



# **INVESTIGATING THE EFFECT OF ACCOUNTING INFORMATION SYSTEMS CHARACTERISTICS ON IMPROVING THE FINANCIAL PERFORMANCE OF PUBLIC CONTRACTORS THROUGH THE MEDIATING ROLE OF AUDIT QUALITY**

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<b>Received:</b> June 20 <sup>th</sup> 2022 <b>Accepted:</b> July 20 <sup>th</sup> 2022 <b>Published:</b> August 30 <sup>th</sup> 2022	The purpose of this study was to investigate the effect of accounting information systems characteristics on improving the financial performance of public contractors through the mediating role of audit quality. Descriptive-correlation method was used to conduct this research. The statistical population of the present study included an unlimited number of accountants, auditors and financial managers of public contracting companies operating in the city of Baghdad-Diwaniyah. Based on the Cochran's formula, a total of 385 required sample sizes were determined. A questionnaire with 48 questions was used to examine the research variables. The reliability of the questionnaires was confirmed by Cronbach's alpha coefficient, the content validity of the questionnaires was confirmed by a group of university professors and their construct validity was confirmed by confirmatory factor analysis. Parametric statistical methods such as Kolmogorov-Smirnov test have been used to ensure the normality of the data and the model of structural equations and path analysis using LISREL software to test the hypotheses. The most important research findings showed that; The relationship between accounting information systems through the mediating role of audit quality has a positive and significant effect on improving financial performance. The accuracy of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality. The verifiability of accounting information systems through the mediating role of audit quality has a positive and significant effect on financial improvement. The timeliness of accounting information systems through the mediating role of audit quality has a positive and significant effect on improving financial performance.

**Keywords:** Accounting Information Systems, Financial Performance, Audit Quality, General Contracting Companies

## **1. INTRODUCTION**

In general, accounting is introduced as an information system whose main purpose is to provide useful information for decision making. Correct design and implementation and optimal adaptation of information systems to the needs of the organization; while providing the necessary platform for providing timely and useful information; It will also increase the value of the organization. Assessments about the characteristics of accounting information systems have been growing steadily in recent years (Al-Waeli et al.,

2020). Accounting information systems include a set of interdependent activities, documents and technologies to collect, process and report information with the aim of reaching a specific decision (Putri and Magfirouh, 2022). In addition to improving the effectiveness and efficiency of business processes and reducing costs, accounting information systems are also able to provide reliable and instant data on demand, contribute to global knowledge, create new reporting tools, and also integrate risk areas and business operations (Alwater et al., 2019).



Today, every organization needs information to continue its activity, economic growth and improve its performance. So that, when necessary, the manager can make the right decision to make the organization profitable. In general, the more complex and critical the decision, the more accurate and extensive information is needed to realize it. For this purpose, a strong and efficient information system is needed to obtain relevant and timely information. The accounting information system is considered one of the main and fundamental systems of the management information system, its task is to provide the information needs of different levels of managers in the fields of planning and resource control, performance evaluation and decision-making (Fathi, 2021). According to contingency theory, accounting information systems lead to achieving financial performance in the organization. Accounting programs that are efficiently integrated can lead to a highly flexible information creation process, high audit quality financial reports, and timely and consistent information that Facilitates planning and decision-making in an organization (Bashiri Menesh et al., 2021).

On the other hand, it should be said that measuring one's own performance is vital for the company's success because it shapes behaviors and improves the company's competitive advantage. Also, considering that the environment has become very competitive and global and technologies are constantly evolving, Companies need more effective and more complex accounting information systems in order to successfully face new conditions and improve their financial performance (Shamshad and Imni, 2021).

On the other hand, the accounting system also indicates the financial performance and its results are very important for management. It can be said that the quality of the audit improves the financial performance; Because this high quality leads to better managerial decision-making and thus leads to better financial performance (Bashiri Menesh et al., 2021).

Therefore, the main problem of the research is as follows: Do the characteristics of accounting information systems have an effect on improving the financial performance of general contracting companies through the mediating role of audit quality?

## **2. THEORETICAL LITERATURE AND RESEARCH BACKGROUND**

### **1.2. Theoretical literature of Characteristics of accounting information systems**

There are several definitions of accounting information system. In one definition, the accounting information system consists of the components and elements of the organization that provide warning information and decision-making information to the users of this information through the processing of financial events.

In a more comprehensive definition, the accounting information system is responsible for converting information data into useful financial reports and presenting them to management within the organization and external sources for decision-making. Converting information data to financial reports in accounting information systems in the form of a collection process Classification, processing, analysis and transfer of information takes place (Shamakhi, 2019).

The accounting information system is responsible for converting information data into useful financial reports and presenting them to management within the organization and authorities outside the organization for decision making. The transformation of information data into financial reports in an accounting information system takes place in the form of the process of collecting, classifying, processing, analyzing and transferring (presenting) information (Jadidi, 2018).

To emphasize and ponder the basic elements and features of the above definitions, we must list the following points:

1- The accounting information system has the comprehensiveness of dealing with a category and system concept.

2- The accounting information system includes any type of organization, including economic enterprises and non-profit institutions and public and private sectors.

3- The extensive provision of information products of an accounting system includes external references and internal references of the organization at different levels (Moussi, 2022).

Reports that can be extracted from accounting information systems are placed on the basis of decision-making and can have significant added value (Virdiansiah and Monandar, 2022).

Accounting information system is a part of informal information communication that is used for the purpose of decision-making, control, forecasting and planning of managers (Barazande et al., 1400).

Objectives and sources of accounting information system

The accounting information system will have two major goals.

Providing information for operations and legal requirements

Providing information for decision making.

An accounting information system that fully achieves these goals will have valuable

benefits. To achieve these goals, there are two main activities:

Transaction processing

Information processing (Al-Shirah et al., 2021).

Activities of an accounting information system



Every accounting information system performs five major activities.

Data collection.

Data processing

Data management.

Data control

Providing information.

Data collection includes data recording, recording them in special forms, coding and ensuring their correctness and completeness (Bahram Far and Rasouli, 2017).

One of the goals of accounting and auditing and financial reporting is to provide information to potential and current investors and creditors and other users of financial statements. The information that is reflected in the financial statements can be effective in the decisions of the users when it has certain qualitative characteristics (Esmaili et al., 2019). Qualitative characteristics refer to the characteristics that make the information provided in financial statements and financial reports useful for users in order to evaluate the financial status, financial performance and financial flexibility of the business unit. Some quality characteristics are related to the content of the information included in the financial statements, and others are related to how this information is presented (Siahoshi, 2021).

