



# THE ROLE OF THE EXTERNAL AUDITOR WHEN REVIEWING THE INTERNAL CONTROL SYSTEMS IN ELECTRONIC ACCOUNTING SYSTEMS

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<p><b>Received:</b> 26<sup>th</sup> April 2023 <b>Accepted:</b> 26<sup>th</sup> May 2023 <b>Published:</b> 28<sup>th</sup> June 2023</p>	<p>This study aimed to explain the role of the external auditor when reviewing internal control systems in electronic accounting systems, given the importance of the effectiveness of the internal control system and its significant impact on the course of designing the external auditor's plan, and a statement of the possibility of relying on the outputs of the internal control system. The research aims to shed light on the importance of the scientific and practical qualification of the external auditor and the need to keep pace with technological developments and the importance of using technology in his work.</p> <p>The analytical descriptive approach was used to present the theoretical concepts related to the research, describe the research variables, and analyze the data and information to draw results that answer the research problem and try to generalize these results.</p> <p>The study concluded that the average rates for all axes were acceptable and within the medium and high limits, and the views of the respondents on the questionnaire were close.</p>

## Keywords:

### FIRST: INTRODUCTION:

Information technology has become increasingly complex, as exponential growth in information technology includes computers, databases, networks, telecommunications, Internet, external networks, electronic commerce, data warehouses, and integrated accounting systems software such as ERP software, automated reasoning systems, and neural network software. The application of information systems helps companies to have more, better and more appropriately available information, and to deliver it much faster than before, and this has a significant impact on information management and business process redesign (Kanellou and Spathis, 2009)

The most important thing that distinguishes the era we live in today is technological progress and the information and software revolution, which prompted economic establishments to search for systems to develop their business. As establishments seek to benefit from this progress in information technology because of its role in improving efficiency and productivity, which is necessary in the current era,

especially in the field of accounting and auditing, which prompted establishments to use it.

When talking about information systems in any economic establishment, we find the accounting information system among the most important information systems in establishments due to the importance of its outputs in decision-making and the continuity of the establishment. This is due to the financial role guaranteed by the accounting information system. Where we find that he is responsible for determining the financial position of the establishment, and accordingly, part of the performance of the establishment is affected by the type of accounting information system used by it (Nour Alddin, 2019). As a result of this technical and technological change that occurred in accounting practices and accounting systems, the auditors had to catch up with this development and exert the necessary professional care to express the appropriate objective opinion on the fairness of the financial statements under audit. Considering that one of the important procedures when auditing the client's accounts is the assessment of the internal control



system to discover the weaknesses in this system and to know the extent to which it is possible to rely on the outputs of the internal control system, the following question arose: What is the role of the external auditor in auditing the internal control system in electronic accounting systems?

#### 1 Academic and practical qualification of the auditor:

The auditor must be characterized by a set of personal and ethical characteristics that qualify him to carry out his professional duties to the fullest. It makes his work satisfied by his clients and his opinions are trustworthy. Accordingly, professional organizations have addressed this issue and issued rules of professional conduct that auditors must abide by in their relations with their clients, colleagues, and society in general when carrying out their duties.

The concept of academic and practical qualification represents the first and most important criteria for the personal formation of an auditor because it deals with how to produce a person licensed to practice the profession, it also deals with how to refine this qualification through practical training, as the strength of any profession and the respect of society for it derives from the strength of the individuals who practice it and their adherence to the rules of professional conduct. Legislations and regulations in various countries have also been keen to require an adequate amount of educational qualification and practical experience for those who practice the profession of accounting and auditing. The various vocational organizations have established conditions and rules that ensure the availability of scientific and practical competence for professionals to ensure the performance of the process with the greatest degree of efficiency and effectiveness, where scientific qualification and professional experience are considered complementary to each other. Vocational training needs continuous briefing on legislative, regulatory, and professional developments that have an impact on work. Academic qualification for all professions requires professional practice from its members for a specific period of time. The accounting and auditing profession also requires its members to spend a specific period of time for practical training in the profession before starting to practice it. Therefore, the trainee has to spend the vocational training period with one of the practitioners of the profession, and the trainer must surround the trainee with his care, supervision, and assistance during the training period, and this represents one of the responsibilities entrusted to the members of the profession. Although the majority of trainees will leave work after the training period to practice the profession on their own

account or work for other auditing firms or work in other accounting jobs.

