



Article

The Impact of Applying IT Governance According to the COBIT Framework and Its Role in Enhancing the Effectiveness of the Internal Control System: An Analytical Study of a Sample of Companies Listed in the Iraq Stock Exchange

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Abstract: The study mainly aims to identify the governance of information technology (COBIT) and determine whether there is a possibility to apply information technology governance according to the COBIT framework in companies listed on the Iraqi Stock Exchange and to find out the extent of its impact on enhancing and improving the effectiveness of internal control and for the purpose of achieving these goals. From the total community. The necessary data were obtained to test the hypotheses using the survey method to collect data through two indicators, the first for governance based on COBIT processes and the other included elements to enable the effectiveness of internal control, where then the use of the descriptive-analytical method and the use of statistical methods to analyze correlation and regression, and from the conclusions of the study were companies. Information technology governance is an integral part of corporate governance and therefore it helps in supporting their electronic operations effectively, which is reflected in the financial reporting processes of economic institutions, and there is a great impact of IT governance in improving the effectiveness of internal control, and the study recommended the need to adopt the COBIT framework according to the latest developments such as the COBIT 2019 framework, which includes additional processes in a way that ensures the governance of the organization from the beginning to the end in a way that contributes to enhancing and developing the work of internal control in the Economic Units

Keywords: IT Governance, COBIT, Internal Control, Effectiveness of Internal Control System

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1. Introduction

Theoretical Framework

Concept and Definition of Information Technology

The word "technology" consists of two syllables: "techno" which means application and skill, and (logy) means study and learning, so the linguistic meaning is the science of skills, i.e. the study of skills logically to perform the application that is added to knowledge [1], and that the word technology is an artistic way to achieve a practical purpose, as it includes means. The concept of IT governance has been the subject of debate since the 1990s, and many definitions have been introduced by academics and professionals in the field. It has been observed that the different definitions differ in some aspects, yet most of them have in common. In common are related to the integration

between companies and IT, which is commonly known as strategic alignment and is considered one of the key elements of IT governance.

Information technology is defined as "the technology of acquiring, processing, storing, and distributing different types of information files through the use of computers and communications that have arisen from powerful engines to create new innovations and creations that can overcome all the laziness and slowness of human performance." [2].

It is also defined as "a group of knowledge, social, humanitarian, scientific-engineering and technical fields, administrative procedures, various techniques, and human efforts to collect, process, store, transfer, retrieve and store information in a way that leads to the establishment of relationships between these technologies, knowledge and the human element dealing with it through its senses and perception" [3].

Concept and Definition of IT Governance

Governance refers to the way an organization processes strategies to ensure that strategies are developed, monitored, and achieved. The concept of effective IT governance revolves around the way senior management interacts and communicates with IT leaders for the purpose of ensuring that technology investment enables the realization of business strategy in an effective and efficient manner [4]. From the achievement of effective management of IT systems which called for the search for information and instructions that ensure the increase of the benefit of information technology [1], according to the Information Technology Governance Institute, IT governance is the responsibility of the board of directors and executive management. It is an integral part of the governance of the organization and consists of the leadership, structures, and organizational processes that ensure that the organization's information technology maintains the organization's strategies, goals, and expansion. IT governance is a concept that has evolved rapidly over the past few years, particularly in communities of practitioners. Practitioners tend to see the value of IT governance as a contribution to business performance and try to measure this contribution in terms of a firm's profitability, as this can be easily expressed in monetary units. Large public institutions, with their natural tendency to control all business processes and reduce risks and costs, strongly support governance approaches [5] and explain [6] IT governance faces an important management challenge. IT governance is very important as it can help ensure that IT supports business objectives, maximizes investment in IT, and manages the risks and opportunities that arise with information technology defined by [7] as the process by which economic units operate on the alignment of business and IT services with performance objectives and strategic objectives and the evaluation of the results achieved, and defined [6] are the structures, processes and mechanisms related to information technology decision-making where each economic unit must emphasize the investment of information technology that achieves the goals.

(Researchers believe that IT governance is an integral part of corporate governance through a set of structures and mechanisms related to information technology that work to align the business based on information technology and the objectives of the economic unit)

IT Governance Objectives

There is a consensus among researchers on the goals pursued by IT governance [8][9][10], which are:

Accreditation of the economic units of information technology in order to ensure the integration between the business strategy and the information technology strategy efficiently and effectively.

