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The Impact of The Integration of Artificial Intelligence Techniques and Continuous Improvement of Operations on the Performance Excellence in Accounting and Auditing Offices A Field Study on Accounting and Auditing Offices Working in Gaza Strip

Dr. Mohammed Mosa farajallah[1], Dr.Dalal Mohammed Ibrahim Mohammed[2]
[1]Ph.D. in accounting and finance, Head of payroll and appointments section in the High Judicial Council, Gaza, Palestine
[2]Ph.D. in accounting, Assistant Professor at Al-azhar University, Al zagazig, Egypt
E-Mail: mmfarajallah@gmail.com[1], dalal.mohamed@azhar,edu.eg[2]

Abstract: *This study aimed to identify the impact of integration between artificial intelligence techniques and continuous improvement of operations on performance excellence in accounting and auditing offices working in Gaza Strip, and to define the concepts of continuous improvement operations and artificial intelligence techniques and their importance, goals and its measurement indicators., in addition to the definition of the concept of organizational performance excellence, and its importance, And measured indicators. The study followed the descriptive-analytical approach. to achieve the study objective, the researcher designed a questionnaire as a study tool. The results of the analysis revealed a significant statistically significant impact between artificial intelligence techniques and continuous improvement of operations on performance excellence, Continuous training on improving operations and using modern accounting techniques is the basis for performance excellence, The human element is considered the most important element in applying modern technologies in accounting offices, and therefore it is the first element to achieve quality and excellence. The researcher recommended: Encourage accounting offices to use modern technologies in the performance of their tasks, especially continuous improvement techniques and artificial intelligence techniques. Working to increase the number of professional courses for employees to learn about modern technologies, to keep abreast of the continuous and changing developments in the modern business environment.*

Keywords — continuous process improvement, artificial intelligence, performance excellence**.**

1. INTRODUCTION

Continuous improvement is a management philosophy aimed at improving products, processes and other activities within the organization in order to effectively and efficiently satisfy customers' requirements by eliminating damage or non-value-added activities in all aspects of the organization (Mironiuk, 2012), It is also a stable and thoughtful pattern of collective activity through which the organization systematically generates and modifies its operating procedures with a view to improving its effectiveness (Butler, et al., 2018). Continuous improvement is one of the main pillars of the TQM methodology, which aims to achieve business excellence by continuing to improve processes. Although difficult to achieve, the organization continues to make efforts to reach it, because there are always opportunities for improvement in operations, either in order to develop for the better or to correct some of the gaps or mistakes made by the institution, or to face environmental changes in order to adapt to survive or to influence.

Artificial intelligence is considered one of the modern computer sciences looking for sophisticated methods of programming it, to do work and conclusions similar, albeit narrowly, those methods attributed to human intelligence, In other words, the computer performs duties and tasks that are close and similar to human intelligence processes such as learning, extrapolation and decision making. Artificial Intelligence is one of the branches of information technology, which is based on the development of software and smart technologies to be applied in one of the fields of computer or robotics so that these programs are highly intelligent by possessing intelligent behavior that facilitates their work in tasks or problem solving (Saleh, 2009).

On the other hand, excellence in organizational performance is an important management concept, and the reason why organizations resort to this type of performance lies in the work environment that requires organizations to think about the ways that make their products and services offer innovative and creative so they can compete. In the sense that excellence is an advanced stage of proficiency in work, and effective performance-based on leading management concepts include focus on performance and results, customer services and effective leadership, management with information and facts, process development, involvement of human resources, continuous improvement and innovation, and building successful organizations (Hamad, 2014)). In addition, organizational excellence represents the activities that make the organization distinct in its performance, through the use of the capabilities and resources available efficiently and distinctly, making it superior and isolated from other competitors, and this is reflected on how to deal with customers, and how to perform its activities and operations and prepare its policy and management strategy and organizational (Hilali & Ghabbour, 2013).

Hence the necessity of conducting this study to the end that the Palestinian Accounting and Auditing Offices seek to achieve excellence and leadership in the labor market, and the continuous improvement that it seeks to generalize and consolidate in all sectors, following modern scientific methods.

2. Statement of the Problem:

Changes in organizations as a result of changes in the competitive external environment make it difficult for these organizations to gain their competitive advantage and be effective by managing their resources. To counter this situation, ideas have begun to move towards AI technologies and continuous process improvement as an activity that distinguishes the organization from its competitors. Accounting and auditing offices in the Gaza Strip are considered one of the important organizations facing severe competition and are in dire need to develop their capacities and improve their operations. In this sense, the study problem is summarized in the following main question:

What is the impact of the integration of artificial intelligence techniques and continuous process improvement on the performance of accounting and auditing offices in the Gaza Strip?

3. Study Objectives:

- Identify the concepts of continuous improvement of processes and their importance, objectives, and indicators of artificial intelligence techniques.
- Identify the concept of excellence of institutional performance, and its importance, and indicators of measurement
- Demonstrate the impact of the integration of artificial intelligence techniques and the continuous improvement of operations on performance excellence in accounting and auditing offices in the Gaza Strip.
- To provide a set of recommendations that help the management of accounting and audit offices in the adoption of modern concepts of management, to achieve excellence and leadership in the field of work.

