

T.C.  
UNIVERSITY of GAZIANTEP  
GRADUATE SCHOOL of SOCIAL SCIENCES  
BUSINESS ADMINISTRATION

**THE IMPACT of ACCOUNTING INFORMATION SYSTEM ON  
INTERNAL AUDIT QUALITY, STATEMENTS: Evidence from  
IRAQ**

**MASTER THESIS**

BAYAR JUMAAH KHUDHUR

GAZIANTEP  
December 2018

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Bayar Jumaah KHUDHUR

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Bu tezin Yüksek Lisans tezi olarak gerekli şartları sağladığını onaylarım.

  
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## ET K BEYAN

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Bayar Jumaah KHUDHUR

December 2018

**DECLARATION of ORIGINAL AUTHORSHIP**

I declare that the Master Thesis entitled “The Impact Of Accounting Information System On Internal Audit Quality Statements: Indication From Iraq” is my own work uniquely, and certify hereby that lest specified, all the work employed in this thesis is my own independent study and it’s not been acquiesced for the accolade of any other degree at any institute department, excluding where unpaid acknowledgment in the text.

Bayar Jumaah KHUDHUR  
20/12/2018

## DEDICATIONS

I dedicate this thesis to

My father, who not only raised me but also his care dearly over the years for my education and intellectual development.

My mother who has been a source of motivation and strength during moments of despair and discouragement. Her motherly care and support have been shown in incredible ways recently.

I also dedicate this work to my beloved wife for patience, encourage, care love that will never be forgotten and to my son Pasha.

I also dedicate it to my brother and sisters for their encouragement during my study.

To my professor for the guidance and to all my friends for their support during the weird.

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## ABSTRACT

### **THE IMPACT of ACCOUNTING INFORMATION SYSTEM ON INTERNAL AUDIT QUALITY, STATEMENTS: Evidence from IRAQ**

Bayar Jumaah KHUDHUR

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The study aimed to demonstrate the impact of the accounting information system on the quality of internal audit through the intermediary role of accounting information properties in Iraqi private hospitals located within the scope of Erbil governorate, of which there are fifteen hospitals, and the sample of the study included financial managers. The accountants, internal auditors and audit committees of the 105 hospitals in the study are individuals. In order to achieve the objectives of the study, the analytical descriptive approach was used in addition to using both simple and multiple regression analysis to identify the impact of the variable independent on the dependent variable and analyze the path so as to identify the role of the intermediate variable in the relationship between the independent variable and the dependent variable. To test the hypotheses of the study. The results of the study reached a number of results, the most significant of which is the existence of a statistically significant effect of the accounting information system on the quality of the internal audit in the private Iraqi hospitals at the level of significance ( $\alpha = 0.05$ ), and the existence of a statistically significant effect on the characteristics of the accounting information represented by the adequacy of the quality of internal auditing in the hospitals under study at the level of significance ( $\alpha = 0.05$ ), the existence of a statistically significant effect of the accounting information system on its quality on the quality of internal auditing in the hospitals under study with the existence of the mean variable and the characteristics of the accounting information at the level of significance ( $\alpha = 0.05$ ). In the light of the results, the study recommended the need to increase attention to the accounting information system in Iraqi private hospitals and the need to follow up on its role in raising and improving the quality of internal auditing in these hospitals, which leads to help the administration to take the appropriate decisions and correct deviations in a timely manner. The quality of the accounting information generated by the accounting information system as the best quality accounting information will help the internal audit departments of these hospitals to enhance their quality and performance.

**Keyword:** Accounting Information System, Internal Audit Quality.



## ÖZET

### MUHASEBE B LG S STEM N N Ç DENET M KAL TE ÜZER NE ETK S , TABLOLAR: IRAK

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Bu çalı manın amacı, muhasebe bilgi sistemlerinin, 15 hastanenin bulundu u Erbil valili i kapsamında yer alan Irak özel hastanelerinde muhasebe bilgi özelliklerinin aracı rolüyle iç denetimin kalitesi üzerindeki etkisini ortaya koymaktır. Çalı manın örne inde finansal müdürler vardı. Çalı mada yer alan 105 hastanenin muhasebecileri, iç denetim görevlileri ve denetim kurulları bireysel olarak ele alındı. Çalı manın amacını gerçekle tirmek amacıyla; de i ken ba ımsızın ba ımlı de i ken üzerindeki etkisini tespit etmek ve ba ımsız de i ken ve ba ımlı de i ken arasındaki ili kide orta de i kenin rolünü belirlemek amacıyla yöntemi analiz etmeye yönelik olarak basit ve çoklu regresyon analiziyle birlikte, analitik açıklayıcı yakla ım kullanıldı.Çalı manın hipotezlerinin test etmek için, çalı mada birkaç sonuca ula ıldı. Bu sonuçlardan en anlamlısı, ( 0.05) önem düzeyinde özel Irak hastanelerinde muhasebe bilgi sistemlerinin iç denetimin kalitesi üzerindeki istatistiki olarak anlamlı etkisi; ( 0.05) önem düzeyinde çalı ma konusu hastanelerde iç denetim kalitesinin yeterlili iyle gösterilen muhasebe bilgisinin özellikleri üzerindeki istatistiki olarak anlamlı etkisi; ( 0.05) önem düzeyinde muhasebe bilgisinin ana de i keni ve özellikleriyle birlikte çalı ma konusu hastanelerde iç denetim kalitesi üzerinde muhasebe bilgi sisteminin istatistiki olarak anlamlı etkisi olarak ortaya çıkmaktadır. Bu sonuçlar ı ında, Iraktaki özel hastanelerde muhasebe bilgi sistemine dikkatleri artırmak ve bu hastanelerde iç denetimin kalitesinin artırılması ve geli tirilmesindeki rolünü izleme zorunlulu u bu çalı mada ortaya çıkmaktadır. Ki böylece, idare sapmaları tespit edip gerekli kararları zamanında alabilecektir. Muhasebe bilgi sistemi tarafından en kaliteli muhasebe bilgisi olarak olu turulan muhasebe bilgisinin kalitesi, bu hastanelerin iç denetim birimlerinin kalite ve performanslarını artırmalarına yardımcı olacaktır.

**Anahtar sözcük:** Muhasebe Bilgi Sistemi, ç Denetim Kalitesi.

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## **SECTION ONE**

### **1.1. INTRODUCTION**

Accounting is the most imperative and the oldest information system in the institute, as it is one of the most important foundations of information needed by all levels of management and external users to rely on the basis for good decisions. As a result of the tremendous evolution of the accounting information system in recent years, the information has become more important and more vital for the management of the Organization, making the process of managing, reporting and communicating to its users. The transition of the accounting information system from the level of a bookkeeping system and the recording of transactions to financial reporting to a system is an integral part of an integrated information system within the organization. The accounting information system does not work in isolation. Submission of the organization and development of the accounting information system include addressing the enormous volume of data and information with the presence of many ways to address them, in addition to the large super speed and accuracy in reporting and at the lowest possible cost.

The accounting information system is a significant system for organizations. It helps the management of the organization to perform its functions efficiently and effectively through the information of system that contributes to the decision making and control of the organization's activities. The success or failure of the Organization depends on the achievement of its objectives. The widespread use of computers in processing data, especially financial data in most organizations, has had a significant impact on the role played by the accounting information system in these organizations, so that the accounting information system can be able to contribute to solving many problems and financial decisions which are faced the management of the organization and the rest of the users of the information provided by the accounting information system. It's essential to assess the information system applied from time to time, to ensure its ability to keep pace with the organization's activities

and to keep abreast of developments, Contemporary works as well as ongoing and successive variations in the economic environment. The development of the accounting information system has led to several risks, which have a negative impact on the adequacy and credibility of the accounting data related to that system, as this system has not been audited (Al-Salah, 2009). The internal audit job plays an important role in guiding corporate operations towards success. It helps to examine and evaluate financial activities, both administrative and operational, and to provide management personnel at all levels with the necessary information so as to assist in the control and protection of assets and operations under their responsibility. The internal audit aims to assist the management and rationalize its decisions by providing independent and objective assurance, in addition to the advisory activity aimed at increasing and improving the value of the operations through independent review, evaluating the effectiveness of operations and control and providing management with objective analysis and constructive suggestions. The basis of audit services is the assurance that it provides for the integrity of operations through audit and review aimed at evaluating the effectiveness of risk administration and controls as well as the integrity and administrative quality and internal organization.

In view of the internal audit role and its importance in evaluating and verifying the accuracy of the data, information, reports and financial declarations produced by the accounting information system, enhancing the credibility and reliability thereof, and ensuring the policies and procedures drawn free from violations and errors, in order to reservation the assets of the organizations from manipulation and embezzlement This study was conducted to determine the impact of the accounting information system on the quality of internal auditing in Iraqi private hospitals to present the appropriate suggestions and recommendations in light of the results to be reached by the researcher.



### **The problem of study**

The growth and growth of organizations, their size, the diversity of products and services they provide, and the abundance of their operations and financial events, have led to the need to pay consideration to the accounting information system increasingly. However, the use of this system led to the emergence of some problems related to the control as these problems led to the inaccuracy of the data, information and financial statements produced by the accounting information system and their lack of suitability to the needs of decision-making and lack of confidence in it This is because the processing process of data and information is not visible. This disturbs the quality of the internal audit because the internal audit function is used as an internal control method aimed at measuring the efficiency and effectiveness of departments, avoiding all problems and addressing them and achieving the organization's various objectives which include achieving a high level of performance, profitability, competitiveness, attracting customers and achieving sustainable development. The research problem facing internal auditing shows the problems of mismanagement, administrative malfunctions, financial irregularities on the organization's systems and resources, and deliberate and unintentional excesses that lead to a lack of confidence in the accounting information system and the information that may result in organizations being exposed to the risk of loss, bankruptcy and liquidation. Misguided and overburdened by internal audit.

Therefore, the problematic of the present study can be signified by raising the following question:

What is the impact of the accounting information system on internal audit quality in Iraqi hospitals regarding the existence of the intermediate variable represented by the accounting information characteristics produced by the accounting information system?

### **Aims of the study**

The main objective of the research is to demonstrate the impact of the accounting information system on internal audit quality, particularly through the intermediary role of the characteristics of accounting information in its dimensions (relevance and reliability) in Iraqi private hospitals, through achieving the following objectives:

1. Statement of the impact of the accounting information system on its components (infrastructure of the accounting information system, databases, software, procedures, and the staffs in charge of the accounting information system) on the quality of internal auditing in Iraqi private hospitals.
2. To identify the relationship between the accounting information system and its components on the characteristics of the accounting information produced by the accounting information system (relevance and reliability) in the Iraqi private hospitals.
3. Determining the impact of the characteristics of the accounting information produced by the accounting information system in its dimensions (relevance and reliability) on the quality of internal auditing in Iraqi private hospitals.
4. Determine the intermediate role of the characteristics of accounting information in its dimensions (relevance and reliability) on the relationship between the accounting information system and internal audit quality in Iraqi private hospitals.

#### **The importance of the study**

The study stems its importance through the importance of the variables that deal with it. This importance is summarized by the following data:

1. Addressing the importance of the accounting information system and its impact on internal audit quality in Iraqi private hospitals.
2. The results are expected to serve many individuals, parties and groups (eg audit committees, internal auditors, financial managers and accountants) in the hospitals in question.
3. The results of the study are expected to serve a large part of the Iraqi private hospital departments by determining the nature of the relationship between the components of the accounting information system and internal audit quality on the one hand and determining the extent of the obligation of the Iraqi private hospitals to provide the elements of the accounting information system.
4. Future efforts will be directed to the Iraqi private hospital departments to take corrective and corrective action in the accounting information system by showing

gaps, gaps and weaknesses that will exploit opportunities and enhance the strengths and opportunities in these systems.



## **SECTION TWO THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

### **2.1. THEORETICAL FRAMEWORK**

At present, business managers are working in a extremely competitive and changing global business background and therefore need an information system that provides a quick response to complex business inquiries. Technological progress has enabled organizations to generate and use the accounting information system. This system is a tool that organizations can use from In order to achieve a stronger and more flexible institutional culture to cope with continuous changes in the environment, one of the main reasons why businesses benefit from high-tech accounting information is to gain support for their business decisions, The accounting system assists organizations in measuring risk from certain business processes or forecasting through future warnings (Mndzebele, 2013).

#### **2.1.1 Accounting Information System**

In recent years, organizations have begun to change rapidly in the face of the globalization of technology. Part of this change is the accounting information system. Any change in the accounting information system depends on data and information. In order to progress the accounting information system, high quality data must be collected, the excellence of this organization, and this information will be a means of design, control and making the right choice in the organization, in fact the accounting information system is vital for all administrations (Jawabreh and Alrabei, 2012).

Before addressing the concept of the accounting information system, one must first understand the concept of the system as the system is a set of interrelated elements within clearly defined boundaries that work together to achieve a set of common objectives by accepting input and produce outputs through an organization transformation ( O'Brien and Marakas, 2010).

Wheeler and Dull, Gelinias (2012) believes that the system must possess elements of organization, integration, interrelationships and central objectives. The system as a whole

consists of a number of subsystems that are integrated into a single system. Each of these subsystems is itself a system of subsystems. The information system can be defined as a set of unified elements that collect, repossess, procedure, supply and distribute information to support decision-making, control and oversight in the institute, as well as support decision-making, direction, control and control. Analyze problems, visualize multifaceted topics, and create new products (Laudon and Laudon, 2012).

From the above definition, the (AIS) can be defined as a specialized and sub-system of the information system. The determination of this specialized sub-system is to collect, procedure, and provide information associated to the financial aspects of business events (Gelinas, Dull and Wheeler, 2012).

It can be defined as the structure, composition or unit used to carry out the accounting work, organize and complete the full accounting cycle and include a correlated set of documents, books, records, reports, accounting lists, business, procedures and arrangements through which the data are collected, analyzed, recorded, summarized, and interpreted (Al-Mutairi, 2012).

The accounting information system can be defined as one of the sub-systems of the firm. It involves of several sub-systems that work together in a intelligible, synchronized, reciprocal and interrelated manner in order to provide historical, current and future financial and non-financial information to all parties interested in the company's order and to serve its objectives (Aljjawi and Jubouri, 2014).

The company's accounting information system is a sub-system of the MIS that can collect a wide variety of information about the organization including information on sales, purchases, salaries, inventory, cash receipts and payments as well (Saracina, 2011).

The accounting information system is not only a support for accounting, financial and commercial operations, but often creates useful information for non-accountants. Individuals working on all other subsystems of the organization need the accounting information system in their operations. In the finance department, the accounting information system has a role in forecast and cash forecasts as well as information on payment and receipt, etc. In the marketing and sales department, the

accounting information system is instrumental in providing a summary analysis of sales, cost information and sales forecasts. In the Human Resources Section, the accounting information system has a role in providing payroll analysis (including information on the entitlement of each employee) as well as projections of future staff costs. In the production section, the accounting information system provides stock inventory summaries (Bagrahoff, Simkin and Norman, 2010).

The Accounting Information System (AIS) plays a significant role in the decision-making procedure in business and managing, and the American Institute of Certified Public Accountants (AICPA) initial reported in 1966 that: Accounting is essentially an information system, and if we more accurately say that accounting is the repetition of theories General information in the field of effective economic activities, consisting of the main part of the information provided quantitatively. Thus, the accounting information system is part of a comprehensive information system whose main objective is to obtain information on business decisions. As the methods of collection, analysis, processing, distribution and archiving of accounting information have changed over the years. Accounting information has always been an important part of the business process ( Sa er and Olui , 2013).

The accounting information system (AIS) is a system that is fully designed for the production, assembly, organization, processing, storage, retrieval and dissemination of the organization, organization or any other specific areas of society. The accounting information system can assist business units, especially small and medium enterprises, In the areas of final price, costs and cash flow by providing information to support and supervise small, medium and effective companies in a dynamic competitive environment, and can also help to integrate those companies, operational considerations and strategic programs Long term (Salehi and Abdipour, 2013).

The researcher finds that the accounting information system is not only important for large organizations but also important and important in small and medium business organizations, which overlook the necessity and importance of accounting The researcher finds that the accounting information system is not only important for large organizations but also important and important in small and medium business organizations, which overlook the necessity and importance of

accounting information systems, and is important because it gives added value to the organization.

Romney and Stainbart (2012) believes that the accounting information system provides added value to the institute by improving the quality and cost of the products and services provided by the organization, improving the efficiency of the organization, sharing knowledge that improves its operations and provides them with a competitive advantage, (Suppliers), improve internal control structure and improve decision-making.

The researcher believes that the accounting information system can be defined in a comprehensive manner as a set of systems, procedures, devices and individuals that work within the organization in order to prepare the data and provide the financial accounting information needed by the administration and other parties that will take decision and decision, With this unit as processors, creditors, current and prospective investors, customers, tax services, government and society. The integrated accounting information system consists of several subsystems. Each subsystem consists of a set of procedures and methods T to achieve its objectives and the need for other procedures that ensure linking these subsystems to each other and then linked to the integrated system of accounting information.

The BIS (2011) combines with Naimat (2012) to identify the functions of the accounting information system, which includes the collection and storage of data related to economic and financial activities, the processing of data through the screening, classification and summarization process, the generation of useful information for decision making and provision to beneficiaries, And ensure sufficient control that confirms the recording and processing of data on business activities accurately and ensure that these data are true and complete, the second part includes monitoring the processing of these data where feedback is made to identify the weaknesses in this process and how to processing them.

Each organization must adapt its own accounting information system to the needs of its users. Therefore, the objectives set for the accounting information system may vary from organization to organization. However, three basic objectives are common to all systems and these are ( Hall, 2011).

1. Support management oversight function: Supervision is a term that refers to management's responsibility to properly manage the organization's resources. The accounting information system provides external users with information on the exploitation and use of resources through traditional financial statements and other reports to be prepared. Within the organization, management receives oversight information from various liability reports.
2. Supporting administrative decision-making: The information system provides administrators with the information they need to implement their decision-making responsibilities.
3. Supporting the day-to-day operations of the organization: The accounting information system provides information to functioning staff to assist them in performing their day-to-day functions that are efficient and efficient.

#### **2.1.1.1. The stages of the accounting information system**

**Inputs:** The primary needs required for the operation of the system, called data, are collected and aggregated in preparation for their introduction to the system for processing. These are economic events of a financial nature, expressed in the unit of cash used. These data are also collected and collected from different documents and documents, which are obtained from objective evidence supporting financial events (documents) and historical data prepared by other system components, quantitative and economic data ( Ziyud, Bahlul and Muhammad, 2009).

**Processing:** Transfers data entered into information. Processing includes the use of logs and books to ensure permanent registration and chronology of system inputs. Journals are used to record accounting operations. Records are used to record other types of transactions that do not perform financial operations Warehouse records, check delivery records, etc., then the entries are transferred to the ledger accounts, which consists of the Assistant Professor accounts, which includes detailed data on the operations that have occurred, and the General Ledger accounts, which includes total totals for the work Which are used for audit purposes and for the preparation of financial statements (Khomeini, 2014).



**Outputs:** consists of reports and financial statements that are processed and presented in a structured and understandable manner so that the user can benefit from them (Ziyud, Bahlul and Muhammad, 2009). The outputs of the accounting information system can be classified into several types, including documentation of ongoing activity, operational reports, planning reports, and audit reports (Naeemat, 2012).

**Control:** The process of monitoring all inputs and processes, and is defined as the organizational plan and all the consistent methods and standards adopted by the institution to defend its assets and control the precision and confidence in its accounting data and improve production efficiency and encourage submission with pre-set managerial policies, internal control objectives can be summarized as follows: Asset protection, accuracy of accounting data, integrity and suitability, adherence to management policies and efficient economic use of resources (Khomeini, 2014).

