

Computerized Management Information Systems and Its Relationship to Improving the Job Performance of the Employees of the Palestinian Cellular Telecommunications Company - Jawwal

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Abstract: The aim of the study was to identify computerized Management Information Systems and their relationship to improving the job performance of the employees of the Palestinian cellular communications company Jawwal. To achieve the objectives of the study, a questionnaire was designed and developed for the purpose of collecting data and measuring the study variables. SPSS was used. The study reached several results, the most important of which is the existence of a statistically significant role for the requirements of operation and management of computerized Management Information Systems (physical, software, human, organizational) in improving the performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal. There are statistically significant differences between the respondents' Computerized Management Information Systems and their relationship to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal, due to the demographic variables (scientific level, years of experience, place of work, job level).

The study concluded with a number of recommendations, the most important of which is the need to keep abreast of technological developments in the field of Management Information Systems and to ensure the use of modern equipment and advanced software. To take care of the availability of modern networks and work to solve network problems such as problems of interruptions and slow communication that came within the results of the study. Hold courses for users related to information technology and operational software and application to increase users' awareness of the capabilities of the hardware and software used and not focus on how to use only.

Keywords: Computerized Information Systems, Functional Performance, Palestinian Cellular Communications Company, Jawwal, Palestine.

1. INTRODUCTION

As a result of technological and economic developments and globalization, information systems have become widely regarded as important in all fields, especially in administrative fields. Information systems have developed at a rapid pace and have diversified applications at all administrative levels. These systems are mentioned by (Al-Moghrabi, 2002) as one of the most successful means they face the challenges of the times as they represent integrated activities aimed at obtaining information and knowledge through technology means for managers to make decisions in different locations.

However, despite the technical progress of these systems, they still need to be accepted and accepted by the user, so as to accept their use and benefit. Hence, attention is paid to the users of the information systems, and the organizations should proceed in parallel lines when developing and applying appropriate information. And attention to users of information technology.

The Palestinian Cellular Telecommunications Company (Jawwal) is looking forward to becoming the leading organization in the field of ICT in Palestine by providing

advanced infrastructure capable of keeping abreast of the latest developments in this sector and providing all terrestrial, cellular, informatics, internet services and added services. It relies on information systems and considers it the technical base for launching. The company is continuously improving its image with its subscribers and increasing their satisfaction with its services and prices by improving the quality of its services and enhancing the efficiency of its employees' performance, which will only be based on the integrated information systems. These systems are the pillars of administrative development. The employee's performance and improvement of his functional ability, and has effects on the behavior of individuals and work groups to make performance results consistent with the objectives of the organization, and gives the worker the ability to accomplish the tasks and duties assigned to him and develop his ability to assume additional responsibilities to achieve a high degree of job satisfaction, to adapt to the working environment, and can thus explore the elements of the human performance in terms of efficiency and productivity, which reflected its impact on the overall effectiveness of the organization.

2. PROBLEM STATEMENT

This research aims at identifying the appropriateness of the main requirements for the management and operation of computerized information system (physical, software, human and organizational) for the needs of the work of the Palestinian Cellular Telecommunications Company - Jawwal, and also to recognize the effectiveness of the information system in meeting the needs of its users. By knowing the role, the communications company can identify the imbalances in the computerized information system and therefore try to cure it and then be able to develop and raise the efficiency of the performance of its employees, and can formulate the problem in the following question:

Q1- What are the computerized Management Information Systems requirements and what do they have to do with improving the functionality of the employees of the Palestinian Cellular Telecommunications Company - Jawwal?

3. RESEARCH QUESTIONS:

The study seeks to answer the following questions:

1. What are the perceptions of the respondents towards computerized Management Information Systems in the Palestinian Cellular Telecommunications Company - Jawwal?
2. What is the level of functional performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal from the point of view of employees?
3. Is there a relationship between the computerized Management Information Systems and the functional performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal from the perspective of the employees?
4. Are the opinions of the respondents in the Palestinian Cellular Telecommunications Company (JAWAL) different about the relationship between computerized Management Information Systems and the functional performance of the employees according to their personal characteristics?

4. RESEARCH IMPORTANCE

1. The study is expected to contribute to the evaluation of computerized Management Information Systems in the Palestinian Cellular Telecommunications Company - Jawwal, and the difficulties and difficulties it faces, and to determine the suitability of these systems to the needs of the workers and raise the level of performance.
2. The study of Management Information Systems in the Palestinian Cellular Telecommunications Company - Jawwal is of particular importance, since the company relies mainly on its work on modern information systems.
3. The study is expected to contribute to improving the quality of services provided to subscribers, which will

benefit the company and the community at the same time.

