued.

## **Literature Review**

### **Information System**

Information system is a set of components nested with each other and work together to gather, classify, process, store distribute, and, facilitate planning, control, communicate and make decisions. (Kenneth & Jane, 2017)

### **Concept of Electronic Information System**

Electronic information system can be defined as a number of overlapping components and standard procedures for obtaining the information that the organization wants and then store, distribute, and revert to them when needed to support management, cooperation, interpretation, expectation and control within the company. (Laudon, 2008)

It is also an interconnected system consisting of personnel, equipment and procedures, with the aim of supplementing the department with the information it needs at all levels of the organization and for the delivery of multiple administrative functions. (Al-A'araji & Alawneh, 2002). It is a collection of structured and subject-related statements that constitute facts, concepts, performance, conclusions and beliefs that represent valuable experience and knowledge of current or expected use. And information is got as a result of data processing through tabulations and classifications, analysis and regulation in an adhoc manner to serve a particular purpose. (Al-Samura'i & al-Zu'obi, 2004). Equally, it is also defined as a set of structured and coordinated data in an appropriate synthesis, giving a special meaning, or a homogeneous combination of ideas and concepts that enables the human beings to benefit from it by accessing and discovering knowledge. (Al-Sharabi, 2008)

### **Electronic information Systems Sources**

There are two sources of information which are the internal and the external source: (Al-Mashraqi, 1997)

1. Internal source: this includes records and reports maintained by the organization in the development of plans, policies and strategies for the conduct of the evaluation process of performance in order to reach the right decision. The internal sources may fall under these types of sources:
  - A. Human Resources information: This focuses on the human component of the organization and its needs. The information systems provide specific data on the needs of the human resources equip them through appropriate training programs and provide them with materials and moral incentives.

- B. Accounting and financial information: Provides a great deal of information necessary to make appropriate decisions. Accountants pay attention to these tasks in order to determine the quality of the information that different administrative levels need to perform this function.
  - C. Operational information: This focuses on the financial flow of goods or production of commodities and services. The production system provides large amounts of data, because apart from the human element that relies on technology and machinery, the data is ready in time, thereby providing effort and money and time in addition to raising productivity efficiency.
2. External source: This is the information that reaches the organization from the external environment, such as ministries and government departments, such as information on laws, legislation and information on all available economic, social, political and technical facts. It may arrive from its initial source after it has been published without distortion, such as information available from the statistics office, or arriving by a secondary source prior to publication, including, government publications, specialized bulletins, resources, customers, competitors, economic indicators, and consulting offices.

Furthermore, information sources were further divided into these as follows: (Al-Kailani, 2000)

- A. Documentary Sources: Data and information collected through magazines, research centers and newspapers, which are divided into:
  - Primary sources: These are collected from reliable authorities for a specific purpose, such as data produced through periodicals and statistics, laws and legislation.
  - Secondary sources: The entity that issued these data is not competent in the area in which it was published, and these are obtained from brochures or publications issued by specific institutions.
- B. Field sources: It is an important source of access to data, and this field data can be collected by means of resolution, personal interviews, or by viewing and observation.
- C. Information networks and database banks: These sources are often based on the internet or the rules of the databases that they publish, and are got within the specialized websites.
- D. Internet: Given the current age people live today, which is characterized by era of technology and the internet, the internet has become one of the most important actors through which data are obtained. These sources thus enhance the effort and time by which researchers interested in data collection take. (Al-Ward & Al-Maliki, 2002)

### **Significance of Electronic Information Systems**

The significance of information system can be identified in the important role it plays in helping companies to succeed in business, as well as the ability to invest it in the system with the high efficiency which makes management able to perform its functions to achieve quality and efficiency in the service. The activation and investment of information is based on the administrative management in the company, so companies have to draw up strategies and plans that develop their own information in order to achieve the highest standards of efficiency and quality. (Al-Tarawneh, 2003)

Information systems are important for the objectives they seek to achieve. The primary objective of maintaining information management systems is to provide the potential and distinctive competitiveness. The operation of information management systems provides extensive

information technology capabilities. These capabilities reflect the behavior of individuals in the companies, their abilities and potentials that affect the business models and techniques that work to harmonize practices about current and future trends and continuous follow-up to ensure that knowledge capacity is built and continuously developed and sustained. (Al-Mayah & Al-Ta'i, 2003)

### **Concept of Employee Performance**

Performance has been defined as the outcome of the interaction between both the capacity and the operator where the relationship is clear between the two variables. The individual may have the ability to perform a particular job, but will not be able to accomplish it efficiently and effectively if he/she does not have sufficient motivation to perform it, and vice versa, the individual may have sufficient motivation required to perform the work, but he/she may not be able to perform in the form required because of lack of capacity (Marsh, 2001).

