The impact of Electronic Accounting Information Systems on Accounting Information Quality with the moderating role of Internal Control: from the perspective of accountants and experts in the Kurdistan Region

Assist. Lect. Hadi Muhammed Ahmed
Department of Accounting, College of Business, Charmo University, Sulaimani, Kurdistan Region, Iraq
Hadi.muhammed@chu.edu.iq

Assist. Lect. Shakhawan Saeed Sangawi
Department of Accounting, College of Business, Charmo University, Sulaimani, Kurdistan Region, Iraq
shaxawan.saed@chu.edu.iq

Lect. Barham Khalid Hassan
Department of Accounting, College of Business, Charmo University, Sulaimani, Kurdistan Region, Iraq
Barham.Khalid@chu.edu.iq

Received:25/6/2024 Accepted:11/9/2024 Published:31/3/2025

Abstract:

This study aims to determine the impact of electronic accounting information systems on accounting information quality with the moderating role of internal control from the perspective of accountants and accounting professionals in the Kurdistan Region. The study population consists of university accounting professors and corporate accounting employees. To achieve the objective of the study, the researchers have redesigned a questionnaire based on previous studies. Within the four provinces, 240 questionnaires were distributed equally, of which 216 were correctly returned. Also, for data analysis, explanatory integration models and corresponding regressions between all three variables were used to analyze the research hypothesis using EViews 12. The main results show that information technology infrastructure has a significant positive effect on accounting information quality. Procedures and guidelines have a significant positive impact on the quality of accounting information. At the same time, reliability has a significant positive effect on accounting information quality. This is even though accounting systems have the same significant impact on the quality of accounting information. However, adding internal audit as a moderating variable significantly increased the relationship between the electronic accounting information system and the quality of accounting information. This study highlights the gap that currently exists in companies in the Kurdistan Region. This study will fill this gap through the implementation of an electronic accounting information system, providing this information to the relevant parties. As a result of these findings, the researchers made several recommendations, including training staff on electronic accounting systems, developing curricula in higher education institutions, and issuing laws and guidelines on maintaining internal audits.

Keywords: Accounting Information Quality, Internal Audit, Electronic Accounting Information System, Information Technology, Accounting Systems.

1. Introduction:

Thanks to the constant technological advancements that have taken place in all walks of life over the years, there has been no area of life that has not been subject to this development. Therefore, accountants used this technology to develop the field to create different tools and methods for accounting and the presentation of accounting information (Najafi et al., 2022, P63). This development caused fierce competition among institutions to reach the top of their goal planned by the institution's management. By taking advantage of the opportunities that arise (Abed, 2019, P205). Therefore, information technology can be used as a tool to improve accounting information systems. To assist the managers and control the financial and economic aspects of the company. To remove the risks (Alawaqleh, 2020, P205). This is why institutions are trying to take full advantage of electronic accounting information systems. Because it speeds up accounting

operations quickly with high quality, which is a good incentive for users of accounting information to trust the information (Almasria *et al.*, 2021). Because the elements that make up an accounting information system are a good help in determining the extent to which a project or company has succeeded or failed, based on this information, managers and users of that information make their own decisions. This is one of the main incentives for using electronic accounting information systems (Ta & Nguyen, 2020, P7). Because the accounting information system is responsible for collecting, recording, and summarizing information, it also prepares financial reports following accounting standards and procedures (Sari & Purwanegara, 2016, P188). Therefore, the electronic accounting information system is considered one of the supported information systems used by the departments for the planning, organization, control, and decision-making processes to make the best use of the resources currently available (Al-Waeli et al., 2020, P246).

Internal auditing is one of the key aspects of the company, to supervise the operations and check the results obtained. How well it fits into the planned plan. It should also show how well the company has complied with the procedures and guidelines (Hadiwijaya et al., 2020, P3). Therefore, each of the functions of maintaining the significance and efficiency of financial reports, ensuring their accuracy, and encouraging compliance with applicable laws and regulations are among the primary functions of the internal auditor (Mayadunnege Senaka Anuruddha & Mahanamahewa, 2021, P157). Therefore, internal audit is considered a tool to improve the accounting information system as well as how it is practiced (Al-Taee & Flayyih, 2023, P95). Because its internal audit system can prevent deliberate or unintentional manipulation of numbers when preparing financial lists and presenting financial reports (Monteiro et al., 2021, P3). An efficient approach to supervision, management, and risk prevention is enterprise internal control. The objective of corporate internal control, as defined by the Committee of Sponsoring Organizations (COSO), is to ensure the accuracy of financial reporting, operational efficacy and efficiency, and compliance with applicable laws and regulations. According to China's new accounting standards and laws, enterprise financial information must be presented for accounting information to be considered high-quality (Luo, 2017).Quality is one of the characteristics that often contributes to financial reporting to assess the quality of information resulting from the use of alternative accounting methods. So, the concepts of information quality are defined by the useful properties of accounting information and its basic rules, which are required to evaluate the quality of accounting information. These concepts help accountants establish accounting standards, and they also help in the preparation of financial statements by evaluating accounting information resulting from the use of accounting using certain alternative methods (Zenad et al., 2019, P6). The quality of a company's accounting information is defined as creating value for the results of the work done by the company. Within a fiscal year, the implementation of an electronic accounting information system. The quality of accounting information provides assurance and validity to the procedures and rules adopted by the company in its electronic accounting information system when preparing financial statements (Phornlaphatrachakorn, 2020, P160). Because the information presented is in the context of financial reports, it is the company's data processing results that should be useful to users. Because it becomes the basis of the decision-making process by the users (Algrar & Ahmed, 2019, P4). Hence, users need high-quality information, as only information with informative features will be useful to them. Since the quality of that information is directly related to the decision-type policy, depending on the quality of the information, it helps to complete tasks more accurately and effectively (Fitriati et al., 2020, P44).

The results obtained in past studies show that electronic accounting information systems affect the quality of accounting information, according to the study by (Fitriati et al., 2020, P44), (Sunarta and Astuti, 2023, P5). This is even though, according to the study (Essa mahmoud al tarawneh et

al., 2023, P1686), electronic accounting information systems have a significant or negligible effect on the quality of accounting information. Internal control significantly affects the quality of accounting information, according to (Majid et al., 2020, P1), (Luo, 2017, P16) and (Afia et al., 2020, P148) research. At the same time, the results of the study (Anuruddha and Mahanamahewa, 2021, P158) show a significant effect of the accounting information system and internal control on the quality of accounting information. However, according to the study (Syahputra, 2022, P1713), internal control has no significant effect on the quality of accounting information.

1.1 The study's problem

Due to the increase in the concealment of financial data and playing with the results, the failure to submit these data in a timely manner has increased in recent years among managers and supervisors of institutions. This system is considered one of the best that can provide high-quality accounting information at any level as desired by users of financial lists. appropriately and at the right time to assist users in the decision-making process. This is in addition to other aspects of the goal. In contrast, we have a manual accounting information system that also provides financial statements at the end of the financial period. To some extent, this manual system cannot fully meet the needs of users of financial lists, which affects the decision-making process. These accounting data and information relate to the operations of the company in a financial year. To solve this problem and prevent fraud, the researchers introduced accounting information systems as an alternative that plays a significant role in handling accounting data and submitting it on time. In order to create an impact on decision-making, planning, and investment processes in institutions.

1.2 The importance of the study

The importance of this study stems from the main reason, which is to identify the strengths of the quality of accounting information provided by companies to users of financial lists and to address the weaknesses. namely, the use of information technology factors such as the creation of electronic accounting information systems. Another significance of this study results from the use of electronic accounting information systems and the extent to which they can answer all users' queries promptly compared to manual systems. lower material and moral costs in terms of management, which makes it easier to troubleshoot and control.

