The Reality of Computerized Management Information Systems in the Palestinian Cellular Communications Company - Jawwal

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Abstract: *The aim of this study was to identify the reality of computerized management information systems in Jawwal, and to detect the differences between the views of the study sample on the variables of the study according to the variables (age, Scientific Qualification, field of work and years of service). To achieve the objectives of the study, a questionnaire was designed and developed to measure the variables of the study applied to the company's 70 employees. The comprehensive inventory method was used and 60 samples were recovered for analysis with a recovery rate (85.7). SPSS pakage was used to analyze the data.*
The study reached several results, the most important of which is that the degree of approval of the requirements of the management and operation of computerized information system in Jawwal Company in general amounted to 73.14%. There were statistically significant differences between the respondents' perceptions of computerized management information systems in Jawwal Company, due to the demographic variables (scientific level, years of experience, work place, job level). Management Information Systems and the importance of using modern devices, advanced software, and attention to the availability of modern networks and work to solve network problems such as interruptions and slow communication that came within the results of the study. And operational and application software to increase user awareness of the capabilities of the hardware and software used and not to focus on how to use them only.

Keywords: Computerized management information systems, Palestinian cellular communications company - Jawwal, Gaza Strip, Palestine.

1. INTRODUCTION

Globalization has led to developments in all sectors, including the technological and economic sectors, and the 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 varied applications at all administrative levels. 2002) as one of the most successful ways in which organizations face the challenges of the times as they represent integrated activities aimed at obtaining information and knowledge through technological means for managers to make decisions in different locations.

The emergence of the global economy, the transformation of the industrial economies, the transformations that accompanied business projects, and the emergence of the so-called digital society have made information systems an essential necessity in the everyday business management (Al Shobaki et al., 2018), (El Talla et al., 2018), (Abu-Naser et al., 2018), (Al Shobaki et al., 2017), (El Talla et al., 2017), (Abu-Naser et al., 2017).

Information is wealth, and its importance lies not only in the decision-making process, but also in other administrative processes, such as planning, policy-making, monitoring and performance assessment(Al Shobaki et al., 2017), (Al Talla

et al., 2018), (Abu-Naser et al., 2018), (Al Shobaki et al., 2017), (El Talla et al., 2017) (Abu-Naser et al., 2017).
Information is a major resource for the organization and an important source of its success. It is also a factor in increasing the efficiency and effectiveness of the various administrative activities. This has made the MIS in the various organizations very important, helping organizations to perform their functions successfully and efficiently (Al-Bashaabsha, 2005).
With the introduction of the systems approach, the term information system is used as a modern method of modern administrative methods that help rationalize the decision making process to meet the challenges faced by companies because of the lack of information or access to it at a later time. The importance of the decision is therefore necessarily equal to the importance of the information on which it is based, and its importance extends to the distinction between successful and failed organizations by determining how successful they are in making decisions (Al Shobaki et al., 2018), (Al Shobaki et al., 2017), and (Al Shobaki et al., 2016). Public and private organizations have witnessed a significant shift in information systems, such as computerization, databases and communication networks, as well as other technological means that have contributed to an

information system that relies primarily on the use of computers (Abu-Naser et al., 2018).

However, despite the technical progress of these systems, they still need to be accepted by the user and satisfied with them, so as to accept their use and benefit from them. Hence the interest in the users of computerized information systems and the organizations in parallel lines when developing and applying computerized information, namely the interest in technology and the interest of users in information technology.

Thus, the culture of information systems indicates the need for an understanding of information systems, which includes a behavioral understanding of the organization and individuals using systems, as well as the necessary knowledge and understanding of computer technology associated with information systems.

In view of the above, Jawwal looks forward to becoming the leading organization in the ICT sector in Palestine by providing advanced infrastructure capable of keeping pace with the latest developments in this sector and providing all terrestrial, cellular, informatics, internet services and added services, which relies on information systems and considers them the technical base for launching.