4. This study is useful in the development of some useful lessons for researchers, which can be relied upon in the development of research in the field of information management systems and identify the various aspects.
5. This study is within the scope of the researcher's first knowledge of computerized Management Information Systems and its relationship to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

5. RESEARCH OBJECTIVES

This study aims to achieve the following objectives:

1. A computerized management information system statement and its relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.
2. Identify the performance level of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.
3. Determining the nature of the relationship between the computerized Management Information Systems and the performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.
4. Knowledge of the significance of the differences between the respondents about computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.
5. Demonstrate the suggestions that will help improve the employees' job performance by enhancing the role of the Management Information Systems in the Palestinian Cellular Telecommunications Company - Jawwal.

6. RESEARCH HYPOTHESIS

The study seeks to test the validity of the following hypotheses:

Ho 1: There is a statistically significant relationship at the level of 0.05α between computerized Management Information Systems (physical inputs, software supplies, human inputs and regulatory requirements) and improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

The following sub-assumptions are derived:

1. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the physical inputs and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.
2. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the software requirements and the improvement of the functional performance of the

employees of the Palestinian Cellular Telecommunications Company - Jawwal.

3. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the human inputs and the improvement of the job performance of the workers in the Palestinian Cellular Telecommunications Company - Jawwal.
4. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the organizational requirements and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

Ho 2: The second main hypothesis: There are statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal due to the following variables (age, scientific qualification, Number of years of service).

7. RESEARCH TERMINOLOGY

- **Computerized Information Systems:** One of the components of the administrative system. It deals with the collection, classification, processing, analysis and delivery of material and quantitative information for decision making to internal and external parties (Al-Dahrawi, 1998).
- **Functionality:** A set of managerial behaviors expressed by the employee with his knowledge, including the quality of performance, good execution and technical expertise required for the job, as well as communication and interaction with the rest of the organization members and adherence to the administrative regulations that regulate its work and strive to respond to it with care (Albashabsha, 2005).

8. THEORETICAL FRAMEWORK

Firstly- Computerized Information Systems:

The complexity of the contemporary business environment has led to a widening of the scope of decisions to be made under uncertainty. Hence, computer and computer-based IT systems are viewed as frameworks to support the integration of science with the personal appreciation of the Director for adapting, developing, adapting, Efficiency of work in the organization as a whole. Therefore, computerized information systems in the present era are considered the main artery responsible for management and other parties with material and quantitative information (Abu Naser & Al Shobaki, 2016). Where the manager needs the means of communication and access to the relevant data and information, in addition to the ability to analyze this data and information, and here can provide computer-based information systems, making communication easier, an analysis economically possible and easier to decision-maker.

Second- Functionality:

Functionality is the net effect of an individual's efforts that begins with abilities, and a realization of the role or tasks. This means that performance in a given position can be seen as a product of the interrelationship between "effort, capacity, and perception of roles". Strengths are the personal characteristics used to perform the function. These abilities do not change and fluctuate over a short period of time. The performance of the role or task indicates the direction that is believed The individual believes that it is necessary to direct his / her efforts in his / her work, and that the activities and behavior that the individual believes are important in the performance of his / her tasks, define the awareness of the role (Al Shobaki & Abu Naser, 2016).

Third- Relationship between Computerized Management Information Systems and Improve Functionality:

The importance of Management Information Systems is in its ability to achieve a lot of the benefits of the organization such as flexibility, speed, inventory control, production control and market research, as well as help improve performance by increasing the speed of completion and accuracy of transactions, and provide customer services to suit their needs and desires and helps through the reports provided by To support the decision-making process and thus improve the quality of decisions and increase their value and productivity based on the information provided and associated with the productivity of the organization.

The use of these systems is not limited to one area, but is used in organizations at the senior management level, taking a strategic and competitive dimension. It is used at the middle management level, where it is useful in the implementation process. The information is described here as tactical, enhances the process of direct supervision and supervision of the conduct of recurrent operations (Al-Salem et al., 2002). Researchers in the world agree that efforts should be made to improve the quality of Management Information Systems, which in turn improves job performance (Albashabsha, 2005).

9. LITERATURE REVIEW

- Study of (Hussein et al., 2018), which aimed at designing and developing a computerized information model capable of working in the network environment of the staffing and employment division of the Department of Administrative and Legal Affairs at the University of Tikrit. The most important results were that the computer system is characterized by fast performance of the required functions, compared to the usual paper system. The computer system also facilitates the process of inputting, searching and retrieving data quickly and easily, modifying data and protecting against damage. It also showed that the use of the computer system instead of the paper system provides a lot of money as the first line to eliminate administrative corruption in addition to the scalability of the computerized systems.