1.3 The study's objectives

This study aims to determine the impact of electronic accounting information systems (i.e., information technology infrastructure, procedures and guidelines, reliability, and accounting systems) on accounting information quality from the perspective of accountants and experts in the Kurdistan Region. To investigate the role of internal control as a moderating variable and its effects on the relationship between electronic accounting information systems (i.e., information technology infrastructure, procedures and guidelines, reliability, and accounting systems) and the quality of accounting information from the perspective of accountants and experts.

To describe how the objectives of the study were achieved, it is divided into several sections to facilitate the determination of the objective of the study. The introduction to the paper is given in Sect. The second section also includes reviews of the relevant literature. This is while the methodology followed in the study is explained in Section Three. The fourth section is devoted to the findings obtained in the study. Section 5 is where the last section shows the results.

2 Literature Review:

According to his research Algrar and Ahmed (2019), aimed to determine the impact of accounting information system quality on accounting information quality. Asia Cell Telecommunications Company, which comprised 40 questionnaires divided into 20 questions after distributing them to the accounting employees working in this telecommunications company, received all the questionnaires. For the questionnaire analysis, simple linear tests were used to test

the hypotheses. The results show that the quality of the accounting information system has a significant impact on the quality of accounting information in the Iraqi stock market.

According to the study by Al Tarawneh et al (2023), which discusses the impact of the efficiency of the EAIS electronic accounting information system on the quality of accounting information, In Jordanian manufacturing factories, the survey consisted of 168 survey forms distributed to the employees of these factories. "Quantitative analytical testing consisting of validity testing, reliability testing, traditional hypothesis testing, and hypothesis testing are used during the data analysis process." The results show that e-accounting information system efficiency has a weakly significant effect on accounting information quality.

According to the study Syahputra (2022), which works on analyzing the impact of internal control and accounting information systems on the quality of information at PT. Pandu Siwo Sentosa (Pandu Logistics), The sampling technique used in this study is arrow sampling. Using descriptive quantitative research methods. The data included the opinions of 66 users of the accounting information system. which was done with Smart PLS 3.0 analysis of the data. The results show that internal control over information quality does not have a significant effect. While accounting information systems have a significant impact on information quality.

According to the study Saeed & Hama (2023), investigated the impact of the use of computerized accounting information systems on the quality of accounting information in the construction sector in Krg. A governmental sampling questionnaire in the form of a five-point Likert scale was used to collect data. where the sample size is 140 questionnaires. The data were analyzed using SPSS statistical software. The results indicate that computerized accounting information systems have a significant impact on the quality of accounting information in construction companies in the Kurdistan Region.

According to the study Ali and Oudat (2020), which deals with the relationship between the quality of accounting information and the quality of the accounting information system (AIS) on the performance of Jordanian commercial and Islamic banks, 41.1% of the questionnaires were returned correctly. A partial least squares model (Smart PLS 3) was used to analyze the data and demonstrate the feasibility of the hypotheses. The results show that information quality affects and enhances organizational performance; at the same time, data and information quality have an insignificant negative effect on bank performance. Hence, this paper suggests that commercial and Islamic banks must implement high-quality AIS.

Financial reports are defined as consisting of a set of financial information about the entity for a specified financial period, made available to stakeholders Mayadunnege Senaka Anuruddha & Mahanamahewa (2021). Therefore, this data and information is one of the targets that, in addition to being targeted by external stakeholders, is also targeted by hackers to access the data and information to hack and use them for private purposes (AHMAD, 2018, P71). Therefore, the data and information provided to the stakeholders in the context of financial reports should be carefully maintained and the needs of the users should be met to make the decisions that they make promptly and correctly (Sunarta & Astuti, 2023, P4). Therefore, the quality of the accounting information must be at a high level for the decisions made by management and stakeholders to be made at the best level. Considering the factors that influence decisions, if these factors are taken into account, the management and stakeholders will face the least risk of making the wrong decisions (Syahputra, 2022, P1713).

2.1 Electronic Accounting Systems

Electronic accounting information systems have become increasingly important in the management and direction of public and private sector institutions due to the rapid development of technology. This in itself has created some complications, especially for the accountant since accounting people

must have technology management skills and experience (Abed, 2019, P207). So, using an appropriate technology system is not only beneficial for the company. Instead, it offers the best assistance to all its users. It also makes it easier to comply with government rules and regulations, which will boost national income (Kareen and Saeed, 2023, P2899). Therefore, accountants should be trained on the programs that are currently used in private sector companies, such as AL Ameen software, Golden Asseal Accounting software, Fresh Books software, Quick Books software, Account Edge Pro software, and Alrasheed software Accounting, which affect the method and nature of data entry and provide information to users at a higher level. However, the accounting information system complements the management system (Al-Jaraideh et al., 2022, P352). Because these programs used in accounting can provide data and information quickly, accurately, efficiently, and effectively, flexibility, reliability, comprehensiveness, appropriateness, data and information security, and self-monitoring, from this data to the users, Therefore, these programs should be included in the curriculum to familiarize students with these types of accounting programs (Abed, 2019, P207)**.**

2.2 Electronic Accounting Information Systems (E-AIS)

Electronic accounting information systems perform the same tasks of storing and receiving financial information and then processing that information and analyzing the data. In the past, the same tasks were done on paper by accountants, but electronic programs facilitate the work of accountants (Qatawneh &, Bader, 2021, P5). Therefore, the system used to provide data and information can prevent hacking attacks and is considered acceptable to users (Al Tarawneh et al., 2023, P1686). Because the data and information used by users must be appropriate, based on that data and information, these parties make decisions. Therefore, institutions that have a strong accounting system. This system plays an important role in the development of the institution because it protects all the assets owned by the institution. And showing them in the financial lists. and showing the profit and loss ratio of the company during the financial period (Al-Jaraideh & Al-Olimat, 2022, P352). This helps managers reduce unnecessary expenses for the institution that are forecasted in the budget. In return, they raise the level of well-being in the company (Emad Harash, 2015, P3), (Sangawi et al., 2023, P723). This progress led to the development of traditional accounting practices. And computers should be used to enter large amounts of data and information. This led to the redesign of a system specific to this area. This has led to the introduction of a new science known as electronic accounting information systems (Alrabei, 2021, P3). The use of electronic accounting information systems by institutions has an important impact, provided they use these systems successfully. Because it affects the overall financial and management systems in companies, which will increase the level of productivity, at the same time, the implementation of an electronic accounting information system can also affect the increase in state revenue (Alfartoosi et al., 2021, P9). The success of decisions and the impact of decisions in the organization depend on the accounting system being followed successfully in the organization and providing data, information, and financial reports to management to become the basis for appropriate decision-making in the organization (Algrar & Ahmed, 2019, P4). Therefore, the system implemented will provide strong support for management decisions in the institution (Hadiwijaya et al., 2020, P3). That is why a more robust electronic accounting information system should be followed in the institution. The value of the institution will be stronger (Majid et al., 2020, P6). That is, as a result of the increase in the ratio of the size of the amount of money refunded to the cost that has occurred (Ahmad et al., 2024, P534). Therefore, an e-accounting information system is measured by the extent to which it has achieved its goal. By comparing the achieved goal against the planned goal (Mohammad Al-Ibbini, 2017, P163).