There are a number of factors that exist in the accounting information system, which may differ in their details from one economic unit to another according to several factors, the most important of which are: the size of the economic unit, the nature of the activity, the material and human resources necessary to operate the system, the nature of the system in terms of manual, However, the provision of these components is necessary for accounting work (Al-Sakka and Al-Hibiti, 2003). The accounting information system consists of the following components (Rainer, Prince and Cegielski, 2014):

**The accounting information system infrastructure:** All and all types of physical components and media used in the processes in which the data, information, equipment or material are transferred do not only include computers and other devices but also all objects and visual media on which data are recorded from pages and pieces of paper that are extracted It has information on magnetic or optical disks, such as computer systems of various types, and computer peripherals of various kinds (Abu Haseira, 2015).

**Databases:** A collection of classified data collected and controlled by the logical relationships between them. It is a gateway and access through computers based on a container that contains a set of data stored in files that are processed into useful

information that facilitates Refer to them and benefit from them (Al-Obeidi, 2012). This data is accessed through various application programs.

**Software:** Includes all the different types of instructions and instructions required in data processing, including operating system sets that guide computer hardware and controls and application software that direct specific user-specific processes and processes such as statistical analysis programs and database programs (Mat, 2015).

**Procedures:** Instructions to integrate the components of the above accounting information system (equipment, software, staff skills, database) to process information and generate desirable outputs (Rainer, Prince and Cegielski, 2014).

**The staffs in charge of accounting information system:** refers to the availability of qualified staff with sufficient skills to deal with the system (Khawaldeh, 2010). The researcher believes that it includes all employees and operators to operate and maintain the work of the accounting information system and ensure the provision of information and financial reports on the operation and non-financial in a timely manner.

Al-Fatlawi (2012) highlighted the main characteristics of the accounting information system. (1) It consists of a set of subsystems, each specialized in providing a particular type of information, and these systems permeate all the activities of the organization; (2) It includes procedures and methods, so that the outputs of a particular system may be inputs to another system, which ultimately leads to the fulfillment of the overall goal (s) desired by the system. (3) The aggregate system, and any subsystems, consists of a set of means, procedures and methods designed for data processing. (4) It contributes to the protection of the Company's assets and rights including the internal control procedures. (5) It is based on a set of standard legal accounting rules and standards to ensure good performance, quality, symmetry and harmony. (6) It must be flexible, the system must respond to changes in the organizational structure or competitive economic environment surrounding the company. (7) The accounting information system produces information outputs that meet the needs of different internal and external parties, such as typical accounting reports, such as income reports and budget reports.

In order aimed at an effective accounting information system to be in place, it should be clever to (1) link with the organizational structure of the organization so that it provides the necessary information to achieve management functions from planning, controlling and taking the necessary decisions so that accounting information shows the association of administrative doings to each other in the form of a group Of appropriate periodic reports that are useful in achieving the objectives. (2) To be a source of analytical and detailed data on the results of the implementation of the plans, which helps to assess performance by comparing results with plans, and policies predetermined. (3) To assist in the timely delivery of information, to store such information, and to retrieve it promptly and regularly when needed. (4) Integration of information, especially useful external information, such as prevailing economic conditions. (5) Use the information generated by the MIS to serve different departments without duplicating the data collection and operation again. (6) Assist in supporting planning budget sub-systems or statistical methods, as they provide relevant information that are key to the success of such systems. (7) The accounting information system provides communication channels for the flow of information to and from the enterprise, harmonizing the information system with the surrounding environment, so that information is provided according to the conditions of the information users. (8) Allow balance between accuracy, detail, accounting reporting times, and cost of the system to be maintained and maintain operational economies (Al-Boab and Al-Alimi, 2014).

According to Kieso, Weygandt and Warfield (2010) , the accounting information system in its modern sense is illustrated in the following figure:

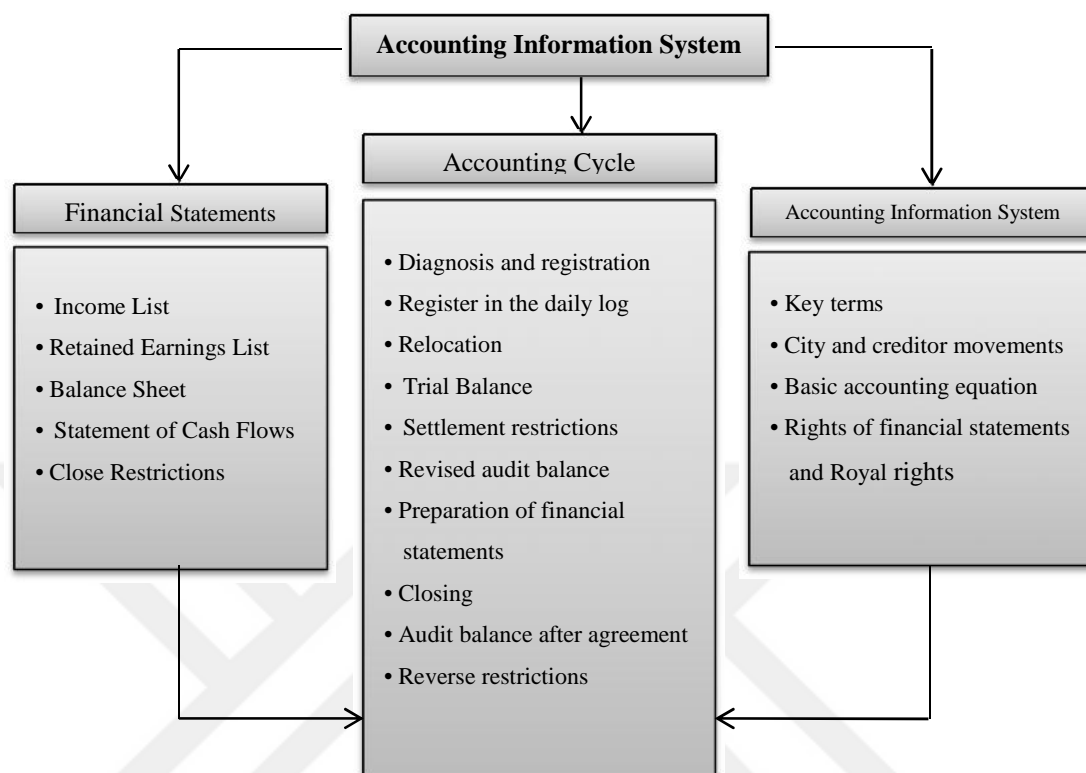


Figure 2.1: Modern concept of accounting information system

**Basic terminology:** The accounting information system contains a set of concepts to identify record, classify and interpret business transactions and other events related to the enterprises. Therefore, you need to understand the basic terms used in the collection of accounting data and such terms (event, business process, account, real and nominal accounts, Journal, Ledger, Audit Balance, Settlement Restrictions, Financial Statements of all types, and Closing Restrictions)

**Debtor and creditor transactions:** All accounts in the accounting information system are based on the concept of debtor and creditor parties and the parties must be equal in each double restriction.

**Basic Accounting Equation:** In each double accounting constraint, the debtor must match the creditor of counterparty equal to it and vice versa. This leads us to the following equation:  $Assets = Obligations + Equity$ .

**Structure of the financial statements and equity:** The balance sheet (equity) and retained earnings in the equity section of the balance sheet are reported in the balance sheet. Income and expenditure are reported in the income statement. In the retained earnings list, dividends are reported. Dividends, income and expenses are transferred

to retained earnings at the end of the financial period and any change in the three items will affect the equity.

**Accounting Cycle:** Is a necessary accounting, which is the accounting procedures used in each organization to record operations and prepare financial statements and starts to diagnose and record transactions and business events in the log of the day and then the transfer to the record of the professor and the preparation of the balance of the audit and the work of the settlement and inventory balances in which the settlement of assets and obligations and the corresponding Of the income and costs at the end of the accounting period, the preparation of the revised audit balance sheet, the preparation of the financial statements in the statement of income, the retained wages statement, the balance sheet and the statement of cash flows, The final beer after the closure, and the work of reverse restrictions after the completion of the preparation of financial statements.

Al-Sakka and Al-Hibiti (2003) show that the accounting information system consists of the following elements:

**Documentary Group:** The documents provide the objective evidence that contains the data that represent the first step in the work of the system, which is one of the important means of monitoring and auditing all economic events. It represents a historical record of economic unity due to the data contained in economic events that carried out by the Unit during the preceding period (s).

**The book collection:** Consists of all the books and records that are held in the economic unit. It represents the container in which all data extracted from all the objective evidence in support of economic events carried out by the economic unit are processed and processed through registration, Of the procedures, assumptions, principles and accounting policies necessary to prepare the presentation in the set of reports and financial statements that require preparation by the accounting system in the relevant economic unit.

**The Accounts Manual:** An important tool in guiding accounting work by identifying the accounts that can be affected by the operations of the Economic Unit. It is also a tool that can contribute to facilitating accounting work through the classifications, tabulations and punctuation that can be given to accounts Addendum

to what may be included in the manual of clarification of some accounting concepts and terminology used and how to process.

**The set of financial reports and financial statements:** The output of the accounting work in any economic unit and the summary of all the operations carried out within its current and non-current activities. It is presented to all parties that have a direct or indirect relationship to the economic unit, Multiple decisions, whether they are from within the economic unit or from outside.

Al-Jazraoui and Said (2009) highlighted the most important factors affecting the design of the accounting information system, namely:

**Strategy and strategic positions adopted by the economic unit:** the art of business management and policies used to achieve the objectives of the economic unit specified in advance, and the economic unit should identify ways to affect the global economy as well as the need to align its strategy with strengths and weaknesses Considering the importance of the possibility of achieving competitive advantages based on the available market opportunities, where the position of the economic unit can be improved when it is able to create and add value to customers coupled with what can do economic units Competition in the markets that any strategy is a broad title and trying to ask the question of what the economic position of the unit and how the unit can be imposed on the competing economic units competing.

**Organizational culture:** Culture is the common values and trends in society that affect economic unity, for example Japanese culture is different from American culture, and this affects the choice of appropriate work methods and strategy.

**Information Technology:** It is a fundamental pillar of the accounting information system as it affects the design and development of the accounting information system through change in accounting to add value to the economic unit, taking into consideration the importance of the specified resources. The accounting information system is more than a computer platform. The consideration of the importance of assessing the cost and benefit of new developments and tools in information technology is essential. Information technology plays a major role in economic units. Through information, it has been able to provide high-quality, low-cost and timely services through the analysis of economic unit operations and the redesign of operational processes.

Zuwalef (2015) has shown that measures to measure the success of the accounting information system are:

**Quality of information:** This concept describes the characteristics of the outputs of the information system and plays a prominent role in the success of this system and its contribution to the justification of decision-making processes. The information quality standards are many items such as relevance, reliability, understanding, completeness, accuracy, comparability and timely suggestion.

**Quality of the system:** The quality of information system is known to positively affect its achievement. The system quality focuses on the desired characteristics of the system itself. This concept includes a range of methods including ease of learning, ease of use, assimilation with other systems, suppleness, response time, and user outlooks.

**User Satisfaction:** It is one of the greatest widely used criteria for assessing the success of the information system. User approval determines the extent to which the user responds to the actual use of the accounting information system, as well as the foundation for the recipient's use of the system. User satisfaction reproduces the user's belief that the system meets his / her need for information. Various methods have been used to measure user approval, such as the range to which the information system meets the user's needs, the hardware and software satisfaction, the system's ability to accomplish the required work, and the system's ability to increase productivity.

**Use of the system:** Providing the information desired by the recipient is essential to the success of the information system since the disappointment and success of the system depends greatly on the level of use of the recipient, by means of using the system failure can be beneficial. The use of the system indicates the range to which recipients rely on the outputs provided by the system in the performance of their functions. The level of use can be measured through many measures, including level of use, frequency of use, time spent in use, and purpose of use. Some studies of these four measures have added two other measures to measure the success of accounting information systems: the impact of the system on users and the performance of the organization.

Kaur and Aggrawal (2013) Identified the factors that lead to the success of the accounting information system which are; (1) Factors related to human resources. (2) Planning factors and relevant factors include: the strategy, the role of senior management of the accounting information system, and the factors related to the infrastructure (structure) of the accounting information system. (3) Stability factors, including factors related to industry strength, organizational factors, factors related to the culture of the organization, factors related to the security of the accounting information system, and factors related to business processes. (4) Factors related to implementation, including: technical factors, Internet-related factors, factors related to the perspective of the accounting information system. (5) Factors related to continuous updating. Factors related to project planning and implementation, marketing, innovation and technology include the provision of information technology support. (6) Valuation factors include factors related to: relationships with customers, profitability, external factors, organizational resource planning, employee participation, marketing performance, other accounting information system factors such as period, and cost and other factors.

Qasem (2004) identified the subsystems that contain the accounting information system and these systems are:

**Expenditure Cycle:** This includes all the activities and processes related to securing the Organization's requirements of materials, labor, equipment and payment of obligations. This course includes the following application systems: procurement system, human resources system, fixed asset system and cash payment system.

**Production cycle:** It includes all procedures and processes related to product design, manufacture and control.

**Revenue cycle:** This system includes all activities and operations related to the sale of goods and services and the collection of cash from sales. This course includes two application systems: sales and cash receipts.

**Funding cycle:** The system includes all activities and processes related to securing and managing funds for the Organization, including cash. Al-Jijawi and Al-Jabouri (2014) also add to these systems.



**The general ledger system and the financial report:** It is characterized by being the focal point for the rest of the organization's systems during the information flow. The operations cycles represent single events recorded in special journals and auxiliary books, general teacher. They separate **the human resources cycle (salaries and wages)** from the expenditure cycle and make it independent. They agree with Al-Jazrawi and Al-Janabi (2009) , but differ from him in considering the funding cycle within the accounting information system and they agree with Kassem (2004).

In her study, Ben Faraj (2014) highlighted the most important benefits of having a good accounting system at the organizational level, namely: (a) an efficient accounting section where there are few errors of clear working procedures and this leads to credible data as a result of clear financial and accounting policies, creating adequate time (vacuum) by financial officials and accountants for other activities such as analysis and planning, adding new value to the organization. (B) Improved internal control through easy detection of fraud, and a clear and detailed definition of duties and powers. (C) The scope of costs is determined by determining profit and loss positions in the company because of the availability of cost-accurate data due to the use of a modern cost system such as effective pricing, identification of citizens where costs can be reduced and obtaining information that maximizes capital through raise the value of the company by increasing the confidence of its customers in addition to easy to borrow from banks and lending institutions. The most important obstacles are the lack of a good accounting information system, which can be mentioned as (a) chaotic or non-salary system, where the structure of accounts does not provide the ability to extract data either for internal or external use. (B) A system that is not sufficiently documented, as some systems are managed by a single person and in his absence no one can operate them. (C) An outdated or outdated system or legacy computer hardware, which makes its ability to extract reports simple. (D) The preoccupation with office work, where many systems rely more on manual labor than on computerized work. (E) Waiting for periods, while accountants prepare some reports such as those for expenses in preparation for closing the accounting period. (F) Lack of reporting tools, which results because the data are overlapping and disorganized, requiring more time to complete reports.

The accountants have a role in the accounting information system where the accountant interacts with the accounting information system and its information products in each economic unit. This interaction generally includes (a) use, (b) evaluation, and (c) development of the accounting information system. On this basis, this interaction can be linked to the presumed cases in which the accountant may be a financial accountant, a tax accountant, an accountant, an auditor. (1) Financial accountants: Financial accounting is one of the accounting fields concerned with the generation of historical financial information. For economic units, this information is in the form of a financial position, an income statement, a cash flow list, and the balance financial statements, and it is known that a section of the external parties and economic units need some or all of these financial statements for legal and legal use. External auditors, particularly investors, use those lists prepared by the Accounting Information System in accordance with Generally Accepted Accounting Principles (GAAP) and this is the responsibility of financial accountants. (2) Account Managers: Generally the account manager of the economic units is known as an auditor and is associated with the chief financial accountant, The head of cost accounting and the budget manager, who lead the activities of accountants, and hence use the accounting information system to gain information to control the accounting activities and the assessment performed by the accounting staff and the direct planning of the accounting function in the unit (3) Tax Expert: Tax accounting has the purposes of developing information related to the tax obligations of each unit and helps to make tax related decisions. Therefore, it defines the outputs of the external tax authorities as well as for the determination of income before and after tax. (4) Administrative Accountant: The cost accountant is also called the task of providing financial information to internal users and it helps in monitoring the various operations and activities of the economic unit. Serves management accounting concepts such as responsibility accounting, standard costs, analysis of deviations, cost analysis, profitability, cash expenditure forecasting, and administrative accountants use the accounting information system to develop information for the managers of the economic unit in which they work.

(5) System developers: The accountant regularly serves the process of designing and developing the accounting information system because of his/her deep experience in his/her profession which contributes to the development of the accounting

information system. (6) Auditor: The purpose of the audit is to evaluate the production of information by the accounting system or to evaluate some of the practical aspects of the accounting information system (Al-Jazrawi and Al-Janabi, 2009).

### **2.1.2. Qualitative characteristics of accounting information**

The economic and trade organizations in general, as well as the processes of managing the organization's performance, managing the current situation of the organization and managing the economic phenomena and crises in particular, need to take decisions on the basis of an information system that provides honest, correct, realistic, non-false, relevant, timely and appropriate information. The information provided by the organizations, the purpose of this information and the nature of its beneficiaries, such information must have certain qualitative characteristics that facilitate the interpretation and use of accounting information (Adrian- Cosmin, 2015).

The qualitative characteristics of accounting information are known as:

(Nkhaei, Nakhaei and Ahmadimousaabad, 2014) These are the characteristics of accounting information that increase their usefulness and effectiveness. These qualitative characteristics are applicable to the information contained in the reports submitted to beneficiaries. It is the spirit of accounting information that gives indications of the usefulness of information. It is a set of attributes that must be characterized by accounting information so that it makes it useful for decision making purposes by users and is viewed by some as representing the quality characteristics of accounting information (Al-Ja'arat, 2012).

Accounting information users are regularly decision-makers, they rely on accounting information to help them make different choices. In order to have a fair decision on accounting information, there is a set of characteristics that must be characterized by the choice maker who uses the accounting information (Al-Dalahmah, 2012).

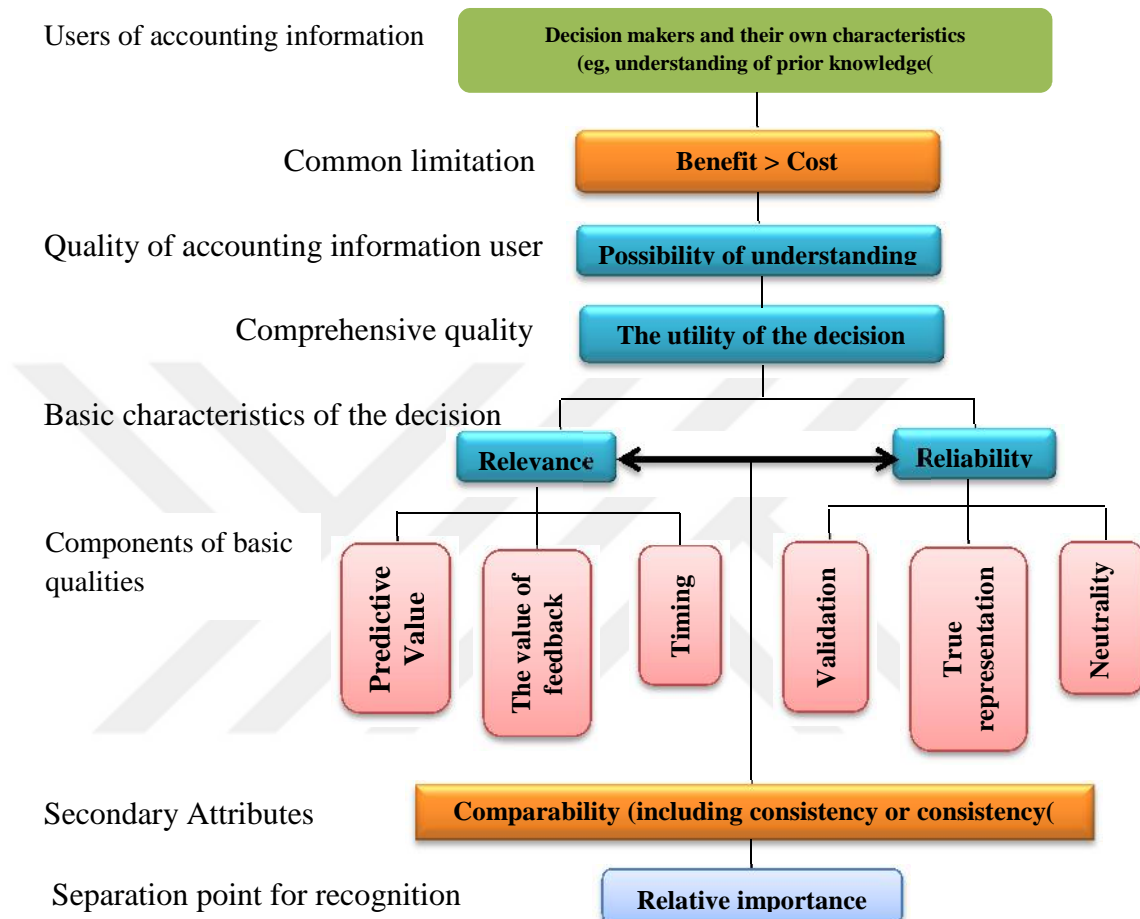
Ability to understand information content (perception) or understandability, users must be able to absorb information in the setting of the decision taken. This quality is special for user (comprehensible) because users will vary in their capacity to accommodate any usual of information. The primary impartial of financial reporting

is to provide understandable information to those who have a sensible understanding of business and economic activities and diligent in the study of information (Spiceland, Sepe, Nelson and Thomas, 2016).