The adoption of information technology in the economic unit to ensure efficiency in their work, reduce costs, and increase control over information technology infrastructures.

Information technology aims to create the maximum benefits of information technology in the economic unit

Optimal strategic use of information technology in order to achieve competitive advantages and achieve the goals set for economic units

IT governance aims at the effective and efficient management of IT resources and the control of associated risks

The Importance of IT Governance

Information technology has been used in the economic unit for decades and with great intensity, and the use of this technology will enhance the pillars of corporate governance by taking into account the optimal use of resources and risk management [11], and that IT governance represents a link between suppliers, customers, and related parties, whether internal or external, that deal with the economic unit, in addition to In addition, it allows openness to new markets and keeping pace with developments [12], and that the special importance of information technology governance has become a decisive factor in achieving the success of the economic unit by applying this technology with the information it provides, and there is no doubt that the economic unit focuses on information technology to add to it. Values for Business [13]. IT governance is essential for an organization because: [14]

Management expects a growing understanding of the way information technology is operated and the likelihood of successfully leveraging it to achieve a competitive advantage.

Successful organizations recognize the risks, exploit the benefits of IT, and find ways to deal with aligning the IT strategy with the business strategy, the successive IT strategy and goals in the organization, and measuring its performance

An organization cannot deliver effective performance against these business and governance requirements without adopting and implementing an IT governance and control framework to define the management control objectives that must be considered.

Governance and control frameworks have become part of good practices for IT management and enable the establishment of IT governance and compliance with ever-increasing regulatory requirements.

Business managers and boards are demanding a better return on IT investments, meaning that IT delivers what the business needs to enhance stakeholder value

IT Governance Standards

There are several frameworks used by organizations in the governance, control and evaluation of information technology, and the design of internal control elements, and these standards are:

Information Technology Infrastructure Library (ITIL) is a set of best practice guidelines and one of the most widely accepted frameworks for IT service management in the world and is used in all industries and sectors including small and large enterprises [15].

COSO Framework: The COSO Integrated Framework for Internal Control is defined as a system that presents the procedures, policies and plans carried out by the management of the economic unit to safeguard its assets and provides components of internal control implemented by the department to provide rational assurance of the implementation of the control objectives and that each component includes many sub-components. However, auditors focus on those that are set up to minimize and detect material misrepresentations [16] and that the use of the COSO framework for internal control assessment will help the company calculate the likelihood of risks that can occur in the opposite way. [15]

ISO standard: ISO standard "Enterprise Information Technology Governance" is an international standard for corporate governance for information technology, first published in 2008 under the name "Corporate Governance of Information Technology" The ISO/IEC 38500 standard was prepared by the ISO/IEC Joint Technical Committee

JTC1, Information Technology and SC40 Information Technology Services Management and Information Technology Governance. The current version of the standard is the one that was updated in February 2015. The next revised version, ISO/IEC WD 38500, is under development and will replace the current standard (ISO 2021). The objective of the standard is to provide organizational management principles, definitions, and a model for governing bodies to use when assessing, directing, and monitoring the use of information technology within an economic unit [17].

Frame COBIT: Control Objectives for Information and Related Technology

Concept and definition of the COBIT framework

Designed to help organizations get optimal value from IT while maintaining a balance between achieving benefits, resource utilization, and assumed risk levels, Cobit allows for full IT management of the organization taking into account the overall business, functional areas as well as stakeholders. Entering and Exiting The fifth edition of Copt can be applied to all organizations of all sizes, whether public, private or non-profit sectors, and according to ISACA, the fifth edition of Cobit is in line with the five principles that allow the company to develop a governance and management framework. Safe, which focuses on a series of seven factors that improve information financing in technology through which the use is for the benefit of certain parties and can be used in information security, risk management, IT governance, security activities, legislative and regulatory compliance, financial processing, and corporate social responsibility reporting [18], So why do we use COBIT? The answer to this question is, "Every day new user requests, industry-specific regulations, and new risks emerge where it has never been more important to maximize the value of ownership, manage risk and security, and ensure compliance through effective IT governance so that no other framework provides scope and benefits like Copt to maintain high-quality information to support business decision and achieve goals." Strategy through the effective use of information technology and ensuring compliance with laws, rules, and policies [19] ISACA describes COBIT as "a comprehensive framework that helps companies achieve their goals for the governance and management of an organization's information technology" [20], while "COBITM" is defined as a control tool. In information technology, which is the result of the unified use of information technology-related resources that need to be managed through technology-specific processes to achieve the Bank's objectives [21], it is defined as a general methodology that provides a basic framework in the creation of information technology and its adaptation to organizational needs, and aims at research, development, dissemination, and promotion of the IT control model [22].