4. Study Importance:

- Spreading the culture of continuous improvement and development in the accounting and auditing offices in the Gaza Strip, and trying to disseminate it to other business sectors in Palestine.
- To provide convincing evidence for the management of these offices on the importance of these study variables, and take them into account when applied, and adapt them if possible to suit the interest of offices.
- The need for the Palestinian business sector, especially the accounting and auditing offices for such a study in the light of the development of business and the conditions of intense competition suffered.

5. Study Hypotheses:

In the context of the study questions, the researcher will try to validate the following main hypothesis:

"There is a statistically significant effect of the integration between the application of artificial intelligence techniques and continuous improvement of operations on the performance excellence of accounting and auditing offices in the Gaza Strip". The following sub-hypotheses emerge:

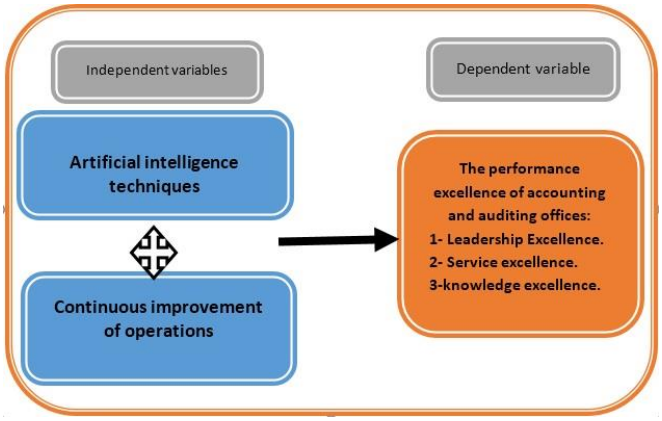
- There is a statistically significant effect of the integration between the application of artificial intelligence techniques and continuous improvement of operations on the leadership excellence of the accounting and auditing offices in the Gaza Strip.
- There is a statistically significant effect of the integration between the application of artificial intelligence techniques and continuous improvement of operations on the service excellence of accounting and auditing offices in the Gaza Strip.
- There is a statistically significant effect of the integration between the application of artificial intelligence techniques and the continuous improvement of operations on the knowledge excellence of accounting and auditing offices in the Gaza Strip.

6. Study Model and Variables:

Figure (1) presents the proposed study model and the relationships between its main variables. The right side of the model represents the two independent variables, namely: 1- Artificial intelligence techniques. 2. Continuous improvement of operations.

The left side of the model represents the dependent variable represented by the performance excellence of accounting and auditing offices, which can be measured by the following sub-variables: (leadership excellence, service excellence, knowledge excellence).

Figure 1: The proposed study model and the relationships between its main variables



7. Previous Studies:

Several previous studies have addressed the topics of continuous improvement of processes and artificial

intelligence and their impact on the performance and excellence of organizations, in several respects, using a number of indicators and different metrics according to each study. While the study (Khan, et.al., 2019) aimed to analyze and apply continuous improvement techniques in the interior design of the company and its impact on its performance, in addition to studying the challenges facing this application in various departments of the company. The results showed that the successful application of continuous improvement techniques reduced the time of completion of the company's projects from 16 weeks to 9 weeks, the profit margin increased from 25% to 27%, sales increased from 11% to 32%, the company's preference for projects and forecasts Its finances were 92% of the final completion of the tenders, a marked increase in the cleaning, arrangement, and organization of the workplace. The researchers recommended that the study be applied in different environments, helping to build knowledge bases about continuous improvement techniques. However, the study (Ritamaki, 2017) aimed to identify the factors affecting the success of continuous improvement techniques in changing management patterns (management of change), as well as to clarify the role played by organizational culture and leadership in this change to achieve operational excellence of the organization by adding value to business and reduce costs and improve production. The results showed that there are a number of factors that affect the success of the application of continuous improvement techniques, including: (work teams, organizational culture, leadership, communication) and thus on the operational excellence, in addition to the application of continuous improvement techniques requires a long period with the support of Manage your company for this application. The researcher recommended that when applying continuous improvement techniques, detailed information and instructions on how to develop processes should be provided. As well as practical guidance on how to build a step-by-step process-based optimization platform. Finally, guide the principles and methods to be used when planning a success strategy. The study (Salman, 2014) aimed to clarify the elements and steps of the application of continuous improvement technology in the organization and its impact on performance development as a key pillar on which the organization depends on the development of its performance through small and continuous improvements to achieve a better level of performance. The results showed that the important role of this technique in improving performance and eliminating the various deficiencies in the organization. The researcher recommended that organizations should be encouraged to use continuous improvement technology to develop their performance and enhance the competitive advantage in the market, the need to continue the application of this technology from year to year because the needs of customers and their expectations and the external environment change over time, which requires organizations to improve and develop their products and operations to suit the external environment.