## **2.2. Theoretical literature on improving financial performance**

Company performance is the degree of success of a company in creating value for different parts of the market. In fact, company performance is determined based on achieving business goals through different company units, and the success of each company's strategies is reflected in the performance of that company (Nasser and Elbasi, 2022). In the definition of marketing performance, it can be said: marketing performance is the organization's ability to increase sales, improve the company's competitive position, develop a new product, improve product quality, reduce the time of delivery of goods or services to customers, expand market share, etc. compared to other competitors in an industry. Specific refers. In general, measuring marketing performance in an organization is not a simple task. Usually, organizations are large, have various activities and are scattered in different places. They seek to achieve various goals and achieve different results. To measure the performance of the organization, several indicators and methods have been presented (Deft, 2015).

Measuring the performance of any economic enterprise can determine the current position of the enterprise (the degree of success in achieving strategic goals and the like); future movements and directions; and improvement programs and activities to be

effective and basically implemented for this purpose (Zatira and Soherti, 2022).

Key indicators of financial performance Key indicators of financial performance include four ratios of financial ratios, including return on working capital or return on assets, return on equity or return on equity, return on sales, and the ratio of the organization's operating expenses to its operating income.

An organization can be alive and live in its surrounding environment when it has the power to offer a valuable output to the society. An output that the society is willing to face with various resources such as human power, money, technology, and social acceptance in general. give to the company (Suriana and Sedana, 2022). Usually, the goals, missions and missions of the organization are formed in order to be able to provide a product or service with high quality, in large quantities, and in compliance with certain standards to the society (quality output). and the more operational plans of the organization to attract resources from the environment (in contrast to quality output). And spending them in a way that achieves the above goals. The ability to absorb more resources from the environment and the ability to provide a more useful output to the environment are known as organizational effectiveness in the theory of organization and management (Kahlol et al., 2022).

Organizational performance is one of the most important structures discussed in management researches, and without a doubt, it is considered the most important measure of success in commercial companies. However, organizational performance includes many factors on the diversity of stakeholder groups, and the importance coefficient of each of the aforementioned factors is largely dependent on the type and characteristics of the environment in which the company operates, but in general, what are the variables and indicators of organizational performance. There is still no complete consensus among experts (Zatira & Suharti, 2022). What is important is that in order to determine the importance of various indicators of organizational performance, companies should look at successful companies in their industry and use them as models. Do your work. It is believed that organizational performance is usually the last dependent variable that is considered in management studies. In the financial field, improving profitability and efficiency indicators, in marketing, improving customer satisfaction, and in the field of operations management, productivity and reducing operational costs are the main goals that are pursued in all management studies. These factors mainly show the indicators and dimensions of organizational performance, which are of particular interest in evaluating the success or failure of the organization. The importance of organizational performance in



academic studies and applied fields, such as managerial rewards and survival of organizations, has made gaining sufficient knowledge of this structure and how to measure it and understanding the factors that can influence it to be of particular importance. (March and Sutton, 2018).

In measuring organizational performance, experts have stated a fundamental difference between market-based indicators and financial performance indicators. Although in most cases there is a significant relationship between market share (one of the most important indicators of market performance) and profitability, one of the most important indicators of financial performance, but in some cases such as market penetration conditions, this relationship will not necessarily be positive and meaningful. Was. Therefore, unlike many researchers who usually do not distinguish between these two categories of indicators, one of the most important measures that should be taken during the evaluation of organizational performance is the separation of market-based performance indicators from financial performance indicators (Willard, 2015).

### **3.2. Theoretical literature of audit quality**

One of the most common definitions of audit quality is the definition provided by D'Angelo (2008). He defined audit quality as follows: the market's assessment (inference) of the probability that the auditor will (1) discover material misstatements in the financial statements or the employer's accounting system, and (2) the discovered material misstatement. to report the probability that the auditor will discover material misstatements depends on the auditor's competence, and the probability that the auditor will report the material misstatements discovered depends on the auditor's independence. "DiAngelo's" definition of the real audit quality is based on the perception of the users<sup>2</sup> or the so-called market inference of the audit quality (Al-Kothar and Aiyoz, 2021).

"Palmeros" defines audit quality in terms of the auditor's credit rating. Since the purpose of the auditor is to create confidence in the financial statements, therefore, the quality of the audit means that the audited financial statements are free from significant distortions. In fact, this definition emphasizes the audit results, that is, the reliability of the audited financial statements reflects the high quality of the audit (Ahtasab et al., 2019).

A fundamental problem in defining audit quality is the distinction between audit quality<sup>3</sup> and auditor quality<sup>4</sup>. Many researches do not distinguish between these two terms and often use them interchangeably. Auditor quality is defined as the overall quality of audit services in all audits of the audit firm. Audit quality must be defined for each audit project separately (on a service-to-service basis) because the audit firm may

not perform all its audits at a similar quality level (Fathi, 1400). In other words, the quality of the auditor is based on the concept of "the quality of the audits of the auditing firm", while the quality of the audit is based on the concept of "the actual quality of each of the audit projects". It is essential (Bashiri Menesh et al., 2021).

Although it is difficult to measure the actual quality of the audit, it is possible to measure the public perception of the quality of the audit and it is possible to observe the market's reaction to the audited information. Basically, in an efficient market, the perception of the quality of the audit should reflect the real quality of the audit. The research conducted by (Razdar and Nehuri, 2019) has been able to clarify the dimensions of this issue to some extent. In his research, he investigated whether the impression of the audit package by the users represents the real quality of the audit or not. The results of his research showed that the users' perception of audit quality represents the real quality of audit. Any research on the relationship between the public's perception of audit quality and other variables can answer many uncertainties in the field of real audit quality. If the market cannot correctly evaluate the actual quality of the audit in certain circumstances, the perception of the quality of the audit will no longer represent the actual quality of the audit (Farmer and Aghdam, 2018).

In general, the research conducted in the field of audit quality can be divided into two general groups: supply motivation<sup>14</sup> for high quality audits and demand motivation<sup>15</sup> for high quality audits. The research conducted from the point of view of audit service providers mainly emphasizes factors that focus on auditors' abilities in providing high quality audits. On the contrary, the research conducted from the perspective of users of audit services mainly deals with factors that affect the demand of users of audit reports, including shareholders, legal authorities, creditors and employers (Safi Lu, 2021).

### **4.2. Research background**

Bashiri Manesh et al. (2021), investigated the impact of accounting information systems on the qualitative characteristics of financial information and audit quality of Ghadir Investment Company. The results showed that Hasadbadari information system had a positive and significant effect on the qualitative characteristics of financial information and audit quality in the company. There is a lot of investment. The findings of this research show the importance of the quality of accounting information systems and its effective role in improving the quality of financial information and the audit process.