2.3 Internal Audit (IA)

internal audit is one of the methods used by corporate authorities to achieve the goals set for the company. Therefore, internal audit in accounting is considered one of the aspects that have a major impact on control and reporting. Therefore, we see that the company adopts several methods and plans to ensure the accuracy of all financial transactions that occur in the institution (Alfartoosi et al., 2021, P13). Therefore, internal audit performance is one of the aspects that affect the growth and success of the company (Taufik, 2022, P33). Internal auditing is one of the factors used by the manager to ensure the proper implementation of the financial policies planned in the organization. Internal audits are therefore considered to protect the assets owned by the company from misuse. Therefore, the internal audit system should be continuously evaluated by the management to identify the strengths and weaknesses of the process. In time, weaknesses should be addressed (Alrabei, 2021, P2). Internal auditing in the company consists of a series of activities that are carried out to create complete assurance and confidence in achieving its objectives. Therefore, internal audit works on a preventive basis to eliminate errors that occur as a result of work (Maharan & Damayanthi, 2022, P233). It played an important role in auditing due to the rapid progress made in all business areas. Because, based on the auditors' work, the relevant parties can make decisions. Therefore, the information verified by the auditor must be credible. That is why all stakeholders use this data and information (Ababneh &, Alrabei, 2021, P3367). therefore, an appropriate environment must be provided for the internal audit process. To conduct the internal audit process at the highest level, because it is a source of progress and development for the company and a reason for the company to adapt to the rapid development taking place in the world (Min, 2021).

2.4 Accounting Information Quality (AIQ)

Accounting information published in the framework of financial statements must comply with international standards because, for users, the most important point in accounting information is the availability of high quality, which includes adequacy, reliability, and quantification (Nguyen et al., 2023, P7). According to the requirements published by the IASB in No. 8 of September 2010, the quality characteristics of accounting information are divided into two groups. The first group is the main characteristic of accounting information quality, which consists of relevance, faithful representation, completeness, and impartiality. Meanwhile, group 2: sub-characteristics of accountant information quality are (comprehensibility, verifiability, timeliness, and comparability)(Ababneh & Alrabei, 2021, P3367). Therefore, the relevant information provided must determine the extent to which it can reduce uncertainty and enhance the level of decision-making ability (Salih et al., 2023, P317). Therefore, it is emphasized that the information should be free from errors, provided that important aspects of the information are not lost. It must be available at the right time so that it can be used clearly and easily by users (Fitriati et al., 2020, P44). Therefore, the data and information published need to be defined within a form. which is meaningful and useful to use because it familiarizes them with what happened in the past and what action should be taken in the future. (Afiah et al., 2020, P148). Therefore, it should emphasize the quality of accounting information provided to the relevant parties. This information influences the direction of decisions (Abdelraheem *et al.*, 2021).

2.5 The Relationship between the E-AIS and the Accounting Information Quality

Accounting information systems are one of the systems that help managers easily understand their tasks and increase data confidence (Al-Waeli, Hanoon, Ageeb, et al., 2020, P246). This system collects, processes, and analyzes information for financial reports. To provide it to users, users also have a criterion for assessing the quality of accounting information determined by providing greater assurance of adequacy, timeliness, accuracy, and completeness (Abdelraheem et al., 2021, P192).

That is why many researchers have argued that the failure or success of the firm in achieving its objectives depends on the quality of the accounting information provided (ALDEGIS, 2018, P72). Therefore, users have a great need for high-quality information because the quality of the information directly affects the type of decisions needed to achieve the organization's goals. Hence, high-quality information can help execute tasks more efficiently and effectively (Fitriati et al., 2020, P44). Electronic accounting information systems will quickly contribute to the efficiency and effectiveness of data and financial reports in terms of time, specificity, and appropriateness of data. Since data with these characteristics plays an important role in the decision-making process in institutions (Ali and Oudat, 2020, P13).

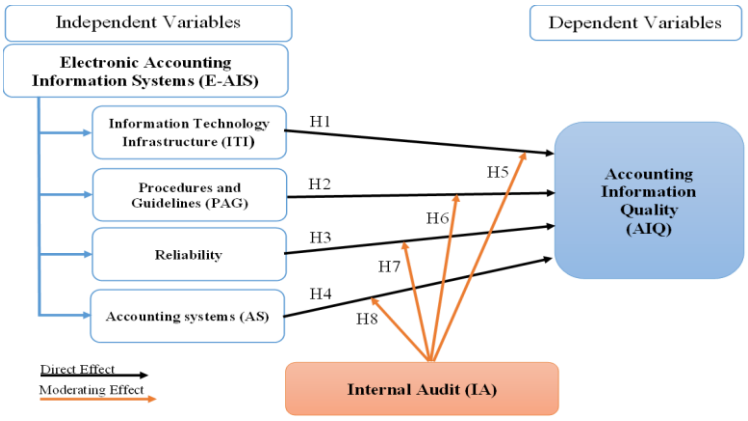
2.6 The Relationship between the Internal Control and the Accounting Information Quality

Internal control plays an effective role in enhancing the quality of information provided by accountants to stakeholders (Al-Waeli, Hanoon, Ageeb, et al., 2020). Internal control plays an effective role in enhancing the quality of information provided by accountants to stakeholders. As a result of continuous work in companies, one of the reasons for completed internal control is to continuously update changes and improve the quality of accounting information, because high accounting information quality cannot be achieved without high internal control (Qatawneh and Bader, 2020). Therefore, solid internal controls with electronic accounting information systems protect the company's assets from misuse because they identify weaknesses in operations while suggesting solutions to correct these weaknesses. This in itself will improve the quality of accounting information (Alrabei and ABSTRACT, 2021).

2.7 Hypotheses Development:

H1: Information technology infrastructure significantly impacts the quality of accounting information.
H2: Procedures and Guidelines significantly impact the quality of accounting information.
H3: Reliability has a significant impact on the quality of accounting information.
H4: Accounting systems significantly impact the quality of accounting information.
H5: Internal audit moderates the effect of information technology infrastructure on accounting information quality.
H6: Internal audit moderates the effect of Procedures and Guidelines on accounting information quality.
H7: Internal audit moderates the effect of Reliability on accounting information quality.
H8: Internal audit moderates the effect of accounting systems on accounting information quality.

Figure 1: Conceptual Model



In this paper, the conceptual model with some modifications previously developed by Layen (Almaliki *et al.*, 2019) is used. Hence, in this model, it is shown that internal audit acts as a

mediating variable, showing the difference that arises in the impact of electronic accounting information systems on accounting information quality. So, it is built within the conceptual model of the assumptions of electronic accounting information systems, which consist of information technology infrastructure, procedures and guidelines, reliability, and accounting systems, that the extent to which electronic accounting information systems affect the dependent variable accounting information quality. At the same time, what would be the effect of an internal audit as a moderator variable on the outcome of the effects listed above? Hence, the conceptual model shows that the hypotheses proposed that comprise the aspects of electronic accounting information systems should be related to internal audit and accounting information quality.

3 Methodology of Research:

3.1 Research design

Using quantitative techniques, the researchers used a questionnaire that was distributed to managers, accountants, and accounting professionals in different sectors in all four provinces of the Kurdistan Region. The number of questionnaires distributed was a targeted sample of sixty questionnaires for each province; the total number of questionnaires distributed was 240. Only 216 questionnaires were returned appropriately, which is 90% of the total questionnaires distributed. In 10% of the questionnaires, the questionnaires were not included in the program for analysis due to inconsistencies in the type of responses.

3.2 Data collection

To elicit answers about the relationship between electronic accounting information systems and internal audits of accounting information quality, a questionnaire was prepared. It was addressed to university accounting professors and accounting employees in companies. On the other hand, these two aspects complement each other in the labor market, to practically adapt the curriculum to the accounting labor market. Because teachers impart accounting information to students, students put this information into practice. Therefore, the information provided by accountants affects the economic sector and stakeholders.

The questions for each of the eight hypotheses of the study were divided into more than five questions, using a five-point Likert scale ranging from “strongly agree” to “strongly disagree." The questions were redesigned to facilitate participants easily expressing their positions on the research questions that were redesigned to measure and determine the answers to the research questions.