The ability to properly use the information in the appropriate judgments for which such information was equipped. The worth of accounting information can be achieved without two basic conditions (or at least one): contributing to reducing doubts of the decision maker and / or contributing to the decision-making process; Increasing the degree of knowledge of the decision-maker (Al-Sakka and Al-Hibiti, 2003).

The qualitative and temporal experience of industry with the types of accounting information over a previous period of time. Therefore, the use of accounting information must be strongminded by an appropriate and appropriate decision maker. It is unreasonable to usage accounting information by a person who does not understand the minimum of what accounting information can express, and therefore the accounting information is judged by that user as non- Good or not useful.

Gibson (2013) outlined the hierarchy of the qualitative characteristics of accounting information and as set by the Financial Accounting Standards Board (FASB) in Declaration No. (2) Of 1980 in the following hierarchical model:



**Figure 2.2:** Hierarchy of the qualitative characteristics of accounting information as explained by FASB

The researcher believes that providing the minimum acceptable level of qualitative characteristics in accounting information leads to the information being of acceptable quality.

The concept of information quality is the main characteristic of useful accounting information. Therefore, defining these characteristics is a necessary connection between the goal setting phase and other mechanisms of the accounting framework. These characteristics will be of great profit to both those responsible for setting appropriate standards as well as those responsible for the groundwork of financial

reports in assessing the quality of information produced by the application of alternative methods (Jabbar, 2012).

The accounting information quality can be assessed with four distinct features: accuracy, suitability, wholeness, or consistency. It examines critical success factors for the quality of accounting information identified and compared with four collections (Producers of accounting information, custodians of this information, consumers of this information and information managers). These features indicate that the organization, the system and persons, whether in the organization or the system or users of this information, are all necessary issues in the appointment of the quality of accounting information (Al-Hiyari, Al-Mashregy, Mat and Alekam, 2013).

The qualitative characteristics of the accounting information, as explained by the FASB, through which the quality of the accounting information is determined are (1) the basic qualitative characteristics of relevance and reliability; (2) secondary qualitative characteristics of comparability, or consistency.

#### **2.1.2.1. Relevance**

The term convenience indicates that the information is appropriate to the needs of decision-making by users and that information is of a good quality when this information touches the economic decisions of its users by helping them assess historical, current and future economic events or confirm or correct past expectations (Mirza, Orll and Holt, 2008).

Appropriate financial information can make a difference in judgments made by its users. Information may be able to make a difference in decision-making even if some users choose not to make use of it or are usually aware of it (knowing and aware of it) from other sources (Wahlen, Baginski and Bradshaw, 2015). Al-Mukhaili (2009) considers that convenience means its ability to serve a particular decision either by reducing the lack of knowledge of decision-makers or by increasing the knowledge of decision-makers about the decision-making situation.

The accounting information allows its users to (1) create expectations about the outcome of past, current or future events, (2) increase current expectations or make a change in these expectations. (3) improve the decision-maker's ability to predict future expected results, increase or correct past and current expectations, and (4)

assess the outcome of decisions based on these decisions (Bofroa'a, 2012). Information must have a predictive value and a retrospective value and be presented in a timely manner (Al-Shami, 2009).

- Predictive value: it helps the maker and decision makers to predict future results based on previous transactions and events (Gibson, 2013). Appropriate information helps to predict the returns associated with future activity. Without knowing past events, it is difficult to predict what will be in the future. Knowing the results of past events without paying attention to the future is not a goal (Atir, 2012). At present, the complexity of the business environment in the face of intense competition, uncertainty and lack of understanding of the relationships between past and future measures of objectives and events and the difficulty of formulating quantitative or descriptive models of decision making make predictability difficult to implement (Ismail and Naoum, 2012).
- Retrospective value: The appropriate information must have a retrospective value of its ability to disclose the extent to which the user has successfully verified its prior expectations (Meida, 2009). The accounting information has retrospective value when it has the ability to change or correct current or future projections, and the return value property of the information is also called retroactive feed (Atir, 2012, 29).

Timing: Timeliness is also imperative for information to be useful, information is timely when available to users early enough to let them to make their statements. The need for timely information requires organizations to provide information on a periodic basis to improve the timing, the Securities and Exchange Commission (SEC), for example, requires its registrars to provide the financial statement information for the rest of the year (3 months) as well as on an annual basis for each financial year (Spiceland, Sepe, Nelson and Thomas, 2016).

#### **2.1.2.2. Reliability**

Reliability is the another qualitative characteristic of information, which means the ability of information to express what the objectives or economic methods contain and in the form that the user can trust on building its different decision models (Meida, 2009). For the information to be useful, the information in the

financial statements must be reliable, which means that the bottom line is for any error or bias on what it is supposed to represent (Dick and Missonier-Piera, 2010). The information must be verifiable, neutral and honest in presentation or representation, and reliability does not necessarily imply certainty or accuracy. For example, approximations may be reliable but this reliability has dissimilar degrees, and the satisfactory degree of reliability will depend on the circumstances (Nikolai, Bazley and Jones, 2010). The reliability of the information means that the methods of measurement and revelation selected for the extraction and demonstration of the results are appropriate methods for the conditions surrounding them, and that the application of those methods was done in such a way as to allow other individuals independent of those who applied them first time reuse to verify those results, It is presented as expressing the essence of the events involved, without being subject to significant distortion, in addition to being biased as reliable, and reliable information, as the reliability of information increases its usefulness (Jabbar, 2012).

As explained above, it can be concluded that reliability consists of the following basic sub-qualitative characteristics:

- The possibility of verification: The availability of the requirement of objectivity in scientific measurement, ie, the results reached by a specific person can reach another person provided that the same methods of measurement and disclosure (Assem, 2013).
- True representation: means that the words and numbers used to describe or depict a particular economic phenomenon in the financial statements correspond to this phenomenon described (pictured), and that excellent representation means that the economic phenomena are complete, neutral and unbiased and free from error (Weil, Schipper and Francis, 2014).
- neutrality: is a term similar to the comprehensive concept called fairness whether the financial statements meet and satisfy a wide range of users, and the information should not be biased in favor of one group of users at the expense of others and harm them, and neutrality also indicates that Accounting standards should not be affected by the potential impact of the new accounting rule to be applied in a given organization. In practice, impartiality is difficult to achieve because organizations



that expect it to be harmed by the new accounting rule often press hard against the proposed standard (Stice and Stice, 2014).

### **2.1.2.3. Comparability**

Accounting information should facilitate comparisons between companies over a period of time. Accounting information is comparable when organizations deal with similar financial events and transactions in the same way or manner (Weil, Schipper and Francis, 2014). Comparability enables users to identify the true similarities and differences in economic events between organizations (Kieso, Weygandt and Warfield, 2010). The essence of comparability is that information becomes much more useful when it can be connected or linked to a scale or criterion. The comparison may be with data in other organizations or companies, or they may be similar information to the same organization but for other periods of time. Comparability of accounting data in the same organization over time is often called consistency, which will be described later. Comparability requires similar economic or financial events that are accounted for in the same way or in the financial statements of different organizations and of a particular organization but for different periods of time. However, it should be recognized that uniformity in accounting is not always an answer to comparability, as different economic conditions may require different accounting treatments or transactions (Stice and Stice, 2014).

### **2.1.2.4. Consistency**

As mentioned above, consistency is linked to comparability. It means consistency in the use of accounting methods that lead to comparison of results to the same organization for different financial periods (Hamidi, 2009). This requires the organization, in the case of adoption or adaption of a certain accounting procedure; it should be used from one period to a later period unless the change is made on the lists. Users should be informed of the accounting information of this change. This is generally stated in the principles of accounting. Disclosure of the nature and rationale for the change in the accounting principle and its impact on income in the financial statements for the period in which the change is completed, and the justification for the change should obviously explain why the accounting principle used is preferred (Needles, Powers and Crosson, 2014). It can be noticed that if the fixed assets are estimated at historical cost in certain periods and at the current cost in a subsequent

period, this may distort the results of the business and the financial position of the company. It should also be noted that the use of a method or technique of measurement in a constant and continuous manner for a long time may also distort the estimation of fixed assets at historical cost for a long time at a time when the overall price level changes significantly during those periods. Therefore, it is necessary to balance consistency in the use of the same methods and accounting procedures from time to time provided that this does not affect the results of the company's business and financial position, and the change of these methods and procedures if they distort the results of the company's business and financial position in more appropriate ways and procedures (Ismail and Naoum, 2012).

### **2.1.3. Internal audit**

Internal Audit was defined as an independent evaluation function established within FAO to examine and evaluate its activities as a service to the Organization (Moeller, 2009).

Masada and Al Khatib (2009) also defined internal auditing as an independent evaluation activity within the entity that aims to examine, evaluate and achieve accounting, financial and other operational aspects, carried out by an internal entity independent of the entity's management, to provide assurance to the management of the Relevance of the procedures, Performance evaluation, effectiveness of procedures, implementation of established policies and performance measurement, and assessment of the effectiveness, procedures and means of internal control and Relevance of design to achieve its objectives.

Abed Rabbo (2010) identified internal auditing as a set of independent activities within the project established by the management to serve them in achieving operations and constraints on an ongoing basis to ensure the accuracy of accounting and statistical data and to ascertain the Relevance of the reserves taken to protect the assets and assets of the establishment and to verify that the employees of the establishment follow policies, plans and procedures And finally to measure the Relevance of these plans, policies and all other means of monitoring in the performance of its purposes and propose the necessary improvements thereto until the project reaches the maximum production efficiency.

The old definition of the Institute of Internal Auditors indicates that internal audit is an independent evaluation function established within the organization to examine and evaluate activities as a service to the organization, in order to assist the organization's members in effectively fulfilling their responsibilities by providing the organization's personnel with analyzes, assessments, recommendations, advice and information relevant to the examination of activities effective control at reasonable cost (Jumaah, 2011).

Internal Audit Institute (**IIA**) identified Internal Audit as an independent, objective and consultative activity designed to increase the value of the organization, improve its operations, and help it achieve its objectives by creating an orderly and disciplined approach to assess and improve the effectiveness of risk management, control and governance processes (Arens, Elder and Beasley, 2012). By analyzing the official definition of the Institute of Internal Auditors (**IIA**) the following physical concepts can be concluded (Pickett, 2005):

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**Internal Audit:** A service that is available within and outside the organization and differs from the role of external audit. Years ago, the Institute of Internal Auditors took into consideration the change of internal audit name to reflect increasingly modern and professional approaches.

**Independence:** The conception of independence is essential, internal auditing cannot endure or continue if it is not objective. All descriptions of internal auditing highlight or expose the component of independence, although the scope of its work and how it is attained is a subject in itself. That the audit has adequate legal position and is able to stand again on the processes under review in order to be useful, and if this is not

attained, this is a fundamental defect in the audit service and some internal audit meanings may not be able to support the standards.

**Affirmation and consultation:** Internal audit provides advice and assistance to administration in a manner appropriate to each manager's needs. At the same time, the main role of internal audit is to provide independent declaration as to whether the institute is managing the risks well or not.

**Activity:** internal audit function can be considered as an important fact, which means that it is a specific service, not necessarily within the institute, for example outsourcing may be done for the internal audit function.

**Designer to add value:** As the audit service consists of the customer base and understanding of the needs of the organization, here the role of the service should lead to the specific benefit of the institute rather than the internal audit work for its own vague objectives, addition value should be the forefront in the minds of managers' internal audit, this feature must be the driving force of the entire audit process.

**Improving the administration's operations:** This leads to the concept of continuous improvement. The auditors are actually in the organization to make things better, not just to check and control the staff of the organization. If internal audit managers cannot explain how auditors can improve economic and business work, in the internal audit process.

**Assisting the Organization in achieving its objectives:** through the role of internal audit in corporate governance, risk management and internal audit evaluation. If the organization is successful in good governance and risk management and when the internal control performance is effective, then the organization is successful and can achieve its objectives and in the long term, and the organization should direct and guide the internal audit department.

**A disciplined systematic approach:** Internal audit is now a complete profession, meaning that it has a clear set of professional standards and is able to work on the best guidelines for practices in the provision of high quality services. This professional measurement unit can expect that its auditors apply a methodology In

the course of their work, whether this work is an advisory or confirmation, the internal audit manager must establish procedures and policies that guide the internal audit process.

**Evaluation and improvement:** The need to focus on improvements in the institute entails the conduct of assessments. Internal audit places what exists during the audit against what should exist to ensure good oversight. This necessarily entails the use of valuation techniques that are functional in a professional and fair method to give reliable results.

**Effectiveness:** is the bottommost line concept depends on the idea that administration is able to set goals and control resources in such a way to ensure that these aims are in fact achieved and completed, the correlation between control and objectives becomes clear, the audit must be able to understand the basic needs the management as it works to achieve its objectives. Complexities behind the concept of great efficiency, and by construction this in the definition of auditing, it becomes likely that the scope of audit is very broad.

**Risk management, control and governance:** Organizations that have not established strong systems for these issues fail in the long term and are under the short-term regulators' control. Professional auditors are those who have these dimensions and make their role important.

The nature of the internal audit is determined by the role it plays in strengthening the corporate governance function. This is evident from the increasing trend in recent years which calls for improving the management performance and the management itself. The emergence of this trend can be attributed to three factors: increase in corporate failures and bankruptcy in the company's ownership patterns, and changes in the regulatory environment in which the company operates. In recent years, there have been several cases of mega-company collapses, particularly in the United States of America. This has attracted the attention of investors, legislators, researchers and others interested in the fields of business and economy. Several studies have explained the reasons for this collapse. The main reason is the poor performance of companies due to the lack of independence of their boards. Audit or absence of internal audit function in these companies, on the other hand, there have been

significant changes in the ownership patterns of companies as a result of the transfer of ownership of shares from the individual investor to investment institutions such as investment funds. Investors who have an effective influence on the corporate board of directors, these investors began calling for the need to change the administrative specifications, procedures and control methods used by companies to achieve the protection required for their interests (Abdel-Jabbar, 2012).

The importance of internal auditing comes from being a management tool through which the work process, institution or organization must be ensured. Internal auditing should not only reveal errors in the mechanisms of applying laws governing general activities but also errors in the laws themselves and thus improve the general system (Dumitrescu- Peculea and Calota, 2014). In recent years, the collapse of prominent companies focused and focused on corporate governance and also emphasized the internal audit process as part of the governance process. The main objective of the internal audit is to support, strengthen and strengthen corporate governance mechanisms and procedures in the organization and to assess and improve the effectiveness of risk management and control (Coram, Ferguson and Moroney, 2007). The researcher believes that the importance of internal auditing comes from the fact that it is a necessary and important function for the work of the organization as it increases the value of the organization and improves its operations as stated in the internal audit concept issued by the Institute of Internal Auditors (IIA). The importance of internal auditing has increased in recent years and has become a calendar activity for all the activities and operations in the establishment. These activities are aimed at developing these activities and increasing their productivity. The importance of auditing has reached its peak for the following reasons: (Al Ayashi and Mohammed, 2014)

Overcoming the Difficulties of Economic Conditions By shedding light on the way in which activities and processes are carried out within an enterprise, they become an important regulatory tool to help senior management cope with complex economic conditions.

The size of the establishment and the geographical spread of the establishment: The size of the enterprise and the multiplicity of products and the complexity of the features and the need of their customers to the data safe and reliable as their interests

allow to wait until the checks are audited by the external auditor so they need internal audit to verify the Relevance of their financial statements and accounting first.

External audit turns to the (optional) method: The size of the selected sample depends mostly on the Relevance of the internal control system of the entity and the key components of the internal control organization are more reassuring to the external auditor than the entity that does not have an internal auditor.

Provision of reliable data and information: The need for reliable data is increased when such data are used to make administrative decisions, particularly decisions regarding the use of available resources. Senior management often obtains information from two executive departments and information contained in the reports of the external auditors.

Follow the method of administrative decentralization: The introduction of the method of administrative decentralization in the large enterprise the need for the senior management of these enterprises to confirm the extent of commitment of the sectoral departments of the plans and policies that the public and these departments achieve the expected return on the money invested and used resources Efficient and effective results. From time to time, the performance of those departments is broken down in accordance with existing performance standards entrusted to the Internal Audit Service.

Sawad (2009) identified the objectives of the internal audit as follows:

(1) To verify the implementation of the plans and administrative policies by the senior management of the project and evaluate and express opinion thereon and analysis of deviations to avoid future deviations and fill the gaps that lead to the loss of project funds and here the internal audit officials write periodic reports on the evaluation of the plans implemented. (2) Ensure that the information presented to the administration is accurate and sufficient and that is from the correct and sound documents. This requires examining all the project processes that are interspersed with the receipt of cash and cash-flow operations. Internal auditing of these tasks ultimately prevents fraud, forgery, Leads to enhanced confidence in books and records, as well as in data and information. (3) Verify that there is adequate protection of the project assets against loss and theft. (4) To judge the possibility of

relying on accounting and statistical data as a basis for successful management decisions. (5) Assessing the work of individuals and the extent to which they are responsible. (6) Assess the efficiency of the use of resources and assets in economic terms.

Al-Qaisi (2010) indicated that the objectives of the internal audit are (1) evaluation and follow-up of the implementation of plans and policies designed to detect weaknesses or deficiencies in the systems or procedures used for the purpose of modification and improvement required. (2) Verifying the values of assets and their compliance with the books for the purpose of protecting the project funds. This precautionary measure requires the need to tighten controls on important operations such as cash and inventory and the need to confirm the existence of the necessary insurance and adequate value and avoid losses resulting from negligence or incompetence. (3) To verify and correct the accuracy of the accounting data, this requires the internal auditor to carry out a continuous audit on the data and figures to verify the Relevance of the data and numbers and their suitability for the purposes to be used. The auditor should analyze these data by linking and comparing them in the project. (4) Training and compliance of employees with policies and procedures. The Audit Department is the most knowledgeable management of all aspects of the project activity and operations and is able to actively contribute to the training programs in terms of a proposal and possibly some of its articles. The internal auditor also standardizes the interpretation and application of all procedures prescribed by Management and taking into account the extent to which staff is consistent with the spirit of those policies and without prejudice to them at any stage. It is clear from the above that auditing functions are more like preventive services to protect project funds and protect administrative plans from deviation. It is also considered structural because it ensures the accuracy of the data used by the administration in guiding the general policy of the project as it introduces the necessary improvements and amendments to the administrative procedures.