2. PROBLEM STATEMENT

In the context of Israeli control of the crossings, the Israeli agreements imposed restrictions on Palestinian companies and limited their ability to develop themselves and develop their work and infrastructure in accordance with the requirements of the times. There are restrictions on the construction of Palestinian networks and support stations in areas classified as "C" Between Palestinian networks and imposed on them to communicate with each other through the rental of capacities of Israeli operators at unreasonable prices and conditions, which in turn hindered communication between the governorates, especially between the West Bank and the Gaza Strip. Therefore, this research aims to identify the adequacy of the main requirements for the management and operation of computerized information system (hardware, software, human and organizational) to the needs of the work of the company Jawwal, and also to identify the effectiveness of the information system in meeting the needs of users of information appropriate for the performance of business.

In light of the above, the problem can be posed in the following question:

What is the reality of the computerized management information systems in the mobile telecom company?

The following questions arise:

Q1-: What are the perceptions of the respondents towards computerized management information systems in Jawwal?

Q2-: Are the opinions of the respondents in Jawwal, different from their personal characteristics?

3. RESEARCH HYPOTHESIS

In order to provide an appropriate answer to the research questions presented, the study seeks to test the validity of the following hypothesis:

Ho 1: There are statistical significance differences at the level of significance α ≤0.05 between the perceptions of the respondents about computerized management information systems in Jawwal Company due to personal variables (age, scientific qualification, field of work and years of service).

4. RESEARCH OBJECTIVES

This study aims to:
1. Disclosure of the reality of Computerized Information Systems in the Mobile Telecommunications Company.
2. Knowledge of the significance of the differences between the respondents about computerized management information systems in the mobile telecom company.
3. Statement of proposals that will help to enhance the attention to management information systems in Jawwal.

5. RESEARCH IMPORTANCE

1. The study is expected to contribute to the assessment of the computerized management information systems in Jawwal Company, and the problems and difficulties it faces, and to determine the suitability of these systems to the needs of the employees and raise the level of performance.
2. The study of management information systems in the company is especially important because 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.

6. THEORETICAL FRAMEWORK

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, the computer and computer-based IT systems are viewed as frameworks to support the integration of science with the personal appreciation of the manager for adapting, developing, adapting, Efficiency of the work of the Organization as a whole. Therefore, computerized information systems are currently regarded as the main artery responsible for providing the Management and other Parties with hardware and quantitative information (El Talla et al., 2018).

Computerized information systems are defined as: one of the components of the administrative system; it deals with the collection, classification, processing, analysis and delivery of hardware and quantitative information for decision making to internal and external parties (Al-Dahrawi, 1998).

As defined by Jawad (2000) as a set of human elements and mechanism for the collection, operation and processing of data in accordance with specific rules and procedures with a view to transforming them into useful information that assists the management of the concerned company in the planning,

(Pascal, 2009) defines it as the sum of equipment, programs, personnel, data and procedures that allow access to appropriate information through data storage and processing for timely and appropriate decision-making.

Dawod (2010) believes that the information system is reflected in the following:

1. An integrated structure comprising the basic elements of the system: "inputs, processes, outputs, and nutrition".
2. The requirements for the management and operation of the system are "machinery, manpower, programs and systems".
3. The data feeds are compiled from the internal environment (the company's activities) and the external environment (political, economic, social, cultural, etc.).
4. The basic objective of the system is to provide the necessary information needed by different departments in making decisions when they are performing the functions of planning, organization, direction and control in the right time and the appropriate cost and quantity.
5. The basic criterion for determining the effectiveness of the system is the extent to which managers' benefit from the information provided by the system.
6. This information reflects past events, current image and future expectations of the company's activities.

Therefore, information systems are an important tool to assist and support the manager, where he needs the means of communication and access to relevant data and information, as well as the ability to analyze these data and information. Here, computer-based information systems can provide means to make communication easier, Economic and easier for the decision-maker.

The contribution of computerized information systems to achieving the objectives of the establishment

The computerized information system provides a number of contributions or returns to the enterprise, such contributions are measurable and some other contributions must be measured. The measurable contributions have a positive impact on the market value of the enterprise, reputation, profitability and competitive advantage can be summarized as follows (Al-Kurdi and Abdul, 2003):

1. Reduce errors.
2. Increased flexibility.
3. Increase the speed of activity.

4. Improved planning and management control and the ability to reduce uncertainty.
5. Open new markets and increase sales.
6. Increased organizational flexibility.