IT Operations: The processes that underpin and operate on the COBIT framework are as follows:

The COBIT framework defines IT governance processes in five dimensions, which are covering the organization from start to finish, applying an integrated framework, enabling the holistic approach, meeting the needs of stakeholders, and separating governance from management [23] Integrating an operational model and a common language for all parts of the organization involved in IT activities is one of the most important and important steps towards good governance. It also provides a framework for measuring and monitoring IT performance, providing IT assurance, communicating with service providers, and integrating management best practices. [14] COBIT includes a reference model that describes and details a set of governance and management processes related to information technology that should exist in the majority of companies. The group consists of core processes that companies need to implement and manage according to their needs in order to align the needs of stakeholders with those of the business and provide effective governance and management of their IT. According to the principle of separating governance from management, the 37 processes are divided into two categories, governance processes and management processes. [20], and the

COBIT framework has identified thirty-four goals related to information technology, divided into four dimensions related to IT management, namely: [14], [24][25][26].

First: Alignment, Planning and Organization (APO)

Planning and organization is the cornerstone of building effective IT governance and corporate governance. Planning and organization involves a number of objectives, namely to coordinate technology and company activities through the planning process, both in the short and medium term. Planning and organization work to ensure that IT management, as its features from the governance framework are translated into real procedures and practices within the company. In addition to improving the strategic alignment process, it also gives management a general description of the needs of the stakeholders and the purpose of the Managing the company structure also allows the identification of capabilities and requirements [27], organization includes the tactics and strategy used in information technology to achieve business objectives and strategic planning, strategy management, strategy planning, risk management and resource management to ensure that the organization , infrastructure, and human capital are in place [28].

Second: Construction, Acquisition and Implementation (BAI)

In order to achieve the information technology strategy, it is necessary to identify, develop, acquire and integrate this technology into the life cycle of the organization [29]. This dimension includes developments and changes in the current IT systems and their management and ensuring the continuity of the life cycle of these systems [1] Ownership and implementation refers to the identification and acquisition of IT requirements for successful business executives within the organization It includes: change management, acceptance, conversion, program and project management, requirements management, and finally knowledge management [27].

Third: Delivery, Service and Support (DSS)

Support and delivery focuses on adding value to the IT system, providing data support and processing properly to maintain business activities, maintain the continuity of information flow and make it permanently available to internal and external beneficiaries, and include: Operations Management, Asset Management, Service and Event Management, Problem Management, Business Continuity Management, Security Management, and Business Process Controls Management Okour, This area focuses on how to maximize the transfer of technology in the organization for the effective implementation of information technology and integration in the business process. This area consists of (six) processes. The information technology processes in the field of DSS (Delivery, Service and Support) based on COBIT are as follows: [30], [31] Operations Management, Management Service Requests & Incidents, Problem Management, Continuity Management, Security Services Management, Business Process Controls Management

Fourth: Monitoring, Evaluation, and Evaluation (MEA)

The processes in this field include the control and monitoring of information technology and the assessment of its ability to meet the overall strategic needs of the economic unit , and also includes the external evaluation of the ability of information technology to contribute to the achievement of business objectives and the internal audit of the control processes by the external and internal auditor [32], and the focus of monitoring Monitoring and evaluation aims to monitor and evaluate performance, internal control system, monitoring and evaluating compliance with external requirements [27] and focuses on the company's strategy in assessing its needs and whether it meets these objectives. MEA is responsible for monitoring the IT governance process and IT planning and implementation. This area refers to performance management, internal control, and compliance with governance and regulation. The MEA domain consists of three processes: MEA1 (Performance Monitoring and Evaluation),

MEA2 (Monitoring and Evaluating Internal Control System), and MEA3 (Monitoring and Evaluating Compliance with External Requirements) [31], [33].

COBIT Framework Principles : The first principle: Meeting the needs of stakeholders: Although there are specific goals for each company and that stakeholders have different needs and motivations, the Cobit framework can adapt its principles that govern it to suit all parties, as it clarifies the sequence of goals, needs and motivations according to their priorities with their manageability and then linking them to specific activities and practices [34], where there is a sequence of goals. In order to meet the needs of stakeholders [35].