Al-Wardat (2006) added the following internal audit objectives: (1) Determining the efficiency and effectiveness of the entity's internal control system, where management plans, organizes and supervises in a manner that provides reasonable assurance that objectives will be met; There is a reasonable effect that the desired



objectives will be achieved and therefore all the systems, processes and activities of the entity are subject to the internal audit evaluation. (2) Achievement of goals and objectives: objectives and control procedures are established by the management and the internal auditor determines whether they are consistent with the goals and objectives of the establishment. The responsibility of setting the objectives of the establishment lies with the senior management or the board of directors. The auditor must ensure that the programs and operations have been implemented as planned. (3) Identification of risk areas: The internal auditor should identify high risk areas and activities and inform management thereof to determine whether they need to be audited and identify the risk areas from the previous auditor's experience in the facility, information derived from other sources, or problems are found in other companies with similar activity to the entity under audit or from the auditor's experience and general knowledge. (4) Professional uncertainty: The internal auditor should plan and perform the audit in consideration of professional uncertainty. The auditor should not assume the trustworthiness of the audited entities. Instead, the auditor should evaluate the audit evidence objectively, and accordingly attention to the conditions that exist if there is nothing wrong with it taking caution in the application of audit procedures.

#### **2.1.3.1. The types of internal audit**

**Compliance audit:** The process of reviewing the establishment's procedures to determine whether the institute follows specific procedures, rules or laws established by some higher authorities, measures the compliance of the organization with established standards, on the existence of provable data and on recognized standards, such as applicable laws, guidelines, policies, procedures of the organization, or the staff of the accounting department. May assess whether they follow the procedures prescribed by the Controller Organization, and other staff can be assessed to determine whether they follow the policies and procedures established by management, the results of the compliance audit process generally report to management within the audited organizational unit (Hayes, Dassen, Schilder & Wallage, 2005).

**Operational Audit:** This is a comprehensive audit of the various functions within the organization to ensure the efficiency and effectiveness of these functions through

the evaluation and testing of administrative activities and performance results, evaluation and comprehensive examination of the operations of the organization and assess the efficiency of the use of material resources and human resources and make recommendations for improvement (Suhar, 2015). According to Ezzedine (2016) operational audit focuses on activities, auditing of activities, and monitoring of the various activities of the organization, in order to ensure that they are implemented in accordance with the policies adopted by the administration. It is related to functions such as why the proportion of defective units in production is high, or why the turnover rate of employees is high, and all the objectives common to operational scrutiny is to maximize the well-being of the organization (Abdel-Sayed, 2010).

**Financial auditing:** It can generally be defined as an independent valuation of historical accounting data for the purpose of measuring whether it is appropriate, consistent and reliable to protect the assets of the organization, and to express an opinion on the effectiveness of the internal control system as part of the financial audit process, areas such as the organization's financial accounts, payroll system, asset management, and yearly financial statements (Kagermann, Kinney, Küting and Weber, 2008).

Al-Amri and Abdul-Moghni (2006) consider that it is the systematic examination of the financial operations and the related accounting records and records to determine the extent to which accounting principles, administrative policies and any other requirements are pre-determined. It is the name of the operations audit where it aims to ensure the integrity of the completion of the various operations in terms of financial and accounting by verifying the commitment of those responsible for the performance of those processes, administrative and financial policies and therefore, the audit is sometimes called audit by the Secretariat.

Al-Wardat (2006) added to the types of internal audit **audit of information systems:** The purpose of the audit of information systems is to confirm the security and integrity of information to give financial and functioning reports in a timely, correct, complete and useful manner. **Performance audit:** The impartial of the performance audit is to ensure the effectiveness, efficiency and economic performance of employees and the extent of compliance with the regulations and laws and calls this type of administrative audit. There is also the so-called **environmental audit:** a self-

assessment process carried out by the economic unit, which includes an objective critical examination aimed at reviewing environmental policies, programs, and activities for the purpose of issuing an objective judgment on whether the economic unit fulfills its responsibilities towards the surrounding environment (Ayob, 2014).

**Social auditing** is a systematic examination or process of systematically gathering evidence for evaluating the social performance of the organization, represented in social programs and activities, in order to ascertain the Relevance of disclosure in social reports in expressing the organization's commitment to fulfill its social responsibilities, approved and accepted criteria, and then report to stakeholders to assist them in decision-making and policy-making (Al-Hayek, Tawfiq, Bashira, 2015).

Ibrahim (2013) distinguished between internal and external auditing in terms of purpose, scope of work, independence, inspection of internal control and beneficiaries, as well as the following **Objective**: The primary objective of the external auditor is to provide a neutral technical opinion on the fairness of the financial statements and their representation of the financial situation and results of the business, while the internal auditor aims to prevent errors and falsifications and to express an opinion to strengthen the internal control systems of the economic unit.

**Scope of work**: For the external auditor, the transformation of external audits from a comprehensive audit to a test audit using samples for several factors, including time and cost. The internal auditor is always within the unit in a position to expand the scope of his examination and tests Due to the time it has to check all processes, which is a comprehensive audit. **Independence**: The auditor is fully independent of the management of the economic unit. The person is a neutral person whose task is to audit the activity of the unit. The internal auditor is appointed by the unit's director and is dismissed. The internal auditor is not an employee within the unit, but this does not mean independence. The independent auditor is independent of the administration of the unit and is considered to be one of the most important characteristics of the unit. **Internal Audit**: The external auditor examines the internal control system in order to ascertain its efficiency in order to determine the scope of the audit, the size of the samples and the quantity of the necessary tests. The internal auditor examines and evaluates the internal control system in order to improve and tighten it.

**Beneficiaries:** While the internal auditor is concerned with the needs and wishes of the management, the external auditor serves the needs of various sects including the administration, the public of the shareholders, the different categories of people, and the different state agencies.

A study of Bsol (2013) showed sets forth a set of principles and rules for the professional conduct of Internal Audit issued by the Institute of Internal Auditors (IIA) for 2009 which internal auditors must comply with.

**Principle of Integrity:** It contains rules of conduct that internal auditors must have, they must act honestly, cautiously and responsibly, maintain the law, discover any acts by law or profession, and must not engage in illegal or unknown activities that are flawed to the internal audit profession or to the organization in which they work, and must respect legitimate objectives and ethics of the organization they work and contribute to achieving them.

**The principle of objectivity:** It also includes a set of rules of conduct that internal auditors must have. Internal auditors should not participate in any activities or relationships that may impair the evaluation of operations and do not accept anything like gifts, and they must disclose the physical facts they all knew while doing their duties. Unchecked facts may distort their reports on the activities they review.

**The principle of privacy:** It includes the rules of conduct that internal auditors must have, including being wise about the use of information acquired while performing their duties and protecting them, and should not use the information for any personal gain or in any manner inconsistent with the law or harms the goals and ethics that are supposed to prevail in the organization in which they work.

**The principle of professional competence:** It includes the rules of conduct that internal auditors must have. Internal auditors must perform their services with the necessary knowledge, experience and skill. They should perform internal audit services in accordance with internal practice standards of internal auditing. They should always improve continuously their competence and the quality of their services.

#### **2.1.3.2. Internal Audit Quality (Ayob, 2014)**

Zureigat & Al-Moshaigeh (2014) believes that the Internal Audit Manager should develop and maintain quality assurance and optimization programs covering all aspects of internal audit activity.

Quality is defined as the extent to which requirements are met. Organizations strive to monitor performance, activities and daily work to achieve the highest quality standards by minimizing errors and detecting deviations in a manner that meets the management's needs with respect to quality of internal audit based on good performance. The internal audit quality is implemented after accounting is performed. The discovery of mistakes, scheme and accounting data is the primary function of the internal auditor. The integrity of records and data, the preservation of the organization's assets, hydration technological development that affected the internal audit task has been considered as an activity to assess and assist management in its judgment on how to implement the various activities (Al-Rawi, Noor and Al-Naimi, 2012). Al-Wardat (2006) believes that the quality of internal audit reproduces the characteristics that must be characterized by accounting information. The willpower of the whole range of accounting information features helps accounting standards preparers and assists those responsible in preparing the financial statements in assessing accounting information.

The Institute of Internal Auditors (IIA) 2009 has identified, through internal quality assurance audits, four important components: • Maintaining the quality of internal audit in companies: (1) Compliance with the Code of Ethics of the Internal Audit Profession; (2) carry out internal audit activities consistent with internal audit standards; (3) Pursuing the professional development of internal auditors continuously. (4) Pursuing continuous improvement in internal auditing practices and methods (Zureiqat, 2011).

Halaibi and Khalaf (2013) have considered the following issues in the analysis of the audit quality: (1) Defining the quality of auditing is difficult because it is difficult to set clear boundaries for the scope or area to be covered by audit quality, and the concept of quality is relative. (2) The quality assurance concepts, both quality control and quality assurance, focused on the methods and procedures that the auditor should follow to achieve good performance and increase confidence in the financial statements, namely, the auditor's attempt to detect errors in the financial statements, ,

The auditor's compliance with the objectives of the parties involved in the audit, and the detection of errors, irregularities and fraud in the financial statements is not the primary objective of the audit. (3) The judgment of the quality of the audit of the auditor's compliance with professional standards and guidelines alone is not sufficient. Compliance with professional standards and publications represents the minimum quality of performance. (4) The quality of the audit is achieved when the auditor meets the standards of professional auditing, professional ethics and standards, audit quality control standards, disclosure of errors and misstatements discovered in the financial statements and the audit meets the needs and wishes of the users of the financial statements.

As mentioned above, the researchers defined the quality of the audit. The quality of the audit is that the quality of the audit is the performance of the audit process efficiently and effectively in accordance with generally accepted auditing standards, disclosure of errors and irregularities discovered and work to meet the wishes and needs of users of the financial statements.

The quality of the internal audit means that the internal audit director determines the optimal level of internal audit services required by the internal auditor, with the need to reach conclusions and recommendations that exceed the current needs of the beneficiaries of the audit whenever possible to meet his future expectations. It helps to improve the internal audit services through the aforementioned compliance with the standards of professional auditing, ethics, professional ethics, quality control standards, disclosure of detected violations, and meeting the needs of beneficiaries from the lists of money. The researcher adds the above to improve the process of communication with the beneficiaries during the work, as well as directing the internal audit reports to the appropriate and timely bodies to ensure the quality of the internal audit.

The internal audit function of the organizations also faces many obstacles and difficulties that can be summarized by (1) the lack of understanding by some employees of the role of the internal auditor in the development and improvement of working methods, and that his role is not limited to highlighting observations and indicating the amount of deviations to benefit the organization and its employees and to try some staff to justify errors and negative distortions in a way that leads to

misleading the internal auditor in the interpretation of deviations. (2) Working pressure in branches leads to delay in the completion of the audit function, sometimes leading to late detection of errors, which is difficult to address, and some staff members are not aware of the internal instructions (policies and procedures) in their department, leading to some errors that affect the performance of work, sometimes due to the low percentage of internal auditors to the total staff of the organization. (3) the continuing errors in the previous reports, despite the emphasis on responding to future errors, and the fact that some staff members responded to the internal audit observations contained in the reports in a vague and sometimes irrelevant manner. (4) The limitation of some members of the Board of Directors to the work of the internal auditor of financial and accounting work only impedes the auditor's performance of the audit work. There are other factors that affect the effectiveness of internal auditing, the most important of which are the personal characteristics of the auditor and the methods of work (Shobaki, 2014).

## **2.2. Literature review**

This section of the second chapter contains a collection of Arabic and foreign studies that complement the theoretical framework of the study. On this basis, previous studies will be presented according to the time criterion from oldest to newest.

- Al Matarneh (2011), entitled Factors Determining the Internal Audit Quality in Banks: *Empirical Evidence from Jordan*

The main aims of this study are to examine the relationship, if any, between efficiency and objectivity, the presentation of the internal auditor and the internal audit quality, and provide indication as to whether the objectivity and effectiveness of the internal auditor affect the quality of the internal audit. To achieve these objectives, a questionnaire has been designed and distributed to a sample of internal auditors in Jordanian banks, the results of the survey designated that internal auditors in Jordanian banks consider the efficiency, impartiality and performance of internal auditors are important factors affecting the quality of internal audit. It was found that the performance was highest (4.5667), followed by efficiency (4.5533) and objectivity (4.2400).

- Al Daya (2009), entitled “Impact of the use of accounting information systems on the quality of financial data in the services sector in the Gaza Strip” (*field study*)

The aim of this study was to assess the impact of the use of accounting information systems on the quality of financial data for the companies of the service sector in the Gaza Strip, and to measure and assess the economic feasibility of using accounting information systems in the services sector in the Gaza Strip, as well as to know the constraints and problems of using of accounting information systems in the services sector in the Gaza Strip. In order to achieve the objectives of this study and to complete the applied aspect, the analytical descriptive approach was used to obtain the theoretical data. The questionnaire has been distributed to all accountants in the service sector companies in Gaza Strip who prepare the financial statements. The study found that the size of the corporation in terms of the number of employees, the size of incomes and the size of capital has the greatest impact on the use of accounting information systems by the firm. The use of accounting information systems will lead to the qualitative characteristics of the financial statements and upsurge the quality of these data in terms of Accuracy, reliability, reliability and timely access to data.

- Hajiha and Rafiee (2011), entitled *The Impact of Internal Audit Function Quality on Audit Delays*

This study seeks the impact of the quality of the Internal Audit Function (IAF) on the appropriate timing and independence of Internal Audit Reports (IAR). The audit delay is the number of days between the end of the firm's financial year and the audit report date. This delays leads to an unequal access to the financial information users need, this is likely to reduce the competence and effectiveness of accounting reports. In this study, data has been examined 57 companies listed on the Tehran Stock Exchange (TSE) for the period 2005 to 2009. These sample firms provided internal audit reports and submitted them to the Audit Committees or the Boards of Directors. The data has been collected through the survey methodology and questionnaire, examining the impact of the quality of the internal audit function on the period of internal audit reports, Pearson correlation coefficient and logistic regression remained used to test the hypotheses, objectivity and efficiency of internal audit and



Internal Audit Standards (IAS), as a measure of the quality of the internal audit job. The results indicate that impartiality and efficiency have a significant correlation with audit delay, but the size of the internal audit has little to do with the duration of the audit.

- Onaolapo and Odetayo (2012), entitled *Effect of Accounting Information System on Organizational Effectiveness: A Case Study of Selected Construction Companies in Ibadan, Nigeria*

The Automatic Accounting Information System (AAIS) provides a financial management tool to enhance structural effectiveness, especially in this age of global technological progress. The study examined the impact of the accounting information system on organizational effectiveness with a particular focus on the specific construction companies in Abadan city. Particularly, the study inspected the impact of accounting information on the quality of financial reporting and decision making. The targeted sampling method was used to select a total of ten individuals from each of the selected companies as a sample for the study. The hypothesis was developed and both statistical and descriptive statistical tools were used in data analysis. The results showed that the accounting information system has an impact on organizational effectiveness.

- Alsharayri (2012), entitled *Evaluating the Performance of Accounting Information Systems in Jordanian Private Hospitals*

The purpose of this research was to evaluate the performance of the accounting information system used in private Jordanian hospitals. In order to achieve the objects of this study, a questionnaire was designed for the purpose of collecting data and was dispersed to a sample of individuals working in 15 hospitals. The SPSS program was used for data analysis, and descriptive statistical methods were used to determine the interpretations of employees of Jordanian private hospitals who use the accounting information system. The study arrived at important findings. The presence of equipment, infrastructure and modern technology is a positive reflection on the performance of the accounting information systems, and the use of modern programs increase the effectiveness of systems performance. This corresponds to the study in the statistical analysis. The attendance of qualified human resources

plays an important role in levitation the performance of accounting information systems.

- Zuwalef and Al-Abduli (2012), entitled Effect of the application of corporate governance on the quality of internal auditing: *An applied study in the industrial companies listed on the Kuwait Stock Exchange*

The aim of this research was to measure the impact of the application of institutional governance on internal audit quality in the industrial corporations listed on the Kuwait Stock Exchange. The study community consisted of all the industrial companies listed on the Kuwait Stock Exchange. The sample included (114) respondents from financial managers, heads of accounting departments, internal audit managers and employees of the accounting and internal auditing departments of these companies. The results of the study found that there is an impact of application of institutional governance (revelation, transparency, responsibility, accountability, fairness, independence, laws and regulations) combined and unique on internal audit quality in these companies.

- Gras-Gil, Marin-Hernandez and Garcia-Perez de Lema (2012), entitled *Internal Audit & Financial Reporting in the Spanish Banking Industry*

This study aims to investigate the relationship between the Internal Audit Function (IAF) and the quality of the financial reports. The study used the questionnaire sent to the internal audit managers in the Spanish banks under study. The study concluded with important results, the most important of which is the banks with high quality financial reports have greater capacity. The study concluded with important results, the most important of which is, the banks with high quality financial reports have greater ability to cooperate between internal and external auditors in the process of annual audits, and that the large participation of internal audit in auditing and reviewing of financial reports improves the quality of these reports in Spanish banks.

- Mami Sa er and Olui (2013), *Information Technology and Accounting Information System's Quality in Croatian Middle and Large Companies*

The accounting information system is of great position for the preparation of high quality accounting information for a extensive range of users. This study examines the impact of information technology on the accounting process and consequently on the quality of accounting information systems. This study analyzes the basic characteristics of the quality of Accounting Information Systems (AIS) as well as understanding the quality of accounting information systems by accountants in medium and large firms in Croatia. The study also provides a historical overview of the quality of accounting information systems on the basis of three pilot studies conducted in 2001, 2008 and 2012, 142 questionnaires were distributed for the purpose of conducting the pilot study. The results of the study concluded that the quality of the accounting information system is influenced by many factors, as the modern information system is almost inconceivable without the use of appropriate information technology, where information technology affects the way and how the accounting information system operates, it contributes to the accuracy and quality of accounting information and timely delivery, and within the companies under study it has been found that the quality of accounting information systems was at a satisfactory level, but nevertheless there are some areas in which need to improve, such as the implementation of appropriate education for their staff, and to conduct ongoing audit to ensure their quality.

- Awosejo, Kekwaletswe, Pretorius and Zuva (2013), entitled *The Effect of Accounting Information Systems in Accounting*

In general, information technology and connectivity have improved the quality of professional accounting facilities in organizations; this study inspected the level of use of accounting information systems and the perception and understanding of Technological Acceptable Model (TAM) such as the apparent ease of use and practicality perceptions and attitudes towards specific use and behavioral intentions. The use of the performance of accounting information systems from organizational and social factors has also been used to determine the extent to which computerized accounting information systems are used in various financial institutions in South Africa. To achieve the goal of the study, 104 questionnaires were distributed to the employees of the accounting information system in the first place, where they formed the majority. The researchers concluded that all factors of the accepted technological

model have a significant impact on the use of accounting information systems in the case of Institutions in South Africa.

- Dargham and Abdullah (2013), study on the extent of adherence to the (Six Sigma) approach in controlling the quality of internal auditing: *an applied study on the banks operating in the Gaza Strip*

The aim of this study was to identify the extent to which the (Six Sigma) approach was applied to the quality of internal auditing in the banks operating in the Gaza Strip. In order to achieve the objectives of the study, a questionnaire was designed and distributed among the staff of the internal audit and quality departments in these banks. The descriptive analytical approach was used through the study of content, percentages, iterations, arithmetic mean, alpha-cronbach and t-test in order to reach the results. The main findings of the study are as follows: The banks operating in the Gaza Strip are committed to (Six Sigma) standards (commitment and support of senior leadership, feedback and measurement, continuous improvement, processes and systems, human resources). Banks operating in the Gaza Strip are subjected to internal auditing standards (professional competence, internal audit management, field of work, planning and implementation of internal audit, delivery of results) to a very large extent. There is a statistically significant relationship between the compliance of the banks operating in the Gaza Strip with the standards of the (Six Sigma) approach and the quality control of the internal audit at a level of ( 0.05).