Characteristics of the information system:

The information system is characterized by the following characteristics (Al-Sharabli, 2009):

1. All systems operate through a particular environment.
2. Consists of elements, components or subsystems that constitute the basic building blocks of the system.
3. There is an overlap between the sub-parts and we cannot change a system component without affecting the rest of the system.
4. All systems have a key function or main objective by which the performance of the organization is evaluated.
5. Use of systems in case of permanent change due to the state of development of the institution.

7. 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 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.

➢ 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 (Abu Sabt, 2005) aimed at evaluating the role of these systems in administrative decision-making in the Palestinian universities in the Gaza Strip. The study is based on exploring the differences between the components of MIS in universities. Management Information Systems- Efficiency of Personnel in the System) the study also focused on measuring the role of information quality and the use of MIS in the decision-making process. The study concluded that there are differences in the components of MIS for the Islamic University, and that there is a very strong relationship between the organizational level of the IS Department and the quality and use of information in the decision making process.

➢ Study of (Jerry Cha_Jan Chang, Willing king (2005): The study has 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 enterprise performance. 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.

Commenting on previous studies:
A review of the previous studies revealed the different environments in which they were conducted, the different nature of the activities of the organizations applied to them,

the variety of variables addressed and the multiplicity of statistical methods used to obtain and analyze data. Those studies revealed the importance of information systems and their primary role in achieving the organization's mission and objectives if properly used, supported by the management of the Organization and provided with the appropriate environment for implementation. This study differed from the application of Jawwal, which is a technological company, and the computerized information system is a vital factor in all its operations.

8. PRACTICAL FRAMEWORK OF THE STUDY:

Firstly- Study Approach:
The researchers used the analytical descriptive approach, which tries to study the "reality of the computerized management information systems in the mobile communications company. The analytical descriptive approach attempts to compare, interpret and evaluate the possibility of reaching generalizations that have a meaning that increases the knowledge of the subject.

The researchers used two main sources of information:
1. **Secondary sources**: The researchers aimed at addressing the theoretical framework of the study to the secondary data sources, which are related Arabic and foreign books and references, periodicals, articles, reports, researches and previous studies that dealt with the topic of study, research and reading in different internet sites.
2. **Primary Sources**: In order to address the analytical aspects, the researchers sought to collect the initial data through the questionnaire as a main tool for the study, which was designed specifically for this purpose.

Second- Society and Study Sample:
The study population is represented by employees of Jawwal in the central region of 70 employees. A comprehensive survey method was used. 70 questionnaires were distributed to the study population and 60 questionnaires were obtained, with a recovery rate of 85.7%.

Third- Study tool:
A questionnaire was prepared on "The reality of computerized management information systems at Jawwal". The Likert scale was used to measure respondents' responses to the questionnaire sections according to Table (1):

Table 1: Likert scale scores

The Scale	Absolutely Agree	Agree	Neutral	Not Agree	Not Quite Agree
Weight	5	4	3	2	1

Fourth- Validity of the questionnaire
The validity of the questionnaire is that the questionnaire questions measure what has been set to measure, and the researchers verify the validity of the questionnaire as follows:
1. **Results of Internal Consistency**: The internal consistency is determined by the consistency of each paragraph of the questionnaire with the area to which

this paragraph belongs. The researchers calculated the internal consistency of the questionnaire by calculating the correlation coefficients between each of the areas of the questionnaire domains and the total score of the field itself.

2. **Structural validity**: Structural validity is a measure of the validity of a tool that measures the extent to which the objectives of the tool 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 level α=0.05. Thus the questionnaire is valid.

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	.967	*0.000

information system		
Computerized Information Systems	.749	*0.000

* Statistically significant at α = 0.05

Fifthly- Reliability of the questionnaire:

This means that the questionnaire will give the same result if the questionnaire is redistributed more than once under the same 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 certain times. The value of the alpha-cronbach coefficient was found to be high (0.930), so that the final questionnaire was valid to be used. Thus, researchers have verified the validity and consistency of the questionnaire, which makes them fully confident in the validity of the questionnaire and its validity to analyze the results and answer the questions of the study and test the hypotheses.

9. 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 Management	25	41.7
	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.