Shafizadeh (2021), investigated the effect of structural equation modeling of the accounting information system on financial performance in different areas of Shiraz municipality. The results showed that the accounting information system has a significant impact on financial performance.

Razdar and Nehuri (2019) investigated the narcissism of managers and financial performance with regard to audit quality in companies admitted to the Tehran Stock Exchange. The results showed that there is a significant relationship between managers' narcissism and return on assets and return on equity. Other results from the hypothesis test showed that the size of the auditor as audit quality has no significant effect on the relationship between managers' narcissism and financial performance of companies.

Faal Mazraa and Aghdam (2018) investigated the impact of audit quality on the relationship between ownership structure and financial performance. The results showed that there is a relationship between ownership structure and financial performance. But audit quality does not affect the relationship between institutional ownership and financial performance.

Ahmadi et al. (2018) investigated the simultaneous effect of corporate governance and audit quality on profit quality with the mediating role of capital structure and financial performance. The results showed that corporate governance and audit quality directly and indirectly (through the mediating variable of financial performance) have a significant positive effect on profit quality; But through the mediating variable of capital structure, they have a significant negative effect. In addition, the findings show that the direct effect of corporate governance and audit quality on profit quality is stronger than their indirect effect.

Liu et al. (2022) investigated the impact of corporate governance and audit quality on improving financial performance. The results showed that corporate governance and audit quality have a positive and significant effect on the financial performance of North Korean stock companies.

Ali (2021), investigated the relationship between independent audit quality and financial performance. The results showed that although the scope of the independent audit is not clear on the absence of adverse conditions such as fraud, error and corruption in the financial statements and data of the company that the auditor is dealing with, it is necessary to provide reasonable assurance within the framework. Audit evidence that can be the basis for the auditor's opinion. By considering the compliance of financial statements and financial data with generally accepted accounting principles and rules, it is assessed that compliance with the rules is ensured. Auditing of financial statements includes accounting books,

accounting documents. Financial statements are audited through these documents.

Al-Waeli et al. (2020), investigated the impact of the features of accounting information systems in improving the financial performance of general contracting companies through the mediating role of audit quality. The results showed that timeliness, accuracy and verifiability have a significant effect on financial performance. While it did not show a significant effect on the relationship of financial performance. It was shown that internal control positively moderates the relationship between communication, accuracy and financial performance. While, the internal control system moderated, it showed no effect on the relationship between verifiability, timeliness and financial performance.

Ado et al. (2020), investigated the impact of audit quality on the financial performance of companies listed on the Nigerian Stock Exchange. The results showed that the audit fee has a positive and insignificant relationship with return on assets (ROA). This means that if the amount paid to auditors for performing audit services is reduced, the financial performance of companies listed on the Nigerian Stock Exchange will increase. According to agency theory, auditor size shows a significant positive relationship with ROA. This positive figure shows that the percentage increase in companies audited by Big4 as well as the financial performance (ROA) also increases. Auditor independence also has a positive and significant relationship with ROA. Finally, auditor independence was found to be more powerful than auditor size on financial performance.

Alwater et al. (2019), investigated the role of integrating hotel sustainability reporting practices into an accounting information system to increase hotel financial performance: Evidence from Iraq. The results showed that the interaction between accounting information system and hotel sustainability reporting leads to the improvement of general financial performance results. These findings show that the outputs of the current accounting system do not fully meet the requirements of sustainability reporting in the hotel industry and the reduction of information reported in annual reports among the social, economic and environmental dimensions of sustainability does not meet. It also pointed out that reporting on environmental information has a significantly greater impact on hotel financial performance than reporting economic and social information. The findings show that the positive relationship between reporting on hotel sustainability and financial performance in the Iraqi hotel industry may motivate management to provide more information on sustainability concerns in order to improve hotel financial performance.

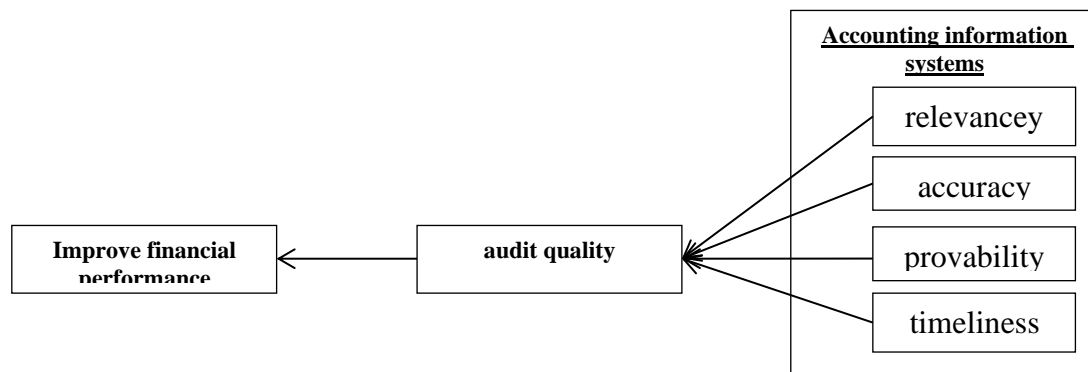


According to the research literature and conducted research, it can be concluded that the relevance of accounting information systems has a positive and significant effect on the improvement of financial performance through the mediating role of audit quality. The accuracy of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality. The provability of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality. The provability of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.

effect on financial improvement through the mediating role of audit quality. The timeliness of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.

### 3. RESEARCH MODEL AND HYPOTHESES

According to the stated contents, the conceptual model of the current research can be drawn in the form of graph 1:



**Graph 1- Conceptual model taken from the research of Al-Waeli et al., (2020)**

Therefore, the research hypotheses are presented as follows:

- H1 :The relevance of accounting information systems has a positive and significant effect on audit quality.
- H2: The accuracy of accounting information systems has a positive and significant effect on audit quality.
- H3: The provability of accounting information systems has a positive and significant effect on audit quality.
- H4: The timeliness of accounting information systems has a positive and significant effect on audit quality.
- H5: The relevance of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.
- H6: The accuracy of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.
- H7: The provability of accounting information systems has a positive and significant effect on financial improvement through the mediating role of auditing quality.
- H8: The timeliness of accounting information systems has a positive and significant effect on the improvement of financial performance through the mediating role of audit quality.

### 4. RESEARCH METHODOLOGY

In terms of its purpose, the current research is an applied research, and in terms of the method of data collection, it is a descriptive (non-experimental) and a field study. And since in this research, the researcher seeks to investigate the effect of accepting the balanced scorecard on the effectiveness of the accounting information system and sustainable performance (Iraq stock exchange companies), Therefore, this research is based on the field research method and the method of conducting is survey. The most important thing is that this research is based on the research method of correlational research and the method of conducting it is a survey, the most important advantage of which is the ability to generalize the obtained results.