- Ismail study (2013), entitled *Effect of accounting information systems in decision-making exploratory study*

The aim of this research is to study the impact of accounting information systems in decision-making, by reviewing and auditing the accounting information systems, and indicating the nature of their relationship to decision-making. The characteristics of the accounting information were identified as relevance and reliability as a basis for measuring the system's ability to ensure quality outputs. The ability of accounting information systems to ensure a continuous flow of data at all levels was also seen as evidence of its ability to directly influence the decision-making process. In order to achieve the objectives of the study, 37 questionnaires were distributed to the sample community composed of directors, accountants and departments's managers of the

Grand Mills Foundation of South Omas, Biskra (GMS), and (34) were received and (3) were cancelled due to a lack of answers. SPSS program has been used, and the study found the importance of reliability and appropriateness in increasing the value and quality of information and thus its direct impact on the decision-making process. The higher the degree of quality of information, the better the choice of decision-makers among the alternatives available, and therefore the greater the maturity of the decision, which means that the institution should be constantly interested in and looking for the best ways to provide the best information as it increases the knowledge of decision makers and reduces the aspects Risk associated with decision making.

- Almbaidin (2014), entitled The Effectiveness of Accounting Information System in Jordanian Banks: *From the Management Perspective*

The study aims to inspect the effectiveness of the accounting information system in Jordanian banks. A questionnaire was designed involving of (29) paragraphs in order to achieve the objective of the study, collecting preliminary information for the sample of the study. The Statistical Package for Social Sciences (SPSS) was used to analyze and test hypotheses. The study sample consisted of (197) participants in Jordanian private profitable banks. The study used many statistical methods. Following the analyzing of the study hypotheses, the study concluded that the accounting information system in the Jordanian banks is effective in applying the needs of the planning processes, monitoring needs as well as decision making needs.

- Alktani and Ghareeb (2014), entitled Evaluation of the Quality of the Internal Auditing Position in the Public Sector in Saudi Arabia: *An Applied Study*

The Saudi Institute of Internal Auditors aims to develop the position and effectiveness of internal auditing in Saudi Arabia. One of the aims of the institute is to provide the international Standards for Internal Auditing, Ethics and related guidelines related to the internal audit of the International Institute of Internal Auditing. The professional and legislative efforts in this regard were carried out on a solid and successful basis, and by their very nature were theoretical and the short achievement of the desired results, which could only be achieved through the development of innovative efforts in practice, was thus discontinued. The results

indicate that there is a lack of independence of auditing functions in public sector units, as well as a scarcity of professionalism that may have a negative impact on the quality of the internal audit function. This may hamper the work of the external auditors when reviewing the financial reports. The results also indicate some of the audit challenges that the Saudi public sector may face in the future.

- Mazza and Azzali (2015), entitled *Effects of Internal Audit Quality on the Severity and Persistence of Controls Deficiencies*

The objective of this research is to examine the effects of internal audit quality on the harshness and perseverance of Internal Control Deficiencies (ICD). The quality of internal audit has been examined through the internal audit process, internal audit inputs and internal control deficiencies. The study was conducted on 14 Italian companies listed on the Milan Stock Exchange. The sample of the study consisted of internal auditors of these companies for a period of 6 years. This study expands the previous results in the shortcomings of internal control and the continuing deficiencies in internal control. Using the data collected through questionnaires and logistic regression analysis, the study revealed that improvement in planning, testing, quality control, efficiency, and independence reduces internal control deficiencies, reduces critical deficiencies, weakens material and reduces continued deficiencies in internal controls over time. The study furthermore, found that revenues are the most severe deficiencies in internal control, while human resources and end-of-period accounts are the most stable.

- Abbot, Daugherty, Parker and Peters (2015), entitled Internal Audit Quality and Financial Reporting Quality: *The Joint Importance of Independence and Competence*

In light of the increasing importance of Internal Audit Functions (IAF) and limited archival evidence on the quality of internal audit, the study examined the interactive model of the quality of internal audit functions consisting of competence and independence. This study was conducted on US companies listed in Fortune 1000, which comprises 1000 companies in terms of revenue and included 909 members of these companies, mostly heads of internal audit departments. In order to better appreciate the determinants of the effectiveness of internal audit utilities as an

auditor of financial reporting, our tests support the hypothesis that the joint existence of efficiency and independence, is a former cop and necessary for effective control of financial reporting by internal audit functions, our results show that the short answer to the question “what is the effect of the efficiency and independence of the internal audit on the quality of financial reports?” It depends on the independence and efficiency of the internal auditor. This study expands the understanding of the quality determinants of internal audit functions in relation to the ongoing discussions by researchers, standard setters, regulators, and practitioners.

### **2.5. Comparison between the current studies of previous studies**

The main features of the present study can be abridged as follows:

1. In terms of the study environment and the application sector, previous studies were conducted on Arab and Jordanian organizations such as commercial banks, Arab companies, service sector, industrial companies in the stock market, public sectors, etc., and some European, American, African and Asian international organizations such as companies listed on stock exchanges, commercial banks, while the this study will be applied to Iraqi private hospitals located within the city of Erbil.
2. In regards to the objective of the study: The research trends of the previous studies were varied and aimed at evaluating the impact of the success and development of the accounting information systems, evaluating their use, performance, efficiency and impact, as well as evaluating the quality of internal auditing in the institutions under study. While the current study aimed to demonstrate the impact of the accounting information system on the quality of internal auditing, especially through the intermediary role of the characteristics of accounting information in Iraqi private hospitals.

## **SECTION THREE**

### **DATA and METHODOLOGY**

The present study explores the impact of accounting information system on the internal audit quality through the intermediary role of the characteristics of accounting information in its dimensions (validity and reliability) in Iraqi private hospitals. This section presents the methodology of the present study. It describes the samples of the study, tools, source of the information, variables, statistical treatments, and the suitability of the data for statistical analysis.

#### **3.1. Approach of Study**

The present study based on an analytical descriptive approach. Regarding the descriptive approach, the office survey was carried out, the Arabic and English researches were examined in order to crystallize the foundations and bases of the theoretical structure and stand in the most essential previous studies. On the analytical level, the questionnaire was used as a tool for study. The Statistical Package for Social Sciences (SPSS) and the Path Amos Analysis were used to analyze the study data to analyze the preliminary study data.

#### **3.2. Questions of the study and Hypotheses**

##### **3.2.1. Questions of the study**

Based on the study problematic, its main question and its objectives, the following questions were formulated:

1. Does the accounting information system distress the quality of internal auditing in Iraqi private hospitals (infrastructure of the accounting information system, databases, software, procedures, and staffs in charge of the information system)?
2. Is there a relationship between the accounting information system and the characteristics of the accounting information produced by the accounting information system (dimensions and reliability) in Iraqi private hospitals?



3. Do the characteristics of the accounting information produced by the accounting information system affect their quality (relevance and reliability) on the quality of internal auditing in Iraqi private hospitals?

4. To what extent do the components of the accounting information system affect the quality of internal audit in Iraqi hospitals for the existence of the intermediate variable of the accounting information characteristics produced by the accounting information system (relevance and reliability)?

Based on the study questions and model, the following hypotheses will be formulated and the conclusions and recommendations will be drawn from them as follows:

### **3.2.2. Hypotheses of the study**

#### **The first main hypothesis**

**H01:** There is no statistically significant effect of the accounting information system on its components (Infrastructure of accounting information system, databases, software, procedures, and staff in charge of accounting information system) on internal audit quality in Iraqi private hospitals at a level of significance ( $\alpha = 0.05$ ).

#### **The second main hypothesis**

**H02:** There is no statistically significant correlation between the accounting information system and the characteristics of accounting information in its dimensions (relevance and reliability) in Iraqi private hospitals at a level of significance ( $\alpha = 0.05$ ).

#### **The third main hypothesis**

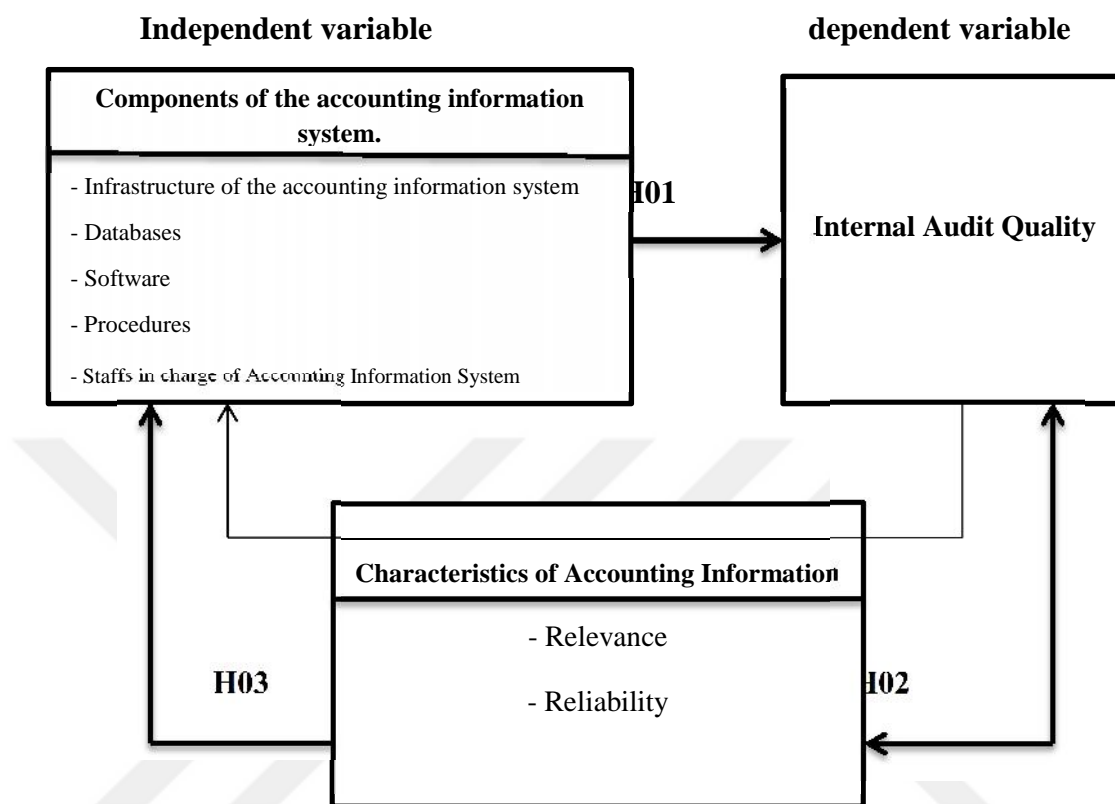
**H03:** There is no statistically significant effect of the characteristics of accounting information in its dimensions (relevance and reliability) on internal audit quality at the level of significance ( $\alpha = 0.05$ ).

#### **The fourth main hypothesis**

**H04:** There is no statistically significant effect of the accounting information system on its components on internal audit quality in Iraqi hospitals for the existence of the

intermediate variable of the characteristics of the accounting information in its dimensions (relevance and reliability) at a level of significance ( $\alpha = 0.05$ ).

### 3.3. The study model



**Figure 3.1:** The study model

Prepared by the researcher based on (Bagranoff, Simkin and Norman, 2010) and (Rainer, Prince and Cegielski, 2014) And the components of the accounting information system (Gibson, 2013) And for the characteristics of accounting information.

### 3.4. Limitations of the study

**Spatial boundaries:** The spatial limits of this study are Iraqi private hospitals located within the province of Erbil.

**Human Boundaries:** The human limits of this study are all financial managers, accountants, internal auditors and audit committees working in Iraqi private hospitals located within the province of Erbil.

**Time Limits:** The period of time required to complete the study, which ranged from the period from December to the end of July.

### 3.5. Determinants of the study

1. The lack of cooperation of some departments of Iraqi private hospitals with the researcher to facilitate the task and waiting for long periods to obtain approvals by the administrations of these hospitals has been attributed to some hospitals lack of cooperation to fear of leaking some of their information, which they see as important to the nature of their work.
2. The lack of responsiveness by some staff in the Iraqi private hospitals under investigation within the province of Erbil to answer some questions of the questionnaire.

### 3.6. Study terms

**Accounting Information System:** They are defined as the systems that use human resources, software and information technology to enter, process, retrieve, and communicate information to the users and beneficiaries to assist them in carrying out the main activities of business organizations (organization functions and management functions), decision making and performance evaluation. (Romney and Steinbart, 2007)

**Internal auditing:** an independent, objective declaration and referring activity designed to add value and improve an institute accomplish its objectives by bringing a systematic, controlled approach to evaluate and improve the effectiveness of risk managing, control, and authority processes (IIA, 2000).

The new meaning shifts the focus of the internal audit role from one of assurance to that of value added and tries to move the profession toward a standards-driven approach with a heightened identity (Bour-Rood, 2000; Krogstad et al, 1999).

**The internal audit quality:** Is the ability of the review to detect, report material misstatement of the financial statements, and to reduce information asymmetries between management and the beneficiaries of the financial statements. The audit quality level is associated to the quality of information contained in the financial statements. (Ahmed, 2012)

### 3.7. Data collection

The participants of the study were from fifteen Iraqi private hospitals located in Erbil governorate, for the year 2018. For more detail (see Table 1.3).

**Table 3.1:** shown Names of Iraqi private hospitals Study community within the province of Erbil

NO.	Name of the hospital	Number	Ratio%
1	Wilfer Hospital	4	4%
2	Bahjachi Hospital	4	4%
3	American Hospital	7	7%
4	Paki Hospital	12	12%
5	Sardam Hospital	10	10%
6	Shar Hospital	8	8%
7	Heart Center Hospital	15	15%
8	Shifa Hospital	3	3%
9	West Eye Hospital	3	3%
10	Eye Center of Kurdistan Hospital	3	3%
11	PAR Hospital	14	14%
12	Mother Hospital	3	3%
13	Rasoul New Hospital	3	3%
14	CMC Hospital	10	10%
15	Nawroz Hospital	6	6%

### 3.8. The sample of the study

The samples of this study consist of all the financial managers, accountants, internal auditors and auditing committees who work in private hospitals within the Erbil governorate. A total of (115) questionnaires were distributed between the participants, (10) questionnaires per hospital. The number of questionnaires retrieved reached, a total of (110) percentage points (95%). After examining the retrieved questionnaires, it was found that there were (5) uncompleted answers. Thus, the total number of questionnaires valid for the analysis as a whole reached (105) percentage points (91.3%) of the number of retrieved responses.

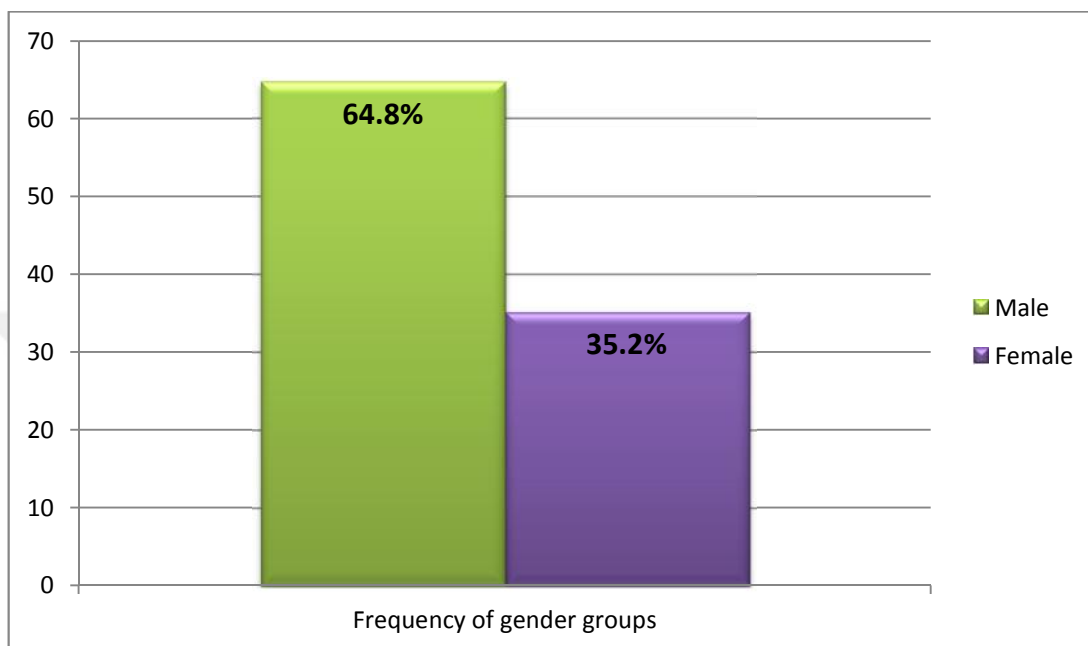
Table 3.2: shows the personal and functional characteristics of the sample of the study in terms of gender, age, qualifications, experience, and job title.

#### 3.8.1. Gender

Table 3.2 shows that 64.8% of the study sample was male and 35.2% of the sample was female.

**Table 3.2:** Frequency table for Level of Gender

Gender	Frequency	Percent%
Male		64.8
Female	37	35.2
<b>Total</b>	<b>105</b>	<b>100.0</b>

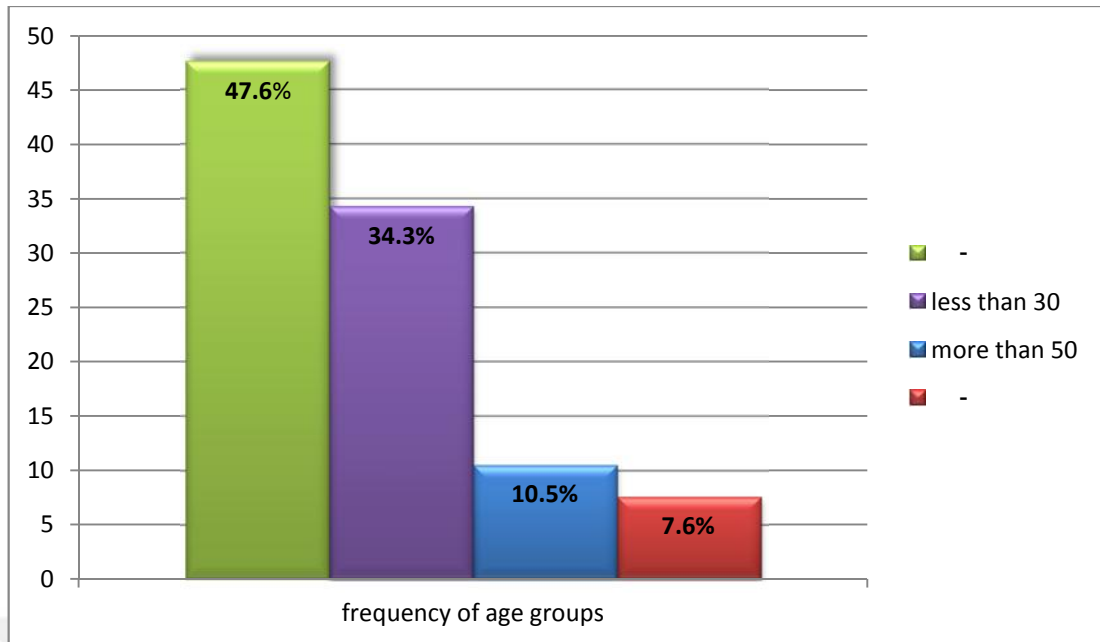
**Figure 3.1:** Frequency and percentage column chart for Gender

### 3.8.2. Age

Table 3.3 shows that the participants of the current study 47.6% were between the ages of 31 and 40 years, 7.6% were between the ages of 41 and 50 years, and 10.5% were aged 51 years and over.