#### 2- The professional specialization of the auditor:

The prevailing trend in the auditing profession is constantly increasing towards adopting higher levels of professional specialization as a result of the diversity of accounting standards for each specific activity separately. Noting the increase in the size of these specialized standards by professional activity, therefore, understanding the nature of audit clients' activities is an effective means of providing high-quality audits (Al-Haddad, 2008).

The auditor's specialization is defined as "the auditor performing independent audit services to clients belonging to one sector or industrial activity, ensuring the similarity of the nature of operations carried out by establishments in the same sector, and the possibility of obtaining knowledge and expertise related to the nature of those operations." (Aziz, 2006) One study also indicated that in order for the audit office to be specialized, it must audit at least 10% of the number of companies that belong to a specific industry, or 10% of the total audit fees at the level of companies in this industry. According to the study (Abdulaziz, Jaafar, 2016), there are several measures to determine whether the external auditor or the audit office specializes in auditing specific industry companies or not:

Market share measure: that is, maintaining a market share of companies operating in a specific industry.

Portfolio share measure: where the audit customer's sales are compared to total customer sales in the same industry as the customer.

#### 3- Identify industry professionals:

Where the service providers in each industry are compared in addition to the second or third largest service provider if there are clear differences between the second and third or between the third and the rest of the service providers. Internal control: defined by the International Auditing Standards Board as a mechanism designed, executed, and maintained by those charged with governance, management, and other staff. To provide reasonable assurance about the achievement of the entity's objectives, with regard to the reliability of financial reporting, the efficiency and effectiveness of operations, and compliance with applicable laws and regulations. The term "controls" refers to one or more aspects of internal control (International Auditing and Assurance Standards Board. 2017). In addition, it is a continuous evaluation of the work of the executors, which leads to early detection of any errors.



It can be said that internal control represents the organizational plan, the means of coordination, and the standards used in the unit in order to protect its assets, control and review accounting data, ensure its accuracy, the extent of its reliance, and increase production efficiency. Encouraging employees to adhere to established administrative policies and ensure that the company is progressing towards achieving its profitability and operational goals in a successful manner (Qurait, 2017).

Through the definitions of internal control, its characteristics can be extracted as follows:

- internal control is an integral part of each system used by the institution to organize and direct its operations and is not an independent system in itself.
- The Internal control is not a single event, but a group of actions and activities that occur continuously.
- The internal control is a process that is laid down, executed, monitored, and developed by individuals at all levels of the organization.
- The Internal control gives reasonable and not absolute assurance about achieving the planned objectives.
- The Internal control includes more matters than those related to the functions of the accounting system and financial reports, as it extends to include the administrative and organizational aspects, beginning with the plans and programs of the institution, and passing through the organizational structure, ending with the means and tools of administrative financial control.

It is worth noting that the objectives of internal control go beyond confidence in financial reports and preserving the assets of the unit, to adherence to laws and regulations, rationalizing the use of available resources, improving the actual practice of activities, and achieving productive efficiency.

While the accounting system does include a number of duties for the company, such as recording and filing information about operations and activities, handling transactions, and so on, and generating data that guides management, all while maintaining tight enough oversight to guarantee precise task recording and processing (Qasim, 2004), But only by enforcing internal control processes that encourage honest recording of all operations can financial information be trusted. The auditors' assessment of control risks will be reduced if the firm has more efficient electronic accounting and internal control systems.

The efficacy of electronic accounting and internal control systems can be verified by auditors when sufficient audit evidence is obtained via testing of controls, the extent of substantive procedures may be reduced. Finally, it is generally accepted that internal control systems need to assess risks, the control environment, and control activities in order to assess the quality of system performance over time (Soudani, 2013).

#### **4- Electronic accounting:**

Electronic accounting is a concept that allows all activities to be managed more efficiently, at reasonable costs, and with the flexibility of use through computer hardware, systems, and Internet facilities.

