

***The Role of the External Auditor in Enhancing the Efficiency of Electronic Accounting Systems and Its Impact on the Accuracy and Reliability of Financial Reports***

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***Abstract:***

*This study aims to identify the importance of the role of the external auditor in enhancing the efficiency of electronic accounting systems and its impact on the accuracy and reliability of financial reports. To achieve the objectives of the study and test its hypotheses, a sample of external auditors and specialized university professors in Algeria were surveyed by distributing a questionnaire. The collected data were subjected to statistical analysis using SPSS statistical package software.*

*The results of the study showed that there is a consensus among the respondents that the intervention of the external auditor through the tools and methodologies he uses leads to improving the efficiency of electronic accounting systems. The study also found that improving the efficiency of electronic accounting systems leads to enhancing confidence in financial reports, by ensuring that information is prepared impartially and objectively, increasing the possibility of validation, providing controls that minimise errors, in addition, the efficiency of electronic accounting systems effectively contributes to reducing the gap between the financial statements and the external auditor's report, which enhances confidence in the output of the external auditor.*

***Keywords:*** *External auditor; electronic accounting systems; accounting data; financial reports.*

***Jel Classification Codes :*** *M42 ; M41 ; M15*

## **1. Introduction:**

In light of the rapid technological developments and digital transformation taking place in the world today, electronic accounting systems have become a key element in the modern business environment, as they play a pivotal role in organizing operations and managing the financial information of enterprises of all sizes and activities. These systems not only facilitate the processes of registration, classification and financial analysis, but also enhance transparency and efficiency in financial reporting. Despite the many benefits provided by these systems, the increasing reliance on them poses new challenges related to ensuring the accuracy and reliability of the resulting financial statements. On the one hand, technical errors and security breaches can distort financial information, and on the other, these systems may be exposed to risks of manipulation or non-compliance with approved accounting standards.

Hence, the role of the external auditor as a pivotal factor in verifying the efficiency and effectiveness of these systems and ensuring the quality of financial reporting. The external audit process is a key pillar in enhancing confidence in financial information, as it evaluates the entity's compliance with generally accepted accounting principles and standards, in addition to verifying the effectiveness of internal controls. In light of the digital transformation, the task of the external auditor is no longer limited to reviewing the financial statements only, but also extends to assessing the efficiency of the electronic accounting systems used in preparing these statements.

Accordingly, this research seeks to analyze the extent to which the external auditor contributes to enhancing the efficiency of electronic accounting systems, and its reflection on the accuracy and reliability of financial reporting. Hence, the main research problem arises as follows:

**To what extent can the external auditor contribute to enhancing the efficiency of electronic accounting systems, and what is the impact of that on the accuracy and reliability of financial reports?**

- **Sub-questions:** This key question leads us to include the following sub-questions:
  1. How does the external auditor contribute to enhancing the efficiency of electronic accounting systems?
  2. What is the impact of improving the efficiency of electronic accounting systems on the accuracy and reliability of financial reporting?
- **Research hypotheses:** To address the problem of this research, we try to test the validity of the following hypotheses:
  1. The intervention of the external auditor through the tools and methodologies that he uses leads to improving the efficiency of electronic accounting systems.
  2. Improving the efficiency of electronic accounting systems enhances confidence in financial reporting by ensuring that information is prepared impartially and objectively, increasing its verifiability, and providing controls that reduce errors

- **Importance of the study :**

The importance of this study is to highlight the interactive relationship between external audit and the efficiency of electronic accounting systems, and the impact on the quality of financial information. Electronic accounting systems have become a vital tool for managing financial data, making ensuring their efficiency critical to enhancing the credibility of financial reporting. This study also seeks to explore the role played by the external auditor in improving the efficiency of these systems, and to identify the best practices and methodologies that auditors can adopt to enhance the effectiveness of electronic accounting systems, which helps institutions to enhance financial governance and achieve compliance with accounting standards, thus improving their financial and administrative performance.

- **Previous studies:**

The following is an attempt to review previous studies that have addressed some aspect of this topic:

- ❖ **A study by (Yohannes & Archie, 2023) titled: The Role of External Auditors in Improving Cybersecurity of the Companies through Internal Control in Financial Reporting:** The purpose of this study is to examine how external auditors can enhance a company's cybersecurity through the implementation of internal controls in financial reporting. To achieve this, the study employs a mixed-method approach, targeting auditors working in public accounting firms across the Greater Jakarta region. Data was collected through questionnaires and interviews, followed by analysis using the Structural Equation Model ( SEM ) with Smart PLS version 4.8.4.