Principle Two: Coverage of the organization from start to finish: The COBIT framework addresses all external and internal IT services and provides a comprehensive view of the management, governance and control of projects based on the auxiliary factors that enable the project to perform its work and cover it from start to finish in line with the responsibilities and activities of its functions. Information Technology [6, 36], and the overall governance style includes its elements of: enabling elements, scope of governance, roles, relationships and activities, and so on : [24]:

Enabling Elements: These are the frameworks, organizational structures, procedures, processes, practices, principles, and resources of the economic unit, and the absence of one of these elements will negatively affect the performance of the organization

Scope of Governance: Governance can be applied to the entire economic unit or to any part within it, and COBIT allows all domains of governance to be dealt with

Roles, Relationships, and Activities: These are the elements that determine who will be involved in the governance process, how they will be involved, and how they will be dealt with within any system of the Department and Governance.

Principle Three: Implement an Integrated Framework: The COBIT framework is in line with other frameworks and standards related to high-level frameworks, which is considered an umbrella framework for enterprise IT governance. [37], and there are many standards related to information technology and good practices that provide all the guidance and instructions for companies to manage information technology, and that the framework of its succession is consistent with these standards and at a high level, and thus it is a holistic framework for IT governance [38].

Principle Four: Enabling a Comprehensive Approach: Principle 4, which is one of the most important principles, makes it clear that the effective and efficient implementation of governance implementation must take into account the interdependence between many components (enablers) such as processes, organizational structures, information, culture, principles, services, and people.), and attention to people and relational aspects (e.g. culture, shared values, beliefs, etc.). Therefore, 'empowerment' is defined as a factor that influences individually and collectively whether something will succeed in managing IT in an organization" [39] and these enabling factors are [40], [41] **Organizational Structures:** These are the basic decision-making entities in a company whose internal and external IT organizational structure should be in line with the needs of the business

Culture and Ethical Behavior: Concern for the organization and individuals as a factor in the success of the organization in governance activities, and that economic units have special ethical guidelines and rules that must be adhered to.

Information: which is spread throughout the economic unit and includes all the information produced and used, and what is required is how to preserve it because it represents the main product of the economic unit

Principles, Policies, and Frameworks: It is the means of translating the desired behavior in the economic unit, and these frameworks include the structure of information technology and the relationship between them.

Software, Infrastructure and Services: Applications that assist an economic unit in processing information include IT services and infrastructure and applications,

applications that provide the organization with IT processing and services and must be designed to meet business needs and are in line with organizational strategies.

Principle 5: Separation of Governance and Management: This framework clearly demonstrates the distinction between governance and management, as governance and management contain different types of activities, requirements for different organizational structures, and perform different purposes [42].

Concept of Internal Control System

Internal control means the set of policies, systems and instructions that enable a bank or financial institution to correct course and conditions, as well as to evaluate the performance of the various units with a view to achieving maximum efficiency [43].

Internal Control According to the COSO (Committee of Sponsoring Organizations of the Treadway Committee), internal control is the process of providing reasonable assurance that objectives are achieved. In particular, these controls help to achieve objectives related to the reliability of financial reporting, compliance with laws and regulations, and the effectiveness and efficiency of operations [44].

Objectives of Internal Control

Internal control aims to ensure the soundness of the financial position of each bank, in particular to ensure financial efficiency and ensure the necessary liquidity. It helps in the valuation of each bank's assets, especially debts, advances, and other accounts receivable. It studies the problems facing institutions and tries to find solutions to those problems. It also ensures that banks and financial institutions comply with the laws, regulations and official instructions issued by the Central Bank. It also helps to provide suggestions and ways that help solve the problems facing economic units and ways to increase their efficiency, and it is divided into four means: (preventive control, performance control, protection control, and corrective control) [44].

Effectiveness of Internal Control: The term "effectiveness" can be defined as the ability to succeed or achieve desired results [45]. Effectiveness of internal control refers to the degree to which the establishment and implementation of internal control provide reasonable assurance of achieving control objectives, including the effectiveness of internal control design and the effectiveness of internal control processes. Effectiveness of internal control is the degree to which the objectives of internal control are achieved through good compatibility and compliance between internal control elements and their external environment, and between the people and systems related to the system. At the operational level of the system. Effectiveness of internal control refers to the extent to which the objectives of this control are achieved through the development and implementation of management activities such as authority and responsibilities, risk control, and incentives Supervisory and information communication. [46, 47] refer to the most important indicators of the effectiveness of internal control, which are: the effectiveness and efficiency of operations related to enabling economic units to respond appropriately to risks, achieving and protecting economic resources from loss, enabling the achievement of profitability, performance objectives and the degree of accuracy in financial reporting that include the preparation of reliable financial statements, including procedures for compliance with applicable laws and regulations (the law). Reporting weaknesses in controls with corrective processes, which determine compliance with the regulations and laws to which the economic unit is subject.