- Study of (Al-Saleh, 2015) aimed at identifying the impact of Computerized Management Information Systems on the internal auditing of the economic institution. The most important results were that the organization is aware of the importance of computerized information system during the audit process, the system can also detect errors, and there is great importance to the information system in raising the performance of the enterprise.
- Study of (Supattra Boonmak, 2007) aimed at measuring the impact of information management systems and information technology on the efficiency of the management of the company. The study has reached several results, the most important of which is that the information management systems and information technology increase the efficiency of the organization, the efficiency of its performance and the improvement of its strategic work. The more the reliance on the information the more the need for information technology. The more efficient the organization, the more effective it is, and the better the culture of the employees of the organization towards the efficiency of performance and effectiveness.
- A study of (Al-Otaibi, 2007) aimed at identifying the role of automation in improving the performance of HR departments using the descriptive approach by applying the social survey entrance to the employees who directly exercise the functions and activities of human resources departments in the central security services in Riyadh. That the use of automation in human resources management in general was weak, that automation could contribute to the planning and recruitment of human resources and the identification of training needs to a large extent, automation could contribute to significantly improve the performance of human resources departments, and automation could contribute to the improvement of human resources departments performance significantly, the study proved that there are obstacles to limit the application of automation, and the study provided an organizational model to activate the automation of human resources departments in the central organs in the Kingdom of Saudi Arabia.
- A study (AL-Moasher and Al-Khasabah, 2006) aimed at showing the effect of organizational and technical factors in the applications of Management Information Systems in the banking sector. The study found that there is a statistically significant effect of the variable technical and organizational variables in the applications of Management Information Systems. The study led to the need to involve employees and users in the process of designing and developing management information.
- Study of (Al-Buhaisi, 2006), which discussed the advantages that business organizations can achieve as a result of their use of modern information technology, especially internet technology and communication networks. The study also clarified the relationship between administrative decisions and information technology. Information to provide to the internal user and to make a decision. The researcher concluded that most of the Palestinian companies do not use these techniques, and that the lack of knowledge of the importance of the Internet and the weakness of their abilities in the English language are the most important factors that lead to the Palestinian companies not use these techniques, while the qualifications of those managers and the quality of training courses that And the size of companies are an important factor in determining their use of such techniques.
- Study of (Jerry Cha_Jan Chang, Willing king, 2005): The study developed a tool for measuring the performance of information systems based on input and output models for information system functions used to support the efficiency of functional processes and improve the performance of enterprises. The model or tool proposed in this paper contains three outputs and trends for evaluation: system efficiency, information efficiency, service efficiency, system efficiency of ease of use, quick response, etc., as well as its impact on employee performance and information efficiency in information quality. Design, use and value as well as their impact on employee performance and service efficiency in all activities that range from the development of the system to its use in support and consulting. The effectiveness of the model and its positive impact on the effectiveness of the organizations and improving the efficiency of the operations were confirmed.
- Study of (Loukis Euripids, Sapounas Ioakim, 2005) aimed at identifying the impact of investment in Management Information Systems on the performance of industrial organizations in Greece. The study used three measures to measure the performance of organizations: sales revenue, productivity of workers, return on assets. The study concluded that there is a complementarity between management of Management Information Systems and number of IT staff, size of training, and other factors, and that this integration supports the increase in the volume of production in the organization and the efficiency of the production of its employees.

10. METHODOLOGY AND PROCEDURES

Firstly- Study Approach: The researcher used the analytical descriptive method which tries to study "computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal. The analytical descriptive approach tries to compare, interpret and evaluate the possibility of reaching generalizations that increase the knowledge of the subject.

The researchers used two main sources of information:

- Secondary sources:** The researcher aimed at addressing the theoretical framework of the study to the secondary data sources which are in Arabic and foreign related books and references, periodicals, articles, reports, researches and previous studies that dealt with the topic of study, research and reading in different internet sites.
- Primary Sources:** To address the analytical aspects, the researcher sought to collect the primary data through the questionnaire as a main performance of the study, specially designed for this purpose.

Second- Society and Study Sample: The study population consists of the staff of the Palestinian Cellular Telecommunications Company - Jawwal in the Middle Region, which has approximately 60 employees. The researcher used the random sample method, where 70 questionnaires were distributed to the study population. 60 questionnaires were obtained, with a recovery rate of 85.7%.

Third- Study Performance: A questionnaire was prepared on "computerized Management Information Systems and their relationship to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal". The Likert scale was used to measure respondents' responses to the questionnaire sections according to Table (1):

Table 1: the degrees of the five - dimensional Likert scale

Response	Strongly Disagree	Don't agree	Neutral	Agree	Strongly Agree
Degree	1	2	3	4	5

The researcher chose grade (1) to respond "strongly disagree" and thus the relative weight in this case is 20% and is proportional to this response.