The study found that innovative technology enhances auditors' ability to analyze audit risks, but its impact on actual audit performance remains limited. The study also contributed to developing a model for understanding cybersecurity audit processes, which helps improve audit performance using advanced technology in accordance with professional standards.

- ❖ **A study by (Al-Bashtawi & Al-Husban, 2013), titled: Determinants Of Auditing Electronic Accounting Information Systems, A Case Study In The Jordanian Commercial Banks:** this research explored the major challenges auditors face when evaluating different electronic accounting systems. The study focused on IT departments, administrative offices, and accounting divisions across all 19 commercial banks in Jordan, using these units as both the research population and sample. Data was gathered from managers and employees in information security and accounting roles.

Using SPSS for quantitative analysis, the study revealed significant auditing difficulties, especially in handling uncertainty and ongoing security risks that make it harder to assess electronic accounting systems before an audit. These findings highlight the complexities auditors must address to ensure thorough and accurate evaluations of digital financial systems.

- ❖ **A study by (Yas, Hayder, & Maytham , 2023), titled: The Role And Importance Of The External Auditor In Reviewing Internal Control In Electronic Accounting**

**Systems (A Prospective Study Of The Opinions Of A Sample Of Auditors In The State Audit Bureau) :** The study aims to clarify the role and importance of the external auditor in assessing internal control within electronic accounting systems, focusing on key information technology requirements related to the control environment, risk assessment, control activities, communication and information processes, and monitoring. The research was conducted using a sample of employees from the Bureau of Financial Supervision, the body responsible for performing external audits of government entities' financial statements in 2022.

The research reached several conclusions, the most important being that the quality of the software used in computerizing accounting information systems plays a crucial role in enhancing the internal control system. This, in turn, increases the efficiency of the external auditing process and improves the quality of the reports it generates.

❖ **The current study is based on previous studies:**

The current study is consistent with previous studies in terms of studying one of the most important variables of the study, which are the concepts related to electronic accounting systems and their importance. However, they differ from them in terms of the study community and in terms of its objectives. The following are the most prominent features that distinguish this study from previous studies:

- **Focus on the environment Algeria:** Unlike previous studies that dealt with other regions such as Jordan, Indonesia, and Iraq, this study focuses on the Algerian environment, which adds an important local dimension and opens the way to understanding the challenges and opportunities facing external auditors in Algeria specifically.
- **Relationship between the efficiency of electronic accounting systems and the reliability of financial reports:** While some studies focused on the role of the external auditor in improving cybersecurity such as studying (Yohannes & Archie , 2023) or identifying audit constraints such as a study( Al-Bashtawi & Al-Husban, 2013), this study highlights the relationship between the efficiency of electronic accounting systems and their impact on the accuracy and reliability of financial reports, which provides a comprehensive vision linking external audit and the quality of financial reports.
- **Use of advanced statistical tools:** This study is based on statistical analysis using SPSS software, an approach similar to some studies such as (Yohannes & Archie , 2023) but focusing on the relationship between the efficiency of electronic systems and trust in financial reporting, an aspect that has not been addressed in depth in previous studies.
- **Reducing the gap between the financial statements and the external auditor's reports:** This study indicates that improving the efficiency of electronic accounting systems directly contributes to reducing the gap between the financial statements and the external auditor's reports, which enhances the reliability of financial auditing, a perspective that previous studies did not address with the same degree of detail.
- **Study sample:** While some previous studies focused on auditors in accounting offices or government departments, this study includes both external auditors and specialized university professors, which adds an academic and professional dimension at the same time, which enhances the credibility and depth of the analysis.

## **2. The Theoretical Framework:**

### **2.1. What are Electronic Accounting Systems**

In recent years, the world has witnessed a major transformation in the field of accounting, as electronic accounting systems have come to play a pivotal role in managing the financial affairs of individuals and companies alike. These systems have replaced traditional paper-based methods and manual calculations, providing us with more efficient, accurate and faster tools in carrying out financial operations.