**Table 3.3:** Frequency table for Level of Age

Age	Frequency	Percent %
30-40	50	47.6
less than 30	36	34.3
more than 50	11	10.5
40-50	8	7.6
<b>Total</b>	<b>105</b>	<b>100.0</b>



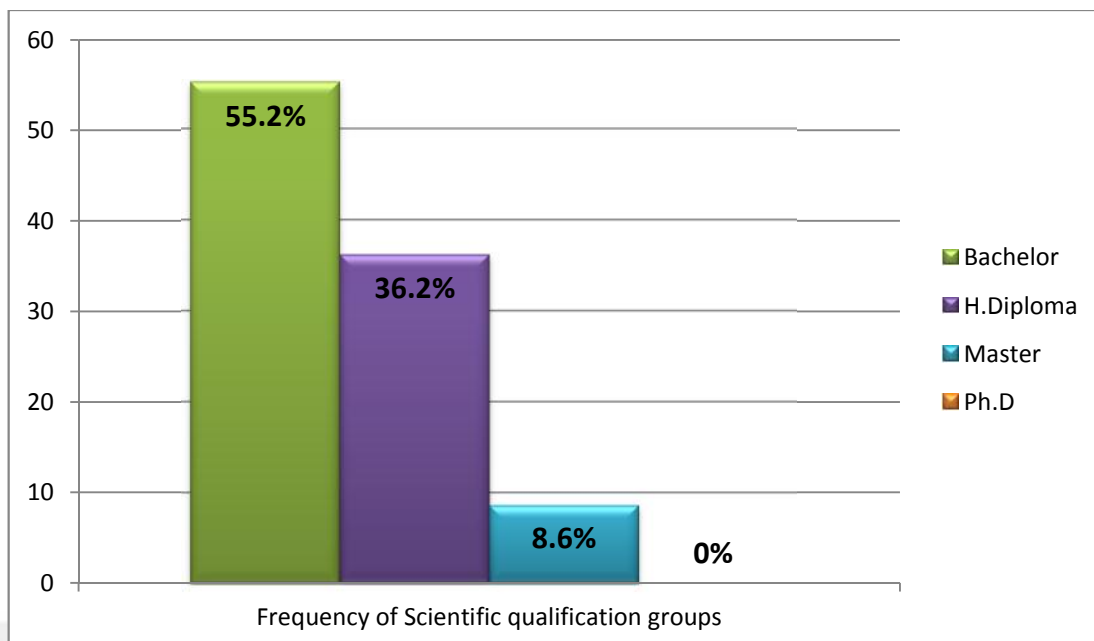
**Figure 3.2:** Frequency and percentage column chart for age groups

### 3.8.3. Scientific qualification

Table 3.4 shows that 55.2% of the samples in this study have bachelor's degree, 8.6% have master's degree, and 36.2% have technical and vocational diploma.

**Table 3.4:** Frequency table for Level of Scientific qualification

Scientific qualification	Frequency	Percent%
Bachelor	58	55.2
Higher Diploma	38	36.2
Master	9	8.6
Ph.D	0	0
<b>Total</b>	<b>105</b>	<b>100.0</b>



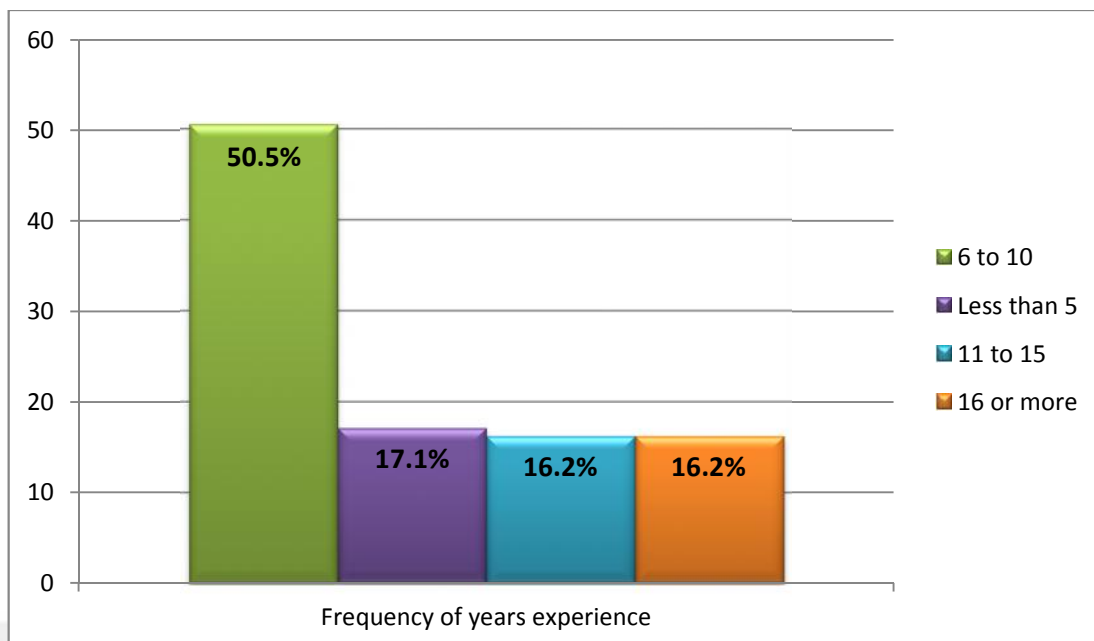
**Figure 3.3:** Frequency and percentage column chart for scientific qualification

#### 3.8.4. Years of experience

As for participants' work experience, table 3.5 shows that 17.1% of the samples have less than 5 years of practical experience, 50.5% have 6-10 year, 16.2% have 11 to 15 year, and finally 16.2% have more than 16 year work experience.

**Table 3.5:** Frequency table for Level of Years of Experience

Y. Experience	Frequency	Percent%
6-10	53	50.5
Less than 5 years	18	17.1
11-15	17	16.2
16 or more	17	16.2
<b>Total</b>	<b>105</b>	<b>100.0</b>



**Figure 3.4:** Frequency and percentage column chart for Years of Experience

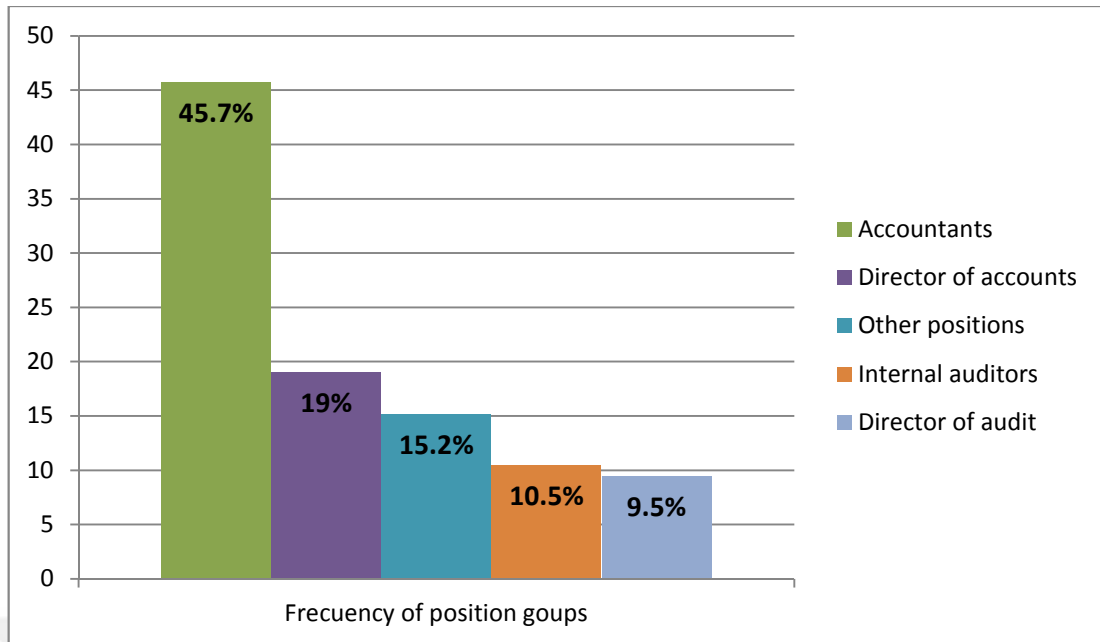
### 3.8.5. Job title

In terms of the functional variable, table 3.6 shows that, 19% of the sample work as financial managers, 9.5% are the heads of the auditing committees, 10.5% are internal auditors, 45.7% are accountants, and lastly 15.2% occupy other positions.

**Table 3.6:** Frequency table for current position

Position	Frequency	Percent%
accountants	48	45.7%
Director of Accounts Unit	20	19%
Others positions	16	15.2%
Internal auditors	11	10.5%
Director of Audit Unit	10	9.5%
<b>Total</b>	<b>105</b>	<b>100.0</b>





**Figure 3.5:** Frequency and percentage column chart for position groups

### 3.9. Questionnaire design tools

#### 3.9.1. The first sources

In order to discourse the analytical aspects of the study topic, main data collection was used through the questionnaire as a main tool for the study. Which included a amount of statements reflecting the aims of the study and its questions, to be answered by the respondents, and the five-Likert scale has been used, so that each answer took relative importance.

#### 3.9.2. The secondary sources

The researcher directed the theoretical framework of the research to the secondary data sources, which are in Arabic and foreign (you mean English or more languages) books and references related to the periodicals, articles reports, researches, and previous studies that related to the current study's topic. The researcher aimed to classify the foundations and methods of technical studies in the writing of studies, as well as take a general view of the newest developments in the subjects of the study.

The main tool of study (questionnaire) included four parts:

**First part:** The piece on the personal and functional variables of the sample of the study through (7) variables (gender; age; scientific qualification; number of years of experience; job title) for the purpose of recitation the characteristics of the study sample.

**Second part:** The accounting information system standard is comprised of five main components: (the infrastructure of the accounting information system, databases, software and procedures and the accounting system) and (25) paragraphs to measure them, divided as follows:

**Table 3.7:** The second part of questionnaire design tools table

A.I. system	Infrastructure	Databases	Software	Measures	S. administrators
Paragraphs Number	5	5	5	5	5
Paragraphs Arrange	1-5	6-10	11-15	16-20	21-25

**Third part:** The measurement of the characteristics of the accounting information includes two main dimensions, namely (relevance and reliability) and (10) paragraphs to measure, divided as follows:

**Table 3.8:** The third part of questionnaire design tools table

Characteristics of A.I	Relevance	Reliability
Number of paragraphs	5	5
Arrange paragraphs	26-30	31-35

**Fourth part:** The internal audit quality standard included (9) paragraphs to measure, from paragraph 36 to paragraph 44.

The variety of response from (1-5) according to the five Likert scale is as follows:

**Table 3.9:** The fourth part of questionnaire design tools table

Alternatives to answer	Strongly agree	I agree	I agree to some extent	disagree	strongly disagree
Grade	5	4	3	2	1

### 3.10. The variables of study

The independent study variable determined the components of the accounting information system (accounting information system infrastructure, databases, software and procedures, and the accounting information system) based on what was defined by (Bagranoff, Simkin and Norman, 2010) and (Rainer, Prince and Cegielski, 2014). The median variable was defined as the characteristics of the accounting information in its dimensions (relevance and reliability) based on Gibson (2013) and (FASB, 1980), the dependent variable is the quality of the internal audit.

### 3.11. Statistical usages

The researcher used the following statistical methods:

- Frequency and ratios to describe the demographic variables of the study sample members.
- Kolmogorov-Smirnov test to verify normal distribution of data.
- Cronbach's Alpha test to determine the stability of the questionnaire paragraphs, which were specifically designed to measure the study variables.
- The arithmetical averages and standard deviations to determine the relative importance of the study variables and their paragraphs.
- Equation of the length of the class, which requires measuring the level of the exercise of the variables of the study, which was calculated according to the following equation:

$$\text{Extent of application} = \frac{\text{The max mark} - \text{The mini mark}}{3}$$

$$\text{Based on Extent of application} = \frac{5 - 1}{3} = 1.33$$

- The importance of averaging from 1 to less than 2.33, the medium importance of 2.33 to 3.66, and the importance of the significance of 3.67 and more.

- One sample T-test (T-test) to verify the significance of the subjects of the questionnaire compared to the specimen.
- Variance Inflation Factor and Tolerance to ensure that there is no multicollinearity between the independent variables in order to demonstrate the appropriateness of the data to the hypothesis hypotheses of the study.
- Multiple regression analysis to show the effect of more than one independent variable on a solitary dependent variable.
- Path Amos analysis using the software to identify the role of the intermediate variable in the relationship between the independent variable and the variable.

### 3.12. Normal distribution of the study variables

For the purpose of verifying the objectivity of the results of the study, Kolmogorov Smirnov Test was conducted to verify that the study data were free from statistical problems that may negatively effect on the results of the hypothesis test. This test requires normal distribution of the data. In contrast, there is a false correlation between the independent and dependent variables of the study. Thus, the association loses its ability to explain or predict the phenomenon under study, as shows in table 3-10.

**Table 3.10:** Normal distribution of the study variables

No.	Variables	Kolmogoro-Smirnov	Sig.*	Result
1	Infrastructure of the Accounting Information System	.152	.000	Not Normality
2	Databases	.124	.000	Not Normality
3	Software	.187	.000	Not Normality
4	Procedures	.129	.000	Not Normality
5	Persons in charge of accounting information system	.088	.043	Not Normality
6	Validity	.137	.000	Not Normality
7	Reliability	.107	.005	Not Normality
8	Internal Audit Quality	.133	.000	Not Normality

Note: The normal distribution is when the level of significance ( $\alpha = 0.05$ ).  
Resource: Outputs of statistical analysis results for SPSS programs

Given the above table, at the ( $\alpha = 0.05$ ) level, all variables were normal, where the normal distribution rates for all responses were greater than (0.05). Which is the level used in the statistical treatment of this study.

### 3.13. Reliability of the study tool

#### 3.13.1. Virtual honesty

The questionnaire was accessible to a group of authorities consisting of (8) faculty members who are specialized in accounting. The opinions of the arbitrators were answered and the necessary amendments were made in the light of the proposals. The questionnaire was issued in the final form as shown in Annex (2).

#### 3.13.2. The stability of the study instrument

The researcher used the Cronbach's Alpha internal consistency test to measure the regularity of respondents' responses to all the questions in the scale, and although the measurement rules in the value obtained are not specified, the alpha ( $\alpha = 0.60$ ) In the applied field of managerial and human sciences in general is acceptable (Sekaran & Bougie, 2010, 184). Table (3-11) shows the results of the stability tool for this study.

**Table 3.11: Reliability Statistics**

<b>No.</b>	<b>Variable</b>	<b>Item</b>	<b>Cronbach's Alpha</b>
1	Accounting Information System	25	0.812
2	Characteristics of Accounting Information	10	0.797
3	Internal Audit Quality	9	0.825
The questionnaire as a whole		44	0.917

Table 3.11 shows the stability values of the main study variables (0.825) for the quality of the internal audit and (0.797) for the characteristics of the accounting information. The Alpha Cronbach indicators indicate that the study instrument usually has a high stability coefficient and its ability to achieve the study aims (Sekaran & Bougie, 2010).

## SECTION FOUR RESULTS and DATA ANALYSIS

This chapter reviews the results of the statistical analysis of the response of the members of the study sample of the financial managers, accountants, internal auditors and the audit committees regarding the variables that were adopted by presenting the initial statistical indicators of their answers through the statistical averages and standard deviations for each of the study variables and the relative importance. The chapter also tests the hypotheses of the study and their respective statistical connotations.

### 4.1. Results of statistical analysis of the study

#### 4.1.1. Elements of the Accounting Information System

To describe the level of the components of the accounting information System (Accounting information system infrastructure, databases, software, procedures and staffs in charge of accounting information System) in Iraqi private hospitals in Erbil governorate, the researcher sought to the use of arithmetic averages. Standard deviations and one Sample t-test test to investigate the morale and the importance of the paragraph, as shown in the tables, (4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, and 4.8).

**Table 4.1:** Mean, standard deviations, and level of **infrastructure of the accounting information system** in the private hospitals under study

No	Infrastructure of the Accounting Information System	Mean	Std. deviation	"T" value	Sig*	Items order	Level
1	The hospital invests heavily in the infrastructure of the accounting information system	3.8857	.65507	60.782	.000	1	High
2	The hospital possess a high level capabilities of technology planning concerning accounting information system	3.7333	.93301	41.002	.000	2	High
3	The hospital information system infrastructure is suitable for different users	3.5333	.93095	38.891	.000	3	Medium
4	The hospital information system infrastructure is appropriate for its network	3.4381	.98960	35.600	.000	5	Medium
5	The hospital information system infrastructure is suitable for different uses	3.4952	.97195	36.849	.000	4	Medium
<b>Mean and Standard deviation for infrastructure of the accounting information system</b>		<b>3.6171</b>	<b>.61464</b>	<b>60.303</b>	<b>.000</b>	-	Medium

Table 4.1 illustrates the sample answers to the phrases on the infrastructure of the relevant information system in the Iraqi private hospitals. The accounting means for this infrastructure of the accounting information system in the Iraqi private hospitals ranged between 3.8857 - 3.4381 with a total average of (3.6171) on the fifth Likert scale which refers to the high and average level of the infrastructure of the accounting information system in hospitals under study.

In the first place came a paragraph "the hospital invests extensively in the infrastructure of the accounting information System" with an average of 3.8857, which is greater than the overall arithmetic mean of (3.6171) and a standard deviation (0.65507). while a paragraph "the Accounting Information System Infrastructure in the Hospital is appropriate to its communication network" was ranked fifth and last with an average of (3.4381), which is lower than the total arithmetic mean of (3.6171) and standard deviation (98960). The table also shows the low dispersal in the responses of the participants on the infrastructure of the accounting information system in the Iraqi private hospitals under study, which reflects the junction in the views of the sample members of the study. The table also indicates convergence in the values of arithmetical averages. In general, it appears that the level of the infrastructure of the accounting information system in the Iraqi private hospitals under study from the opinion of view of the study sample was medium.

**Table 4.2:** Mean, standard deviations, and level of **databases** in the private hospitals under study

No	Databases	Mean	Std. deviation	"T" value	Sig*	Items order	Level
6	The hospital possess specific procedures and standards for managing its databases	3.9238	.79294	50.706	.000	1	High
7	Hospital databases and general framework are clear and smooth	3.8000	.84807	45.914	.000	2	High
8	The hospital possess specific policies for the ownership of its databases	3.7714	.91207	42.371	.000	4	High
9	Hospital databases are integrated with accounting information system applications	3.7905	.81683	47.551	.000	3	High
10	Hospital databases are shared between its users and all departments	3.6000	.93644	39.393	.000	5	Medium
<b>Mean and Standard deviation for Databases</b>		<b>3.7771</b>	<b>.55074</b>	<b>70.276</b>	<b>.000</b>	-	High

Table 4.2 shows the answers to the sample for statements related to the level of databases in Iraqi private hospitals. The means for these databases in Iraqi private



hospitals reached from 3.9238 to 3.6000 with a total regular of 3.7771 on the Likert fifth scale, which indicates the high level of databases in Iraqi private hospitals.

"The hospital has specific procedures and standards for database management" paragraph came in the first place with an average of 3.9238, which is higher than the general arithmetic mean of (3.7771) and a standard deviation of (79294), while, the paragraph "Hospital databases shared between users and all departments" ranked fifth and last with an average of (3.6000), which is lower than the total arithmetic mean of (3.7771) and standard deviation (93644). The table also shows the low dispersal in the responses of the sample members of the study on the databases in the Iraqi private hospitals under study, which reflects the junction of views of the sample members of the study. The table also indicates convergence in the values of arithmetical means. In general, the level of databases in the Iraqi private hospitals under study from the point of view of the study sample was high.

**Table 4.3:** Mean, standard deviations, and level of **software** in the private hospitals under study

No	Software	Mean	Std. deviation	"T" value	Sig*	Items order	Level
11	The hospital possess an accounting program for salaries and wages	3.9619	.94994	42.737	.000	2	High
12	The hospital possess an accounting program for procurement	4.0667	5.13897	8.109	.000	1	High
13	The hospital possess an accounting program for accounts and assets	3.5619	1.06450	34.287	.000	5	Medium
14	The hospital possess an accounting program for cost accounting	3.6476	1.16834	31.992	.000	4	Medium
15	The hospital possess an accounting program for stores	3.6857	1.09469	34.500	.000	3	High
<b>Mean and Standard deviation for Software</b>		<b>3.7848</b>	<b>1.40321</b>	<b>27.638</b>	<b>.000</b>	-	High

Table 4.3 shows the answers to the sample of the study on the level of software in Iraqi private hospitals, where the software arithmetic mean ranged between (4.0667 - 3.5619) with a total average of (3.7848) on the Likert pentagram Scale indicating the high level of software in Iraqi private hospitals. It came first

"The hospital has a purchasing accounting program" paragraph came first with an average of 4.0667, which is higher than the general account mean of 3.7848 and a standard deviation of 5.13897. While "The hospital has an accounting program for

assets and depreciation accounts" paragraph ranked fifth and last with an average mean (3.5619) is below the overall arithmetic average of (3.7848) and the standard deviation (1.06450).