Employees' performance involves a range of related administrative behaviors that reflect excellence in employee's tasks and responsibilities which include quality of performance, and good implementation, the required technical expertise in the post, as well as contact and interaction with the rest of the organization, and commitment to the administrative aspects of the work, as well as striving to respond to them with care and effectiveness. (Al-Hawamdeh & Al-Fahdawi, 2002)

According to Abdel-Malik (2004), Employees' performance is important to organizations:

- A. A process consists of several stages under which products are produced and the objectives for which it was designed are achieved. And it requires several resources that interact with each other to produce a good or service that achieves its objectives. The process may be concrete, such as industrial production processes, or intangible, such as service delivery in the different areas. Performance is the main component of the process as it is the integral part of it because it is linked to the human element that manages the process and converts the raw materials to manufactured goods of material value, sold to the consumer with a value higher than the value of the resources employed, including the value of the human work effort in a bid to make profit. Therefore, the stability of the cost of resources and the productivity of the human resource make the organization achieve its goals with the better efficiency, better capacity, less cost and more profitability.
- B. Performance is of great importance within any organization that attempts to achieve success and progress as the final product of all activities undertaken by the individual or of the organization. When the output is high, it is a clear indication of the organization's success, stability and effectiveness and the organization is being more stable and sustainable when the performance of the workers is distinct. The interest of the management and leadership of the organization on the performance level is usually greater than that of its employees. Therefore, performance at any organizational level within the organization or in any part of it is not only a reflection of the abilities and motivations of the subordinates therein, but a reflection of the abilities and motivations of the heads and leaders as well. The working performance of the organization is also due to its relevance through its life cycle at the various stages: from its emergence, survival, continuity and stability, the stage of prestige, pride, excellence and leadership. The ability

of the organization to overcome a stage of growth and migrate to a more advanced stage depends on its performance level.

- C. The importance of performance does not stop at the organization level only, but also on the importance of performance on the success of a country's economic and social development plans.

### **Determinants of Employee Performance**

- A. Amount of effort: This reflects the amount of physical or rational energy that measures the rate or level of performance during a certain period of time. The amount or rate of energy and the amount of effort is linked to the reinforcement or incentives that the worker obtains from the institution. Whether these incentives are material or moral, motivate the worker to produce and increase the effort (Abdel-Malik, 2004).
- B. Quality of effort: The level of accuracy, quality and the degree to which the effort is matched by specific quality specifications and the quality of the effort can be measured by experience. As a production supervisor who has gained experience, quality of the effort can be measured by contacting clients and customers, which is one of the best methods and standards used in measuring quality. This equally serves as an assessment of customers satisfaction from products or services produced. (A'ashour, 1989)

Departments at all levels of an organization must provide adequate and appropriate working conditions for workers and provide a work environment in which they are heavily supported management impediments to the greatest extent possible, therefore, environmental factors must be taken into consideration because they are influences on effort, capacity and direction.

C. Impact of communication pattern on employees' performance.

With an effective communications pattern, a regulatory environment conducive for creativity, innovation and decision-making can be created. Communication is a social means through which understanding between individuals is built through transmission of information, data, opinions and ideas for the purpose of achieving targeted performance. The efficiency of communication depends on many factors related to the nature of the work and the organizational climate prevailing in the organization, which is affected by the pattern of communication. (Al-Salmi, 2010)

### **Relationship between Information System and Employees' Performance**

This section presents empirical evidences from previous studies done related with the two variables of this study, which are information system and employee performance.

Bale and Abu Sen (2016) studied the effect of organizational conflict on employees' Performance in banks in Sudan. Eventually, organizational conflict represented in the role conflict and the ambiguity conflict was found to affect positively the professional satisfaction. This was due to the fact that when organizational conflict was managed in an effective way, it does affect the performance of employees and their professional satisfaction.

Salman (2015) conducted a study on the impact of comprehensive quality administration on the performance of employees at the Jordanian hospitals from strategic perspective. The study used a sample of 267 employees from French hospitals in Jordan to distribute questionnaires to them and using descriptive analytical method in analysis. The study showed comprehensive quality administration was significant in all its dimensions of strategic planning, decision making, while

focusing on customers and continuous improvement on the employees' performance. Similarly, the study of Awajan (2015) on effective administration and its effect on the level of performance of Jordanian universities using time managing application. The researcher distributed to 181 questionnaires to the respondents. Eventually, the study found there were no statistical differences in the employees performance level based on to their demographic and characteristics such as (gender, age, qualifications, years of service).