#### **2.1.1. The Concept of Electronic Accounting Systems:**

The electronic accounting information system is defined as : a combination of human resources, operational procedures, and information technology working together to achieve the unit's functions (Fouda & al, 2019, p. 373). Electronic Accounting Information System (EAIS) involves organized procedures for recording accounting data using computers and analysing processes to obtain necessary documents. (Lamouri & Bennoui, 2024, p. 176)

Others define electronic accounting systems as: a structure or a unit used in executing the accounting task and regulating and completing the accounting cycle. It includes an integrated group of accounting documents, records, reports and sheets, tasks, procedures and arrangements by which financial data related to economic treatments can be collected, analysed, recorded, summarized, and interpreted. (Khattab, 2016, p. 123)

It is also defined as a set of components that are interconnected with each other on a regular basis in order to produce useful information, and to communicate this information to users in an appropriate and timely manner in order to help them perform the functions assigned to them (Ramyar, 2021, p. 545).

The concept of electronic accounting information systems can be summarized in the following points (Qaoud, 2007, p. 52):

- A computerized system, prepared by specialists, and operated using a computer.
- Provides accounting information in a timely manner, to assist in making decisions.
- Providing accounting information that serves planning, control and decision-making functions.

They can be defined as the hardware, software, remote communication methods, database administration, and other information processing methods utilized in computer-based information systems.

#### **2.1.2. Importance of Electronic Accounting Systems:**

The use of information technology is the main pillar of these systems, due to its superior ability to quickly run data and turn it into information. Hence, the importance of using modern computer systems in processing accounting data derived from accounting documents, and converting them into data that can be used in developing plans and performance programs for business and monitoring the implementation of these plans.

The use of computers in Various areas of accounting work lead to the achievement of many advantages, the most important of which are the following ( Raza, 2024) :

- **Automated Transaction Processing:** Financial transactions are recorded and processed automatically, minimizing manual input and reducing errors. This includes tasks such as payroll management, invoicing, and bank reconciliations.

- **Instant Financial Reporting:** Businesses can generate real-time financial reports, allowing for timely and well-informed decision-making.
- **Seamless Data Integration:** Accounting systems can sync with other business tools like CRM and ERP software, ensuring smooth data exchange across departments.
- **Enhanced Security and Compliance:** Advanced security measures safeguard sensitive financial information while ensuring adherence to regulatory standards.
- **Scalability:** Adapts to the growth of the business, accommodating higher transaction volumes and more intricate financial operations.
- **Remote Accessibility:** Multiple users can access the system from different locations, promoting collaboration and supporting remote work environments.
- **Cost-Effectiveness:** Reduces reliance on extensive paper records and manual labour, leading to significant cost savings compared to traditional accounting methods.

### 2.1.3. The Challenges facing electronic accounting systems:

One of the main issues with electronic accounting systems is the following (Viola Syukrina & Iskandar , 2021, p. 3) :

- **Data security:** All company data is stored on remote servers or computers, necessitating periodic backups to ensure data integrity.
- **Data loss:** Data can be deleted or lost due to technical issues with hardware or software.
- **Data theft:** Data can be vulnerable to theft by third parties, posing a threat to information security.
- **Internet dependency:** Most online accounting systems require a high-speed internet connection to send data and receive adjustments, which makes it difficult to work offline and requires special training to deal with these requirements.

Therefore, electronic accounting information systems may be exposed to many threatening risks due to a set of various factors as follows:

- - EAIS handle massive transaction volumes, making physical documentation impractical;
  - System transition errors often go undetected as modification traces become untraceable, while invisible processes prevent proper review;
  - External consultants engaged for system development may potentially exploit system access;
  - EAIS vulnerabilities can catastrophically compromise organizational records - posing greater threats to digital systems than manual ones;
  - Advancing communication technologies facilitate remote system access, increasing risks of unauthorized entry or data misuse;
  - Distributed database applications across multiple locations create potential entry points for viral infiltration.

## 2. 2. Contribution of the External Auditor in Enhancing the Efficiency and Effectiveness of Electronic Accounting Systems:

Electronic accounting systems are a key element in achieving accuracy and transparency in the management of financial operations, making them an important pillar for the success of organizations. However, to ensure their effectiveness and efficiency, the importance of the role of the external auditor as an independent entity contributes to evaluating the performance of these

systems and working to improve them. Thanks to his experience and impartiality, the external auditor can identify strengths and weaknesses, and ensure compliance with accounting and auditing standards, which enhances the credibility of financial statements and supports strategic decision-making within organizations.