3.3 Identification of Variables

The study aims to develop a valid model that will help identify the impact of electronic accounting information systems and internal audits on the quality of accounting information in different sectors of the Kurdistan Region. Electronic accounting information systems are identified as a key component in the study that companies use to obtain high-quality accounting information, while the presence of a strong internal audit will increase the impact of electronic accounting information systems on the quality of accounting information. Therefore, electronic accounting information systems are the main topic of the study, as are the accompanying explanatory integration and regression models among all three variables. This is part of the research equation, where the first equation shows the impact of electronic accounting information systems on the quality of accounting information. At the same time, the second equation shows the impact of electronic accounting information systems and internal audits on the quality of accounting information. Does it increase the relative effect or decrease it?

$$\mathbf{AIS} = \boldsymbol{\beta 0} + \boldsymbol{\beta 1}\mathbf{IT\,I} + \boldsymbol{\beta 2}\mathbf{PAG} + \boldsymbol{\beta 3}\mathbf{R} + \boldsymbol{\beta 4}\mathbf{AS} + \mathbf{e} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (\mathbf{1})$$

$$\mathbf{AIS} = \boldsymbol{\beta 0} + \boldsymbol{\beta 5}(\mathbf{IT\,I} * \mathbf{IA}) + \boldsymbol{\beta 6}(\mathbf{PAG} * \mathbf{IA}) + \boldsymbol{\beta 7}(\mathbf{R} * \mathbf{IA}) + \boldsymbol{\beta 8}(\mathbf{AS} * \mathbf{IA}) + \mathbf{e} \ldots (\mathbf{2})$$

Description:
AIQ: Accounting Information Quality (Dependent variables).
E-AIS: Electronic Accounting Information Systems (Independent variables).
ITI: Information Technology Infrastructure (Independent variables).
PAG: Procedures and Guidelines (Independent variables).
R: Reliability (Independent variables).
AS: Accounting Systems (Independent variables).
IA: Internal Audit (Independent variables).
a: Constants
β1, β2 …. β8: Partial Coefficient Regression
e: Error

4 Results Discussion:

4.1 Background Information for Respondents

Table 1 clarifies that more than three-fourths of the respondents are male, 81.5. While 18.5 percent of the respondents were female.

Table 1: The gender of respondents is analyzed

		Frequency	*Percent*	*Cumulative Percent*
Valid	***Male***	*176*	*81.5*	*81.5*
	Female	*40*	*18.5*	*100.0*
	Total	***216***	***100.0***	

Source: Created by the Researchers

Table 2 shows the qualifications of those who participated in answering the questionnaire. Of the holders of bachelor's degrees who responded to the questionnaire only 22.2 total respondents. This is while 14.8 respondents hold a diploma. At the same time, more than half of the respondents hold a master's degree (55.6 percent). In contrast, only 7.4 percent of these people hold doctoral degrees. Therefore Table 2 shows how the qualifications of the participants are distributed.

Table 2: Features of Respondents Based on Education

		Frequency	*Percent*	*Cumulative Percent*
Valid	***BSc***	*48*	*22.2*	*22.2*
	Diploma	*32*	*14.8*	*37.0*
	Master	*120*	*55.6*	*92.6*
	PhD	*16*	*7.4*	*100.0*
	Total	***216***	***100.0***	

Source: Created by the Researchers

Table 3 shows how much work experience the respondents who took part in the survey had. Therefore, the rates are indicative of the rate of contribution. More than half of the respondents have between 11 and 15 years of work experience, accounting for 55.6 percent. Meanwhile, it is followed by people with 16 to 20 years of work experience at 13.0 percent. However, the respondents who participated in the questionnaire with work experience ranging from 6 to 10 years and more than 20 years participated in the same proportion of 11.1 percent. While people with less than 5 years of work experience come in last in the participation ranking with 9.3 percent.

Table 3: Year of Experience

		Frequency	*Percent*	*Cumulative Percent*
Valid	***Less than 5 years***	*20*	*9.3*	*9.3*
	6-10 years	*24*	*11.1*	*20.4*
	11-15 years	*120*	*55.6*	*75.9*
	16-20 years	*28*	*13.0*	*88.9*
	More then 21	*24*	*11.1*	*100.0*
	Total	***216***	***100.0***	

Source: Created by the Researchers

4.2 Analyzing Descriptively

The main objective of the study is presented in Table 4. The impact of electronic accounting information systems on the quality of accounting information has been worked on independently. On the other hand, internal audit has been used as a moderator variable, and the effect of the moderator variable on the relationship between the two independent variables. Here, the data collected were directed to the respondents through a questionnaire. With the help of EViews Vers 12, he shared the answers to the questions. These results are shown in Table 4 as follows.

The accounting information quality variable has the lowest value of 3.135417, the highest value of 4.916667, and the median value is 4.119792 with a standard deviation of 0.366975, which indicates that the respondents mostly agreed with the questions of the accounting information quality variable. This is while, the independent variable of information technology infrastructure has a low value of 2.5, versus a high value of 5, with a mean value of 4.166667, and with 0.525719 indicating its standard deviation. These results indicate that some respondents were dissatisfied with the questions. Meanwhile, the independent variable of procedures and guidelines with lowest and highest values are as follows 3 and 5, with mean value of 4.25 and standard deviation of 0.493781. This result also shows that the questions of this variable were satisfactory to the respondents. Meanwhile, reliability as another independent variable shows 2.83333 and 5 lowest and highest values with a mean of 4.166667 and a standard deviation of the final independent variable proprietary accounting system has the lowest value of 3 and the highest value of 5, with a mean value of 4.25, with a standard deviation of 0.4378.

At the same time, the introduction of the intermediate role of internal control has affected the relationship between electronic accounting information systems and the quality of accounting information in companies in the Kurdistan Region. The results suggest that the moderating role of internal control may cause the centrality for each variable to remain stable or decrease. Whereas, the centrality value for the technological infrastructure variable by entering the mean role of internal control from 4.166667, decreased to 4, with the standard deviation decreasing from 0.525719 to 0.489316. At the same time, the independent variable of procedures and guidelines has a median value decreased from 4.25 to 4.166667. When the role of the mean variable was entered into the data, this caused the standard deviation of the independent variable to drop to 0.473254. However, the reliability variable when the role of the internal control mean variable was included in the results did not cause a change in the mean value but caused a change in the standard deviation from 0.461006 to 0.534616. Conversely, when the role of the mean variable of internal control is included in the results, the mean value of the independent variable of the accounting system decreases from 4.25 to 4. Conversely, the standard deviation increases from 0.4378 to 0.503308.

Table 4: Descriptive Statistics

	Median	*Maximum*	*Minimum*	*Std. Dev.*	*N*
AIQ	***4.119792***	***4.916667***	***3.135417***	***0.366975***	***216***
IT I	***4.166667***	***5***	***2.5***	***0.525719***	***216***
PAG	***4.25***	***5***	***3***	***0.493781***	***216***
R	***4.166667***	***5***	***2.83333***	***0.461006***	***216***
AS	***4.25***	***5***	***3***	***0.4378***	***216***
IT I*IA	***4***	***4.83333***	***2.5***	***0.489316***	***216***
PAG*IA	***4.166667***	***5***	***2.33333***	***0.473254***	***216***
R*IA	***4.166667***	***5***	***2.33333***	***0.534616***	***216***
AS*IA	***4***	***5***	***2.5***	***0.503308***	***216***

Source: Data processed with EViews Vers 12.

4.3 Results of Correlation

To determine the relationship between the variables, we used the correlation test between our independent variables and the dependent variable. Our dependent variable is defined as Accounting Information Quality (AIQ), while our independent variable is known as Electronic Accounting

Information System (E-AIS), divided into four typologies, which consist of Information Technology Infrastructure (ITI), Procedures and Guidelines (PAG), Reliability (R), and Accounting System (AS). According to the results in Table 5, it shows that the Information Technology Infrastructure (ITI) Sig is smaller than 0.05, so there is a positive relationship between the two variables. When the dependent variable changes by one, it causes a positive change. Then there is a change in ITI of 0.585699. Meanwhile, Procedures and Guidelines (PAG) has a smaller Sig of 0.05. Therefore, this one shows a positive relationship between the two variables. Therefore, when its independent variable (PAG) is 0.592605, changing positively creates a change in the dependent variable by one. The independent variable of reliability (R) has a Sig smaller than 0.05, which establishes a relationship. If the dependent variable changes by one, it causes a positive change of 0.714117. The result emphasizes that the accounting system (AS) changes by 0.723134 because it has a Sig smaller than there is a strong positive relationship between e-accounting information systems and accounting information quality according to the Pearson correlation coefficient; hence, it is appropriate to use multivariate analysis to evaluate the effect between variables. This result is explained in Table 5 in Section 1.