#### 1.4. Society and statistical sample

The statistical population of this research includes accountants and internal auditors and financial managers of Iraq stock exchange companies, which number is 325. To determine the minimum required sample size, the second formula of Kekran was used for the limited population, so the minimum required sample size was 385 people. It is worth mentioning that non-random sampling method is available due to the lack of access to all the people of the studied society. The demographic characteristics of the respondents are as follows:



**Table 1- Characteristics of the respondents**

Characteristics of the respondents		Frequency	Frequency rate
gender	Male	307	0/80
	Female	78	0/20
Age	Less than 30 years	219	0/57
	31-40 years	95	0/25
	41-50 years	71	0/18
education	Bachelor's degree	139	0/36
	Master's degree	228	0/59
	P.H. D	18	0/5
Organizational position	manager	77	0/20
	deputy	205	0/53
	expert	103	0/27
Field of Study	Accounting management	263	0/68
	Economy	79	0/21
	other fields	43	0/11

#### 2.4. Data collection

Data was collected through a questionnaire. 400 questionnaires were distributed and collected in person in the research community during 2 weeks. The respondents were assured that their name and their organization will be completely confidential and will not be disclosed in any way. Out of 430 distributed questionnaires, 395 questionnaires were returned, of which 385 completed questionnaires were used in the analysis. The average return rate of the questionnaire was 92%. Considering the research culture in the country, the rate is satisfactory.

#### 3.4. Measurement scale and validity and reliability

The present research questionnaire consists of three parts. The first part is related to how to complete the

questionnaire; The second part is related to the demographic characteristics of the respondents and finally the third part is related to the research variables. Therefore, this questionnaire contains 48 questions depending on the description of table (2).

The reliability of the questionnaires was confirmed by Cronbach's alpha coefficient, the content validity of the questionnaires was confirmed by a group of university professors and their construct validity was confirmed by confirmatory factor analysis, which was more than 0.7 for both variables, which indicates the reliability of the questionnaire.

Each question of the questionnaire includes five options (including I completely disagree, I disagree, I have no opinion, I agree and I completely agree) so that the respondent can choose one of them.

**Table 2- The structure of the questionnaire**

Variable	Dimensions	QTY of questions	Number of questions	Sources
Accounting information systems	Relevency	6	6-1	Al-Waeli et al., (2020)
	accuracy	6	12-7	
	provability	6	18-13	
	timeliness	6	24-19	
Improve financial performance	----	8	37-33	
audit quality	Management and leadership	5	41-38	
	Professional quality	4	45-42	
	Purpose and mission	4	48-46	
	customer value	3	37-33	



**5.FINDINGS AND ANALYSIS**

**Findings related to descriptive statistics:**

According to the SPSS output listed in table number (3), since the average of all variables is higher than

the theoretical average (3), which shows the appropriate state of the research variables.

**Table 3- Descriptive statistics of research variables**

Variable	Number	Average	standard deviation
Accounting information systems	385	4/15	0/80
Improve financial performance	385	4/43	0/75
audit quality	385	4/41	0/82

According to the output of Lisrel software listed in table number (4), since all the variables have a significance level greater than 5%, therefore, the

significance level of the assumption of normality of the research variables was confirmed.

**Table 4- The results of the Kolmogorov-Smirnov test to determine the normal distribution of research data**

Variable	Acceptance of balanced scorecard	Effectiveness of accounting information system	Sustainable performance
<b>Z</b>	1/15	1/48	1/73
<b>Sig</b>	0/11	0/14	0/15
<b>N</b>	385	385	385

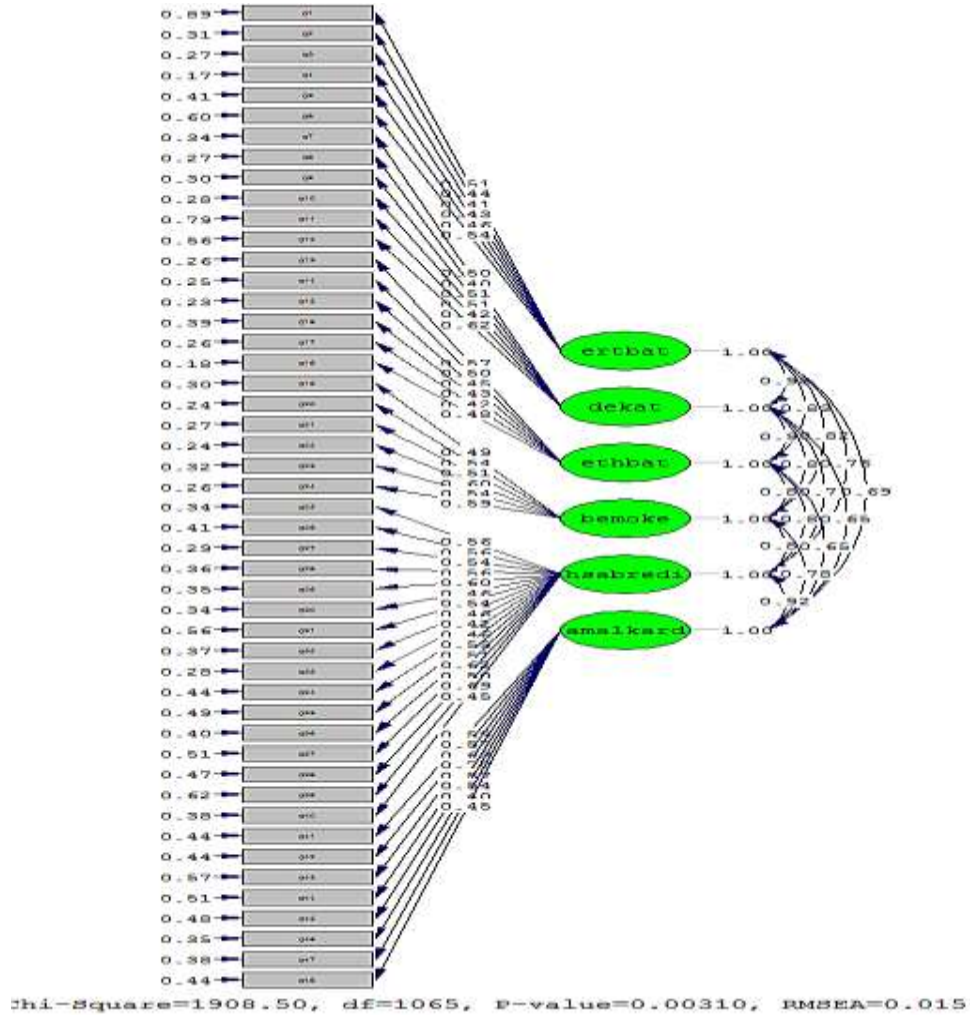
**Findings related to confirmatory factor analysis of questionnaire constructs**

In this study, variables (accounting information systems, financial performance improvement, audit quality) were used to conduct the research, which included a total of 48 questions in a five-point Likert scale.