#### **2.2.1. Skills to be provided in the external auditor for the evaluation of electronic accounting systems:**

The rapid developments in information technology have imposed great challenges on the auditor, including the need to modify the way he thinks and looked at the variables surrounding him, and the need to take advantage of those variables to develop his performance for the better. This has fundamentally changed the audit methodology as follows (Al-Alami, 2015, p. 43) :

- Change in the culture of auditor knowledge (scientific qualification), as it is necessary to be fully familiar with the basics of electronic data operation, information industry technology, and the full study of languages, programs, and advanced computer means.
- Reviewing the audit plan and procedures, especially since a large part of the elements of the accounting system is inside the computer such as books, documents, lists and reports.
- Reconsider the nature of evidentiary evidence, and make use of computer and operations research methods to obtain more of it alongside or as a substitute for traditional evidence.
- Reconsider the mechanism of internal control systems, and take advantage of the entrance of the dome and self-control in strengthening internal control systems for data and information.
- Reviewing the methods of preparing and presenting audit reports in line with recent developments in the thinking and methodology of senior management, and applying the principle of control by exception and addressing substantive issues.

#### **2.2.2. Responsibilities of the Auditor towards Software and Electronic Data Processing Devices:**

The Head of the Data Processing Department (Electronic Data Processing) is ultimately responsible for the selection of all computer programs used in data processing. As for the external auditor, his responsibility is to verify that there are proper procedures for approving and amending accounts, and that accounting staff follow these procedures during accounting data processing operations, in accordance with the following steps (Serdouk, 2009) :

- Ensure that all modifications in the program are proven on the program modification request form.
- Ensure that the cost of modifying the program is accurately calculated, and that the high-cost modifications have been approved by a specialized committee.
- Ensure that both the preparers of the program and the users of the computer system adopt the model specifications of the program, which is considered as a permit to prepare or modify the program.
- Compare the modifications in the program with the ongoing program and use it in processing the data in the computer program library.
- Ensure that the documentation of the program is compatible with the documentation of the preparation or modification of the program.
- Passing the job of the person in charge of the computer library, especially related to documents documenting requests for modification of the program.

The auditor's implementation of these steps or procedures serves as a preventive control measure to ensure proper oversight during the electronic processing of accounting data. This necessitates the auditor's understanding of all risks associated with e-accounting data processing, the

parties responsible for potential errors, and those involved in safeguarding these systems. Additionally, the auditor must be familiar with the system's components, including both hardware and software.

### **2.3- Impact of the Efficiency and Effectiveness of Electronic Accounting Systems on the Quality of Financial Reporting**

The digital transformation of accounting information systems has significantly impacted various business operations, including accountants' working methods, data recording processes, and the implementation of new systems and networks. This evolution necessitates full compatibility between information technology and accounting information system components. Auditors must also acquire foundational knowledge in computer systems and automated controls within the organization. (Mutawaa, 2019, p. 465). Thus, relying on the electronic operation of data in the accounting environment is a necessity to improve the quality of the information that is presented in financial reports, and to make accounting information more reliable in order to provide a better alternative to traditional accounting systems.

In light of the above, the most important effects expected from the efficiency of electronic accounting systems on the quality of the accounting information contained in the financial reports can be determined through the following characteristics (Wahba, 2023, p. 137) :

- **Transparency of information:** Enables secure, role-based access to information, increasing clarity
- **Reliability:** Automated controls validate data integrity, strengthening report credibility.
- **Error & Fraud Reduction:** System automation minimizes human errors and data manipulation risks.
- **Accuracy:** Automated verification reduces mistakes, enhancing data precision.
- **Completeness & Clarity:** Predefined system requirements ensure comprehensive and interpretable data.
- **Relevance:** Delivers tailored information to users based on permissions and needs.
- **Comparability:** Standardized inputs enable consistent cross-period and inter-report comparisons.
- **Timeliness:** Facilitates real-time reporting, reducing disclosure delays.
- **Faithful Representation:** Minimizes human bias, ensuring objective and accurate financial data.

### **3. Methods and Materials**

Through this section, we aim to explore the practical aspects of this survey study, which includes the study population and sample, as well as the statistical methods used in its preparation. This serves as a foundation for analysing the results, testing hypotheses, and interpreting them.