Table 5: Correlation Matrix (1)

Covariance Analysis: Ordinary					
Sample: 1 216					
Correlation					
Probability					
	AIQ	**ITI**	**PAG**	**R**	**AS**
AIQ	**1.000000**				

IT I	**0.585699**	**1.000000**			
	0.0000	**-----**			
PAG	**0.592605**	**0.275928**	**1.000000**		
	0.0000	**0.0434**	**-----**		
R	**0.714117**	**0.227066**	**0.434578**	**1.000000**	
	0.0000	**0.0987**	**0.0010**	**-----**	
AS	**0.723134**	**0.384333**	**0.453909**	**0.364419**	**1.000000**
	0.0000	**0.0041**	**0.0006**	**0.0067**	**-----**

Source: Data processed with EViews Vers 12.

To further demonstrate the relationship between variables when testing the relationship between our independent variables and the dependent variable, Internal Audit (IA) was used as a moderating variable. The result also in Table (6) shows that Internal Audit as the moderating variable was a factor in increasing the correlation between independent variables such as (ITI*IA), (PAG*IA), (R*IA), (AS*IA), and the dependent variable (AIQ). That is the independent variable of the electronic accounting information system which owns that relationship with the following coefficients 0.737032, 0.902491, 0.901977, 0.833505. Because they possess a Sig smaller than 0.05. By comparing the results in Table 6 with the results in Table 5 they show the increase in the relationship between the variables with the continuation of a positive relationship between them.

Table 6: Correlation Matrix (2)

Covariance Analysis: Ordinary					
Correlation					
Probability					
	AIQ	**IT I*IA**	**PAG*IA**	**R*IA**	**AS*IA**
AIQ	**1.000000**				

IT I*IA	**0.737032**	**1.000000**			
	0.0000	**-----**			
PAG*IA	**0.902491**	**0.669176**	**1.000000**		
	0.0000	**0.0000**	**-----**		
R*IA	**0.901977**	**0.732614**	**0.814791**	**1.000000**	
	0.0000	**0.0000**	**0.0000**	**-----**	

AS*IA	**0.833505**	**0.647660**	**0.767191**	**0.751204**	**1.000000**
	0.0000	**0.0000**	**0.0000**	**0.0000**	**-----**

Source: Data processed with EViews Vers 12.

The purpose of using the unit root test is that this test refers to an economic measure that helps us determine the extent to which the data obtained through the questionnaires are stable or otherwise in a state of non-stationarity. There is more than one method of root one testing, some of which are standard methods of root one testing, including the "Augmented Dickey-Fuller (ADF), Dickey-Fuller (DF), and Phillips-Perron (PP) tests." Because this test gives us more confidence in how appropriate the data and models used are, they emphasize the validity of the statistical analysis of the data and the accuracy of predicting the results, rejecting the null hypothesis. So, according to the results in Tables 7 and 8 hypothesis 0 is rejected in Favor of accepting the intended hypothesis.

Table 7: Summary Group unit root test (1)

Series: AIQ, ITI, PAG, R, AS		
Method	***Statistic***	***Prob.*****
Null: Unit root (assumes common unit root process)		
Levin, Lin & Chu t*	***-13.8104***	***0.0000***
Null: Unit root (assumes individual unit root process)		
Im, Pesaran and Shin W-stat	***-14.6103***	***0.0000***
ADF - Fisher Chi-square	***163.206***	***0.0000***
PP - Fisher Chi-square	***168.771***	***0.0000***
**** Probabilities for Fisher tests are computed using an asymptotic Chi**		
-square distribution. All other tests assume asymptotic normality.		
Dependent Variable: AIQ		

Source: Data processed with EViews Vers 12.

Table 8: Summary Group unit root test (2)

Series: AIQ, (IT I*IA), (PAG*IA), (R*IA), (AS*IA)		
Method	**Statistic**	**Prob.****
Null: Unit root (assumes common unit root process)		
Levin, Lin & Chu t*	**-8.95876**	**0.0000**
Null: Unit root (assumes individual unit root process)		
Im, Pesaran and Shin W-stat	**-10.9839**	**0.0000**
ADF - Fisher Chi-square	**118.395**	**0.0000**
PP - Fisher Chi-square	**152.102**	**0.0000**
**** Probabilities for Fisher tests are computed using an asymptotic Chi**		
-square distribution. All other tests assume asymptotic normality.		
Dependent Variable: AIQ		

Source: Data processed with EViews Vers 12.

4.4 Results of Regression

The results are presented in Table 9. It shows that the value of the coefficient of the relationship between the independent variable of the electronic accounting information system and the quality of accounting information as the dependent variable is represented by the value of 0.853364. That is, the variables mentioned in the study have an 85% effect on the dependent variable, and the variables not mentioned in the study have a 15% effect on the dependent variable of accounting information quality. This result shows that adding another variable will affect our dependent variable. At the same time, adjusted R 2, whose value is 0.841394, shows that the independent variable explained 84% of the variation in the dependent variable.

AIQ = -0.012243 + 0.208402*IT I + 0.106995*PAG + 0.354200*R + 0.319274*AS

Table 9: Multiple regression results (1)

*Dependent Variable: **AIQ***				
Method: Least Squares				
Included observations: 216				
Variable	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
C	*-0.012243*	*0.248209*	*-0.049325*	*0.000**
IT I	*0.208402*	*0.041770*	*4.989248*	*0.000**
PAG	*0.106995*	*0.048460*	*2.207906*	*0.032**

R	*0.354200*	*0.049540*	*7.149707*	*0.000**
AS	*0.319274*	*0.054894*	*5.816180*	*0.000**
R-squared	*0.853364*			
Adjusted R-squared	*0.841394*			
F-statistic	*71.29045*			
Prob(F-statistic)	*0.000000*			

Dependent Variable: AIQ

*****The impact is statistically significant at (Sig < 0.05).

Source: Data processed with EViews Vers 12.

The results are shown in Table 10. It presents that after adding internal accuracy as a moderating variable, the value of the correlation coefficient between the independent variables (ITI, PAG, R, and AS) and the dependent variable (AIQ) is shown with a value of 0.915668. That is, each of the variables (ITI, PAG, R, AS) affects the dependent variable (AIQ) by 91%, and if we compare this result with the same result in Table 9, we see that after adding internal audit as a moderating variable, increasing the (R) value is from 0.853364 to 0.915668. Similarly, when the adjusted R 2 value is 0.908784, the adjusted R 2 result changes after adding internal audit as a moderating variable.

AIQ = 0.999237 + 0.045361*(IT I*IA) + 0.303050*(PAG*IA) + 0.264306*(R*IA) + 0.149656*(AS*IA)

Table 10: Multiple regression results (2)

Dependent Variable: AIQ				
Method: Least Squares				
Included observations: 216				
Variable	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
C	*0.999237*	*0.144037*	*6.937370*	*0.000**
IT I*IA	*0.045361*	*0.047092*	*0.963231*	*0.040**
PAG*IA	*0.303050*	*0.061047*	*4.964247*	*0.000**
R*IA	*0.264306*	*0.056347*	*4.690644*	*0.000**
AS*IA	*0.149656*	*0.050770*	*2.947736*	*0.004**
R-squared	*0.915668*			
Adjusted R-squared	*0.908784*			
F-statistic	*133.0099*			
Prob(F-statistic)	*0.000000*			

Dependent Variable: AIQ

*The impact is statistically significant at (Sig < 0.05).