All parties (employee, manager, customer, public agency, business, supplier) are in fact users of the system and those who share updated information immediately. It takes accountants who can update this structure, by entering the financial data through the appropriate accounting qualification and participate in the work of this system in the company. Electronic bookkeeping is what is meant by "electronic accounting." A word for an organization's accounting framework in which laptops and electronic financial records play a central role. The accounting department must keep track of, analyze, monitoring, and comparing the financial position of the business enterprise. The financial position refers to the assessment of the feasibility, harmony, and financial success for the company. Ratio analysis, along with return on equity (ROE) and return on asset (ROA) calculations, is used to do this. monetary return on investment (ROI) using accounting data from the economic data department to paint a fuller picture (Muda and Janros, 2022).

in the agency's overall cash performance. These reviews can be submitted to the top of the control as one of its bases for making business enterprise choices. Thus, the use of computerized accounting systems leads to the development of general financial performance because it provides statistical techniques and equipment experience that help in performance evaluation and decision-making. Electronic accounting variable index by:

- a) A company can maintain financial reporting quality of timeliness, reliability, and accuracy due to computerization.
- b) Improved speed and accuracy in processing and analyzing data to provide timely and accurate feedback to the management on progress toward decision-making goals.



- c) The system can facilitate the processing of company transactions.
- d) Financial analysis and management are the domain of the accounting system.

Although computerized accounting systems efficiently manage economic realities, the true expense that organizations face when they transition to electronic accounting systems is the ability to generate first-hand information about the company. Managers can only make informed decisions if the data they get is accurate and trustworthy.

The challenges of applying electronic accounting are specifically about the safety of information, All data is stored on a remote server or backed up on employee laptops, and data loss is possible if either of these systems fails. Data can also be stolen by unauthorized parties.

**FIELD STUDY:**

**Section One:**

It includes the personal data of the study sample (age, job position, educational qualification, number of years of experience).

age	
job position	
educational qualification	
number of years of experience	

**Section Two:**

It contains 12 statements. The study subjects were asked to determine their response to what each statement describes according to a scaled five-level Likert scale consisting of five levels. (Strongly agree, agree, neutral, disagree, strongly disagree), and the statements were distributed to test the three hypotheses of the study according to:

- The first hypothesis is 4 statements
- The second hypothesis is 4 statements
- The third hypothesis 4 statements

The first hypothesis: There is a positive role for the scientific and practical qualification of the external auditor when auditing the internal control systems in electronic accounting systems.

	statement	Strongly agree	agree	neutral	disagree	strongly disagree
1	The academic qualification of the auditor increases the efficiency of his dealings with electronic accounting systems.					
2	The practical qualification of the auditor increases the efficiency of his dealings with electronic accounting systems.					
3	The number of years of experience of the external auditor is directly proportional to his ability to evaluate the internal control system.					
4	The technical development that occurs in the accounting profession makes it difficult for external audits to perform, which negatively affects the quality of the audit outputs.					

**The second hypothesis: There is a positive role for the specialization of the external auditor when auditing the internal control systems in the electronic accounting systems.**

statement	Strongly agree	agree	neutral	disagree	strongly disagree
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1	The external auditor's specialization in auditing accounting information systems increases the efficiency of evaluating the internal control system.					
2	The specialization of the external auditor reduces his reliance on external experts.					
3	The emergence of electronic accounting created the need for an external auditor to specialize in auditing electronic accounting systems.					
4	The specialization of the external auditor increases the quality of the audit outputs.					

**The third hypothisis: the use of electronic accounting systems enhances the quality of the internal control system.**

	<b>statement</b>	<b>Strongly agree</b>	<b>agree</b>	<b>neutral</b>	<b>disagree</b>	<b>strongly disagree</b>
1	The existence of an electronic accounting system necessitates the existence of an effective internal control system.					
2	The presence of an electronic accounting system reduces accounting errors.					
3	The existence of an electronic accounting system enables the external auditor to rely on the internal control system.					
4	The existence of an electronic accounting system requires the expansion of audit procedures by the external auditor.					