#### **3.1 - Study Population and Sample:**

The study population consists of the following groups: (external auditors; university professors specialising in accounting and auditing). The content and results of the field study are linked to the period during which the questionnaire forms were distributed and collected, which was during January 2025.

As for the study sample, an electronic questionnaire was widely distributed to the study population across several states of the country, and 38 valid responses were received for the study.

Regarding the structure of the questionnaire, it was divided into two sections. The first section included three questions containing general information about the study sample, while the second section was divided into two main axes, as follows:

- **Axis 1:** Pertains to the role and responsibility of the external auditor in enhancing the efficiency of electronic accounting systems.
- **Axis 2:** Pertains to the impact of improving the efficiency of electronic accounting systems on the accuracy and reliability of financial reports.

### **3.2 - Study Tool:**

To study and analyse the questionnaire, data was collected and tabulated using the Statistical Package for the Social Sciences (SPSS). Through this, a set of statistical tests was applied, including measures of central tendency (frequencies and percentages), as well as the use of the arithmetic mean and standard deviation. Additionally, the validity and internal consistency of the questionnaire items and axes were tested using Cronbach's alpha, along with a one-sample T-test.

### **3.3 - Testing the Construct Validity of the Study Axes:**

In this study, we attempted to use Cronbach's alpha coefficient to estimate the degree of homogeneity and consistency of the study axes. The results were as follows : **(Refer to Table 1)**

**From Table (1)**, we observe that the value of the stability coefficient for all axes is appropriate and meets the purposes of the study, as the value of Cronbach's alpha for the first axis was 0,805, and this value reached 0,703 for the second axis, which indicates the validity, stability and consistency of the axes, considering that the minimum adopted in accepting the alpha coefficient is 60% or more, which allows us to rely on these statistical results to achieve the objectives of the study.

## **4. Results and Discussion:**

### **4.1- Analysis of the Results of the First Section of the Questionnaire (Characteristics of the Study Sample):**

To analyse the characteristics of the study sample, a set of inquiries was included in the questionnaire form, containing general information about the sample. The extracted results revealed the following: **(Refer to Table 2 )**

The results of Table (1) showed the following:

#### **A - Academic Qualification:**

The results presented in the table above indicate that the educational level of all sample members is high, as the majority hold university degrees, except for three (03) individuals who possess other vocational qualifications. This serves as a positive indicator of the respondents' ability to effectively answer the questionnaire, thereby enhancing confidence in the accuracy of their responses.

#### **B - Occupation:**

As observed in the table above, the distribution of the study sample by occupation consists of external auditors and university professors specialising in accounting and auditing. The participation rate of external auditors stands at 42.1%, whereas university professors specialising in accounting and auditing represent 57.9%. This demonstrates that the target environment is closely aligned with the subject of the study.

### **C - Professional Experience:**

The findings indicate that 55.3% of the respondents (21 individuals) have more than 10 years of experience, while 31.6% (11 individuals) have between 5 and 10 years of experience. Meanwhile, 13.2% have less than 5 years of experience. This suggests that the majority of the sample possesses sufficient expertise, enabling them to provide reliable and insightful information.

## **4.2 - Analysis of the Results of the Second Section of the Questionnaire**

This section aims to examine the research problem by transforming respondents' qualitative opinions into a quantitative format using the five-point Likert scale. A weighted scoring system was applied to responses, ranging from 5 to 1, as follows:

Strongly Agree = 5	Agree = 4	Neutral = 3	Disagree = 2	Strongly Disagree = 1
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### **4.2.1 - Analysis of the results of the first axis** – related to the role and responsibility of the external auditor in enhancing the efficiency of electronic accounting systems.

The analysis of this axis was based on a set of statistical tests, including the arithmetic mean, standard deviation and percentages, in addition to the (T-Test) test for one sample. The results of the questionnaire showed the following: **(Refer to Table 3 )**

Table 3 presents the respondents' views on the importance of the external auditor's role in enhancing the efficiency of electronic accounting systems. The results indicate that the mean scores for all items exceeded the neutral score of 3. Additionally, the relative rate for all items was higher than the minimum acceptable rate of **60%**. Furthermore, the calculated **T-value** at a significance level of **0.000** suggests that the overall trend among respondents leans toward agreement with the items in the first dimension. This confirms the presence of a statistically significant indication of the importance of the external auditor's role in enhancing the efficiency of electronic accounting systems.