Abdulla (2010) examined the integration between comprehensive quality standards and increasing employees' performance efficiency in the nursing field in King Saud Medical city in Riyadh. The researcher realized that the medical sector in Riyadh have delayed in not applying the comprehensive quality standards and were being unaware of the advantages of the application on the system. After testing and applying it in the study, the researcher noticed that the Saudi community is witnessing a significant improvement in all the sectors including medical, which emphasizes the importance of applying the concept of comprehensive quality management.

Abu Ka'oud (2106) investigated on the impact of administrative information system on solving general administration problem in the department of land and survey in Jordan. The aim of the study was to identify the importance of the application of the information system and its positive feedback in solving public administrative problems in the department of land and survey. The study used the descriptive analytical approach using a sample of 238 male and female workers in the department. The study revealed that there was a statistical significant effect of management information system with its dimensions system component, workers efficiency, information quality and data timing in solving the problems of the department.

Furthermore, Al-Mahadeen (2012) examined the effect of administrative information systems in decision making in a telecommunication company. The researcher adopted the descriptive analytical method using a sample of 327 male and female employees of the middle administrative levels. The results showed a statistically significant difference in the information systems with many variables such as (qualifications, job description, gender), equally a statistically significant difference regarding decision making with many variables such as (qualifications, job description, gender). Equally, Mansour (2009) determined the impact of modern electronic accounting systems in the development of internal auditing. The aim of the study was to develop a process of internal auditing to keep up with the continuous technological advancement in electronic data processing, in order to reinforce the confidence among the users of financial statements to provide a neutral technical opinion by the usage of electronic processing. The researcher found that the auditing process and the professional practice affected the outputs of electronic accounting information system.

Esbensen and Crisciunas (2008) conducted this study on crisis management and information Technology focusing on how companies and organizations can protect themselves from crises when faced with difficult and critical conditions, which may have a negative impact on the efficiency and effectiveness of MIS. Personal interviews with some IT managers in a few international companies, who have sufficient crisis management experience in the companies they work for was carried out. The finding of the research revealed problems related to companies' fear of sudden crises, such as loss of communication via the Internet, e-mail and fear of piracy, as well as fear of using new systems that are useless. The researchers concluded that



the main danger to companies and institutions lies within the company or the institution, especially the employees.

Al-Hakeem (2010) ascertained the possibility of administrative control of automated information systems of public institutions of an economic background. The study aimed to identify the ability of the inspectors of the central financial control authority to evaluate the structure of automated administrative control by conducting an audit of the economic institutions that use automated information systems according to the standards of control of information systems and in line with the evolution of the application of information technology in information systems. Eventually, the results showed there were no statistically significant difference that reflects increase of administrative control effectiveness in information technology and increasing use of control controls in accordance with the accepted regulatory standards. Equally, there were no statistically significant difference that reflects increased control effectiveness in information technology, and increased use of control procedures by the auditors.

More so, Othman (2013) examined the role of computerized accounting information system on improving and developing the efficiency and effectiveness of the internal control system. The study used mixed methods in collection of data. The study found that accurate information can be obtained at the lowest cost and least time possible with computerized information system, and the efficiency of the performance of internal control in the financial and administrative fields can be increased with computerized information system. Halidni and Al-Ghuban (2009) investigated the role of internal control on electronic accounting information system using on a sample of banks in the Kurdistan region of Iraq. A field study was conducted using ten banks using questionnaires distributed to the respondents. The result of the study found that there is a statistically significant effect of control of applications in order to ensure the validity and credibility of information prepared by banks.

On the employees' performance side, the study of Al-Kasasbeh (2007) examined the effect of information technology in improving the effectiveness of institutional performance using a case Study of Jordan free zones corporations during 1996-2005. However, the research found that there is a positive correlation between the dimensions of IT variables: size of investment, hardware, software, IT workers and all indicators of the effectiveness of institutional performance except for return on cost. There was also impact of the database dimension on all performance indicators of institutional performance except for the goal of developing new free zones, as well as the effect of networks and communications on all indicators of effective institutional performance. So also, Al-Shami (2010) studied the effect of e-government implementation on improving business performance in Ajman Municipality and Planning Department. The study found that the degree of the employee training on the application of e-government has a significant positive impact on improving the performance of employees. The application of e-government has a direct and significant impact on the efficiency of the performance of employees in municipal departments.