Fourth- The validity of the questionnaire

The truth of the questionnaire is to measure the questions of the questionnaire, and the researcher verifies the veracity of the questionnaire through the validity of the measure.

Fifth-Believe the meter:

- Results of Internal Coherence:** The consistency of the internal consistency is determined by the consistency of each paragraph of the questionnaire with the area to which this paragraph belongs. The researcher calculated the internal consistency of the questionnaire by calculating the correlation coefficients between each of the areas of the resolution domains and the total score of the field itself.
- Structural Integrity** Structural honesty is one of the measures of sincerity of performance that measures the extent to which the goals that performance wants to achieve are achieved, and shows the extent to which each area of study is related to the overall score of the questionnaires. Table (2) shows that all correlation coefficients in all areas of the questionnaire are statistically significant at $\alpha \leq 0.05$. Thus, all areas of the questionnaire are considered valid for the measurement.

Table 2: The correlation coefficient between the degree of each area of the questionnaire and the total score of the questionnaire

The Field	Pearson Coefficient Of Correlation	Probability Value (Sig.)
Hardware Requirements	.900	*0.000
Software requirements.	.886	*0.000
Human requirements.	.753	*0.000
Organizational requirements.	.861	*0.000
Requirements for management and operation of computerized information system	.967	*0.000
Computerized Information Systems	.749	*0.000

* Statistically significant at $\alpha = 0.05$

Reliability stability:

This means that the questionnaire will be given the same result if the questionnaire is redistributed more than once under the same conditions and conditions. In other words, the stability of the questionnaire means stability in the results of the questionnaire and does not change significantly if it is redistributed to the sample several times over time certain. The value of the alpha-Cronbach coefficient was found to be high (0.930), so that the final resolution was valid for use. Thus, the researcher has confirmed the validity and consistency of the questionnaire, which makes him fully confident in the validity of the questionnaire and its validity to analyze the results and answer the questions of the study and test hypotheses.

11. ANALYSIS AND DISCUSSION OF THE STUDY RESULTS:

The results of the study will be presented and discussed as follows:

Presentation of the characteristics of the study sample according to personal information:

Table 3: Distribution of the sample of the study

		The Number	Percentage %
Age	Less than 30 years	16	26.7
	From 30 to 40 years	28	46.7
	From 41 to 50 years	14	23.3
	More than 50 years	2	3.3
Total		60	100.0
Scientific Qualification	Diploma	20	33.3
	BA	36	60.0
	Postgraduate	4	6.7
Total		60	100.0
Employment	Top Level Management	20	33.3
	Middle level	25	41.7

	Management		
	Low level Management	15	25.0
Total		60	100.0
Number of years of service	Less than 5 years	14	23.3
	From 5- 10 years	33	55.0
	More than 10 years	13	21.7
Total		60	100.0

The following table shows the following:

- 26.7% of the sample of the study were under the age of 30 years, 46.7% were aged 30-40 years, 23.3% were aged 41-50 years, and 3.3% were for more than 50 years old. The researchers attribute these percentages to Jawwal's interest in recruiting young people to the nature of work at Jawwal, which requires fieldwork at times, in addition to working hours.
- That 33.3% of the sample of the study have a diploma degree, 60.0% have a bachelor's degree, while 6.7% hold a postgraduate degree.

- 33.3% of the sample of the study in the field of higher management, 41.7% of their work in the middle administration, while 25.0% of their work in the lower management. This distribution is logical according to the needs of each level of managers, as the higher the level of management the fewer the number of employees in the department.
- 23.3% of the study sample has years of service of less than 5 years, 55.0% have years of service from 5-10 years, while 21.7% have served for more than 10 years. This is evidenced by the low turnover of the company in addition to the expansion during the recent period and the opening of branches in all provinces, which requires the recruitment of additional numbers.

Second- Analysis of question paragraphs:

1. Analysis of "computerized Management Information Systems"

- **Analysis of the paragraphs of the field of "material inputs"**

The T test was used to determine whether or not the average response was neutral. The results are as follows:

Table 4: The arithmetic average and the probability value (Sig.) for each paragraph of the "material inputs"

No.	Item	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	There are computers that are suitable for the job.	4.58	91.67	20.76	*0.000	1
2.	The system provides sufficient space for information storage.	4.07	81.33	11.64	*0.000	2
3.	The company provides the means to enter data suitable to the need for work.	3.35	67.00	2.39	*0.010	4
4.	The speed of the devices is commensurate with the required workload in the company.	3.25	65.00	1.65	0.052	6
5.	The network in the company has a fast connection.	3.35	67.00	2.36	*0.011	4
6.	The information network used in the company provides sufficient capabilities to achieve the goals of the information system.	4.00	80.00	12.68	*0.000	3
All paragraphs		3.77	75.33	9.14	*0.000	

* Statistically significant at $\alpha = 0.05$

Table 4 shows that the mean of all the paragraphs is 3.77, that is, the relative arithmetic mean for all the domains of the field is 75.33%, and the probability value (.Sig) is 0.000. Therefore, field D is statistically significant at the mean level $\alpha \leq 0.05$. Responding to this area has increased its neutrality

by 3, which means that there is approval by the sample on this area.