The study (Mansour and Al-Abed, 2015) aimed to identify the relationship of organizational excellence to total quality of food industry organizations in the northern West Bank, and the impact of some variables on each of them, the study found that provide a high level of organizational excellence and a very high level In food industrial organizations, A positive correlation between the level of organizational excellence and the level of total quality in the industrial organizations in Nablus governorate, the researchers recommended the most important recommendations: Paying more attention and training in leadership and management for workers in food industry organizations, and the need to study the needs of consumers constantly, Take into account new productions, analyze the types of competing products, and build a new product industry that takes into account the specifications of other products. As well as the study (Ali, 2002) aimed to identify the extent of application of the pillars of total quality, and the impact on the performance of industrial organizations operating in Jordan, In addition to identifying the main obstacles that prevent the application of these pillars. The results showed that the level of application of quality pillars varies from high to medium level, in addition to the presence of a number of obstacles that impede the implementation of the pillars of total quality management in the researched organizations, including: weak human resource development strategy and lack of adequate resources during the application process. The researcher recommended the need to establish a special unit of quality and provide financial support, and focus on providing material and moral awards in order to deepen commitment to the pillars of total quality. In addition. The study (Juwaihan, 2013) aimed to identify the extent of the application of the dimensions of quality culture in the organizations researched, and to demonstrate the impact of total quality management on the strategic performance of organizations, The results showed that there is a statistically significant relationship to the TQM dimensions on the strategic performance, in addition to the continuous improvement of operations has a significant impact in improving the production products and services of the organization from the perspective of employees. The researcher recommended the importance of organizations to instill the values of quality culture in all its dimensions, which is based on the adoption of techniques and methods of total quality in order to bring about the right cultural change. In addition, the principles of continuous improvement are an essential part of the organization's culture and work to raise awareness for all employees.

The study (Shinawa & El-Bakry, 2018) aimed to identify the role of artificial intelligence in achieving customer satisfaction and the impact of this on cost accounting, as well as to identify the concept of artificial intelligence and its techniques and its importance and the extent of its impact on production in a way that contributes to meet the wishes of customers. The results showed that reliance on artificial intelligence achieves customer satisfaction, Artificial intelligence techniques contribute to the objectives of cost accounting of measuring costs and control over cost elements and help in making decisions more efficiently, companies have become aware that customer satisfaction is very

important to its success and is now seeking To achieve it and began to trend to apply artificial intelligence tools to reach it. The researchers recommended the need for companies to rely on artificial intelligence techniques because of their significant role in achieving suitability for use and achieve customer satisfaction and impact on cost accounting. The study (Majd, 2016) aimed to identify the role of artificial intelligence in the prediction and quantitative analysis of risks in institutions, by incorporating artificial intelligence mechanisms and probabilistic methodologies, it supports the decision-making process to detect and address various risks associated with the business environment. The results showed that artificial intelligence systems work more accurately and faster than the human element, which leads to lower errors and improves the quality of performance, Raising levels of productivity, and optimizing the use of economic resources, in addition to that it can work under uncertain circumstances through the knowledge bases on which the decision is based. The researcher recommended the need to focus on the use of various methods of artificial intelligence and statistical and mathematical methods in the prediction process, and address the various risks facing economic institutions.

In reviewing previous studies, it was found that most of the previous studies related to the subject matter were conducted in different environments from the local environment. The results of these studies were guided by different circumstances. The sub-variables and their indicators of measurement for these studies differ from the indicators of measurement of the current study, which in turn can affect in one way or another on the conclusions can be reached, in addition to this difference in itself is distinct from this study from other studies.

8. THEORETICAL FRAMEWORK

8.1 Continuous Process Improvement:

Continuous improvement is a management philosophy aimed at continuously developing processes and activities related to machinery, materials, personnel and production methods (Mahfouz, 2004). It is considered as one of the main pillars of the TQM methodology, which aims to achieve the level of workmanship by continuing to improve processes. Although difficult to achieve, the organization continues to make efforts to reach it, because there are always opportunities for continuous improvement either in order to develop for the better, or to correct some of the gaps or mistakes made by the organization, or to face environmental changes in order to adapt to survive or influence them. (Weetman, 2006) argues that continuous improvement is the process of making short-term improvements in small recurring vocabulary relative to major long-term fundamental changes, by reducing variable costs at certain rates.

8.1.1 Elements of Success of Continuous Improvement (Al-Weshahi, 2003):

Senior management commitment: Quality decisions are strategic decisions. Therefore, the commitment of senior management in supporting and developing them and activating the movement of those in charge is one of the main tasks that lead to its success. The commitment of senior management is to promote a clear strategic vision of the organization and its objectives, as well as to enhance and develop the capabilities of employees to improve their performance.

Employee participation and work teams building: The human element is the most important element of this methodology, and therefore is the first element to achieve quality and excellence, and is responsible for the process of leadership and implementation of this methodology.

Fact-based Decision Making: Organizations that implement a system of continuous improvement and quality are characterized by their decisions based on correct facts and data and not just individual predictions or assumptions and expectations based on personal opinions.

Staff Training: Training is the heart of continuous improvement. There are skills that must be learned by staff in the organization Perhaps the most prominent is to develop the efficiency of individuals, so that they can delete errors and cancellation.

8.1.2 Steps to Continuous Process Improvement (Besterfield, 2011):

There is a range of methods used by companies in the process of optimization, including the Juran Trilogy:

Planning: Planning begins to improve the quality of products and services provided by organizations by identifying customer needs and turning them into clear requirements, Through which the company can develop the characteristics and attributes of service that suit the needs of customers.

Control: aims to ensure that the operations are going as planned by relying on feedback. The control process consists of a set of stages and steps: starting with identifying the processes to be monitored, then setting clear objectives for the control process, when evaluating the performance of the actual work and comparing it with the planned objectives, and finally addressing the differences between the planner and the actual.