Source: Data processed with EViews Vers 12.

4.5 Hypothesis testing

To test the research hypothesis, which consists of eight hypotheses., the hypothesis results illustrate the extent to which the electronic accounting information system affects the quality of accounting information. This is while an internal audit is added as a moderating variable to determine to what extent it affects the relationship between the two independent variables, and the dependent variable is analyzed from the perspective of accountants in the Kurdistan Region, according to the multiple regression model.

4.5.1 Information technology infrastructure significantly impacts the quality of accounting information.

According to the results given in Table 9 for H1, the value of the coefficient is equal to 0.208402, the value of the t statistic is equal to 4.989248, and the statistical significance level is 0.000, which is less than 0.05. The above result indicates a significant positive impact of information technology infrastructure on the quality of accounting information in companies in the Kurdistan Region. According to this result, we can accept H1, which indicates that information technology infrastructure significantly affects accounting information quality. At the same time, we can reject H0. This result is the same as that of the study (Hadiwijaya et al., 2020) and (Fitriati et al., 2020).

4.5.2 Procedures and Guidelines significantly impact the quality of accounting information.

According to the results given in Table 9 for H2, the coefficient value is equal to 0.106995, the t-statistic value is equal to 2.207906, and the statistical significance level is 0.032, which is less than 0.05. The above result indicates that there is a significant impact of procedures and guidelines on the quality of accounting information in companies in the Kurdistan Region. According to this result, we are able to accept H2, which indicates that procedures and guidelines have a significant effect on accounting information quality. In contrast, we reject H0. The results of this research hypothesis are the same as those of (ALDEGIS, 2018).

4.5.3 Reliability has a significant impact on the quality of accounting information.

According to the results given in Table 9, we can conclude that the value of a coefficient for H3 is equal to 0.3542, the value of the t statistic is equal to 7.149707, and the level of statistical significance was 0.000, which is less than 0.05. The above result indicates that there is a significant positive effect of the trust variable on accounting information quality in the Kurdistan Region companies. According to this result, we conclude that we accept H3, which indicates that reliability significantly affects accounting information quality. In contrast, we reject H0. The result obtained in this study is the same as that of the study (Saeed & Hama, 2023) and (Alrabei, 2021).

4.5.4 Accounting systems significantly impact the quality of accounting information.

The result given in Table 9 shows that the value of a coefficient for H4 is equal to 0.319274, the t-statistic value is equal to 5.81618, and the statistical significance level was 0.000, which is less than 0.05. The above result indicates the existence of accounting systems and explains the significant effect of accounting systems on accounting information quality in the Kurdistan Region companies. According to this result, we conclude that we accept H4, which indicates that the accounting system has a significant effect on the quality of accounting information. In contrast, we reject H0. According to the results shown in the study, the same results of the study (Fitriati et al., 2020).

4.5.5 Internal audit moderates the effect of information technology infrastructure on accounting information quality.

From the results of Table 10, it is clear that the value of a coefficient for H5 is equal to 0.045361 and the t-statistic value is equal to 0.963231 and the statistical significance level was 0.040 which is less than 0.05. The result obtained above indicates the existence of an effect of internal audit explains the relationship between information technology infrastructure and accounting information quality in the Kurdistan Region companies. According to this result, we conclude that we accept H5, which indicates that internal audit moderates the effect of information technology infrastructure on accounting information quality. And in turn, we reject H0. Internal audit moderates the effect of Procedures and Guidelines on accounting information quality. This result is similar to the results of the study (Ababneh & Alrabei, 2021).

4.5.6 Internal audit moderates the effect of Procedures and Guidelines on accounting information quality.

In the result of Table 10, it is clear that the value of a coefficient for H6 is equal to 0.30305, the t-statistic value is equal to 4.964247, and the statistical significance level is 0.000, which is less than 0.05. The result obtained above indicates the existence of an influence of internal audits on the relationship between Procedures and Guidelines and accounting information quality in companies in the Kurdistan Region. According to this result, we conclude that we reject H0 against the acceptance of H6, which indicates that internal audit moderates the effect of Procedures and Guidelines on accounting information quality. This result is similar to the results of the study (Alwashah & Al-karabsheh, 2022).

4.5.7 Internal audit moderates the effect of Reliability on accounting information quality.

In the result of Table 10, it is clear that the value of a coefficient for H7 is equal to 0.264306, the t-statistic value is equal to 4.690644, and the statistical significance level was 0.000, which is less than 0.05. The result obtained above indicates the existence of an effect of internal audits on the

relationship between reliability and accounting information quality in the Kurdistan Region companies. According to this result, we conclude that we reject H0 against the acceptance of H7, which indicates that internal audit moderates the effect of reliability on accounting information quality. The study (Ahmadpour & Shahsavari, 2016) has the same results as this study.

4.5.8 Internal audit moderates the effect of accounting systems on accounting information quality.

In the result of Table 10, it is clear that the value of a coefficient for H8 is equal to 0.149656, the t-statistic value is equal to 2.947736, and the statistical significance level was 0.004, which is less than 0.05. The result obtained above indicates the existence of an effect of internal audit on the relationship between accounting systems and accounting information quality in the Kurdistan Region companies. According to this result, we conclude that we reject H0 against the acceptance of H8, which indicates that internal audit moderates the effect of accounting systems on accounting information quality. Research (Wahyudi et al., 2017) has the same results as this study.

5 Conclusion and recommended:

5.1 Conclusion:

This study further aimed to analyze the impact of electronic accounting information systems on accounting information quality. At the same time, if you add internal audit as a moderating variable to the study, this moderating variable affects the relationship between accounting information systems and accounting information quality. As is obvious, the accounting information system is considered one of the systems responsible for recording all financial transactions and providing accounting information to the relevant parties about the company's financial activities during a financial year. This study relied on a questionnaire divided into nine main sections to obtain the data. Each variable (information technology infrastructure, procedures, guidelines, reliability, and accounting system) is considered part of the independent variable that the electronic accounting information system affects the quality of accounting information. At the same time, when increasing the internal audit, what affects the relationship between both the independent variable and the dependent variable? According to the obtained results, each of the information technology infrastructure, procedures and guidelines, reliability, and accounting system as independent variables has a significant positive impact on the quality of accounting information This result is the same as the results of the research of (Algrar & Ahmed, 2019), (ALDEGIS, 2018), (Najaf *et al.*, 2022). At the same time, when adding internal accuracy as a moderating variable, has the effect of increasing the relationship between the independent variable and the dependent variable. This result is the same as the result of his study (Ahmad and Alalbyt, 2018) and (Saeed & Hama, 2023). Electronic accounting information systems can be developed in collaboration with other corporate systems to provide more services to other stakeholders and facilitate early access to accounting information. It also participates in the integration of accounting systems in institutions by international accounting principles. Reduce accounting errors to a minimum, which is a good tool for institutional managers to use in the decision-making process.

5.2 Recommended:

Based on the above results, it is recommended:

1- These curricula should be carefully reviewed in order to assess the ability and competence of accountants to manage these accounting systems.
2- Learners need training and the provision of educational materials and supplies. So that it is adapted to the labor market by companies and institutions of higher education so that a skilled accountant in his field enters the labor market.

3- In addition, several laws and guidelines should be issued by the government to ensure the independence of internal audits in companies and private institutions to protect the lives of accountants from measures and guidelines issued by companies that weaken the internal audit system.