Components of Internal Control

Control environment: A control environment is a set of standards, processes, and structures that provide the basis for implementing internal control throughout an organization [48]. This environment creates discipline and structure that affects the quality of internal control [49].

Risk assessment: It is the process used by an organization to decide how to deal with risks that pose a threat to achieving its objectives and entails setting goals and prioritizing

them, identifying risks and assessing their potential impact. Accordingly, risk assessment is seen as the identification, assessment, and management of risks [50].

Information and communication: Information and communication is one of the key elements according to the COSO control framework, where a company needs to convert the data it obtains from its internal and external environments into information and transmit it to stakeholders accurately and reliably in a timely manner [51].

Control: It is the last element of internal controls. This component involves evaluating the quality of the performance of an organization's internal control systems over time. It ensures that the components of internal controls are present, functional, and effective. This can be done through continuous monitoring, separate evaluations, or a combination of the two [52].

The Relationship between IT Governance in accordance with COBIT and its Impact on Enhancing the Effectiveness of Internal Control

The need for technology governance has emerged, and this term represents the (IT Governance) information group within the concept of corporate governance with a term of organizational frameworks and processes that ensure that information technology achieves investment in technology and achieves the organization's strategic goals, in addition to the application of corporate governance for information technology that provides all data to its customers, in addition to that, under the governance of information technology, the urgent need for the quality of accounting information and the need for information security in order to Protecting the latter and thus imposing control over it, and here the role of internal control in the field of information technology has emerged, which can play an active role in adding value to the organization [53] In addition, internal control in any economic unit is considered of great importance because of its control procedures and effective means of controlling any activity in this unit, and the main goal of the effectiveness of internal control is to protect this unit and ensure the correctness, integrity and fairness of the Financial reporting, protection of the company's assets , and motivating employees to comply with the laws, legislations and administrative policies set and raising the efficiency of operation, as new and important control and regulatory concepts and frameworks such as governance emerged, as the effectiveness of internal control and its provisions was emphasized by the international professional organizations specialized in this field, especially the International Federation of Accountants [54]. Continuous development to keep pace with the developments in information technology, there have been many uses by organizations in order to process their financial data, as it has helped to build those successful organizations and companies and build good relationships with their customers, as well as helped them improve productivity, make decisions, and encourage global competition for information technology. The audit process is facing a great challenge to develop its methods and tools in order to continue providing services with high quality, so that this technology has helped the control and audit profession to carry out its work and verify the validity of the prepared financial statements and reduce a lot of time when preparing those data, which indicates that there is a mutual relationship between information technology. His presence is internal audit, and this has helped to improve his efficiency and effectiveness of internal control [55].

2. Materials and Methods

Study Methodology

The Search Problem. Despite the role played by electronic accounting systems and their applied programs in facilitating financial reporting processes for economic units, they have been associated with an increase in the risks of accounting information security. This is through attempts to penetrate and manipulate accounting information systems or the possibility of deleting or adding some data without leaving an impact, especially in the private and public financial sector. He witnesses many incidents that do a lot of damage to the reputation of these organizations. In addition, technological developments may affect the estimates of management and audit workers to the degree of risk associated

with each item of the financial statements, which will negatively impact the effectiveness of the company's internal control system. On this basis, the research problem lies in the extent to which the implementation of information technology governance in accordance with the COBIT framework has an impact on enhancing the effectiveness of the internal control system in companies listed on the Iraqi Stock Exchange?).

Research Objective.

The research aims to achieve the following:

1. Determine the feasibility of applying IT governance processes according to the COBIT framework in companies listed on the Iraq Stock Exchange.
2. Analyzing and Measuring the Impact of the Application of Information Technology Governance (COBIT) on Enhancing the Effectiveness of the Internal Control System in the Companies Sample Study.
3. Theoretical Statement of the Impact of the COBIT Framework on Internal Control

Importance of the research: Due to the lack of literature in the field of accounting and control that addresses the modern mechanisms and regulatory frameworks for IT governance, represented by the COBIT framework, this study contributes to providing libraries with a study concerned with COBIT for information technology to improve control processes through the benefit of all parties related to the company's auditors. Internal audited shareholders, investors. The importance of the study is scientifically represented in the study variables related to the mechanisms of corporate governance for information technology according to the COBIT framework to improve the effectiveness of internal control in electronic accounting systems and the possibility of linking them, as this linkage represents a great scientific addition to the current study, as well as the importance of the current study stems from reaching the best practices by the Council of management and stakeholders and enhancing the effectiveness of control in the research sample.