Optimization: This includes improving current performance levels and moving to higher levels of performance than current operations, as well as creating a platform for continuous improvement through the formation of quality boards, and work teams, Support them with everything they need to identify problems and find solutions.

8.2 Artificial intelligence:

Artificial intelligence includes expert systems and intelligent programs that function much like the way the human mind works by understanding and predicting actions in a way that the human mind treats, sometimes outweighing the way the human mind works (Arnous, 2007). Artificial intelligence aims to understand the nature of human intelligence by making computer programs capable of simulating intelligent human behavior. This means that a

computer program can solve a problem or make a decision in a situation, as the program itself finds a way to solve the problem or make a decision by referring to the many different heuristic processes in which the program is fed (Roda & Poch, 2000). In addition, Artificial intelligence is a name given to a set of new methods of programming accounting systems, which can be used to develop systems that simulate some elements of human intelligence and allow them to make deductive processes about the facts and laws that are represented. In computer memory (Sorour, 2005).

8.2.1 Artificial Intelligence Fundamentals:

Artificial intelligence is based on a set of foundations, as follows (Saleh, 2009):

Data representation: It is how to represent the data or problem in the computer so that it understands and can be processed and think of a suitable solution.

Research: It is about thinking by itself, so that the computer searches the options available to him and assessed according to the criteria set for him or is devised by himself and then decide the best solution to the problem.

Algorithms: We need to draw a way to use this information.

Programming language: used to represent both information and algorithms.

8.2.2 Artificial Intelligence fields:

Artificial intelligence is linked to various fields such as: computer science, mathematics, accounting, knowledge engineering, and serves many areas, including:

Information Technology: It includes physical products, software, operation of information systems, management processes, operational framework for IT control, and human skills and capabilities required to develop products and services.

Advanced manufacturing technology: through automation or flexible production system.

Representation of knowledge automatically through expert systems: These programs contain a huge amount of information owned by a human expert in a particular field of knowledge, the expert system is a program designed to carry out tasks related to human experience and decision-making.

Natural language processing: or human language processing, which is concerned with the development of programs and systems that have the ability to understand or generate human language, that is, the user of these programs to enter data naturally and computer understand and extract them.

Robot technology.

8.3 Organizational performance excellence:

There are a lot of organizations at the moment looking for excellence, but few are able to achieve the goal, as well as organizational excellence is the right situation that organizations should be, and it is not achieved by chance, but the totality of the efforts of staff and the excellence of leaders and excellence of workers, This is under the influence of an organizational culture that supports this distinction (Hawsawi, 2009). Organizational excellence is defined as the organizations' investment of critical opportunities preceded by effective strategic planning and a commitment to a common vision of goal clarity, resource adequacy and performance (Pinar & Girard, 2008), It is also a case of administrative creativity and organizational excellence, achieves unusually high levels of performance and implementation of the Organization's productive, marketing, financial and other processes. , Resulting in achievements that outperform competitors and satisfy all customers and stakeholders in the organization (Alnosour, 2010). On other hand (Dehaghan & Pourtaher, 2014) believes that the organization's progress and growth in all organizational aspects, and increase the likelihood of long-term organizational success, through a logical and rational approach that promotes change, in order to improve the level of organizational effectiveness, a comprehensive approach to improve organizational performance, (Khairy, 2014) adds that it coordinates and unites efforts, actions, and activities, including defining the authority and responsibility given to individuals for the achievement of distinctive objectives.

8.3.1 The importance of organizational performance excellence:

The importance of organizational excellence lies in:

- Organizations need ways and means to identify the obstacles they face as they arise.
- Organizations need a way to gather information, so that they can make important decisions about human resources such as who should be promoted. It is an employee who is altruistic, initiative and excellence in performance.
- The organization needs to continuously develop its members, both managers and staff, so that they can help make the organization more distinct in performance, compared with competing organizations.
- The organization needs to provide the necessary skills for the decision-maker, whether individual or group, and to reflect on the sensitivity of the role-played and its importance in achieving creativity and excellence in organizations.

8.3.2 Dimensions of organizational excellence:

The European Quality Foundation (EFQM) has developed an Excellence Management Model (EFQM), which includes several dimensions (Saada, 2013). The researcher relied on this model to develop indicators of organizational excellence. These dimensions are as follows:

1- Leadership Excellence: Excellence in leadership is one of the most important pillars on which modern management is based, where contemporary management requires superior capabilities of the leader to be able to keep abreast of developments and changes

2- Service Excellence: All categories of customers are consumers of goods and services. When a good or service is obtained that does not meet the needs of the customer groups or increases their expectations, these dealers turn to competitors to deal with them. Under the management of excellence, the use of competitors is an indication that something is wrong in the way of service delivery, these symptoms lead to an action plan to correct these errors or shortcomings, and the use of structural approach to solving problems makes it possible to move continuously towards continuous improvement.

3- Knowledge excellence: Knowledge has become the most important strategic source in building the competitive advantage of organizations, and the most important resource of the capital and labor force, it is the only resource that increases accumulation and does not decrease use, but contributes to the generation of new ideas and development at a cheaper cost, or without additional cost.