Equally, Al-Ramahi, & Al-Deeba (2010) explored on the level of governance of information technology and its impact on the level of performance of industrial companies listed on the Amman stock exchange. Using simple linear regression to analyze the data, they found there is a clear effect of IT governance dimensions such as implementation, support, delivery, follow-up and evaluation which have a statistically significant impact on the net profit margin, while (after planning and organization) have had no effect, and return on assets is affected by the level of IT

governance. Al-Otaibi, (2010) assessed the impact of information technology on employees' performance in this field study in Australia. The study aims to identify the human resources systems currently used in educational institutions, systems and services, e-learning due to significant role of trend towards the use of technology in the management of human resources. Therefore, based on the discussion of literature above, thus this study proposed the hypothesis: H1: Information system has a statistical significant positive direct effect on employees' performance.

**Method and Procedures**

The population of the study consists of employees working in public administrations at the Jordanian industrial companies. The data was collected from the period of 2016 – 2017 using primary source of data collection done through quantitative approach. Questionnaire was used and distributed to the sample of the study, which consists of administrative staff at 63 Jordanian industrial companies listed on the Amman Stock Exchange. Simple random sample was used to choose 433 employees as the respondents, from which 396 representing 91.5% returned the questionnaires.

The research instrument was developed with the measurement tool adopted from previous researchers where the construct of employees' performance was based on Salman, (2015), Awajan (2015) and Shaheen (2007), while information systems was measured using Al-Mahadeen (2012). The analyses were conducted using Structural equation model (SEM) technique as the method of analysis while AMOS v24 is used to assess the measurement and structural model for this study.

Exploratory factor analysis (EFA) was conducted and based on the value of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity revealed a value above 0.5 and a significant value of Bartlett's test of sphericity (Kaiser, 1970) as shown in the table 1 below.

Table 1: Results of EFA (KMO & Barlett's Test of Sphericity)

		Electronic Systems	Information	Employees' Performance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.96		0.96
Bartlett's Test of Sphericity	Approx. Chi-Square	6811.41		7512.37
	df	105		190
	Sig.	0.000		0.000

Hence, Confirmatory Factor Analysis (CFA) using AMOS 24 was conducted to assess empirically the constructs theorized to test the goodness-of-fit for the confirmatory factor solution (Hair et al, 2006). Then, the Model fit was evaluated using the maximum likelihood (ML) method.

Hence, Table 2 presents the goodness-of-fit statistics to assess how well-specified the model explains the observed data. Eight common model-fit measures were used to assess the model's overall goodness-of-fit. There are eight common measures of model fitness, and all the measures suggested that the model has a satisfactory model fit, implying that the selected indicators are a good representation of their corresponding underlying constructs as shown in Table 2.

Table 2 Measurement Model Fit Indices

Fit Indices	Recommended value*	Indices Value
Chi-square/degree of freedom ( $\chi^2/df$ )	$\leq 3.00$	2.150
Adjusted goodness of fit (AGFI)	$\geq 0.80$	0.810
Comparative fit index (CFI)	$\geq 0.90$	0.951
Incremental Fit Index (IFI)	$\geq 0.90$	0.952
Tucker-Lewis index (TLI)	$\geq 0.90$	0.946
Root mean square error of approximation (RMSEA)	$\leq 0.06$	0.055
Root mean square residual (RMSR)	$\leq 0.10$	.025
PCLOSE	$\geq 0.05$	0.015

\*Source: Lia & others, 2007

Subsequently, several tests were performed on the measurement models to examine their validity and reliability. First, the composite reliability for the internal consistency is demonstrated, since values for all constructs are above the suggested threshold of 0.70 (Nunnally, 1978) and the lowest value of composite reliability is 0.911, which is larger than the recommended value of 0.7, showing good reliability. Convergent validity can be assessed by examining Average Variance Extracted (AVE) from the measures. For AVE, a score of 0.5 indicates acceptability (Fornell & Larcker 1981). The AVE ranges from 0.673 to 0.845, which shows convergent validity. Details is shown in Table 3 below.