Research Hypothesis: - The study is based on two main hypotheses:

First: There is a statistically significant relationship between the governance of information technology according to (COBIT) and the effectiveness of internal control, from which the following sub-hypotheses are included:

Sub-Hypothesis (1): There is a Statistically Significant Relationship between Harmonization, Planning, and Organization Processes and the Effectiveness of Internal Control

Sub-Hypothesis (2): There is a Statistically Significant Relationship between Construction, Acquisition, Implementation and the Effectiveness of Internal Control

Sub-hypothesis (3): There is a statistically significant relationship between delivery, service, support and the effectiveness of internal control

Sub-Hypothesis (4): There is a Statistically Significant Relationship between Monitoring, Evaluation, Evaluation and the Effectiveness of Internal Control

Second: There is a statistically significant effect between the governance of information technology according to (COBIT) and the effectiveness of the internal control system, from which the following sub-hypotheses are included:

Sub-Hypothesis (1): There is a Statistically Significant Effect between the Processes of Alignment, Planning, and Organization and the Effectiveness of Internal Control

Sub-Hypothesis (2): There is a Statistically Significant Effect between Construction, Acquisition and Implementation Processes and the Effectiveness of Internal Control

Sub-hypothesis (3): There is a statistically significant effect between delivery, service, and support operations and the effectiveness of internal control

Sub-hypothesis (4): There is a statistically significant effect between the monitoring, evaluation, and evaluation processes and the effectiveness of internal control.

Data Collection Method. In line with the importance and purpose of the research, as well as its hypothesis, I have relied on the following in its preparation:

First: The theoretical aspect: The literature was used on what is available from Arab and foreign sources related to the subject of the research, and scientific articles and researches published in reputable Arab and international journals and websites (Internet)

Second: The field aspect: The first axis related to the governance of information technology was dealt with by relying on the descriptive-analytical approach (a case study in a number of companies listed on the Iraqi Stock Exchange), through a governance index that was formulated in the form of a survey form that deals with the extent to which the dimensions of COBIT have been achieved or not achieved to determine the level of IT governance available, and compare it with the COBIT model. This is done by calculating the value of IT governance through the preparation of governance measures consisting of several paragraphs to which the bank's application is verified, and a point is calculated for each applied procedure, and the total points are calculated for the bank. The second axis relates to the effectiveness of the internal control system in the field of information technology, for this purpose, a survey form was prepared that includes the elements of enabling internal control for the COBIT framework and distributed to the employees working in the internal control departments.

Seventh: Research Variables: The research model consists of two aspects, the first aspect relates to the independent variables, the information technology governance processes according to the COBIT framework, while the second aspect relates to the dependent variable, which is represented in the elements of enabling the effectiveness of the internal control system under the COBIT framework.

Applied Study

Description of the study sample

According to the nature and purpose of the research problem, and in order to test the hypotheses on the extent to which the application of information technology governance according to the COBIT framework affects the effectiveness of the internal control system in Iraqi commercial banks, the method of selecting the study sample and measuring its variables is presented as follows:

Sample Research Banks

The research population included all banks in the regular and secondary markets (20) banks and the second market (24) banks, with a total of 44 banks. The researcher aimed to analyze the relationship between the information technology governance mechanisms according to the COBIT framework and the effectiveness of the internal control system for a sample of banks, including 26 banks, 14 banks for the regular market and 12 banks for the second market from the research community, as the number of banks in the research sample reached (26) banks They constitute 59% of the total population. The necessary data were obtained to test the hypotheses using the survey method to measure both the two variables of IT governance as well as the effectiveness of the internal control system, as well as the websites of the research sample banks were used to obtain the necessary information for analysis.

Measurement of Study Variables

This study is concerned with testing the effect of the level of commitment to the application of IT governance mechanisms according to the COBIT model on the effectiveness of the internal control system in the banks of the research sample. Therefore, it deals with two main variables, namely the application of IT governance according to COBIT and the effectiveness of the financial control system, which is divided into a set of sub-variables that represent quantitative measures for each of these variables. The following is a description of the study variables and how to calculate them using measurement indicators prepared for each variable.