9. METHODOLOGY:

9.1 DETERMINE THE METHODOLOGY OF THE STUDY:

The study followed the descriptive-analytical method, through which the researcher tries to describe the phenomenon subject of the study, and analysis of its data, and to show the relationship between its components, and the views that are presented about them, and the processes they contain, and the effects they cause.

9.2 STUDY POPULATION:

The study population consists of all accountants and auditors working in the accounting and auditing offices during the period of the study. Which spread in all governorates of the Gaza Strip.

9.3 STUDY SAMPLE:

The researcher chose a random sample of (120) accountants and auditors in the accounting and auditing offices under study. After distributing the questionnaires according to the researcher's knowledge, (105) questionnaires (87.5%) were retrieved.

9.4 STUDY TOOL:

To achieve the objective of the study, the researcher designed a questionnaire, drawing on similar previous literature, and consulting with expertise and specialization in this field in the academic and professional field. The questionnaire was divided into two sections: Section I / this section consists of Data on staff, accounting, and auditing offices such as: job title, educational qualification, and practical experience, years of experience, number of training courses, company age. Section II / is a measure aimed at identifying the impact of the integration of artificial intelligence techniques and continuous improvement of operations on the excellence of the performance of accounting and audit offices. This section contains three axes with a total of (36) questions. The researcher used the five-point Likert scale to determine the importance of each questionnaire to measure the respondents' responses to the questionnaire.

9.5 VALIDITY AND CONSISTENCY OF THE STUDY:

The validity of the scale: The accuracy of the scale was confirmed by:

9.5.1 The validity of the arbitrators: The scale was presented to a group of arbitrators with specialization in accounting at Palestinian universities, to guide their views on the appropriateness of the scale questions for its purpose, as well as to ensure the correctness and clarity of the language formulation, and some questions were added, deleted or modified based on the arbitrators 'suggestions, The scale included in its final form (36) questions.

9.5.2 Validity of the internal consistency: The Validity of the internal consistency was confirmed by calculating Pearson correlation coefficients between the scores of each dimension and the total degree of the questionnaire, by applying the scale to a survey sample consisting of (40) individuals outside the study sample, and obtained high stability coefficients indicating Validity of the scale as shown in Table No. (1).

Table (1): Correlation coefficients and significance level for each field And the total score for the questionnaire

#	the field	Correlation coefficient	Significance level
Dimensions of organizational performance excellence		**0.976**	**0.000**
1	Leadership Excellence	0.894	0.000
2	Service Excellence	0.901	0.000
3	Knowledge Excellence	0.894	0.000
Artificial intelligence techniques		**0.900**	**0.000**
Continuous improvement of operations		**0.898**	**0.000**

9.5.3 Stability of the scale: Alpha-Cronbach stability: The researcher calculated the Alpha Cronbach parameter to measure the stability of each field of the scale and the scale questions as a whole, and obtained high stability parameters indicating the validity of the scale as shown in Table No. (2).

Table (2): Stability coefficients for scale fields

#	the field	Questions	Alpha - Cronbach
Dimensions of organizational performance excellence		**20**	**0.937**
1	Leadership Excellence	7	0.855
2	Service Excellence	7	0.859

3	Knowledge Excellence	6	0.829
Artificial intelligence techniques		**8**	**0.885**
Continuous improvement of operations		**8**	**0.878**
All fields together		**36**	**0.963**

9.6 DESCRIPTION OF SAMPLE CHARACTERISTICS AND HYPOTHESIS TEST:

Description of sample characteristics: Through the general data collected on the respondents and the company's data by the first section of the questionnaire, and using statistical iterations, the characteristics of the study sample were determined, In order to identify the characteristics of the respondents' society in terms of scientific, practical and social composition, the following table clarifies this:

Table No. (3): Description of the sample characteristics

Job Title	**General Manager**	**Financial Manager**	**Auditor**	**100%**
Duplicates	46	34	25	**105**
Qualification	**Bachelor Degree**	**Master**	**PhD**	**100%**
Duplicates	79	21	5	**105**
number of training courses	**nothing**	**(1-5) courses**	**More than 5 courses**	**100%**
Duplicates	7	83	15	**105**

Years of Experience	**Less than 5 years**	**years-5) (10**	**(15-11) years**	**more than 15 years**	**100%**
Duplicates	9	58	16	22	**105**
the company age	**Less than 5 years**	**years-5) (10**	**(15-11) years**	**more than 15 years**	**100%**
Duplicates	11	37	39	18	**105**

9.7 ANALYSIS OF STUDY QUESTIONS AND HYPOTHESIS TEST:

9.7.1 Analysis of the study questions: For analyzing the questionnaire questions, several statistical methods were used, such as: arithmetic averages, percentages, and standard deviations for each field question, as well as the total field.

A- Analysis of the first Axis questions (Continuous improvement of operations): This Axis was used to measure the degree of Continuous improvement, the following results were monitored:

Table (4): Analysis of questions in the Axis of Continuous improvement.