- **Analysis of the "Software Requirements"**

The T test was used to determine whether or not the average response was neutral. The results are as follows:

Table 5: The arithmetic average and the probability value (Sig.) for each paragraph of the "software requirements"

No.	Item	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The software used is compatible with the business requirements of the company.	3.98	79.67	11.26	*0.000	2
2.	Software is updated to suit the business needs of the company.	3.97	79.33	10.88	*0.000	3
3.	The software used covers all the activities of the company.	3.40	68.00	2.84	*0.003	6
4.	Computer software and applications are easy to	3.75	74.92	5.77	*0.000	4

	use.					
5.	I have all the necessary instructions to run the programs I need in my work.	3.48	69.67	3.68	*0.000	5
6.	There is control over the programs used to ensure the integrity of EDP.	4.25	85.00	17.91	*0.000	1
All paragraphs		3.80	76.07	10.60	*0.000	

* Statistically significant at $\alpha = 0.05$

Table (5) shows that the mean of all the paragraphs is 3.80, ie, the relative arithmetic mean for all the domains of the field is 76.07%, and the probability value (.Sig) is 0.000. Therefore, field D is statistically significant at the mean level $\alpha \leq 0.05$. Responding to this area has increased its neutrality

by 3, which means that there is approval by the sample on this area.

– **Analysis of the paragraphs of the field of "human inputs"**

The T test was used to determine whether or not the average response was neutral. The results are as follows:

Table 6: The arithmetic average and the probability value (Sig) for each paragraph of the "human inputs"

No.	Item	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	Contact the system responsible for the information system directly.	3.77	75.33	7.33	*0.000	2
2.	The technical department of the computerized system responds quickly to my queries.	3.40	68.00	2.97	*0.002	5
3.	The computer department deals with the problems facing the workflow.	3.55	71.00	4.34	*0.000	4
4.	I have good relations with the staff in the department responsible for the information system.	3.72	74.33	6.90	*0.000	3
5.	The computer department provides the same level of services at all times.	3.20	64.00	1.47	0.074	6
6.	Employees in the computer department have adequate qualifications and skills for the work needs.	3.92	78.33	10.58	*0.000	1
All paragraphs		3.59	71.83	7.94	*0.000	

* Statistically significant at $\alpha = 0.05$

Table (6) shows that the mean of all the paragraphs is 3.59, ie, the relative arithmetic mean for all the domains of the field equals 71.83%, and the probability value (.Sig) is 0.000. Thus, field D is statistically significant at the mean level $\alpha \leq 0.05$. Responding to this area has increased its

neutrality by 3, which means that there is approval by the sample on this area.

– **Analysis of the field of "regulatory requirements"**

The T test was used to determine whether or not the average response was neutral. The results are as follows:

Table 7: The arithmetic average and the probability value (Sig) for each of the paragraphs of the "regulatory requirements"

No.	Item	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)	Ranking
1.	The information available in the system is commensurate with the needs of the post.	4.00	80.00	11.24	*0.000	1
2.	There is no exaggeration in the confidentiality of information between different administrative levels.	3.42	68.33	2.60	*0.006	3
3.	Top management provides financial support to use the computerized information system	2.90	58.00	-0.62	0.268	6
4.	Top management is encouraged to use the computerized information system.	3.88	77.67	8.74	*0.000	2
5.	Top management provides training programs related to the use of the computerized information system	3.25	65.00	1.84	*0.035	5
6.	The top management is interested in the opinions and suggestions on the use of computerized	3.35	67.00	2.70	*0.005	4

	information system				
	All paragraphs	3.47	69.33	5.04	*0.000

* Statistically significant at $\alpha = 0.05$

Table (7) shows the mean of all the paragraphs is 3.47, ie, the relative arithmetic mean for all the domains of the field equals 69.33%, and the probability value (.Sig) is 0.000. Therefore, the field D is statistically significant at the mean level $\alpha \leq 0.05$, indicating that the average response to this field has increased about the degree of neutrality which is 3,

Table 8: The arithmetic mean and the probability value (Sig.) for all paragraphs "Management and operation of computerized information system"