From the preceding analysis, it can be concluded that the external auditor's role has a critically significant influence on improving the efficiency of electronic accounting systems. When ranking the statements within this axis, it is evident that the respondents most strongly agreed with statement eight, which states that (the external auditor should use audit methods and techniques that align with the electronic system in place within the organisation to ensure the effectiveness of the audit process) This statement recorded a mean percentage of **91.06%** with a standard deviation of **0.645040**. It was followed by statement four, which asserts that (the external auditor should be able to identify risk points that hinder electronic processes and establish the necessary control procedures to enhance system efficiency) with a mean percentage of **86.84%**.

### **4.2.2 - Analysis of the Second Axis: The Impact of Improving the Efficiency of Electronic Accounting Systems on the Accuracy and Reliability of Financial Reports**

The analysis of this axis was conducted using the same statistical methods applied in the previous axis, and the questionnaire results were as follows: **(Refer to Table 4 )**

The results presented in **Table 4** reflect the opinions of the sample members regarding the impact of improving the efficiency of electronic accounting systems on the accuracy and reliability

of financial reports. The respondents' opinions were positively inclined towards agreement across all items, as the significance level for all items was 0.000, which is less than 0.05. Additionally, the mean scores for all items were higher than the neutral score of 3, and the relative average for all items exceeded the minimum threshold of 60%. This confirms the rejection of the null hypothesis, indicating a statistically significant impact of improving the efficiency of electronic accounting systems on the accuracy and reliability of financial reports.

When attempting to rank the items within this dimension, it was found that the respondents were most in agreement with Item 5 (Electronic accounting systems enable the timely preparation of financial reports, which supports their effectiveness and relevance). The mean percentage for this item was 86.32%, with a standard deviation of 0.525320 and a T-value of 50.644, confirming a positive consensus on this statement.

This was followed by Item 2 (Electronic accounting systems enhance the ability to verify the accuracy of accounting information, thereby supporting the reliability of reports), which achieved a mean percentage of 85.26% and a standard deviation of 0.44626, indicating strong agreement with this statement.

Next in the ranking, based on the respondents' level of agreement, was Item 9, which achieved a mean percentage of 84.74%.

## **5. Conclusion:**

This study addressed the topic of (The Role of the External Auditor in Enhancing the Efficiency of Electronic Accounting Systems and Its Impact on the Accuracy and Reliability of Financial Reports) The role of the external auditor is considered a fundamental element in improving the efficiency of electronic accounting systems, as it ensures the effectiveness and reliability of these systems, thereby enhancing the accuracy and transparency of financial data. Additionally, the external auditor contributes to identifying weaknesses in these systems and provides necessary recommendations for improvement, which positively reflects on the quality of financial reports. This vital role of the external auditor boosts the confidence of investors and stakeholders in financial reports, especially in light of rapid technological advancements and the increasing demand for high-quality financial information, underscoring the growing importance of their role in this field.

Through the theoretical framework of this research, we attempted to address the key variables of the study by exploring the nature of electronic accounting systems in terms of their concept and importance, as well as their role in improving accounting practices. We also examined the contribution of the external auditor in enhancing the efficiency and effectiveness of electronic accounting systems by outlining the skills required for the external auditor to evaluate these systems, their responsibilities regarding electronic data processing programs and hardware, and the procedures for auditing electronic accounting systems. Additionally, we discussed the impact of the efficiency and effectiveness of these systems on the quality of financial reports.

The practical aspect of the study involved surveying the opinions of a sample of external auditors and university professors specialising in accounting and auditing regarding the research problem. The study yielded a set of results, which can be summarised as follows:

### Hypotheses Testing Results:

1. **First Hypothesis:** Concerning the role of the external auditor in enhancing the efficiency of electronic accounting systems, this hypothesis was validated through the unanimous agreement of the surveyed sample in the first section of the questionnaire that the intervention of the external auditor, through the tools and methodologies they use, leads to improved efficiency of electronic accounting systems.
2. **Second Hypothesis:** Regarding the impact of improving the efficiency of electronic accounting systems on the accuracy and reliability of financial reports, this hypothesis was also validated through the results of the second section of the questionnaire, where the majority of respondents agreed that improving the efficiency of electronic accounting systems enhances confidence in financial reports by ensuring the preparation of information with neutrality and objectivity, increasing the ability to verify its accuracy, and providing control mechanisms that reduce errors.