Furthermore, the table shows the low dispersal in the responses of the study sample members about the software in the Iraqi private hospitals under study, which reflects the junction of views of the sample members of the study. The table also indicates convergence in the values of arithmetical means. In general, the level of software in the Iraqi private hospitals under study from the point of view of the study sample was high.

**Table 4.4:** Mean, standard deviations, and level of **Procedures** in the private hospitals under study

No	Procedures	Mean	Std. deviation	"T" value	Sig*	Items order	Level
16	The hospital has a handbook of procedures and mechanisms for its operation	3.6952	.90004	42.070	.000	5	High
17	The hospital's accounting information system clarifies mechanisms for dealing with financial issues	3.8857	.80041	49.745	.000	2	High
18	The hospital confirms the set of procedures and instructions for employees using the information system	3.7905	.79294	48.983	.000		High
19	The objective of the hospital is to standardize the work and to avoid unorganized activities	3.8381	.84494	46.546	.000	3	High
20	The hospital's accounting information system contributes to streamlining business procedures	3.9143	.95186	42.138	.000	1	High
<b>Mean and Standard deviation for Procedures</b>		<b>3.8248</b>	<b>.57559</b>	<b>68.090</b>	<b>.000</b>	-	High

Table 4.4 shows the answers to the sample of the study on the level of procedures in Iraqi private hospitals, where the averages for the mean of procedures in Iraqi private hospitals ranged between (3.9143 - 3.6952) with a total average of (3.8248) on the Likert pentagram scale indicating the high level of procedures in Iraqi private hospitals.

“The accounting information system at the hospital contributes to the simplification of the work procedures” paragraph ranked first with an regular of 3.9143, which is higher than the general account regular of 3.8248, a standard deviation of (95186), while the paragraph " Procedures and mechanisms of work "is ranked fifth and last with an regular of (3.6952), which is lower than the total arithmetic mean of (3.8248) and a standard deviation (90004). The table also shows the low dispersal in the responses of the sample members of the study on the Iraqi

private hospitals under the study, which reflects the junction of views of the sample members of the study. The table also indicates junction in the values of arithmetical mean. In general, the level of procedures in the Iraqi private hospitals under study from the point of view of the study sample was high.

**Table 4.5:** Mean, standard deviations, and level of **Staffs in charge of accounting information system** in the private hospitals under study

No	Staffs in charge of accounting information system	Mean	Std. deviation	"T" value	Sig*	Items order	Level
21	Our accountants in charge of accounting information system characterized by high technical level.	3.6000	1.04329	35.358	.000	4	Medium
22	Our accounting information system staff (Employees) care about developing their capacities to be suit to business requirements.	3.7048	.97983	38.744	.000	2	High
23	Our accounting information system staff have the ability to develop the accounting system and modify it if required.	3.7143	1.01635	37.448	.000	1	High
24	Our staff in charge of accounting information system Participate in preparing and developing accounting information system.	3.6952	1.02960	36.776	.000	3	High
25	The hospital is keen to open periodically trainings for its staff in charge of accounting information system.	3.1238	1.26107	25.383	.000	5	Medium
<b>Mean and Standard deviation for Staffs in charge of accounting information system</b>		<b>3.5676</b>	<b>.77018</b>	<b>47.466</b>	<b>.000</b>	-	Medium

Table 4.5 shows the answers to the sample of the study on the statements concerning the level of ISIS administrators in Iraqi private hospitals where the arithmetic mean of this technique ranged between (3.7143 - 3.1238) with a total regular of (3.5676) on the Likert pentagram scale indicating the high level of the accounting information system in Iraqi private hospitals. "**Our accounting information system staff have the ability to develop the accounting system and modify it if required**" paragraph came first with mean average of (3.7143), which is higher than the general mean average of (3.5676) and a standard deviation of (1.01635), whereas "**The hospital is keen to open periodically trainings for its staff in charge of accounting information system**" paragraph came fifth and last with an average of (3.1238), which is lower than the total arithmetic average of (3.5676) and standard deviation (1.26107). The table also shows the low dispersal in the responses of the study sample members regarding the accounting system in the Iraqi private hospitals under study, which reflects the convergence of views of the sample members under study. The table also indicates convergence in the values of arithmetical means. In general, the level of the accounting information system in the

private Iraqi hospitals under study from the point of view of the study sample was Medium.

#### 4.1.2. Characteristics of Accounting Information

To describe the level of the characteristics of the accounting information (Relevance and reliability) in the Iraqi private hospitals, the study used the statistical averages and standard deviations, and the one sample T-test to verify the implication and the importance of the paragraph, as shown in tables (4.6 - 4.7).

**Table 4.6:** Mean, standard deviations, and level of **Characteristics of Accounting Information (Relevance)** in the private hospitals under study

No	Characteristics of Accounting Information (Relevance)	Mean	Std. deviation	"T" valuez	Sig*	Items order	Level
26	The current accounting information system provides us with appropriate information for the uses of the interested parties	3.7810	.87685	44.185	.000	2	High
27	The current accounting information system contributes timely information	3.7429	.89902	42.661	.000	3	High
28	Financial reports derived from the current accounting information system are appropriate for hospital needs	3.8095	.82153	47.516	.000	1	High
29	Financial reports extracted from the current accounting information system provide an adverse feedback on the results of activities and workers	3.6381	.77365	48.186	.000	4	Medium
30	Financial reports derived from the current accounting information system include indicators on forecast and forecast construction	3.5429	.93056	39.013	.000	5	Medium
<b>Mean and Standard deviation for Characteristics of Accounting Information (Relevance)</b>		<b>3.7029</b>	<b>.60708</b>	<b>62.501</b>	<b>.000</b>	-	High

Table 4.6 illustrates the study sample responses to the statements on the level of appropriateness of accounting information in Iraqi private hospitals. The arithmetic averages for the suitability of accounting information in Iraqi private hospitals ranged from (3.8095-3.5429) to a total average of (3.7029) on the Likert Pentagon scale, which refers to the high level of suitability of accounting information in Iraqi private hospitals. "The financial reports derived from the current accounting information system are suitable for the needs of the hospital" paragraph came in the first place with an average of (3.8095), which is higher than the general account average of (3.7029) and a standard deviation of (82153). However, "Finance from the current accounting information system, indicators on the construction of forecasts and predictions" paragraph ranked fifth and last with an average of

(3.5429), which is lower than the total arithmetic average of (3.7029) and a standard deviation (93056).

The table also shows the low dispersal in the responses of the study sample members on the appropriateness of accounting information in the Iraqi private hospitals under study, which reflects the junction of the views of the sample members of the study. The table also indicates junction in the values of arithmetical means. In general, the level of appropriateness of accounting information in the private Iraqi hospitals under study from the point of view of the study sample was high.

**Table 4.7:** Mean, standard deviations, and level of **Characteristics of Accounting Information (Reliability)** in the private hospitals under study

No	Characteristics of Accounting Information (Reliability)	Mean	Std. deviation	"T" value	Sig*	Items order	Level
31	The financial reports extracted from the current accounting information system are accurate	4.0095	.79051	51.973	.000	1	High
32	Financial reports extracted from the current accounting information system free of bias	3.7333	1.08545	35.244	.000	5	High
33	The financial reports extracted from the present accounting information system are fairly representative of the phenomena to be reported	3.8571	.85966	45.976	.000	3	High
34	The financial reports extracted from the current accounting information system are characterized by their verifiable Relevance and access to the same results	3.9333	.86898	46.382	.000	2	High
35	The financial reports extracted from the current accounting information system are clear and transparent	3.7429	1.01932	37.626	.000	4	High
<b>Mean and Standard deviation for Characteristics of Accounting Information (Reliability)</b>		<b>3.8552</b>	<b>.73615</b>	<b>53.663</b>	<b>.000</b>	-	High

Table 4.7 shows the responses to the sample under study on the statements regarding the level of reliability of accounting information in Iraqi private hospitals. The accounting mean for the reliability of accounting information in Iraqi private hospitals ranged between (4.0095 - 3.7333) with a total average of (3.8552) on the Likert Fifth scale, which indicates the high level of reliability of accounting information in Iraqi private hospitals. **"The financial reports extracted from the current accounting information system are accurate"** paragraph came first with an average of (4.0095), which is higher than the general account average of (3.8552) and a standard deviation of (.79051), while the paragraph **"Financial reports extracted from the current accounting information system free of bias"** ranked

fifth and last with an average of (3.7333), which is lower than the total arithmetic mean of (3.8552) and a standard deviation (1.08545). The table also shows the low dispersion in respondents' responses to the reliability of the accounting information in the Iraqi private hospitals, which reflects the convergence of the views of the sample members. The table also indicates junction in the values of arithmetical means. In general, the level of reliability of the accounting information in the Iraqi private hospitals under study from the point of view of the study sample was high.

#### **4.1.3. Internal audit quality**

To describe the level of quality of internal audit in Iraqi private hospitals, the study sought to use the mean and standard deviations, and the one sample T-test to verify the significance and the importance of the paragraph, as shown in Table (4.8).

Table 4.8 shows responses to the sample under study on the quality of internal audit in Iraqi private hospitals. Where the internal audit quality of Iraqi private hospitals ranged between (4.0857 - 3.5905) with a total average of (3.8688) on the Likert Fifth scale, which indicates the high level of internal audit quality in Iraqi private hospitals. **"The internal auditor reports to the Department as soon as information arrives that may affect the audit"** paragraph came first with mean average of (4.0857), higher than the general mean average of (3.8688), a standard deviation of (8.3337), while the paragraph **"The internal audit department of the hospital performs its audits in accordance with the professional standards and the necessary local and international regulatory requirements"** ranked ninth and last rank with mean regular of (3.5905), which is lower than the total arithmetic mean of (3.8688) and standard deviation (1.00666). The table also shows the low dispersal in the responses of the sample members on the quality of the internal audit of the Iraqi private hospitals under study, which reflects the junction of views of the sample members of the study. The table also indicates junction in the values of arithmetical means. Overall, the level of quality of the internal audit of the Iraqi private hospitals under study from the point of view of the study sample was high.

**Table 4.8:** Mean, standard deviations, and level of **internal audit quality** in the private hospitals under study

No	internal audit quality	Mean	Std. deviation	"T" value	Sig*	Items order	Level
36	The internal audit department of the hospital has a manual for procedural audit of the work mechanisms, which emphasizes the need for availability	3.9810	.80838	50.462	.000	3	High
37	The internal audit department has policies and auditors	4.0190	.84331	48.835	.000	2	High
38	The internal audit department of the hospital has a clear plan for the audit	3.8952	.89790	44.453	.000	5	High
39	The internal audit department of the hospital directs all its employees continuously to investigate and investigate the causes of errors and deviations	3.7238	1.02371	37.274	.000	8	High
40	The internal audit department of the hospital emphasizes the procedures to ensure quality control mechanisms	3.7429	.89902	42.661	.000	7	High
41	The internal audit department of the hospital performs its audits in accordance with the professional standards and the necessary local and international regulatory requirements	3.5905	1.00666	36.548	.000	9	Medium
42	The internal auditor reports to the Department as soon as information arrives that may affect the audit	4.0857	.83337	50.237	.000	1	High
43	The Internal Audit Section applies clear policies and procedures to address differences between audit team members	3.8476	.82952	47.529	.000	6	High
44	The internal audit department of the hospital documents all the procedures carried out by the hospital	3.9333	.91217	44.186	.000	4	High
<b>Mean and Standard deviation for internal audit quality</b>		<b>3.8688</b>	<b>.64894</b>	<b>61.089</b>	<b>.000</b>	-	High

#### 4.2. Analyzing the appropriateness of the data to test the hypotheses of the study

Prior to apply the regression analysis to exam the hypotheses of the study, the researcher performed several tests in order to ensure that the data is suitable for regression analysis hypotheses. It was established that there is no high correlation between the independent variables **Multicollinearity** by using variance inflation factor (**VIF**) **Tolerance** for each variable of the study, taking into consideration that the permissible variance inflation factor (**VIF**) of the value (10) is not exceeded. And the allowable variance value is greater than (0.05). Normal distribution was also calculated by using the **Skewness** coefficient, since the data follow normal distribution if the value of the spindle is less than ( $\pm 1$ ). Table 4.9 shows the results of these tests.

**Table 4.9:** Test results of variance inflation factor, Tolerance and Skewness

N0	Independent variables	VIF	Tolerance	Skewness
1.	Infrastructure of the accounting information system	1.796	0.557	0.607
2.	Databases	1.808	0.553	0.242
3.	Software	1.411	0.709	0.606
4.	Procedures	1.434	0.697	0.821
5.	Staffs in charge of accounting information system	1.648	0.607	0.347

The results in table 4.9 have shown that there is no multi-collinearity between the independent variables (the accounting information system infrastructure, the databases, the software, the procedures and the accounting information system).

This is confirmed by the values of the Variance Inflation Test standard (VIF) for the dimensions of (accounting information system infrastructure, databases, software and procedures, and accounting information System Operators) which is (1.796, 1.808, 1.411, 1.434, 1.648), respectively, which are lower than (10). It is also apparent that the tolerance test values reached from (0.553 – 0.709) to greater than (0.05). This is an indication that there is no high correlation between independent variables. It has been confirmed that the data follows the natural distribution by calculating skewness where the the values were less than (1).

Based on the foregoing and after ascertaining that there is no multi-collinearity between the dimensions of the variable being reduced, and that the data of the study variables are subject to natural distribution, it is possible to test the hypothesis of studies in the hospitals under study.

### 4.3. Testing the Study Hypotheses

#### 4.3.1. The first main hypothesis

**H01: There is no statistically significant effect of the accounting information system on its components** (infrastructure of accounting information system, databases, software, procedures, and staffs in charge of accounting information system) **on the quality of internal audit in Iraqi private hospitals"** at a level of significance ( $\alpha = 0.05$ ).



To test this hypothesis, multiple regression analysis was used to verify the impact of the factors of accounting information System (Accounting information system infrastructure, databases, software, procedures, and the staffs in charge of accounting information System) on the quality of on the quality of internal audit in Iraqi private hospitals, as shown in table 4.10.

Table 4.10: Multiple regression analysis results for the impact of the components of the accounting information system on the quality of internal audit

Sig*	T			DF		Sig*	F	Adjusted (R <sup>2</sup> )	R <sup>2</sup>	R	Dependent
.020	2.371	0.213	Infrastructure	5	Regression	0.000	24.795	0.534	0.556	0.746	Internal audit quality
0.469	0.727	0.065	Databases								
0.542	0.613	0.049	Software	99	Residual						
0.000	3.655	0.293	Procedures								
0.000	3.912	0.336	Staffs in charge of.	104	Total						

- The effect is statistically significant at level ( 0.05).

Table 4.10 has shown the impact of the accounting information system and its components on the quality of internal audit in Iraqi private hospitals. The results of the statistical analysis showed that there was a statistically significant impact of the procedures and the staffs in charge of accounting information system on the quality of internal auditing in the Iraqi private hospitals. The regression reached **R** (0.746) at the level ( 0.05).

**R<sup>2</sup>** it has reached (0.556), that is, the value (0.556) of changes in the quality of internal audit in the Iraqi special services due to the change in procedures and system-based, and in the same setting, the results of the analysis presented that the Adjusted **R<sup>2</sup>** identification coefficient reached (0.534) which reflects the net level of the procedures and system operators after disposing of the standard error values resulting from the quality of internal audit in Iraqi private hospitals. The value of the effect is (0.293) of procedures and (0.336) for system administrators.

The degree of effect also reached (0.293) for procedures and (0.336) for system users. This means that a one-degree increase in the level of attention to procedures and system administrators leads to an upsurge in the quality of internal audit in private hospitals under study by (0.293) for procedures and (0.336) for system administrators, respectively. The significance of this effect confirms the value of the calculated  $F$ , which reached (24,795), a function at the level ( $\alpha = 0.05$ ). This confirms the Relevance of the acceptance of the first main hypothesis. Therefore, it rejects the null hypothesis and accepts the alternative hypothesis which states **that "there is a statistically significant effect of the procedures and those in the staffs in charge of accounting information system on the quality of internal auditing in the private Iraqi hospitals under study at level ( $\alpha = 0.05$ ).**

#### 4.3.2. The second main hypothesis

**H02: There is no statistically significant correlation between the accounting information system and its elements** (infrastructure of accounting information system, databases, software, procedures, and staffs in charge of accounting information system) **and the characteristics of accounting information in its dimensions** (Relevance and Reliability) in Iraqi private hospitals at a level of significance ( $\alpha = 0.05$ ).

To test this hypothesis, a Staff correlation coefficient was used to verify the nature of the relationship between the independent study variable and the components of the accounting information system and the variable of the median study is the characteristics of the accounting information (Relevance and reliability) in the Iraqi private hospitals, as shown in Table 4.11.

Table 4.11 displays the correlation coefficients between the components of the information system and the characteristics of the accounting information. Eighteen correlations with significant function were found to differ in their correlation intensity. It was found that the highest correlation values between the independent and intermediate variables were between the two variables of the staffs in charge of accounting information system on the one hand and the reliability on the other with a value of (0.561<sup>\*\*</sup>) which is a function at a probability level ( $\alpha = 0.01$ ) and less, while the lowest correlation values Between the independent and intermediate variables

were between the software on the one hand and the reliability on the other with a value of (0.261\*\*), which is a function at a probability level ( 0.05) and less. Overall, based on the results presented, it appears that the investigated variables are correlated with significant relationships indicating that the increase or the decrease in one of them will result in an increase or decrease on other variables. It is a practical outcome that contributes to achieving some of the objectives of the study.

This confirms the Relevance of the acceptance of the second main hypothesis. And therefore rejects the null hypothesis and accept the alternative hypothesis, which states:

**"The existence of a statistically significant correlation between the components of the accounting information system (Infrastructure of the accounting information system, databases, software, procedures, and staffs in charge of accounting information system) and the characteristics of the accounting information (Relevance and Reliability)"**

**Table 4.11:** Matrix of correlation coefficients between the components of the accounting information system and characteristics of accounting information

	Relevance	Reliability	Characteristics of AI
<b>Infrastructure of accounting information system</b>	0.545** Sig= 0.000	459** Sig= 0.000	0.562** Sig= 0.000
<b>Databases</b>	.483** Sig= 0.000	.278** Sig= 0.004	0.418** Sig= 0.000
<b>Software</b>	0.443** Sig= 0.000	0.261** Sig= 0.007	0.387** Sig= 0.000
<b>Procedures</b>	0.388** Sig= 0.000	0.315** Sig= 0.001	0.393** Sig= 0.000
<b>Staffs in charge of AIS</b>	0.551** Sig= 0.000	0.561** Sig= 0.000	0.628** Sig= 0.000
<b>Elements of accounting information system</b>	0.639** Sig= 0.000	0.484** Sig= 0.000	0.625** Sig= 0.000

Significant at P 0.05

\*\* Significant at P 0.01

### 4.3.3. Third main hypothesis

**H03: There is no statistically significant effect of the characteristics of accounting information in its dimensions (relevance and reliability) on the quality of internal auditing at the level of significance ( $\alpha = 0.05$ ).**

To exam this hypothesis, multiple regression analysis was used to confirm the impact of the characteristics of the accounting information (Relevance and reliability) on the quality of internal audit in Iraqi private hospitals, as exposed in Table (4.12).