Item	SMA	Relative Arithmetic Mean	Test Value	Probability Value (Sig.)
Requirements for management and operation of computerized information system	3.66	73.14	9.44	*0.000

* Statistically significant at $\alpha = 0.05$

Table (8) shows that the arithmetic average of all computerized Management Information Systems is 3.66 (total score of 5), ie, the relative arithmetic mean is 73.14%, and the probability value (.sig) is 0.000. Therefore, the field paragraphs are statistically significant at the level $\alpha=0.05$, indication, indicating that the average response score for this field is substantially different from the average approval

Table 9: The arithmetic average and the probability value (Sig.) For each paragraph of the "functional"

No.	Paragraph	SMA	Relative arithmetic mean	Test value	Probability Value (Sig.)	Rank
1.	The company seeks continuous improvement in the performance of employees.	4.20	84.00	17.02	*0.000	3
2.	There is an ongoing evolution in quality of service provided by employees.	4.08	81.67	14.95	*0.000	4
3.	Staff have the willingness and willingness to work outside the office.	3.83	76.67	6.49	*0.000	12
4.	Staff comply with the rules and procedures of work.	4.07	81.33	12.51	*0.000	6
5.	The company's performance has improved in recent years.	4.24	84.75	14.57	*0.000	2
6.	Staff improves the disposition of critical times.	4.03	80.69	10.87	*0.000	8
7.	The good performance of the company has strengthened its competitiveness.	4.02	80.33	13.88	*0.000	9
8.	Contributing to the administrative decision makers.	4.07	81.36	14.06	*0.000	5
9.	Employees have the skills to communicate with everyone.	4.37	87.33	12.56	*0.000	1
10.	The company has a unique system to receive the views of the beneficiaries to improve performance	4.00	80.00	12.14	*0.000	10
11.	Performance assessment is based on sound scientific grounds.	3.97	79.33	11.76	*0.000	11
12.	Employees develop their performance and skills continuously.	4.07	81.33	13.03	*0.000	6
	All paragraphs	4.08	81.56	20.01	*0.000	

* The arithmetic average is statistically significant at the level of significance $\alpha \leq 0.05$.

Table (9) shows that the arithmetic mean of all paragraphs equals 4.08, ie, the relative arithmetic mean for all the fields of the field equals 81.56% and the probability value (.Sig) is 0.000. Therefore, the field D is statistically significant at the mean level $\alpha \leq 0.05$, responding to this area has increased its neutrality by 3, which means that there is approval by the sample on this area.

meaning that there is approval by the sample members on this field.

Analysis of all "computerized Management Information Systems"

The T test was used to determine whether or not the average response was neutral. The results are as follows:

score and this means that there is consent by the sample members to "computerized Management Information Systems" in general.

2. Analysis of functional area paragraphs

The T test was used to determine whether or not the average response was neutral. The results are as follows:

12. RESEARCH HYPOTHESIS TEST:

Ho 1: There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between computerized Management Information Systems (physical inputs, software supplies, human inputs and regulatory requirements) and improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

Table (10) shows that the correlation coefficient is .556, and that the probability value (Sig) is 0.000 which is less than $\alpha = 0.05$. This indicates a statistically significant relationship between the computerized Management Information

Systems and their role in improving the job performance of the employees of the company Palestinian cellular communication at a statistical significance level ($\alpha = 0.05$).

Table 10: The correlation coefficient between computerized Management Information Systems and improving the job performance of the employees of the Palestinian cellular communications company

Hypothesis	Pearson coefficient of correlation	Probability Value (Sig).
There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between computerized Management Information Systems (physical inputs, software supplies, human inputs and regulatory requirements) and improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.	.556	*0.000

* The correlation is statistically significant at the indication level $\alpha=0.05$.

It is divided into several hypotheses:

1. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the physical inputs and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

Table (11) shows that the correlation coefficient is .386, and that the probability value (Sig) is 0.000 which is less than $\alpha = 0.05$ level. This indicates a statistically significant relationship between the material inputs and the improvement of the job performance of the employees of the Palestinian cellular communications company Statistical significance level ($\alpha = 0.05$).

Table 11: The correlation coefficient between the physical inputs and the improvement of the job performance of the employees of the Palestinian cellular communications company

Hypothesis	Pearson coefficient of correlation	Probability Value (Sig).
There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the physical inputs and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.	.386	*0.000

* The correlation is statistically significant at the indication level $\alpha=0.05$.

2. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the software requirements and the improvement of the functional performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

= 0.05 level. This indicates a statistically significant relationship between the software requirements and the improvement of the functional performance of the employees of the Palestinian cellular communications company Statistical significance level ($\alpha = 0.05$).