### Study Results:

The theoretical and applied research yielded a set of results, which can be summarised as follows:

1. Electronic accounting systems are a fundamental element in achieving accuracy and transparency in managing financial operations, making them a cornerstone for the success of organisations.
2. The rapid developments in information technology have imposed significant challenges on external auditors, including the need to adapt their mindset and perspective towards surrounding variables, as well as the necessity to leverage these variables to improve their performance.
3. The computerisation of accounting information systems has influenced many activities within business organisations, such as impacting the working methods of accountants, data recording methods, and the introduction of new systems and networks.
4. Relying on electronic data processing in the accounting environment is essential for improving the quality of financial reports and making accounting information more reliable compared to traditional systems.
5. The use of auditing methods and techniques by external auditors that are compatible with the electronic accounting system applied in the organisation contributes to enhancing the effectiveness of the auditing process.
6. Electronic accounting systems enable the timely preparation of financial reports, supporting their effectiveness and relevance.
7. The efficiency of electronic accounting systems helps bridge the gap between financial statements and the external auditor's report, thereby boosting confidence in the outputs.
8. Electronic accounting systems allow for the clear, organised, and accurate presentation of information, making it easier to understand and enhancing user confidence.

### Recommendations:

Based on the results of this study, the following recommendations can be made:

1. **Enhancing Professional Qualification:** Strengthen the professional training of external auditors by providing them with continuous training in electronic accounting systems and the

latest developments in information technology to ensure their ability to evaluate these systems effectively.

2. **Developing Specialised Auditing Standards:** Create auditing standards and procedures tailored to the nature of electronic accounting systems to improve audit quality and ensure the accuracy and reliability of financial reports.
3. **Increasing the Use of Electronic Auditing Tools:** Promote the use of electronic auditing tools that rely on artificial intelligence and data analysis technologies to help external auditors detect errors and potential risks more effectively.
4. **Strengthening Collaboration:** Foster collaboration between external auditors and IT departments within organisations to ensure a deeper understanding of the mechanisms of electronic accounting systems, contributing to their continuous evaluation and development.
5. **Implementing Stricter Controls:** Enforce stricter controls on electronic accounting systems by activating regulations and legislative frameworks that ensure compliance with international accounting standards, thereby enhancing the reliability of financial information.

## 5. Appendices:

**Table No. (1) : Stability coefficient according to the Cronbach alpha equation**

N	Inspected	Number of paragraphs	Cronbach's Alpha
1	The role and responsibility of the external auditor in enhancing the efficiency of electronic accounting systems	12	0.805
2	The Impact of Improving the Efficiency of Electronic Accounting Systems on the Accuracy and Reliability of Financial Reporting	12	0.703
Axes of the questionnaire:		24	0,793

**Source:** Prepared by the researcher based on the outputs of spss v25

**Table No. (02):** Displays the distribution of responses of the study sample members according to personal data.

Variable	Variable categories	Frequency	Percentage %
<b>Academic qualification</b>	Bachelor	4	10.5
	Master	8	21.1
	Magister	2	5.3
	Doctorate or PhD	21	55.3
	Other	3	7.9
	<b>Total:</b>	<b>38</b>	<b>100</b>
<b>Occupation</b>	External Auditor	16	42.1
	University Professor Specialising in Accounting and Auditing	22	57.9
	<b>Total:</b>	<b>38</b>	<b>100</b>
<b>Professional Experience</b>	Less than 5 years	5	13.2
	5 to 10 years	12	31.6
	More than 10 years.	21	55.3
	<b>Total:</b>	<b>38</b>	<b>100</b>