Analysis of the paragraphs "Requirements for the management and operation of computerized information system"

1. Analysis of the paragraphs of the field of "hardware requirements"

The T test was used to determine whether or not the average response was 3 or not. The results are as follows:

Table 4: The arithmetic mean and the probability value (Sig) for each of the paragraphs of the "**hardware requirements**"

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 α = 0.05

The following table shows the following:

– The arithmetic average of all the paragraphs is 3.77, ie, the relative arithmetic mean for all the domains of the field is 75.33%, and the probability value (Sig.) is 0.000. Therefore, the field is statistically significant at the mean level (α≤0.05), indicating that the average response to this field has exceeded the degree of neutrality is 3, meaning that there is approval by the sample members on this area. The researchers attributed this to Jawwal's interest in everything related to the hardware equipment because its work depends mainly on it as well as being attractive for customers.

– The paragraph "There are computers suitable for the job" is ranked first with a relatively high weight (91.67).

The researchers attributed this to Jawwal's interest in the hardware equipment and appearance of the company as one of the attractions for customers.

– The paragraph "The speed of the devices corresponds to the size of work required in the company" ranked last with a relative weight (65.00), which is a medium degree. The researchers attributed this to the problems of electronic equipment because of the complexity of the Israeli side to enter, making them not at the required level of quality and speed in the provision of service.

2. Analysis of "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 mean 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 use.	3.75	74.92	5.77	*0.000	4

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 α = 0.05

The previous table shows the following:

– The mean of all the paragraphs is 3.80, ie, the relative arithmetic mean for all domains is 76.07%, and the probability value (Sig.) is 0.000. Therefore, field is statistically significant at the mean level (α≤0.05), indicating that the average response to this field has exceeded the degree of neutrality which is 3, meaning that there is approval by the sample members on this field. The researchers attributed this percentage to Jawwal's interest in software and computer applications because its quality is the basis for the company's work. Consequently, any defect in the software will affect the survival and continuity of the company.

– The paragraph "There is control over the programs used to ensure the safety of electronic data operation" was ranked first with a relative weight (85.00), which is high. Control is an important element to ensure confidentiality and data tampering.

– The paragraph "Software used covers all activities carried out by the company" ranked last with a relative weight (68.00) and is an average ratio. The researchers attribute this to some of the constraints that sometimes limit the company's ability to develop itself under the Israeli ban on certain software requirements.

3. Analysis of the paragraphs of the field of "human requirements"

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

Table 6: The arithmetic mean 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 α = 0.05

The following table shows the following:

– That the arithmetic average 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. Therefore, the field is statistically significant at the mean level (α≤0.05), the degree of neutrality is 3, meaning that there is approval by the sample members on this area. The researchers attributed this result to Jawwal's interest in human cadres, and it is chosen according to the highest specifications and is subject to high standards, so the staff is highly qualified.

– The paragraph reads: "Employees in the computerized department have sufficient qualifications and skills for the need of work" got the first place with a relative weight (78.33) and a high percentage. This is a fact of reference to the way the company selects the human cadres working in it, since a large proportion of them are highly qualified and have good abilities and experience.

– The paragraph "The computer department provides the same level of services at all times." In the last place and a relative weight (64.00) is the average approval. The researchers attributed this to the interruption of services at some times and are not many, but in times of pressure or events.

4. Analysis of the field of "Organizational 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 information system	3.35	67.00	2.70	*0.005	4
All paragraphs		3.47	69.33	5.04	*0.000	

* Statistically significant at $\alpha = 0.05$

The previous table shows the following:

– The arithmetic average 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 is statistically significant at the mean level ($\alpha \leq 0.05$), indicating that the average response to this field has exceeded the degree of neutrality which is 3, meaning that there is an approval by the sample members on this area. The researchers attributed this to the support of top management for the use of information systems in all areas of work because of the advantages that contribute to reduce errors and maintain the confidentiality of work and provide departments with their information needs in a timely manner.

– The paragraph "The information available in the system commensurate with the needs of the job" was ranked first with a relative weight (80.00) and high approval. This is due to the employees' interest in information related to their work.

– The paragraph "top management provides financial support for the use of computerized information system" came in last place with a relatively low weight (58.00) which is low approval. This is due to the economic conditions of the company in light of the decline in market share after the emergence of other companies in the field.

Analysis of all sections of the "Requirements for the management and operation of computerized information system"

The T test was used to determine if the mean response was 3 or not. The results are shown in Table (8).