#	**The question**	**Arithmetic mean**	**Standard deviation**	**percentage**	**arrangement**
1	The office sets the priorities for continuous improvement in a manner **CONSISTENT** with its mission and goals.	3.71	0.72	74.3	4
2	The office adopts new ideas that push for continuous improvement and development.	3.98	0.84	79.6	1
3	The office prepares plans and improvement programs using experienced professionals.	3.42	1.00	68.4	8
4	The Office attaches great importance to the suggestions made by staff related to improving operations.	3.65	0.87	73.0	5
5	Employees are keen on continuing to provide an outstanding level of performance.	3.86	0.76	77.1	2
6	The office provides to review and monitor its activities and operations continuously.	3.83	0.87	76.6	3
7	Office management focuses on customer opinions and desires in continuous improvement of operations.	3.49	0.89	69.7	7
8	The office looks at customer complaints and finds appropriate solutions for them to raise the efficiency and quality of the services provided.	3.60	0.74	72.0	6
Continuous improvement of operations		**3.69**	**0.64**	**73.8**	

It is clear from the above table No. (4) that the arithmetic averages for all axis questions ranged between (3.42 - 3.98) with a percentage ranging between (68.4% - 79.6%) according to the five-step scale (Likert), as it is also evident by the low dispersion in the responses of the sample individuals around That axis with its various questions, where the value of standard deviations ranged between (0.72 - 1.00), which reflects the convergence of the respondents' views on that axis.

It also turns out that the level of availability of continuous improvement of operations in general at the office management came in a great way, as the arithmetic means for the field reached (3.69) and with a percentage of (73.8%).

B- Analysis of the second Axis questions (Artificial intelligence techniques): This Axis was used to measure the degree of Artificial intelligence techniques, the following results were monitored:

Table (5): Analysis of questions in the Axis of Artificial intelligence techniques.

#	**The question**	**Arithmetic mean**	**Standard deviation**	**percentage**	**arrangement**
1	The office uses advanced software to provide services to clients.	3.27	0.86	65.3	8
2	The office provides modern electronic devices to employees in order to continuously develop its business.	3.49	0.80	69.7	6
3	The office is interested in updating its systems in line with modern technology and advanced software.	3.45	1.01	69.0	7

#	The question	Arithmetic mean	Standard deviation	percentage	arrangement
4	The staff has the appropriate technical qualification to deal with modern hardware and software.	3.82	0.78	76.4	2
5	Modern technological applications in offices contribute to improving processes and quality of services.	3.71	0.95	74.3	4
6	Computerized systems are available in the office that help employees make decisions quickly and accurately.	3.67	0.78	73.3	5
7	Modern electronic applications help reduce the margin of error in operations.	3.74	0.71	74.9	3
8	The office is keen to acquire the latest accounting and auditing programs continuously.	4.10	0.89	81.9	1
Artificial intelligence techniques		**3.65**	**0.67**	**73.1**	

It is clear from the above table No. (5) that the arithmetic mean for all axis questions ranged between (3.27 - 4.10) with a percentage ranging between (65.3% - 81.9%) according to the five-step scale (Likert), as it is also evident by the low dispersion in the responses of the sample individuals around That axis, with its various questions, where the value of standard deviations ranged between (0.71 - 1.01), which reflects the convergence of the respondents' views on that axis.

It also turns out that the level of availability of artificial intelligence technologies in general at the office administration came in a great way, as the arithmetic mean for the field reached (3.65) and with a percentage of (73.1%).

C- Analyzing the questions of the first field of the third axis (Leadership Excellence): This field was used to measure the degree of excellence in leadership performance, as one of the sub-variables for the excellence of the performance of accounting offices, and the following results were monitored:

Table (6): Analysis of the questions of the field of Leadership Excellence.

#	The question	Arithmetic mean	Standard deviation	percentage	arrangement
1	The management of the office seeks to motivate its employees so that it can provide distinguished services.	3.90	0.83	78.1	2
2	Office management encourages employees to present new and distinct ideas.	3.91	0.77	78.3	1
3	The office management adopts strategic goals based on the client's needs and desires.	3.68	0.99	73.5	5
4	The office management handles the planning process for future needs.	3.70	0.77	73.9	3
5	Management encourages employees to work with team spirit and urges them to be creative and to improve continuously.	3.70	0.82	73.9	4
6	Management is keen to find effective systems to manage and implement operations.	3.41	1.11	68.2	7
7	Management is developing an effective system for measuring, reviewing and developing key performance results.	3.56	0.73	71.2	6
Leadership Excellence.		**3.69**	**0.66**	**73.9**	

It is clear from the above table No. (6) that the arithmetic mean for all field questions ranged between (3.41 - 3.91) with a percentage ranging between (68.2% - 78.3%) according to the five-step scale (Likert), as it is also evident by the low dispersion in the responses of the sample individuals around That field with its various questions, where the value of standard deviations ranged between (0.73 - 1.11), which reflects the convergence of the respondents' views on that field.

It also turns out that the level of availability of leadership performance excellence in general with the office's management came in a great way, as the field average score was (3.69) and with a percentage of (73.9%).

D- Analyzing the questions of the second field of the third axis (Service Excellence): This field was used to measure the degree of service performance excellence, as one of the sub-variables for the performance excellence of accounting offices, and the following results were monitored:

Table (7): Analysis of questions in the field of service excellence.