Table (12) shows that the correlation coefficient is .383, and that the probability value (Sig) is 0.000 which is less than α

Table 12: The correlation coefficient between the software requirements and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company

Hypothesis	Pearson coefficient of correlation	Probability Value (Sig).
There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the software requirements and the improvement of the functional performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.	.383	*0.000

* The correlation is statistically significant at the indication level $\alpha=0.05$.

3. There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the human inputs and the improvement of the job performance of the workers in the Palestinian Cellular Telecommunications Company - Jawwal.

Table (13) shows that the correlation coefficient is 5.76 and that the probability value (Sig) is 0.000 which is less than $\alpha = 0.05$ level. This indicates a statistically significant relationship between the human inputs and the functional performance at a statistical significance level ($\alpha = 0.05$).

Table 13: correlation coefficient between human inputs and functional performance

Hypothesis	Pearson coefficient of correlation	Probability Value (Sig).

There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the human inputs and the improvement of the job performance of the workers in the Palestinian Cellular Telecommunications Company - Jawwal.	.576	*0.000
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* The correlation is statistically significant at the indication level $\alpha=0.05$.

- There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the organizational requirements and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.

Table (14) shows that the correlation coefficient is 546 and that the probability value (Sig) is 0.000 which is less than $\alpha = 0.05$ level. This indicates a statistically significant relationship between the organizational inputs and the functional performance at a statistical significance level ($\alpha = 0.05$).

Table 14: correlation coefficient between organizational inputs and functional performance

Hypothesis	Pearson coefficient of correlation	Probability Value (Sig).
There is a statistically significant relationship at the level of $\alpha \leq 0.05$ between the organizational requirements and the improvement of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal.	.546	*0.000

* The correlation is statistically significant at the indication level $\alpha=0.05$.

Ho 2: There are statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal due to the following variables (age, scientific qualification, Number of years of service).

The "mono-variance" test was used to see if there were statistically significant differences and this test teachers fit to compare 3 or more averages.

- There were statistically significant differences at $\alpha \leq 0.05$ between the average of the respondents' opinions

on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal due to age.

Of the results shown in Table (18) shows that the probability value (Sig) corresponding to the "Mono-variance" test is greater than $\alpha \leq 0.05$ level for all domains and fields combined, thus it can be concluded that there are no statistically significant differences between the mean of the study sample About these areas and areas combined together are attributed to age.

Table 15: Results of the "Single Contrast" test - age

The Field	Averages				Test Value	Probability Value (Sig.)
	Less than 30 years	From 30 to 40 years	From 41 to 50 years	More than 50 years		
Hardware Requirements	3.88	3.77	3.65	3.58	0.329	0.804
Software requirements.	3.98	3.76	3.68	3.92	0.763	0.520
Human requirements.	3.66	3.58	3.57	3.42	0.134	0.940
Organizational requirements.	3.66	3.50	3.29	2.75	1.380	0.258
Requirements for management and operation of computerized information system	3.79	3.65	3.55	3.42	0.646	0.589
Computerized Information Systems	4.16	4.13	3.93	3.71	1.506	0.223
All Areas Together	3.91	3.81	3.67	3.51	0.972	0.413

- There were statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal attributed to the scientific qualification.

Of the results shown in Table (16) show that the probability value (Sig) corresponding to the "Mono-variance" test is greater than the $\alpha \leq 0.05$ level for all domains and fields combined. Thus, it can be concluded that there are no statistically significant differences between the mean of the study sample about these areas and areas combined together are attributed to the scientific qualification.

Table 16: Results of the Single Contrast Test " - Qualification

The Field	Averages	Test	Probability
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	Diploma	BA	Postgraduate	Value	Value (Sig.)
Hardware Requirements	3.80	3.75	3.79	0.047	0.954
Software requirements.	3.83	3.79	3.83	0.030	0.970
Human requirements.	3.51	3.68	3.21	1.547	0.222
Organizational requirements.	3.48	3.49	3.25	0.192	0.826
Requirements for management and operation of computerized information system	3.65	3.67	3.52	0.144	0.866
Computerized Information Systems	3.92	4.19	3.81	0.047	0.954
All Areas Together	3.74	3.85	3.62	0.684	0.509

3. There were statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal attributed to the field of work.

Of the results shown in Table 17, the following can be inferred:

It was found that the probability value (Sig) corresponding to the mono-variance test was less than $\alpha \leq 0.05$ level of the fields of "physical inputs, software requirements,

management information system requirements", and thus it can be concluded that there are statistically significant differences between the average sample estimates Domains are attributed to the field of work and to the benefit of those whose field of management is minimal.

As for the other fields and fields combined, it was found that the probability value (Sig) is greater than the significance level of $\alpha \leq 0.05$ and thus it can be concluded that there are no statistically significant differences between the average estimates of the sample of the study on these areas and fields combined due to the field of work.