**Findings related to standard coefficients of research structures:**

According to the output of the Lisrel software shown in the graph (2), the coefficient of the standard path of the relationships is higher than 0.4, so it can be said that the questions in question have good explanatory power.

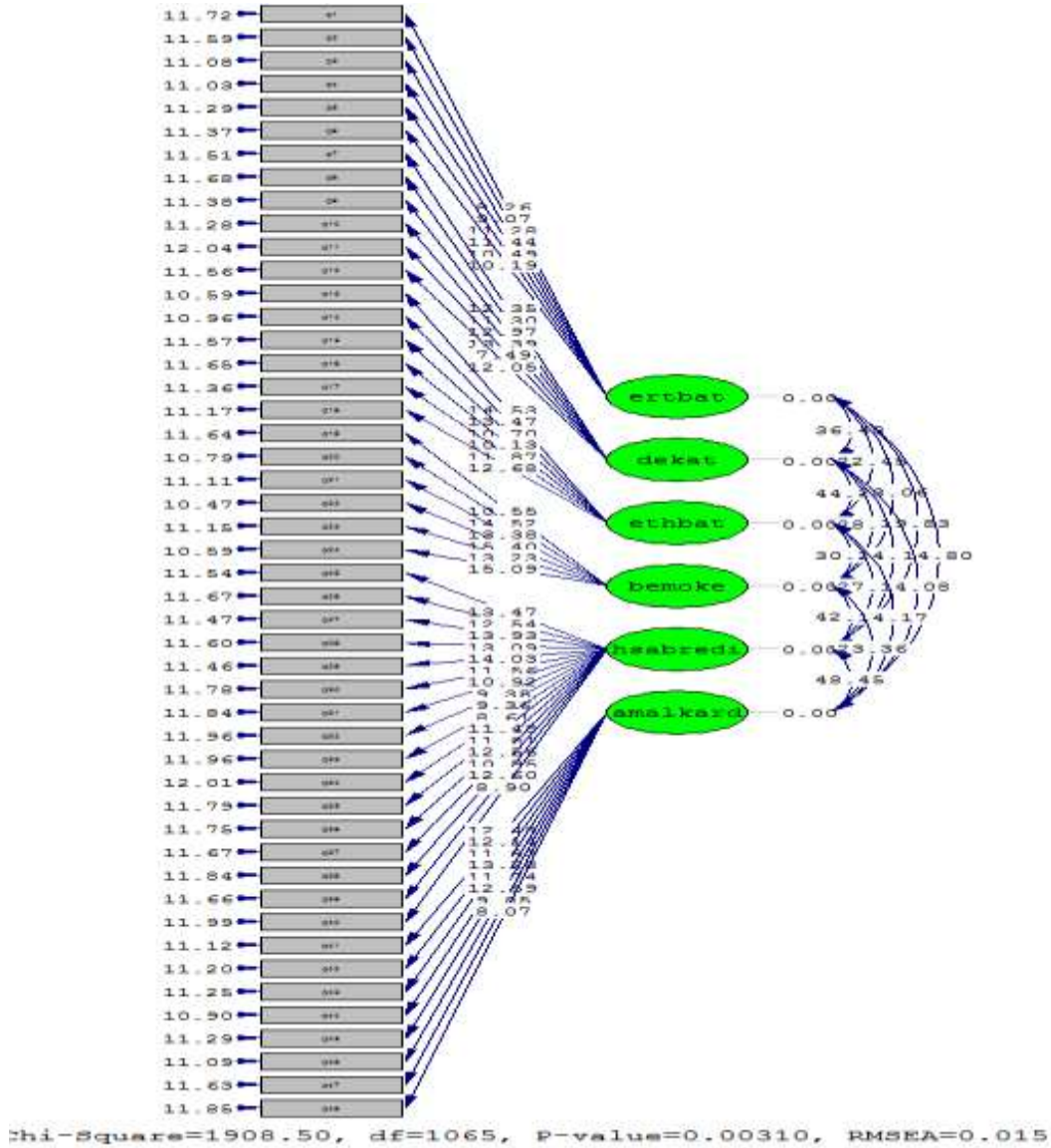




**Graph 2- Analysis of the confirmatory factor of the questionnaire in the standard mode**

Findings related to the significant coefficients of research structures:  
 According to the output of the Lisrel software shown in the graph (3), the significance of the standardized

path coefficient of the relationships is higher than 1.96, so it can be said that all the factor loadings and path coefficients of the model are significant



**Graph 3- Analysis of the confirmatory factor of the questionnaire in the significance mode**

**Findings related to fit indices of factor analysis of structures:**

According to the output of Lisrel software listed in table (5), all the general fit criteria of the confirmatory

factor analysis indicate the general fit of the proposed model with the data and indicate the appropriate fit of the variable measurement model.

**Table 5- Analyzing of fit indices**

Fit indices		proper values	High values	Research values	Fit result
Chi-square division by degree of freedom	$\chi^2/df$	$\leq 3$	$\leq 2$	1/79	proper fit
Root Mean Squared Error of Approximation (RMSEA)	Root Mean Squared Error of Approximation (RMSEA)	$\leq 0/1$	$\leq 0/08$	0/015	proper fit
Normed Fit Index (NFI)	Normed Fit	$\geq 0/9$	$\geq 0/95$	0/90	proper fit