Table 3 Composite Reliability and AVE for Internal Consistency

	Cronbach's Alpha	CR	AVE
Employees Performance	0.965	0.969	0.689
Electronic Information System	0.977	0.980	0.845

Also, the Cronbach's alpha for all constructs are above 0.70, which is better than before removing items that were loaded less than 0.5 on its corresponding factors, especially for employees' performance and electronic information system. This implies a high reliability of the measures. Second, the standardized factor loadings for all items are above the suggested cut-off 0.60 (Table 3) and all are significant, showing strong evidence of convergent validity. All items are significant with high loadings, which are above the recommended value of 0.60, therefore demonstrating convergent validity.

AMOS version 24 was used to perform the analysis, where the structural model is evaluated by using the R-square ( $R^2$ ) for dependent constructs (indicated within the ovals that represent the dependent constructs in this model), the size and t-statistics and significant level of structural path coefficient. The t-statistics are estimated using the bootstrap re-sampling procedure. The structural model results are illustrated in Table 4 shows the path coefficients along with their respective t-statistics.

Table 4: Direct Effect: path coefficient and t-statistics

Paths			Direct Effect		
			Path Coefficients	T-Value	P-value
electronic Information System	→	Employees Performance	.354	6.803***	0.000

\*\*\* p< .001, \*\* p<.01, \* p<.05, based on two-tailed test; t (p< .001) = 3.29; t (p< .01) = 2.58; t (p< .05) =1.96.

Subsequently, the squared multiple correlation ( $R^2$ ) for each endogenous construct was given. This is the number used to measure the percentage of construct variation that the model explained (Wixom & Watson, 2001). The  $R^2$  value from SEM results is 0.54 for this model, which indicates that 57% of the variance in employees' performance of the sample is explained by information system, which provides strong evidence of the strength of the model in explaining and predicting employees' performance.

Table 5:  $R^2$  for each endogenous construct

Construct	R Square
Employees Performance	0.57%
Electronic Information System	0.38%

In answering the question, electronic information system has a statistically significant positive direct effect on employees' performance. This hypothesis is verified (with the path coefficient = 0.354; t-statistic = 6.803 and p-value < .001) refer to table 4. It shows that the higher the ability of organization to use and apply procedures, tools and material means, which include the collection, operating, deployment and retrieval of information more efficiently, the higher the employees executes their job duties and responsibilities well. As a result, the hypothesis proposed was accepted.

## Discussion

The use of electronic information and communication (EIC) plays a major role in influencing the performance of human resources through improved communication methods, data transfer and the creation of a collective communication pattern networks among users, which enhances relations, improved working environment, and mitigated the pressures of recurring daily routines. EIC helps to streamline and rationalize staff training planning by providing timely and up-to-date information to training supervisors, providing appropriate training content, implementing training programs through new training methods such as distance training, on-the-job training, etc., which helps identify staff weaknesses and thus design appropriate training programs that lead to higher employee performance (Al-Otaibi, 2010). The findings of this study agreed with previous researches. For instance, (Al-Qari, 2007) study highlighted the positive impact of electronic information system and communication on human resources management by raising the level of staff through accurate information, saving time and contribution to knowledge management, speeding, efficiency, functional merit, quality of information and job

performance, as well as communication flexibility through electronic networks. Similarly, (Yassa, 2010) demonstrated that the use of information systems and communication to make decisions increases the quality of decisions, gain time, increase productivity and improve performance. It also contributes to increasing the accuracy of information and avoiding the costs resulting from frequent mistakes and the elimination of the large number of papers and bureaucratic procedures, and the narrowness of the workplace. Furthermore, (Bosmegon, 2009) dealt with the effective role of informatics in overcoming difficulties and facilitating work. Also, (Omar, 2010) indicated that the successful application of information technology helps to provide accurate and accurate information that helps decision-makers make informed decisions. Whereas, (Al-Mannan, 2012) study showed that the use of technology helps to identify administrative errors which has increased the efficiency of the work and led to the simplification of the banking process.

### **Conclusion**

Conclusively, the study has been able to prove the hypothesis that electronic information system has a statistically significant positive direct effect on employees' performance. The use of electronic information and communication (EIC) plays a major role in influencing the performance of human resources through improved communication methods, data transfer and the creation of a collective communication pattern among networks among users, which has enhanced relations, improved the working environment, and mitigated the pressures of recurring daily routines it could be deduced that the application of electronic information system in Jordanian industrial companies was high from employees' point of view. This is logical because of increased competition in the industrial sector, both internally and externally, as well as the widespread availability and low cost of the electronic information system in Jordan, compared to other countries and the government initiatives, which encourage the use of technology in different sectors.

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