Table 8: Arithmetic mean and probability value (Sig.) for all the "Management and operation of the 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 the "Requirements for management and operation of computerized information system " is 3.66 (the total score is 5) ie the relative arithmetic mean is 73.14% and the probability value is (Sig.) is 0.000. Therefore, this indicating that the average response level ($\alpha = 0.05$) for this field is substantially different from the average approval score. This means that there is approval by the respondents on the "management and operation of computerized information system requirements" in general. The researchers attributed this result to Jawwal's interest in using modern methods, especially in the light of technological development, and that it is always a pioneer in this field because its work depends primarily on technological development.

10. RESEARCH HYPOTHESIS TEST:

Ho 1: There are statistical significance differences at the level of significance α ≤0.05 between the perceptions of the respondents about computerized management information systems in Jawwal Company due to personal variables (age, scientific qualification, field of work and 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.

1. Age:

Table 9: 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

Table (9) shows that the probability value (Sig.) corresponding to the "Mono-variance" test is greater than the level α ≤0.05 for all domains combined. Thus, it can be concluded that there are no statistically significant differences between the mean of the study sample about these fields combined together are attributed to age. The researchers attributed the result to Jawwal's interest in recruiting competent staff and thus having a good knowledge of information systems.

2. Scientific Qualification:

Table 10: Results of the single-variance test - scientific qualification

The Field	Averages			Test Value	Probability Value (Sig.)
	Diploma	BA	Postgraduate		
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

Table (10) shows that the probability value (Sig.) corresponding to the "Mono-variance" test is greater than the level α≤0.05 for all domains and domains combined, thus it can be concluded that there are no statistically significant differences between the mean of the study sample for these fields and fields combined together are attributed to the scientific qualification. The researchers attributed the result to the company's closeness in qualifications.

3. Employment:

Table 11: Results of the Single Contrast Test - Work Area

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 α≤ 0.05.

From the results shown in Table (11), the following can be inferred:

It was found that the probability value (Sig.) corresponding to the mono-variance test is less than the level α≤0.05 of the fields of "hardware requirements, software requirements, management information system requirements". Thus, it can be concluded that there are statistically significant differences between the mean of the sample 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 level α≤0.05. Therefore, it can be concluded that there are no statistically significant differences between the averages of the sample of the study sample on these fields and fields combined due to the field of work. The researchers attribute this result to the convergence of the nature of work at the higher levels while different from the lower levels and this creates the need for some additional skills.

4. Years of service:

Table 12: 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

Of the results shown in Table (12) shows that the probability value (Sig) corresponding to the "Mono-variance" test is greater than the level of significance α ≤0.05 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. The result is that employees are continuously subject to training in new work methods and thus all have the same knowledge regardless of their years of service.

11. 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 study years of service in the mobile communications company ranging from 5 to 10 years.

– The level of approval of the hardware requirements in the mobile company reached 75.33%.

– The degree of approval of the software requirements in the company reached 76.07%.

– The level of approval of the human requirements in the mobile company reached 71.83%.

– The approval of organizational y requirements in the Telecommunications Company reached 69.33%.

– The level of approval of the requirements of the management and operation of computerized information system in the telecommunications Jawwal Company in general was 73.14%. The order of the dimensions was as follows: (software requirements, then hardware, followed by humanity, and finally replaced the organizational y requirements).

- The results showed that there were no statistically significant differences at the level of α ≤0.05 between the average of the respondents' opinions on computerized management information systems at Jawwal Company due to the following variables (age, scientific qualification, field of work, number of years of service).

- It was found that the probability value (Sig) corresponding to the mono-variance test is less than the α ≤0.05 level of the fields "hardware requirements, software requirements, information system management and operation requirements" and thus it can be concluded that there are differences on these areas (Sig) is greater than the 0.05 α α level, so it can be concluded that there are no differences between the mean of the sample of the study sample on these areas and the areas combined are attributed to the field of work

12. RECOMMENDATIONS

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

- The Mobile Telecommunications Company shall provide means of data entry that are suitable for the required work required by the employees.

- The speed of the devices must be commensurate with the volume of work required by the employees of the mobile operator.

- Need to increase the network speed in the company to facilitate the 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.

- Top management should provide financial support to use the computerized information system.

- Top management should provide training programs related to the use of computerized information system.

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