References:

1. ABABNEH, D.S. and ALRABEI2, A.M. (2021), "THE MODERATING EFFECT OF INFORMATION TECHNOLOGY ON THE RELATIONSHIP BETWEEN AUDIT QUALITY AND THE QUALITY OF ACCOUNTING INFORMATION 'JORDANIAN AUDITORS PERCEPTION'", Journal of Theoretical and Applied Information Technology, Vol. 99 No. 14, pp. 3365–3378.
2. Abdelraheem, A.A.E., Hussaien, A.M., Mohammed, M.A.A. and Elbokhari, Y.A.E. (2021), "The effect of information technology on the quality of accounting information Abubkr", Accounting, Vol. 7, pp. 191–196.
3. Abed, A.M. (2019a), "The Impact of the use of Electronic Accounting Information Systems in raising the efficiency of Financial Performance of Economic Institutions", Al Kut Journal of Economics Administrative Sciences, Vol. 20 No. 34, pp. 204–221.
4. Abed, A.M. (2019b), "The Impact of the use of Electronic Accounting Information Systems in raising the efficiency of Financial Performance of Economic Institutions", Al Kut Journal of Economics Administrative Sciences, Vol. 34 No. 20, pp. 204–221.
5. Afia, N.N., Alfia, A. and Sofi, P. (2020), "Effect of Employee Competence and Internal Control Systems on Accounting Information Quality of the local Government in West Java region", Utopía y Praxis Latinoamericana, Vol. 25 No. 1, pp. 146–153.
6. Afiah, N.N., Alfian, A. and Sofia, P. (2020), "Effect of employee competence and internal control systems on accounting information quality of the local government in West Java region", Utopia y Praxis Latinoamericana, Vol. 25 No. 1, pp. 146–154, doi: 10.5281/zenodo.3774595.
7. Ahmad, A.A.B. and Alalbyt. (2018), "The Internal Auditing Procedures Effectiveness in Using Accounting Information System to Assess Fraud in Jordanian Commercial Banks", International Journal of Academic Research in Accounting, Finance and Management Sciences, Vol. 8 No. 3, pp. 290–299.
8. Ahmadpour, A. and Shahsavari, M. (2016), "Earnings management and the effect of earnings quality in relation to bankruptcy level Online ISSN (Firms listed at the tehran stock exchange)", Iranian Journal of Management Studies (IJMS), Vol. 9 No. 1, pp. 77–99, doi: 10.22495/cocv9i1c3art2.
9. Al-Ibbini, O.A.M. (2017), "The Critical Success Factors Influencing the Quality of Accounting Information Systems and the Expected Performance", International Journal of Economics and Finance, Vol. 9 No. 12, pp. 162–167.
10. Al-Jaraideh, S.N.A. and Al-Olimat, N.H. (2022), "The impact of the Accounting Information System on performance of Jordanian commercial banks", International Journal for Research in Applied Science & Engineering Technology, Vol. 21 No. 11, pp. 351–368.
11. Al-Jaraideh, S.N.A., Al-Olimat, N.H. and Accounting. (2022), "The Impact of Electronic Accounting Information Systems on Financial Performance of Jordanian Commercial Banks", YMER, Vol. 21 No. 11, pp. 351–368.
12. Al-Taee, S.H., Hamed and Flayyih, H.H. (2023), "IMPACT OF THE ELECTRONIC INTERNAL AUDITING BASED ON IT GOVERNANCE TO REDUCE AUDITING RISK", Corporate Governance and Organizational Behavior Review, Vol. 7 No. 1, pp. 94–100.
13. Al-Waeli, A.J., Hanoon, R., geeb, H. and hairidan, H. (2020), "Impact of Accounting Information System on Financial Performance with the Moderating Role of Internal Control in Iraqi Industrial Companies: An Analytical Study", Journal of Advanced Research in Dynamical and Control Systems, Vol. 12 No. 8, pp. 246–261, doi: 10.5373/jardcs/v12i8/20202471.
14. Al-Waeli, A.J., Hanoon, R.N., Ageeb, H.A. and Idan, H.Z. (2020), "Impact of Accounting Information System on Financial Performance with the Moderating Role of Internal Control in Iraqi Industrial Companies: An Analytical Study", Jour of Adv Research in Dynamical & Control Systems, Vol. 12 No. 8, pp. 245–261.
15. Alawaqleh, Q.A. (2021), "Impact of Accounting Information System on Internal Audit Quality: Mediating Role of Organizational Culture Qasim", International Journal of Financial Research, Vol. 12 No. 1, pp. 205–213.
16. ALDEGIS, A.M. (2018), "Impact of Accounting Information Systems' Quality on the Relationship between Organizational Culture and Accounting Information in Jordanian Industrial Public Shareholding Companies Ahmad", International Journal of Academic Research in Accounting, Finance and Management Sciences, Vol. 8 No. 1, pp. 70–80.
17. Alfartoosi, A., Jusoh, M.A., Mohsin, H.J. and Yas, H. (2021), "The effect of e-accounting and mediated by internal control system on the performance of SME in Iraq Abstra", American Journal of Business and Operations Research (AJBOR), Vol. 3 No. 1, pp. 5–38.
18. Algrar, A.Y. and Ahmed, R.M. (2019), "The impact of blockchain on accounting information systems", Journal of Information Technology Management, Vol. 11 No. 3, pp. 62–80, doi: 10.22059/jitm.2019.74301.
19. Ali, B.J.A. and Oudat, M.S. (2020), "Information Quality and Data Quality in Accounting Information System:

Implications on the Organization Performance", International Journal of Psychosocial Rehabilitation, Vol. 24 No. 5, pp. 3258–3269.
20. Almaliki, O.J., Rapani, N.H.A., Khalid, A.A. and Sahaib, R.M. (2019), "Structural Equation Model for the Relationship between Accounting Information System and Internal Audit Effectiveness with Moderating Effect of Experience", International Business Education Journal, Vol. 12 No. 1, pp. 62–82.
21. Almasria, N.A., Airout, R.M., Samara, A.I., Saadat, M. and Jrairah, T.S. (2021), "THE ROLE OF ACCOUNTING INFORMATION SYSTEMS IN ENHANCING THE QUALITY OF EXTERNAL AUDIT PROCEDURES", Journal of Management Information and Decision Sciences, Vol. 24 No. 7, pp. 1–23.
22. Alrabei, A.M. (2021), "the Influence of Accounting Information Systems in Enhancing the Efficiency of Internal Control At Jordanian Commercial Banks", Journal of Management Information and Decision Sciences, Vol. 24 No. Special Issue 1, pp. 1–9.
23. Alrabei, A.M. and ABSTRACT, J.U. (2021), "THE INFLUENCE OF ACCOUNTING INFORMATION SYSTEMS IN ENHANCING THE EFFICIENCY OF INTERNAL CONTROL AT JORDANIAN COMMERCIAL BANKS", Journal of Management Information and Decision Sciences, Vol. 24 No. 1, pp. 1–9.
24. Alwashah, M.A. and Al-karabsheh, F.I. (2022), "the Role of Internal and External Audit in Reducing the Risk of Accounting Information Systems (From the Estimation of the Internal and External Auditor)", Journal of Management Information and Decision Sciences, Vol. 24 No. S4, pp. 1–16.
25. Anuruddha, M.S. and Mahanamahewa, P. (2021), "Influence the Quality of Accounting Information Systems and the Effectiveness of Internal Control on Public Financial Reporting Quality; an Empirical Sturdy Mayadunnege", INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS, Vol. 4 No. 2, pp. 2643–9875.
26. Essa mahmoud al tarawneh, Alqaraleh, M.H., Ali, B.J.A. and Atta, A.A.B. (2023), "The Impact of the Efficiency and Effectiveness of Electronic Accounting Information Systems on the Quality of Accounting Information", Information Sciences Letters An International Journal, Vol. 12 No. 3, pp. 1685–1692.
27. Fitriati, A., Tubastuvi, N. and Anggoro, S. (2020), "The Role of AIS Success on Accounting Information Quality", The International Journal of Business Management and Technology, Vol. 4 No. 2, pp. 43–51.
28. Hadiwijaya, M.S.R., Praptapa, A. and Bawono, I.R. (2020), "Effect of Internal Audit and Accounting Information System on the Effectiveness of Internal Control", Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis, Vol. 8 No. 1, pp. 1–13, doi: 10.57178/atestasi.v3i2.222.
29. Harash, E. (2015), "The Role of Environmental Uncertainty in the Link between Accounting Information System and Performance Small and Medium Enterprises in Iraq", Global Journal of Management and Business Research: G Interdisciplinary, Vol. 15 No. 2, pp. 26–32.
30. Kamal Ahmad, K., Hasan Salih, K. and Saeed Sangawi, S. (2024), "The Impact of Operating Cash Flow on Corporate Profitability: Amman Stock Exchange case study", Journal of Economics and Administrative Sciences, Vol. 30 No. 140, pp. 532–543, doi: 10.33095/2gvf4697.
31. Kareen, A.S.H. and Saeed, V.S.H. (2023), "The Impact Of Using Computerized Accounting Information Systems In Quality Of Accounting Information; An Analytical Study For Construction Sector In Krg", Journal of Namibian Studies, Vol. 34 No. 2, pp. 2895–2918.
32. Luo. (2017), "Enterprise Internal Control and Accounting Information Quality", Journal of Financial Risk Management, Vol. 6 No. 1, pp. 16–26.
33. Maharan, P.P.G. and Damayanthi, I.G.A.E. (2022), "The Effect of Accounting Information Systems and Internal Control of Employee Performance with Organizational Culture as A Mediation Variable", American Journal of Humanities and Social Sciences Research, Vol. 6 No. 2, pp. 233–241, doi: 10.36555/jasa.v6i2.1862.
34. Majid, J., Suwandi, M., Bulutoding, L. and Sumarlin, A.W. (2020), "THE INFLUENCE OF ACCOUNTING INFORMATION SYSTEMS AND INTERNAL CONTROL ON THE QUALITY OF FINANCIAL STATEMENT WITH INTELLECTUAL INTELLIGENCE AS A MODERATING VARIABLE (A STUDY ONCOFFEE SHOPSIN MAKASSAR CITY)", INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT, Vol. 7 No. 3, pp. 1–19.
35. Mayadunnege Senaka Anuruddha and Mahanamahewa, P. (2021), "Influence the Quality of Accounting Information Systems and the Effectiveness of Internal Control on Public Financial Reporting Quality; an Empirical Sturdy", International Journal of Multidisciplinary Research and Analysis, Vol. 04 No. 02, pp. 155–167, doi: 10.47191/ijmra/v4-i2-09.
36. Monteiro, A.P., Vale, J., Silva, A. and Pereira, C. (2021), "IMPACT OF THE INTERNAL CONTROL AND ACCOUNTING SYSTEMS ON THE FINANCIAL INFORMATION USEFULNESS: THE ROLE OF THE FINANCIAL INFORMATION QUALITY", Academy of Strategic Management Journal, Vol. 20 No. 3, pp. 1–14.
37. Najaf, A., Soleimanpur, S. and Morady, Z. (2022), "The Impact of Information Technology Methods on Accounting Information Quality: Empirical Evidence From Iran Amir", NAJAFI, SOLEIMANPUR AND MORADY, Vol. 46 No. 1, pp. 63–77.
38. Nguyen, T.N.L., Vu, T.K.A. and Bui, T.N. (2023), "IMPACT OF INTERNAL CONTROL ON THE QUALITY OF ACCOUNTING INFORMATION AT ENTERPRISES LISTED ON THE STOCK MARKET IN VIETNAM Thi", International Journal of Professional Business Review, Vol. 8 No. 5, pp. 1–33.
39. Phornlaphatrachakorn, K. (2020), "Accounting Control System, Accounting Information Quality, Value Creation,

and Firm Success: An Empirical Investigation of Auto Parts Businesses in Thailand", INTERNATIONAL JOURNAL OF BUSINESS, Vol. 25 No. 2, pp. 159–177.

40. Qatawneh, A.M. and Bader, A. (2020), "QUALITY OF ACCOUNTING INFORMATION SYSTEMS AND THEIR IMPACT ON IMPROVING THE NON-FINANCIAL PERFORMANCE OF JORDANIAN ISLAMIC BANKS", Academy of Accounting and Financial Studies Journal, Vol. 24 No. 6, p. 1019.
41. Saeed, V.S.H. and Hama, A.S. (2023), "The Impact of using Computerized Accounting Information Systems in detecting Fraud; An analytical study for the construction sector in KRG", Journal of University of Raparin, Vol. 10 No. 3, pp. 782–809, doi: 10.26750/vol(10).no(3).paper34.
42. Salih, R.H., Sangawi, S.S., Salih, K.H., Ahmed, A.M., Ahmad, K.K. and Salih, R.H. (2023), "The Impact of the Current Ratio and Profitability Ratio on Solvency Ratios: An Applied Study in the Tehran Stock Exchange", Tikrit Journal of Administrative and Economic Sciences, Vol. 20 No. 65, pp. 314–330.
43. Sangawi, S.S., Mohammed, H., Mohammed, N. and Salih, K.H. (2023), "An Investigation into the Impact of Profitability on Annual Growth Rate among the Listed Manufacturing Companies on the Iraqi Stock Exchange", Tikrit Journal of Administrative and Economic Sciences, Vol. 19 No. 64, pp. 720–739.
44. Sari, N.Z.M. and Purwanegara, D. (2016), "The Effect of Quality Accounting Information System in Indonesian Government (BUMD at Bandung Area)", Research Journal of Finance and Accounting, Vol. 7 No. 2, pp. 188–196.
45. Sunarta, I.N. and Astuti, P.D. (2023a), "ACCOUNTING INFORMATION SYSTEM QUALITY AND ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF ACCOUNTING INFORMATION QUALITY I", International Journal of Professional Business Review, Vol. 8 No. 3, pp. 1–20.
46. Sunarta, I.N. and Astuti, P.D. (2023b), "ACCOUNTING INFORMATION SYSTEM QUALITY AND ORGANIZATIONAL PERFORMANCE : THE MEDIATING ROLE OF ACCOUNTING INFORMATION QUALITY Article history : Accounting Information Quality ; Accounting Information System Accounting Information System Quality and Organiza", INTERNATION JOURNAL OF PROFESSIONAL BUSINESS REVIEW, Vol. 8 No. 3, pp. 1–20.
47. Syahputra, O. (2022), "The Effect Of Internal Control And Quality Of Accounting Information Systems On Quality Information On Pt. Pandu Siwi Sentosa (Pandu Logistics)", Journal of Management, Vol. 12 No. 2, pp. 1712–1217.
48. Ta, Q.B. and Nguyen, T.T. (2020), "Impact of factors on the quality of accounting information system in civil engineering construction enter- prises", Management Science Letters, Vol. 10, pp. 2985–2992.
49. Taufik, F. (2022), "The Success Analysis of Internal Audit Implementation on Electronics Through Integrated Instance Accounting System of National Data Communication Application", Indonesian Journal of Business, Accounting and Management, Vol. 1 No. 1, pp. 31–41, doi: 10.36406/ijbam.v1i1.127.
50. Wahyudi, A., Pituringsih, E. and Hermanto. (2017), "Determinant of Quality of Financial Statement Information With Effectiveness of Internal Control System as Intervening Variable", Jember International Conference and Call for Papers.
51. Zenad, Y.S., Hasaballah, A.S. and Shlaka, J. kadhim. (2019), "The impact of implementing electronic governance on the quality of accounting information in businesses – An applied study", African Journal of Hospitality, Tourism and Leisure, Vol. 8 No. 4, pp. 1–22.
52. Min, W. (2021), "On the Internal Control and Audit of Computer Accounting", *Journal of Physics: Conference Series*.