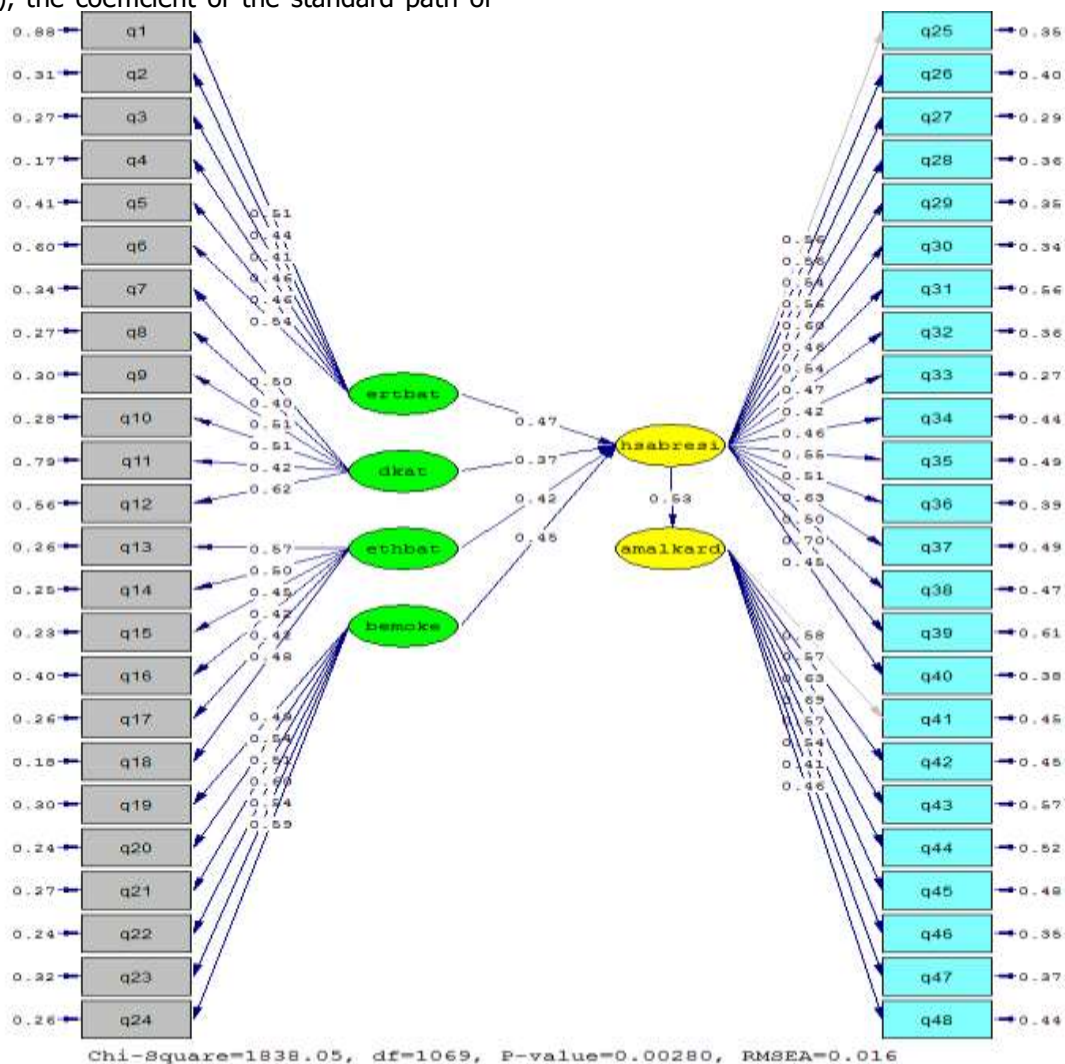


	Index (NFI)				
Non-Normed Fit Index (NNFI)	Non-Normed Fit Index (NNFI)	≥0/9	≥0/95	0/91	proper fit
Comparative Fit Index (CFI)	Comparative Fit Index (CFI)	≥0/9	≥0/95	0/94	proper fit
Incremental Fit Index (IFI)	Incremental Fit Index (IFI)	≥0/9	≥0/95	0/93	proper fit
Goodness of Fit Index (GFI)	Goodness of Fit Index (GFI)	≥0/9	≥0/95	0/96	proper fit
Adjusted Goodness of Fit Index (AGFI)	Adjusted Goodness of Fit Index (AGFI)	≥0/8	≥0/9	0/92	proper fit

**Analyzing research hypotheses**

The findings of the investigation of the standard path coefficients related to the research hypotheses: According to the output of the Lisrel software shown in the graph (4), the coefficient of the standard path of

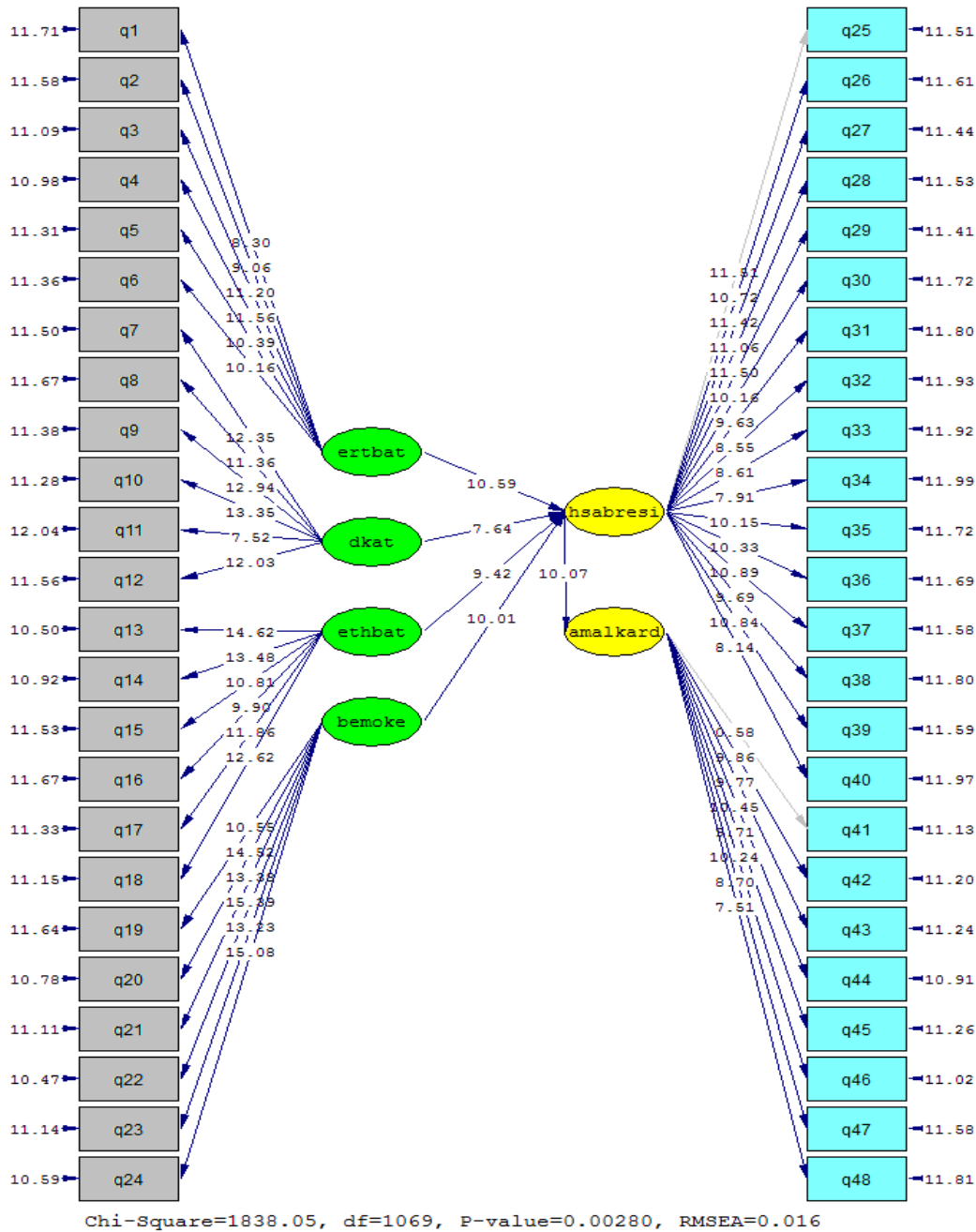
the relationships is higher than 0.3, so it can be said that all factor loadings are confirmed.