**Applied Side**

**1-Introduction:**

The researcher used quantitative and qualitative data methods to analyze the data and obtain the necessary results. The information and data collected were obtained from two sources, the primary and secondary sources. The secondary sources represented the previous research, while the primary sources were represented by a questionnaire used by the researcher and presented as an appendix at the end of the study.

research community

The community consists of the intended sample located in the Rafidain Bank, which is represented by the employees present in the bank and those present in the financial department, as well as the auditors present in the bank.

**Table No. 3-1 Number of questionnaires**

no	site	distribution	recipient
1	Al-Rafidain Bank	50	45

**2- Factor analysis**

The researcher applied this method to verify the credibility of the questionnaire, as well as the validity of the topic contained within the questionnaire, "The role of the external auditor when reviewing the internal control systems in electronic accounting systems." Where some modifications were made to the questionnaire for the purpose of clarifying the information included in it.

On the other hand, the researcher extracted the coefficients for each of the axes and for each question, for the purpose of ascertaining the validity of the questionnaire, as well as making sure that its coefficients are identical and as shown in the table, and if the coefficients exceed the value of 0.5, these questions are considered valid for the questionnaire.

**Table 3-2 Extraction coefficients (factor analysis)**

value	question	value	question	value	question
.671	1-3	.768	1-2	.780	1-1
.556	2-3	.601	2-2	.720	2-1
.851	3-3	.843	3-2	.530	3-1
.798	4-3	.503	4-2	.577	4-1
.728	5-3	.786	5-2	.683	5-1

And through the results in the previously existing table, it was found that the coefficient values all exceeded the value (0.5), and this indicates the validity of the questionnaire for the purpose of continuity in the test.

**3- The stability coefficient for the questions of the axes**

The researcher extracts the value of the coefficient for the purpose of knowing the stability of the questionnaire and knowing the accuracy of their answers, as well as knowing the consistency and consistency of the answers, and the alpha coefficient is one of the common methods used for this process for the purpose of knowing the internal consistency of the questionnaire.

**Table 3-3 Alpha coefficient values**

axis	number	Result
The first axis	5	0.870
The second axis	5	0.808
The third axis	5	0.848

From the values of the results in the table above, we conclude that all axes are credible because the values of the alpha coefficient were all significant, acceptable and high.

Analysis of the questionnaire axes:

The first axis: There is a positive role for the scientific and practical qualification of the external auditor when auditing the internal control systems in electronic accounting systems.

**Table No. 3-4 of the Results of the scientific and practical qualification of the external auditor when auditing internal control systems in electronic accounting systems**





axis	statement	average rate	deviation values	T-Test Statistic	statistical significance	The importance of the axis
The first axis	The academic qualification of the auditor increases the efficiency of his dealings with electronic accounting systems.	3.6222	1.02888	23.617	0	3
	The external auditor plays an important role in protecting companies from fraud and manipulation in electronic accounting systems	3.6444	1.04785	23.331	0	2
	The number of years of experience of the external auditor is directly proportional to his ability to evaluate the internal control system.	3.4222	1.07638	21.328	0	5
	The technical development that occurs in the accounting profession makes it difficult for the external audit to perform, which negatively affects the quality of the audit outputs.	<b>3.8444</b>	<b>1.12726</b>	<b>22.878</b>	<b>0</b>	<b>1</b>
	The need for technical and software knowledge to be available to the external auditor to audit electronic accounting systems	<b>3.5556</b>	<b>1.19764</b>	<b>19.915</b>	<b>0</b>	<b>4</b>
Total		<b>3.6178</b>	<b>.89017</b>			<b>high</b>

Source: From the researcher's work in the spss program

**The second axis: There is a positive role for the specialization of the external auditor when auditing the internal control systems in the electronic accounting systems.**

**Table No. 3-5 results related to the specialization of the external auditor when auditing internal control systems in electronic accounting systems**

axis	statement	average rate	deviation values	T-Test Statistic	statistical significance	The importance of the axis
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<b>The second axis</b>	The external auditor's specialization in auditing accounting information systems increases the efficiency of evaluating the internal control system.	3.3778	1.05073	21.565	0	3
	The specialization of the external auditor reduces his reliance on external experts.	3.3556	.93312	24.123	0	4
	The emergence of electronic accounting created the need for an external auditor to specialize in auditing electronic accounting systems.	3.3778	1.02888	22.023	0	3
	The specialization of the external auditor increases the quality of the audit outputs.	3.6222	1.24843	19.463	0	2
	The emergence of the need for auditor specialization in evaluating internal control systems by evaluating the efficiency of the applicable electronic accounting system	3.7111	1.16037	21.454	0	1
		3.4889	0.8197			<b>average</b>