#	The question	Arithmetic mean	Standard deviation	percentage	arrangement
1	The procedures for providing services to clients are fast.	3.88	0.79	77.5	1
2	The procedures for providing services to clients are confidential and reliable.	3.59	0.93	71.8	3
3	The office designs and develops new services in response to customer needs.	3.56	0.78	71.2	5
4	Communication with clients is carried out continuously through technological means.	3.68	0.99	73.5	2
5	The office is obliged to provide services at the specified time and date.	3.33	1.14	66.7	6
6	The office is obliged to provide services at the specified time and date.	3.33	1.10	66.7	7
7	The office provides all necessary information to clients with accuracy, clarity and in a timely manner.	3.57	1.00	71.4	4
Service excellence		**3.56**	**0.75**	**71.3**	

It is clear from the above table No. (7) that the arithmetic mean for all field questions ranged between (3.33 - 3.88) with a percentage ranging between (66.7% - 77.5%) according to the five-step scale (Likert), as it is also evident by the low dispersion in the responses of the sample individuals around That field with its various questions, where the value of the standard deviations ranged between (0.78 - 1.14), which reflects the convergence of the respondents' views on that field.

It also turns out that the level of availability of service performance excellence in general with the office's

management came to a moderate degree, as the field average computed (3.56) and a percentage of (71.3%).

D- Analyzing the questions of the third field of the third axis (Knowledge Excellence): Using this field to measure the degree of knowledge performance excellence, as one of the sub-variables for the excellence of the performance of accounting offices, and the following results have been monitored:

Table (8): Analysis of questions in the field of Knowledge Excellence

#	The question	Arithmetic mean	Standard deviation	percentage	arrangement
1	The office continuously trains and develops employees by experts and professionals.	3.60	0.87	72.0	5
2	The office is keen to benefit from the experiences of other offices and institutions in developing performance.	3.46	0.96	69.1	6
3	The office is interested in exchanging experiences and knowledge with other offices.	3.90	0.78	78.1	1
4	The office encourages employees to continue learning and developing skills and capabilities.	3.86	0.76	77.1	2
5	The office encourages creative employees and embraces their creative ideas.	3.64	0.74	72.8	4
6	The office encourages creative employees and embraces their creative ideas.	3.68	0.86	73.5	3
Knowledge Excellence		**3.69**	**0.63**	**73.8**	

It is clear from the above table No. (8) that the arithmetic averages for all field questions ranged between (3.46 - 3.90) with a percentage ranging between (69.1% - 78.1%) according to the five-step scale (Likert), as it is also evident by the low dispersion in the responses of the sample individuals on That field, with its various questions, where the value of standard deviations ranged between (0.74 - 0.96), which reflects the convergence of the respondents' views on that field.

It also turns out that the level of availability of knowledge performance excellence in general with the office's management came to a large degree, as the field average score was (3.69) and a percentage of (73.8%).

10. HYPOTHESES TEST:

To test the validity of these hypotheses, the researcher performed a simple linear regression analysis, and the Beta coefficient was used to know the expected change in the dependent variable (the excellence of the accounting office's performance) due to the change in one unit of the independent variable (continuous improvement of processes and artificial intelligence techniques). R^2 was also used to identify the ability of the model to interpret the relationship between independent and dependent variables, in addition to using the (F) test to identify the significance of the regression model. The significance level (0.05) was relied upon to judge the significance of the effect, as the calculated significance level was compared with the value of the approved significance level, and the results of the hypothesis test were as follows:

1- The first hypothesis "There is a statistically significant effect of the integration between the application of artificial intelligence techniques and the continuous improvement of operations on the leadership excellence of accounting and auditing offices in the Gaza Strip."

Table (9): the result of the simple linear regression test for the first hypothesis

The field	Leadership excellence		
	Significance level (Sig.)	T-Test	Regression coefficient (Beta)
the integration between the application of artificial intelligence techniques and the continuous improvement of operations	0.000	16.192	0.900
The correlation coefficient (R)	**Significance level (Sig.)**	**Value of (F) test**	**Coefficient of determination (R^2)**
0.847	0.000	262.180	0.718

The results shown in Table No. 9 revealed that the value of (R) was (0.847), the value of (R^2) was (0.718), and this indicates the strength of the integration relationship between the application of artificial intelligence techniques and the continuous improvement of operations on the leadership excellence of accounting offices. The value of (F) (262.18) is statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates the significance of the model as a whole.

The value of (t) was (16.192) corresponding to the variables of continuous improvement of processes and artificial intelligence techniques, which is a statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates a statistically significant effect between the integration between the application of artificial intelligence techniques and the continuous improvement of processes on Leadership excellence for accounting offices. The value of (Beta) reached (0.900), which means that the leadership excellence of accounting offices increases by one unit as the integration between the application of artificial intelligence techniques and continuous improvement of operations increases by (0.900). Hence, the first hypothesis can be accepted, which is: "There is a statistically significant effect of the integration between the application of artificial intelligence techniques and the continuous improvement of operations on the leadership excellence of accounting and auditing offices in the Gaza Strip."

2- The second hypothesis: "There is a statistically significant effect of the integration between the application of artificial intelligence techniques and

continuous improvement of operations on the service excellence of accounting and auditing offices in the Gaza Strip".