**Graph 4- Structural model of research hypotheses in standard mode**

The findings of the significance analysis of the standard path coefficients related to the research hypotheses:  
 According to the output of Lisrel software listed in the graph (5), the significance of the standardized path

coefficient of the relationships is higher than 1.96, so it can be said that all factor loadings and path coefficients of the model are significant.



**Diagram 5- The structural model of the research hypotheses in the meaningful state**

**Findings related to the fit indices of the conceptual model:**

According to the output of Lisrel software listed in table (6), all the general fit criteria of the confirmatory

factor analysis indicate the general fit of the proposed model with the data and indicate the proper fit of the desired model.



**Table 6- Examination of fit indices**

Fit result	Research values	High values	proper values	Fit indices
proper fit	1/71	≤2	≤3	$\chi^2/df$
proper fit	0/016	≤0/08	≤0/1	Root Mean Squared Error of Approximation (RMSEA)
proper fit	0/94	≥0/95	≥0/9	Normed Fit Index (NFI)
proper fit	0/90	≥0/95	≥0/9	Non-Normed Fit Index (NNFI)
proper fit	0/90	≥0/95	≥0/9	Comparative Fit Index (CFI)
proper fit	0/93	≥0/95	≥0/9	Incremental Fit Index (IFI)
proper fit	0/91	≥0/95	≥0/9	Goodness of Fit Index (GFI)
proper fit	0/92	≥0/9	≥0/8	Adjusted Goodness of Fit Index (AGFI)

**Examination of fit indices**

**Analyzing research hypotheses**

The final result of the hypothesis analyzing of this research is reported in table (7).

**Table (7): The result of analyzing research hypotheses**

Hypotheses	direct coefficient (significant)	Result
The relevance of accounting information systems has a positive and significant effect on audit quality	0/47 (10/59)	confirm
The accuracy of accounting information systems has a positive and significant effect on audit quality.	0/37 (7/64)	confirm
The provability of accounting information systems has a positive and significant effect on audit quality	0/42 (9/42)	confirm
The timeliness of accounting information systems has a positive and significant effect on audit quality	0/45 (10/01)	confirm
The relevance of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality	0/24	confirm
The accuracy of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality	0/19	confirm
The provability of accounting information systems has a positive and significant effect on financial improvement through the mediating role of auditing quality	0/22	confirm
The timeliness of accounting information systems has a positive and significant effect on the improvement of financial performance through the mediating role of audit quality.	0/23	confirm

The mediating effect is obtained from the product of the path coefficient of the independent-mediating variable and the path coefficient of the mediating-dependent variable. According to Table 6, the relevance of accounting information systems through the mediating role of auditing quality has a positive and significant effect of 0.24 on improving financial performance. The accuracy of accounting information systems has a positive and significant effect of 0.19 on improving financial performance through the mediating

role of audit quality. The provability of accounting information systems through the mediating role of audit quality has a positive and significant effect of 0.22 on financial improvement. The timeliness of accounting information systems has a positive and significant effect of 0.23 on the improvement of financial performance through the mediating role of audit quality. Therefore, the research hypotheses are confirmed.



## **6. DISCUSSION, CONCLUSIONS AND SUGGESTIONS**

### **First hypothesis: the relevance of accounting information systems has a positive and significant effect on audit quality.**

According to the results of the research, the coefficient of influence between the variable of relevance of accounting information systems to audit quality is equal to 0.47 percent. So it can be concluded that the relevance of accounting information systems has a positive and significant relationship with audit quality. Since the purpose of the auditor is to establish confidence in the information of the financial statements, therefore, the quality of the audit means that the audited financial statements are free from significant distortions. In fact, the relevance of accounting information systems emphasizes the quality of the audit, that is, the reliability of the audited financial statements reflects the high quality of the audit. As a result, the relevance of accounting information systems has a positive effect on the quality of auditing in general contracting companies operating in Baghdad-Diwaniye city. Therefore, the first hypothesis of the research is confirmed and the opposite hypothesis is rejected.

### **Second hypothesis: the accuracy of accounting information systems has a positive and significant effect on audit quality.**

Based on the results of the research, the coefficient of influence between the accuracy variable of accounting information systems and audit quality is equal to 0.37 percent. So, it can be concluded that the accuracy of accounting information systems has a positive and significant relationship with audit quality. Due to the difficulty of measuring the actual audit quality, many studies have tested the perception of audit quality and argue that the accuracy of accounting information systems has an impact on the audit quality, therefore larger audit firms have less incentive for opportunistic behavior and hence Users' perception of the audit quality of such audit institutions is in a better state. As a result, the accuracy of accounting information systems has a positive effect on the quality of auditing in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the second hypothesis of the research is confirmed and the opposite hypothesis is rejected.

### **The third hypothesis: the provability of accounting information systems has a positive and significant effect on audit quality.**

Based on the results of the research, the coefficient of influence between the variable of provability of accounting information systems and audit quality is

equal to 0.42 percent. So it can be concluded that the provability of accounting information systems has a positive and significant relationship with audit quality. Auditors often waive potential adjustments based on factors such as employer size, internal controls, financial health, repetition, and type of judgments. Therefore, provability in accounting information systems is effective on the provision of audit quality. Waiver is less likely for entrepreneurs who have poor financial health. As a result, the provability of accounting information systems has a positive effect on the quality of auditing in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the third hypothesis of the research is confirmed and the opposite hypothesis is rejected.