**Table 4.12:** The results of the multiple regression analysis of the effect of the characteristics of the accounting information on the internal audit quality

Sig**	T			DF	Sig**	F	Adjusted (R <sup>2</sup> )	R <sup>2</sup>	R	Dependent
0.000	4.928	0.477	Relevance	2	0.000	27.709	0.339	0.352	0.593	Internal audit quality
				Regression						
102	Residual									
0.076	1.792	0.174	reliability	104	Total					

- The effect is statistically significant at level ( $\alpha = 0.05$ ).
- The value of F is a tabular at a level ( $\alpha = 0.05$ ).
- The value of T is a tabular at a level ( $\alpha = 0.05$ ).

Table 4.12 illustrates the impact of the characteristics of accounting information (relevance and reliability) on the internal audit quality in private ethnic hospitals. The results of the statistical analysis presented that there was a statistically significant effect on the quality of internal auditing in the Iraqi private hospitals. The correlation coefficient **R** (0.593) was at ( $\alpha = 0.05$ ). The **R<sup>2</sup>** definition factor was (0.352), in other words, the value of (0.352) of the changes in the quality of the internal audit resulted from the change in the appropriateness of the accounting

information, the results of the analysis presented that the adjustment factor **adjusted R<sup>2</sup>** reached (0.339) Imitates the net level of interest in the appropriateness of accounting information after the elimination of standard error values resulting from the quality of internal audit in Iraqi private hospitals. The value of the effect was (0.477). This means that the increase in the level of attention to the appropriateness of accounting information leads to an increase in the quality of internal auditing in the hospitals in question by (0.477). The implication of this effect confirms the calculated value of **F** (27.709) which is a function at ( $\alpha = 0.05$ ), this confirms the incorrect acceptance of the third main hypothesis, and therefore rejects the null hypothesis and accept the alternative hypothesis, which states:

**"The existence of a statistically significant effect of the Relevance of accounting information on the quality of internal auditing in Iraqi private hospitals at a significant level ( $\alpha = 0.05$ )"**

#### **4.3.4. Fourth main hypothesis**

**H03: There is no statistically significant effect of the accounting information system on its components** (Infrastructure of accounting information system, databases, software, procedures, and staffs in charge of accounting information system) **on the quality of the internal audit in Iraqi hospitals for the existence of the intermediate variable of the characteristics of the accounting information in its dimensions** (relevance and reliability) at a level of significance ( $\alpha = 0.05$ ).

To test this hypothesis, Path Analysis was used using SPSS program to verify the impact of the accounting information system on the quality of internal audit in Iraqi hospitals for the existence of the characteristics of the accounting information as an intermediate variable. As shown in Table 4.13. The table shows the results of the track analysis of the impact of the accounting information system on the quality of internal auditing in Iraqi hospitals regarding the existence of the intermediate variable of the characteristics of the accounting information. The results of the statistical analysis showed that there is a statistically significant effect on the quality of internal auditing with the characteristics of the accounting information. The calculated (**Chi<sup>2</sup>**) value (20.888) at level ( $\alpha = 0.05$ ) and degrees of freedom **DF** =

(18). The value of  $\text{Chi}^2/\text{DF}$  was (1.160) which is statistically significant. Goodness (GFI) of Fit Index is worth has reached its value (0.935) and is close to one true value (full fit). In the same context, the Comparative Fit Index (CFI) is (0.991) approximated to the value of the correct one. The value of the Root Mean Box (RMSEA) **Root Mean Square Error of Approximation** (0.048) is equal to the value of zero. While the direct impact of the elements of the accounting information system on the characteristics of accounting information (0.437), which indicates that the elements of the accounting information system affect the characteristics of the accounting information, and therefore increased attention to the components of the accounting information system will generate an impact on the characteristics of the accounting information, the direct impact of the elements of the accounting information system on the quality of internal audit (0.481). This indicates that the elements of the accounting information system affect the quality of the internal audit. Therefore, increasing the interest in the components of the accounting information system will have an impact on the quality of internal auditing in the hospitals under study. Finally, the direct impact of the characteristics of accounting information on the quality of internal audit in the hospitals under study (0.521), which indicates that the characteristics of the accounting information affect the quality of internal auditing in the hospitals in question, therefore, increasing the interest in the characteristics of the accounting information will generate an impact on the quality of internal auditing in the hospitals under study.

The indirect impact of the accounting information system components on the quality of internal audit in the hospitals studied was in the presence of the intermediary variable, characterized by the characteristics of the accounting information (0.384). This confirms the intermediate role that the characteristics of accounting information play in the impact of accounting information system components on the quality of internal audit in the hospitals in question. The value of the Squared Multiple correlations ( $R^2 = 0.190$ ) for the characteristics of the accounting information, that is, the value (0.190) of changes in the characteristics of the accounting information is the result of the change in the components of the accounting information system, the value of the Multiple Squared Correlation ( $R^2 = 0.296$ ) for the quality of the internal audit in the hospitals under study is (0.266) of the changes in the quality of the internal audit in the hospitals under study due to the change in the components of the

accounting information system and the characteristics of the accounting information. The Critical Ratio (T calculated) value of the path (the components of the accounting information system → characteristics of the accounting information) has been reached and (4.583) and (6.620) of the path (components of the accounting information system → quality of internal audit) and (7.053) of the path of (characteristics of accounting information → quality of internal audit) which is significant at ( 0.05), and this result indicates that there is an impact of the elements of the accounting information system on the quality of internal audit in Iraqi private hospitals with the intermediate variable of accounting information characteristics. Increased attention to the components of the accounting information system will have an impact on the characteristics of accounting information and the quality of internal auditing in the hospitals under study. It is a practical outcome that contributes to achieving some of the objectives of the study. And therefore reject the null hypothesis and accept the alternative hypothesis, which states:

**"The existence of a statistically significant effect of the elements of the accounting information system on the quality of internal auditing in Iraqi hospitals regarding the existence of the intermediate variable represented by the characteristics of the accounting information at the level of significance ( 0.05)"**





**Figure 4.1:** Shows the impact values of the study variables

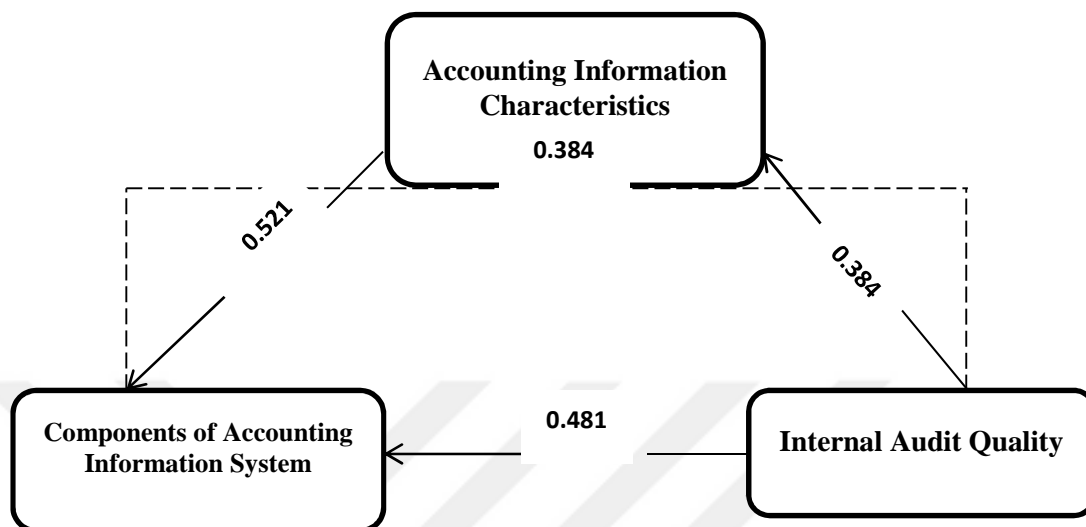


Figure 4.1 shows that there are three direct effects among study variables (accounting information system components, accounting information characteristics and internal audit quality), with the value of these effects ranging from (0.437) to (0.521), it is noted that the value of the direct impact between the components of the accounting information system and the characteristics of the accounting information (0.437), and the value of the direct impact between the components of the accounting information system and the quality of internal audit (0.481), and the value of the impact between the characteristics of the accounting information and the quality of the internal audit (0.521). Also has an indirect effect through the characteristics of accounting information between the components of the accounting information system and the quality of internal audit and its value (0.384). Identification coefficient  $R^2$  for accounting information characteristics its value (0.190), the Identification coefficient for internal audit quality  $R^2$  is (0.296).

## **SECTION FIVE CONCLUSION and RECOMMENDATIONS**

### **5.1: Conclusion**

In the light on the analysis of the results in chapter four of the descriptive statistical analysis of the study variables and the hypothesis testing, this chapter examines the overall findings of the study. The study developed a set of recommendations within the suggestions section that can be used by different institutions including educational institutions.

### **5.2. Discussion of results**

#### **5.2.1. Descriptive results of the study variables**

1. The results indicated that the level of the infrastructure of the accounting information system in the private Iraqi hospitals studied from the point of view of the study sample was moderate.
2. The results of the arithmetical averages and standard deviations showed that the level of databases in the Iraqi private hospitals under study from the point of view of the sample of the study was high.
3. It was also revealed through the descriptive analysis that the level of software in the Iraqi private hospitals is the subject of study from the point of view of the study sample was high.
4. It has been found that the level of procedures in the private Iraqi hospitals under study from the viewpoint of the study sample was high.
5. The results also showed that the level of the staff in charge of accounting system in the Iraqi hospitals under study from the point of view of the sample of the study was moderate.

6. It was also found that the level of adequacy of accounting information in the Iraqi private hospitals under study from the point of view of the study sample was high.

7. The results of the arithmetical averages and standard deviations showed that the level of reliability of the accounting information in the private Iraqi hospitals under study from the point of view of the sample of the study was high.

8. It was found that the level of quality of internal audit in the Iraqi private hospitals under study from the point of view of the study sample was high.

### **5.2.2. Test results of study hypotheses**

1. The results of the first study hypothesis analysis indicate that there is a statistically significant impact of the accounting information system (procedures and staff in charge of accounting information system) on the quality of internal audit in Iraqi private hospitals at an indication level ( 0.05).

2. There is a significant statistical correlation between the accounting information system and its components (Infrastructure of accounting information system, databases, software, procedures and staff in charge of accounting information system) and the characteristics of accounting information (adequacy and reliability) in Iraqi private hospitals at an indication level ( 0.05).

3. The existence of a statistically significant impact on the characteristics of the accounting information of (adequacy) the quality of internal auditing in Iraqi private hospitals at a level of significance ( 0.05).

4. The existence of a statistically significant impact of the accounting information system with its components on the quality of internal audit in Iraqi hospitals in the existence of the characteristics of the accounting information as an intermediary variable at a level indication ( 0.05).

### **5.3. Recommendations**

1. The accounting information system is a key to the operation and continuity of hospitals and is the basis for the provision and flow of information, so Iraqi private hospitals should work to design, build and develop the accounting information system while working on its review and follow-up.

2. The need to increase attention to the accounting information system for its role in raising and improving the quality of internal audit by increasing the ability to work in analyzes and comparisons of information and results. The accounting information system also provides the necessary information to management about the existing deviations through the reports provided by the internal audit department, which helps the administration to make the appropriate decisions to correct the deviations in a timely manner.
3. The need to pay attention to the quality of accounting information produced by the accounting information system, since the best quality of accounting information will greatly assist the internal audit departments in these hospitals to enhance their quality and performance.
4. The Internal Audit Department continuously monitors and evaluates the accounting information system periodically during the year and informs the senior departments of the Iraqi private hospitals about the weakness of these systems and correcting them and the quality of the audit process.
5. To focus on the employees of the accounting information, accounts and financial departments and all sections that provide the organizations with accounting information that they need to possess a qualified competencies and scientific and practical experiences that enable the functioning and performance of the accounting information system in a good and proper manner. Also the need to focus on the employees in the internal audit departments and the need to follow up the performance of the accounting information system to ensure the good and proper performance of the system in order to achieve the quality of internal audit. Their work is not limited to documentary scrutiny, but extends to the monitoring and evaluation of plans and policies in order to detect weaknesses and imbalances in the accounting information system and to make the necessary adjustments and improvements.
6. To focus on holding specialized training courses for accounting system administrators and auditors on the use of the accounting information system and its latest developments, and work on enhancing education using accounting information systems in the university curricula in Iraq to upgrade the level of accounting information systems and internal auditing services.

7. The Iraqi private hospitals need to develop programs for purchasing and assets accounts and depreciation as these programs are necessary and useful and represent one of the parts of the important accounting information system to provide information about the goods and assets of hospitals.



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## APPENDIX

### Questionnaire List

#### Dear Respondent

This questionnaire is one of the studying tools to meet the requirements of achieving Masters of the department of Administration and Economics in University of Gaziantep Title: The impact of accounting information system in internal audit quality.

Kindly take the time to fill the bellow questionnaire after reading all its content thoroughly. Please give it your time and attention as your answers will be used to reach the results of this study. Provided that the information will be used with complete anonymity and will not be used for any purpose other than the scientific research.

*Thanks for your valuable time and response*

**The Supervisor: ASSIST. PROF. Erkan Alsu**

**The researcher: Bayar Jumaah Khudhur**

You can see the following information about the study variables before you start answering the questions in the questionnaire, as follows:

#### **Accounting information system:**

The accounting information system is an important system for any organization. It helps the management of the organization to perform its functions efficiently and effectively through the information system that contributes to the management decisions and control the organization's activity. Therefore, the efficiency of the accounting information system or not. The success or failure of the Organization depends on its objectives. The widespread use of computer data processing, especially financial in most organizations, has had a significant and significant impact on the role of the accounting information system in contributing to the solution of many of these organizations, so that the accounting information system can be a problem And the financial decisions facing the management of the organization and the rest of the users of the information provided by the accounting information system, it was necessary to evaluate the information system applied from time to time and ensure its ability to keep pace with the activities of the organization and keep abreast of developments, Contemporary works as well as ongoing and successive changes in the economic environment.

#### **The internal audit:**

The internal audit function plays an important role in guiding the company's operations towards success. It assists in the examination and evaluation of financial activities, whether administrative or operational, and provides management personnel at all levels with the necessary information to assist in the control and protection of assets and operations under their responsibility. The internal audit aims to assist management and rationalize its decisions by providing independent and objective assurance, as well as consulting activity aimed at increasing and improving the value of operations through independent review, evaluating the effectiveness of operations and control and providing the Department with objective analysis and constructive suggestions. The basis for audit services is the assurance it provides for process integrity through audit and review aimed at assessing the effectiveness of risk management and controls as well as the quality and integrity of administrative and internal management.

**Please put the sign (x) on the option that represents the alternative you deem proper for the phrases below:**

#### **-GENERAL QUESTIONS**

##### 1- Gender

- Male
- Female

**2- Age:**

- Below 30 years
- 30 to 40 years
- 40 to 50 years
- Above 50 years

**3- Scientific qualification:**

- Student of BSc
- Student of MSc
- Student of PhD
- thers.....

**4- Years of experience:**

- Less than 5 years
- 5 to 10 years
- 10 to 15 years
- More than 15 years

**5- Current function:**

- Accounting manager
- Director of the Audit Committee
- Internal auditor
- Accountant
- Other.....

**A- Independent (Elements of the Accounting Information System)**

NO	ITEMS	Strongly agree	Agree	Neutral	disagree	Strongly disagree
<b>Infrastructure of the Accounting Information System.</b>						
1	The hospital invests heavily in the infrastructure of the accounting information system					
2	The hospital possess a high level capabilities of technology planning concerning accounting information system					
3	The hospital information system infrastructure is suitable for different users					
4	The hospital information system infrastructure is appropriate for its network					
5	The hospital information system infrastructure is suitable for different uses					
<b>Databases</b>						
6	The hospital possess specific procedures and standards for managing its databases					
7	Hospital databases and general framework are clear and smooth					
8	The hospital possess specific policies for the ownership of its databases					
9	Hospital databases are integrated with accounting information system applications					
10	Hospital databases are shared between its users and all departments					
<b>Software</b>						
11	The hospital possess an accounting program for salaries and wages					
12	The hospital possess an accounting program for procurement					
13	The hospital possess an accounting program for accounts and assets					
14	The hospital possess an accounting program for cost accounting					
15	The hospital possess an accounting program for stores					



NO	ITEMS	Strongly agree	Agree	Neutral	disagree	Strongly disagree
<b>Procedures</b>						
16	The hospital has a handbook of procedures and mechanisms for its operation					
17	The hospital's accounting information system clarifies mechanisms for dealing with financial issues					
18	The hospital confirms the set of procedures and instructions for employees using the information system					
19	The objective of the hospital is to standardize the work and to avoid unorganized activities					
20	The hospital's accounting information system contributes to streamlining business procedures					
<b>Staffs in charge of accounting information system</b>						
21	Our accountants in charge of accounting information system characterized by high technical level					
22	Our accounting information system staff (employees) cares about developing their capacities to be suit to business requirements.					
23	Our accounting information system staffs have the ability to develop the accounting system and modify it if required.					
24	Our staffs in charge of accounting information system participate in preparing and developing accounting information system.					
25	The hospital is keen to open periodically trainings for its staff in charge of accounting information system.					

**B- Characteristics of Accounting Information**

NO	ITEMS	Strongly agree	Agree	Neutral	disagree	Strongly disagree
<b>Validity</b>						
26	The current accounting information system provides us with appropriate information for the uses of the interested parties					
27	The current accounting information system contributes timely information					
28	Financial reports derived from the current accounting information system are appropriate for hospital needs					
29	Financial reports extracted from the current accounting information system provide an adverse feedback on the results of activities and workers					
30	Financial reports derived from the current accounting information system include indicators on forecast and forecast construction					
<b>Reliability</b>						
31	The financial reports extracted from the current accounting information system are accurate					
32	Financial reports extracted from the current accounting information system free of bias					
33	The financial reports extracted from the present accounting information system are fairly representative of the phenomena to be reported					
34	The financial reports extracted from the current accounting information system are characterized by their verifiable validity and access to the same results					
35	The financial reports extracted from the current accounting information system are clear and transparent					

**C- Dependent (Internal audit quality).**

NO	ITEMS	Strongly agree	Agree	Neutral	disagree	Strongly disagree
<b>Internal Audit Quality</b>						
36	The internal audit department of the hospital has a manual for procedural audit of the work mechanisms, which emphasizes the need for availability					
37	The internal audit department has policies and auditors					
38	The internal audit department of the hospital has a clear plan for the audit					
39	The internal audit department of the hospital directs all its employees continuously to investigate and investigate the causes of errors and deviations					
40	The internal audit department of the hospital emphasizes the procedures to ensure quality control mechanisms					
41	The internal audit department of the hospital performs its audits in accordance with the professional standards and the necessary local and international regulatory requirements					
42	The internal auditor reports to the Department as soon as information arrives that may affect the audit					
43	The Internal Audit Section applies clear policies and procedures to address differences between audit team members					
44	The internal audit department of the hospital documents all the procedures carried out by the hospital					

## VITAE

Bayar Jumaah KHUDHUR was born in 1982 in Iraq / Ninawa. Graduated from the accounting department, Faculty of Administration and Economics, University of Mosul in 2005/2006. He holds a master's degree in accounting for "The Impact of the Accounting Information System on Internal Auditing Quality: A Guide from Iraq" in the Department of Business Administration at Gaziantep University in 2018. He is married and has one child.

## ÖZGEÇM

Bayar Jumaah KHUDHUR 1982 yılında Irak / Ninawa'da doğdu. 2005/2006 yıllarında Musul Üniversitesi, Muhasebe ve İktisat Fakültesi, Muhasebe Bölümü'nden mezun oldu. 2018 yılında Gaziantep Üniversitesi İletme Bölümü'nde "Muhasebe Bilgi Sisteminin Ç Denetim Kalitesine Etkisi: Irak'tan Bir Kılavuz" unvanında muhasebe alanında yüksek lisans derecesine sahiptir. Evli ve bir çocuk babasıdır.