Source: From the researcher's work in the spss program

The third axis: **use of electronic accounting systems enhances the quality of the internal control system.**

Table No. 3-6 The use of electronic accounting systems enhances the quality of the internal control system

<b>axis</b>	<b>statement</b>	<b>average rate</b>	<b>deviation values</b>	<b>T-Test Statistic</b>	<b>statistical significance</b>	<b>The importance of the axis</b>
<b>The third axis</b>	The existence of an electronic accounting system necessitates the existence of an effective internal control system.	3.5778	.94120	25.500	0	2
	The existence of an electronic accounting system reduces accounting errors.	3.5778	.98832	24.284	0	2
	The existence of an electronic accounting system enables the external auditor to rely on the internal control system.	3.4000	.96295	23.685	0	4
	The existence of an electronic accounting system requires the expansion of audit procedures by the external auditor.	3.4667	1.07872	21.558	0	3
	The existence of an electronic accounting system eliminates the need for the internal audit	3.6667	1.24316	19.786	0	1





function					
	<b>3.5378</b>	<b>0.8266</b>			<b>high</b>

Source: From the researcher's work in the spss program  
 From the above results, it was found that:

We notice from the tables above that the averages (rates) of the questions were all within the accepted limit within the five-point criterion of the Likert criterion, as that average amounted to more than (3), and this means that the limits of the values were all of medium and high levels.

The dispersion values within the tables above were mostly close to each other, and this indicates that the points of view of the studied and randomly selected sample are close.

The calculated value of the t-test in Table No. (3-4) was greater than the tabular value. This can be seen through the significant value equal to (0.000), which is less than 0.05, and this means rejecting the null hypothesis and accepting the alternative hypothesis. This means that there is a positive role for the scientific and practical qualification of the external auditor when auditing the internal control systems in electronic accounting systems.

The calculated value of the t-test in Table No. (3-5) was greater than the tabular value. This can be seen through the significant value equal to (0.000), which is less than 0.05. This means rejecting the null hypothesis and accepting the alternative hypothesis, and this means that there is a positive role for the specialization of the external auditor when auditing internal control systems in electronic accounting systems.

The calculated value of the t-test in Table No. (3-6) was greater than the tabular value. This can be seen through the significant value equal to (0.000), which is less than 0.05. This means rejecting the null hypothesis and accepting the alternative hypothesis, and this means that the use of electronic accounting systems enhances the quality of the internal control system.

#### CONCLUSIONS:

- average rates for all axes were acceptable and within the medium and high limits.
- The views of the respondents were similar.
- The presence of a positive role for qualification, scientific and practical, and for the specialization of the external auditor when auditing internal control systems in electronic accounting systems.

- The use of electronic accounting systems enhances the quality of the internal control system.

#### RECOMMENDATIONS:

- Developing the scientific and practical competencies of the external auditor through training and continuing education.
- Interest in graphic analysis techniques and other tools that help the external auditor to improve his role in auditing internal control systems in electronic accounting systems.
- Provide adequate support and resources to the external auditor to carry out his mission effectively.
- Commitment to providing a strong and effective internal control system to facilitate the work of the external auditor.
- Developing strong cooperative relationships between the entities responsible for executing the electronic accounting system and the external auditor to improve the quality of work and achieve common goals.
- Maintain high levels of transparency and accountability throughout the execution of the electronic accounting system.
- Regularly update the electronic accounting system and ensure that it complies with legal and regulatory requirements.
- Provide adequate support to execute the external auditor's recommendations effectively and in a timely manner.

Documenting all procedures related to auditing internal control systems in electronic accounting systems, and ensuring the availability of documents and evidence necessary to support the decisions taken.

Conduct an assessment of the role of the external auditor and improve the process based on the results of the assessment and ongoing feedback.

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