### **Fourth hypothesis: Timeliness of accounting information systems has a positive and significant effect on audit quality.**

Based on the results of the research, the coefficient of influence between the timeliness of accounting information systems and audit quality is equal to 0.45 percent. So, it can be concluded that the timeliness of accounting information systems has a positive and significant relationship with audit quality. The accounting information system will have two major goals. Provide information for operations and legal needs Provide timely information for decision making. An accounting information system that fully achieves these goals will have valuable benefits. As a result, the timeliness of accounting information systems has a positive effect on the quality of auditing in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the fourth hypothesis of the research is confirmed and the opposite hypothesis is rejected.

### **The fifth hypothesis: the relevance of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.**

According to the results of the research, the effect that the relevance of accounting information systems indirectly and through the audit quality variable has on the improvement of financial performance is equal to 0.24 percent. So, it can be concluded that audit quality positively and relatively mediates the relationship between accounting information systems and improving financial performance. The relevance of accounting information systems makes the information provided in financial statements and financial reports useful for users in order to evaluate the financial status, financial performance and financial flexibility of the business unit. Some qualitative characteristics are



related to the content of the information contained in the financial statements, and others are related to the way this information is presented. As a result, the relevance of accounting information systems through audit quality has a positive effect on improving financial performance in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the sixth hypothesis of the research is confirmed and the opposite hypothesis is rejected.

**The Sixth hypothesis: the accuracy of accounting information systems has a positive and significant effect on improving financial performance through the mediating role of audit quality.**

According to the results of the research, the effect that the accuracy of the accounting information systems indirectly and through the audit quality variable has on the improvement of financial performance is equal to 0.19 percent. So, it can be concluded that audit quality positively and relatively mediates the relationship between the accuracy of accounting information systems and the improvement of financial performance. If the transaction processing system is designed correctly and has high accuracy, it is effective on the audit quality and ultimately on improving the performance of the organization, and if this goal is achieved, it will bring the following benefits to the institution or company: economic processing of information, effective and it will be effective. It controls the data well and accurately and processes them correctly. As a result, the accuracy of accounting information systems through audit quality has a positive effect on improving financial performance in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the seventh research hypothesis is confirmed and the opposite hypothesis is rejected.

**The seventh hypothesis: the provability of accounting information systems has a positive and significant effect on financial improvement through the mediating role of auditing quality.**

Based on the results of the research, the effect that the provability of accounting information systems indirectly and through the audit quality variable has on improving financial performance is equal to 0.22 percent. So, it can be concluded that audit quality positively and relatively mediates the relationship between the provability of accounting information systems and the improvement of financial performance. The provability of accounting information systems can be viewed mainly from two points of view. The first is the subjective concept that is related to the performance of companies compared to their

competitors, and the second point of view is the objective concept that is based on the absolute measurement of performance. As a result, the provability of accounting information systems through audit quality has a positive effect on improving financial performance in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the eighth hypothesis of the research is confirmed and the opposite hypothesis is rejected.

**The eighth hypothesis: the timeliness of accounting information systems has a positive and significant effect on the improvement of financial performance through the mediating role of audit quality.**

Based on the results of the research, the effect that the timeliness of accounting information systems indirectly and through the audit quality variable has on the improvement of financial performance is equal to 0.23 percent. So, it can be concluded that audit quality positively and relatively mediates the relationship between the timeliness of accounting information systems and the improvement of financial performance. The accounting information system is responsible for converting information data into useful financial reports and presenting it to management within the organization and authorities outside the organization for decision making. The transformation of information data into financial reports in accounting information systems takes place in the form of the process of collecting, classifying, processing, analyzing and transferring information. As a result, the timeliness of accounting information systems through audit quality has a positive effect on improving financial performance in general contracting companies operating in Baghdad-Diwaniyah city. Therefore, the ninth hypothesis of the research is confirmed and the opposite hypothesis is rejected.

In general, in this research, the impact of the characteristics of accounting information systems on improving the financial performance of general contracting companies was investigated through the mediating role of audit quality, and based on the results of the research, there was a positive and significant relationship between these variables. The characteristics of accounting information systems including: relevance, accuracy, verifiability, timeliness had a positive and significant effect on audit quality, and audit quality as a mediating variable led to the improvement of this relationship and increasing the relationship between relevance, accuracy, verifiability, to Timeliness of accounting information systems with the financial performance of contracting companies became public. Therefore, by knowing the importance



of each of the above variables, managers of general contracting companies in Baghdad can pay attention to the features of accounting information systems as well as their components and improve audit quality; Take more effective steps to improve performance and create conditions for improving and increasing the financial performance of general contracting companies in a favorable way.

Today, business owners take care of their financial accounts using these softwares. Also, experts and accounting teams of organizations and large companies manage accounts and automate financial company accounting operations with the help of these softwares. The use of these software, while simplifying the control of financial affairs of businesses, makes measuring financial indicators and presenting periodical reports for stock market and capital market analysts' use an easy and novel thing. Today, all types of organizations need an accounting information system to manage their finances. Every good manager needs a powerful tool to manage his collection in the best way. The financial and human resources software suite is a powerful tool that can help managers control employees and calculate their salaries. The accounting information system is considered as one of the main and basic systems of the management information system, and its task is to provide the information needs of different levels of managers in the fields of planning and resource control, performance evaluation and decision making.

Developments in recent years in the field of information technology have been associated with extensive effects on accounting information systems. Few organizations or companies can be found.

According to the results of the analysis of the hypotheses, the following suggestions can be made:

- ✚ Considering the effects of the timeliness component; In these companies, reports are often presented regularly such as daily reports, weekly reports, and there is no delay between the occurrence of an event and the relevant information report. Appropriate and timely use of information in decision-making creates the power to make effective and efficient decisions for managers. Having information with the ability to be analyzed leads to the provision of quality accounting information for making correct and logical decisions and effectively supports managers' decisions and finally encourages managers to make decisions based on the information obtained from accounting systems.
- ✚ Considering the effects of the accuracy

component; The information contained in the financial reports issued by the accounting information systems in these companies are valid, transparent and accurate, and the accounting information systems provide information that reduces errors during work. Also, in the conditions of analysis, the task of information systems should be designed so that it can accurately provide aggregated and integrated information.

- ✚ Considering the effects of the provability component; Company managers should ensure users that the accounting information presented in these companies accurately reflects the economic phenomena that they intend to describe and help to easily verify the information in terms of authenticity and origin. Designers of organizations and designers of information systems should also pay due attention to the effects of environmental uncertainty and design systems that provide information with a wide range in the conditions of task analysis.
- ✚ Considering the effects of the communication component; Accounting information systems in these companies help to make the output information more suitable for decision makers. Also, pay attention to the external environment factors and features and dimensions of the external environment such as: competition, technology and supply and events of the organization as criteria for measuring the environmental uncertainty of the organization in order to make rational decisions on the part of the managers.

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