Table 17: Results of the Single Contrast Test "- the field of work

The Field	Averages			Test Value	Probability Value (Sig.)
	Top level Management	Middle level Management	Low level Management		
Hardware Requirements	3.48	3.81	4.07	3.919	*0.025
Software Requirements.	3.48	3.94	4.00	5.139	*0.009
Human Requirements.	3.42	3.68	3.68	1.399	0.255
Organizational Requirements.	3.24	3.53	3.66	1.646	0.202
Requirements For Management And Operation Of Computerized Information System	3.41	3.74	3.85	3.756	*0.029
Computerized Information Systems	4.09	4.09	4.04	0.066	0.936
All Areas Together	3.63	3.86	3.91	2.070	0.136

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

4. There were statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal due to the years of service.

Of the results shown in Table (21) shows that the probability value (Sig) corresponding to the "Mono-variance" test is greater than $\alpha \leq 0.05$ level for all domains and fields combined. Thus, it can be concluded that there are no statistically significant differences between the mean of the study sample about these areas and areas combined together are attributed to years of service.

Table 18: Results of the Single Contrast Test "- years of service

The Field	Averages			Test Value	Probability Value (Sig.)
	Less than 5 years	From 5- 10 years	More than 10 years		
Hardware Requirements	4.00	3.70	3.69	1.186	0.313
Software requirements.	4.04	3.73	3.73	1.454	0.242
Human requirements.	3.65	3.60	3.51	0.200	0.819
Organizational requirements.	3.64	3.46	3.28	0.848	0.434

Requirements for management and operation of computerized information system	3.83	3.62	3.55	1.053	0.356
Computerized Information Systems	4.18	4.05	4.03	0.605	0.550
All Areas Together	3.95	3.77	3.71	1.132	0.329

13. RESULTS

Through statistical analysis, several results are presented, the most important of which are:

- Most of the study sample was under 40 years of age, with 73.4%.
- 60% of the sample of the academic qualification Bachelor.
- 55% of the sample of the study years of service in the Palestinian Cellular Telecommunications Company - Jawwal ranging from 5 to 10 years.
- The percentage of approval of the physical requirements in the Palestinian Cellular Telecommunications Company - Jawwal reached 75.33%.
- The rate of approval of the software requirements in the Palestinian Cellular Telecommunications Company - Jawwal reached 76.07%.
- The level of approval of the human inputs in the Palestinian Cellular Telecommunications Company - Jawwal reached 71.83%.
- The approval of the regulatory requirements in the Palestinian cellular communications company Jawwal reached 69.33%.
- The level of approval of computerized Management Information Systems in the Palestinian Cellular Telecommunications Company - Jawwal reached 73.14%.
- The level of approval of the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal reached 81.56%.
- The results showed a statistically significant relationship at the level of $\alpha \leq 0.05$ between computerized Management Information Systems and improving the functional performance of the employees of the Palestinian cellular communications company.
- The results showed a statistically significant relationship at the level of $\alpha \leq 0.05$ between the physical inputs and the improvement of the job performance of the employees of the Palestinian cellular communications company.
- The results showed a statistically significant relationship at the level of $\alpha \leq 0.05$ between the requirements of the software and the improvement of the functional performance of the employees of the Palestinian cellular communications company.

- The results showed a statistically significant relationship at the level of $\alpha \leq 0.05$ between the human inputs and the improvement of the job performance of the employees of the Palestinian cellular communications company.
- The results showed a statistically significant relationship at the level of $\alpha \leq 0.05$ between regulatory and functional requirements.
- The results showed that there were no statistically significant differences at the level of $\alpha \leq 0.05$ between the average of the respondents' opinions on computerized Management Information Systems and their relation to improving the job performance of the employees of the Palestinian Cellular Telecommunications Company - Jawwal due to the following variables (age, scientific qualification, Employment, Number of years of service).

14. RECOMMENDATIONS

Through statistical analysis, several recommendations are presented, the most important of which are:

- The Palestinian Cellular Telecommunications Company - Jawwal must provide data inputs suitable for the needs of the work required by the employees.
- The speed of the equipment must be commensurate with the volume of work required by the employees of the Palestinian cellular operator Jawwal.
- The need to increase the network speed in the company to suit the ease of work of employees.
- The software used in the company should cover all the activities of the company.
- All employees must have the necessary instructions to run the programs they need to perform their work.
- The computer department should provide the same level of services at all times.
- The technical department concerned with the computerized system in the company should answer the inquiries of the employees at the company quickly.
- Senior management should provide financial support to use the computerized information system.
- Senior management should provide training programs related to the use of computerized information system.

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