**Source:** Prepared by the researcher based on the outputs of spss v25

**Table (03):** The analysis of the degree of agreement of the sample members on the following points:

Number	Paragraph	Arithmetic Mean	Standard Deviation	%	T-Value	Significance Level	Ranking of Statements by Importance
1	The auditor's understanding and awareness of the structure and framework of the electronic accounting system enhance their effectiveness when accepting the assignment and when developing the audit strategy, thereby contributing to improving the efficiency of electronic accounting systems.	4.1842	0.56258	83.68	45.848	0,000	6
2	The external auditor should be well-versed in electronic data processing techniques and how information is prepared to improve the effectiveness of the audit process.	4.2632	0.44626	85.26	58.889	0,000	4
3	The auditor should ensure that the hardware and software used are free from electronic risks that may affect the audit process.	4.0526	0.76925	80.98	32.476	0,000	11
4	The external auditor should be able to identify risk points that hinder electronic processes and establish the necessary control procedures to enhance the efficiency of the systems.	4.3421	0.62715	86.84	42.68	0,000	2
5	The external auditor should enhance their understanding of the internal control system and the working environment of electronic accounting systems, which helps them identify and assess risks effectively.	4.1842	0.60873	83.6	42.372	0,000	7
6	The external auditor should exercise the necessary professional care to detect any fraud or manipulation of the software and hardware used in electronic processes.	4.2632	0.68514	85.34	38.357	0,000	3
7	The external auditor should pursue continuous education in information technology to update their knowledge of the latest developments in accounting and auditing.	4.1316	0.70408	82.64	36.173	0,000	9
8	The external auditor should use audit methods and techniques that are compatible with the electronic system in place at the organisation to ensure the effectiveness of the audit process.	4.5526	0.64504	91.06	43.508	0,000	1
9	The external auditor can participate in the design of the organisation's accounting software to ensure its compliance with auditing standards and to improve its efficiency.	4.0526	0.61281	81.06	40.767	0,000	10

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10	The external auditor may seek the assistance of information technology experts in cases requiring specialised knowledge to ensure the collection of sufficient and appropriate evidence.	4.2368	0.85216	84.72	30.649	0,000	5
11	The external auditor should ensure the integrity of electronic software protection systems, as well as the regularity of maintenance and updates, to ensure their efficiency and quality.	4.1579	0.54655	83.16	46.896	0,000	8
12	A complex electronic accounting system requires intensive audit procedures to reduce risks and ensure data accuracy.	3.8684	0.70408	77.44	33.869	0,000	12

**Source:** Prepared by the researcher based on SPSS outputs.

**Table No. (04):** Presents the analysis of the degree of respondents' agreement on the following points:

Number	Paragraph	Arithmetic Mean	Standard Deviation	%	T-Value	Significance Level	Ranking of Statements by Importance
1	Electronic accounting systems ensure the preparation of information in a neutral and objective manner, thereby enhancing the reliability of reports.	4.1579	0.54655	83.16	46.896	0,000	5
2	Electronic accounting systems enhance the ability to verify the accuracy of accounting information, which supports the reliability of reports.	4.2632	0.44626	85.26	58.889	0,000	2
3	Electronic accounting systems provide preventive controls designed to prevent errors or irregularities.	4.1842	0.5123	83.76	50.348	0,000	4
4	Electronic accounting systems contribute to reducing uncertainties in financial data and the likelihood of ambiguity, thereby enhancing the credibility of financial reports.	4.1316	0.47483	82.62	53.638	0,000	7
5	Electronic accounting systems enable the timely preparation of financial reports, which supports their effectiveness and relevance.	4.3158	0.52532	86.32	50.644	0,000	1
6	Electronic accounting systems contribute to increasing the ability of financial reports to predict future performance.	3.8158	0.65162	76.38	36.098	0,000	10
7	The efficiency of electronic accounting systems helps reduce the gap between financial statements and the external auditor's report, thereby enhancing confidence in the outputs.	4.0263	0.67731	80.62	36.645	0,000	9

8	The quality of electronic accounting systems allows for accurate comparisons of accounting information across different financial periods and between similar entities, supporting analysis and forecasting.	4.0789	0.58732	81.66	42.812	0,000	8
9	Electronic accounting systems ensure that information is presented clearly, systematically, and accurately, making it easier to understand and increasing user confidence in it.	4.2105	0.57694	84.74	44.988	0,000	3
10	Electronic accounting systems provide timely control reports on the performance of management levels, supporting performance evaluation.	4.3158	0.52532	86.32	50.644	0,000	1
11	The quality of electronic accounting systems depends on their ability to produce accurate information that aids decision-making.	4.1316	0.41401	82.64	61.517	0,000	6
12	Electronic accounting systems are designed according to policies, procedures, and organisational structures that enhance the quality of their outputs.	4.1316	0.57756	82.64	44.098	0,000	6

**Source:** Prepared by the researcher based on SPSS outputs.

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