Table (10): the result of the simple linear regression test for the second hypothesis

The field	Service excellence		
	Significance level (Sig.)	T-Test	Regression coefficient (Beta)
the integration between the application of artificial intelligence techniques and the continuous improvement of operations	0.000	15.657	1.004
The correlation coefficient (R)	Significance level (Sig.)	Value of (F) test	Coefficient of determination (R^2)
0.839	0.000	245.147	0.704

The results are shown in Table No. (10) revealed that the value of (R) was (0.839), and the value of (R^2) was (0.704), and this indicates the strength of the relationship of integration between the application of artificial intelligence techniques and the continuous improvement of operations on the service excellence of accounting offices. The value of (F) was (245.147), which is statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates the significance of the model as a whole.

The value of (t) was (15.657) corresponding to the variables of continuous improvement of processes and techniques of artificial intelligence, which is a statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates a statistically significant effect between the integration between the application of artificial intelligence techniques and the continuous improvement of processes on Service excellence for accounting offices. The value of (Beta) also reached (1.004), which means that the service excellence of accounting offices increases by one unit as the integration between the application of artificial intelligence techniques and continuous improvement of operations increases by (1.004). Hence, the second hypothesis can be accepted "There is a statistically significant effect of the integration between the application of artificial intelligence techniques and continuous improvement of operations on the service excellence of accounting and auditing offices in the Gaza Strip".

3- The third hypothesis: "There is a statistically significant effect of the integration between the application of artificial intelligence techniques and the continuous improvement of operations on the knowledge excellence of accounting and auditing offices in the Gaza Strip".

Table (11): the result of simple linear regression for the third hypothesis

The field	knowledge excellence		
	Significance level (Sig.)	T-Test	Regression coefficient (Beta)
the integration between the application of artificial intelligence techniques and the continuous improvement of operations	0.000	18.040	0.871
The correlation coefficient (R)	Significance level (Sig.)	Value of (F) test	Coefficient of determination (R^2)
0.872	0.000	325.425	0.760

The results are shown in Table No. (11) revealed that the value of (R) was (0.872), and the value of (R^2) was (0.760), and this indicates the strength of the integration relationship between the application of artificial intelligence techniques and the continuous improvement of operations on the cognitive excellence of accounting offices. The value of (F) was (325.425), which is statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates the significance of the model as a whole.

The value of (t) was (18.040) corresponding to the variables of continuous improvement of processes and techniques of artificial intelligence, which is a statistically significant value at the level of significance ($\alpha \leq 0.05$), which indicates a statistically significant effect between the integration between the application of artificial intelligence techniques and the continuous improvement of processes on Knowledge distinction of accounting offices. The value of (Beta) reached (0.871), which means that the cognitive excellence of accounting offices increases by one unit as the integration between the application of artificial intelligence techniques and continuous improvement of operations increases by (0.871). Hence, the third hypothesis can be accepted, which is: There is a statistically significant effect of the integration between the application of artificial intelligence techniques and the continuous improvement of operations on the knowledge excellence of accounting and auditing offices in the Gaza Strip.

11. CONCLUSIONS:

- The results of the statistical analysis showed that there is a significant statistically significant effect between all the techniques of continuous improvement of operations and the artificial intelligence techniques on the excellence of the performance of accounting and auditing offices (leadership, services, and knowledge).
- Computerized systems and modern technological applications are available in offices that help employees make decisions quickly and accurately, as they contribute to offices to improve operations and quality of services, in addition to reducing the margin of error in operations.

- The human component is considered the most important element in applying modern technologies in offices, and therefore it is the first element for achieving quality and excellence, and it is responsible for the process of leadership and implementation of this methodology.
- Accounting and auditing offices that apply the continuous improvement system and techniques of artificial intelligence are distinguished by the fact that their decisions are based on correct facts and data and are not just individual speculations or assumptions and expectations based on personal opinions.
- The results showed that continuous training on improving operations and the use of modern accounting techniques upset the performance excellence in all its forms, and there are skills that employees in the organization must learn, perhaps the most prominent of which is the development of the competence of individuals.
- Office management adopts new ideas that push for continuous improvement and development. The office prepares plans and improvement programs using experienced professionals.
- The offices use the techniques of continuous improvement of the processes and the techniques of artificial intelligence, the office provides all the necessary information to the clients with accuracy, clarity and in a timely manner, as it works on designing and developing new services in response to the needs of customers.

12. RECOMMENDATIONS:

- Encourage accounting offices to use modern technologies in the performance of their tasks, especially techniques for continuous improvement and artificial intelligence techniques, to develop their performance and enhance competitiveness.
- The need to continue to apply continuous improvement techniques for processes and artificial intelligence technologies, in order to develop their products, processes, and services, in a manner consistent with the needs and expectations of customers and the constantly changing external environment.
- Working to increase the number of professional courses for employees to learn about modern technologies, to keep abreast of the continuous and changing developments in the modern business environment, especially the techniques of continuous improvement of processes and artificial intelligence techniques.
- Working to increase the adoption of office management policies and procedures aimed at updating and developing artificial intelligence programs used in offices, to enable them to meet the evolving and growing needs of customers.
- The need for accounting and auditing offices to provide the necessary skills to the decision-maker, whether individual or group, and reflect on the sensitivity of the role it plays and its importance in achieving creativity and excellence in organizations.
- The necessity of office management to encourage employees to work in a team spirit, and encourage them to be creative and continuous improvement.

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