IT governance according to COBIT

For the purpose of measuring the level of application of IT governance according to the COBIT framework, a governance index was used that was formulated in the form of a survey form that deals with the extent to which the dimensions of COBIT have been achieved or not achieved in the banks of the research sample in order to determine the level of IT governance available, the IT governance index used in this study consists of four axes consisting of four different indicators that represent COBIT processes, namely planning and organization. Acquisition and implementation, support and delivery, and follow-up and evaluation.

Measuring the effectiveness of internal control

For the purpose of evaluating the effectiveness of the internal control system in the banks of the research sample, a survey form was prepared to evaluate the internal control system and distributed to the audit officials in the banks of the research sample through personal interviews to collect the necessary information for the evaluation. The survey list consists of 28 paragraphs within 7 axes that represent the elements of enabling the internal control system within the framework of COBIT for information technology governance

3. Results and Discussion

Results of Statistical Analysis

Normal Distribution Analysis: This analysis is necessary to assess whether the data follows the normal distribution, and is a basic assumption for many parametric tests such as t-test and analysis of variance (ANOVA).

Table 1. Descriptive statistics for study variables

		Statistics												
		APO	BAI	DSS	MEA	ITG	PPF	OPR	OST	CEB	INF	PCC	CIAP	ICE
N	Valid	26	26	26	26	26	26	26	26	26	26	26	26	26
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0
Skewness		-.419	-.480	-.160	-.811	-.245	-.844	-.827	.287	-.821	.500	-1.633	-.153	-2.525
Std. Error of Skewness		.456	.456	.456	.456	.456	.456	.456	.456	.456	.456	.456	.456	.456
Kurtosis		.180	.441	.480	.403	.714	-.880	.402	-.506	2.124	-.643	3.132	-.004	9.853
Std. Error of Kurtosis		.887	.887	.887	.887	.887	.887	.887	.887	.887	.887	.887	.887	.887

We can see from the above table that the sample size for all variables is 26, there is no missing data (missing = 0) for any variable, indicating that the dataset under analysis is complete (Skewness values: ranging from -2.525 for the variable 0.287 for the variable OST), the standard error of the torsion is constant for all variables and is equal to 0.456. Most variables have torsion values that fall within the acceptable range (1.96) except for the variable ICE has the highest negative torsion value (-2.525), which means that its data are heavily skewed to the left. Kurtosis values range between (9.853 and -0.506) and the standard error of kurtosis is constant for all variables and is equal to (0.887), and most of the variables have acceptable kurtosis values, except for the variable variable (ICE), PCC, and CEB, where the kurtosis numbers were (3.123, 9.853, and 2.124) respectively.

Descriptive Statistics

Table 2. The Independent Variable (Information Technology Governance)

Descriptive Statistics						
		N	Minimum	Maximum	Mean	Std. Deviation
Alignment, Planning and Organization	APO	26	6	12	9.35	1.164
Construction, Acquisition and Implementation	BAI	26	5.00	11.00	8.7308	1.04145
Delivery, Service & Support	DSS	26	5.00	11.00	8.9231	1.16355

Monitoring, Evaluation and Evaluation	ME A	26	4.00	10.00	8.0769	1.16355
IT Governance	ITG	26	20.00	41.00	35.0769	3.89793
Valid N (listwise)		26				

Table 3. The Dependent Variable (Effectiveness of the Internal Control System)

Descriptive Statistics						
		N	Minimum	Maximum	Mean	Std. Deviation
Principles, Policies and Frameworks	PPF	26	2.00	4.00	3.3846	.80384
Operations	OPR	26	1.00	4.00	2.9615	.52769
Organizational Structure	OST	26	2.00	4.00	2.6923	.61769
Culture, Ethics and Behaviors	CEB	26	1.00	4.00	2.8846	.65280
Information	INF	26	2.00	4.00	2.5385	.58177
Personnel, Competence and Specialization	PCC	26	1.00	4.00	3.4615	.76057
Services, Infrastructures & Applications	CIAP	26	1.00	4.00	2.5385	.64689
Effectiveness of internal control	ICE	26	10.00	25.00	20.4615	2.65678
Valid N (listwise)		26				

Hypothesis Test Results:
Correlation Analysis

Table 4. Correlation hypotheses and the results of statistical analysis:

Hypothesis	Independent variable	Dependent variable	Pearson correlation coefficient (r)	Correlation coefficient square (r ²)	Significance level (Sig. 2-tailed)	(N)	Statistical judgment (at $\alpha=0.01$)	The strength and nature of the relationship
Home	ITG	ICE	0.908**	0.824	0.000	26	Hypothesis accepted	Very Strong/Direct (Positive)
Sub 1	APO	ICE	0.813**	0.661	0.000	26	Hypothesis accepted	Very Strong/Direct (Positive)
Sub 2	BAI	ICE	0.827**	0.684	0.000	26	Hypothesis accepted	Very Strong/Direct (Positive)
Sub 3	DSS	ICE	0.672**	0.452	0.000	26	Hypothesis accepted	Strong/Direct (Positive)
Sub 4	MEA	ICE	0.816**	0.666	0.000	26	Hypothesis accepted	Very Strong/Direct (Positive)

The first main hypothesis: There is a statistically significant relationship between the implementation of (IT) governance and the effectiveness of the internal control system

We can see from the above table that the value of the correlation coefficient was (0.908), and since this value is very close to the maximum value (+1), it indicates that there is a very strong correlation between the application of the information technology governance mechanisms (ITG) and the effectiveness of the internal control system (ICE), as well as the relationship of a for the positive indication of the value. (+0.908) means that the relationship is direct (i.e., the change in one variable is offset by a change in the same direction in the other. The significance level also indicates at the bottom of the table that the relationship is statistically significant at the level of (0.01) $\alpha = 0.01$), which is equivalent to a 99% confidence level. This means that the probability that this strong relationship (0.908) happened by accident is very small (less than 1%).), and the main hypothesis was accepted: (H1) "There is a statistically significant relationship between the application of corporate governance mechanisms according to COPT and the effectiveness of the internal control system. "Rejecting the alternative hypothesis.

The first sub-hypothesis: There is a statistically significant relationship between the application of COBIT, planning and organization processes and the effectiveness of the internal control system: Pearson's correlation coefficient was used to test the nature and strength of the relationship between the independent variable, which is the alignment of planning and organization (APO), and the dependent variable, which is the effectiveness of the internal control system (ICE). Pearson's correlation coefficient was $r = 0.813$). This value is classified within the very strong correlation range according to the criteria of statistical interpretation. The positive signal of the correlation coefficient indicates that the relationship between the two variables is direct, i.e., the increase in the efficiency and effectiveness of the application of planning and organization mechanisms in the company is associated with a significant increase in the effectiveness of the internal control system, and the calculated significance level (Sig. 2-tailed) reached the value of (0.000) and when comparing this level with the approved alpha value ($\alpha = 0.01$), we find that $0.000 < 0.01$). This indicates that the discovered relationship is statistically significant, which means rejecting the non-existence hypothesis (H0) that there is no relationship, and accepting the first sub-hypothesis that states that there is a statistically significant relationship between the application of the alignment, planning and organization processes according to COBIT and the effectiveness of the internal control system.

The second sub-hypothesis: There is a statistically significant relationship between the application of construction, acquisition and implementation processes according to COBIT and the effectiveness of the internal control system: Through the above table, the Pearson correlation coefficient was used to find the correlation between the two variables, where the value of the Pearson correlation coefficient was ($r = 0.827$). Which classifies it as a very strong correlation, and the positive sign (the absence of a negative signal) confirms that the relationship is direct (positive). This means that the more the construction and acquisition processes are implemented in the company, the more effective the internal control system will be, and the calculated significance level (Sig) is (0.000). This value is much smaller than the level of significance adopted in the research ($\alpha = 0.01$), the high significance indicates that the strong relationship discovered is not the result of chance, but is of very high statistical significance (with a confidence level of 99%), and this proves to the statistical decision: the hypothesis of nullity (H0) is rejected because the level of significance is less than (0.01), and the second sub-hypothesis is accepted. which states that there is a statistically significant relationship between the application of construction, acquisition and implementation processes according to COBIT and the effectiveness of the internal control system.

Third sub-hypothesis: There is a statistically significant relationship between the application of connections, service and support according to COBIT and the internal control system. By analyzing the correlation (Pearson coefficient) to evaluate the nature, strength and direction of the relationship between the independent variable, it is found

that the value of the Pearson correlation coefficient was ($r=0.672$). This value indicates that there is a strong and positive (direct) correlation between delivery, service, support and the effectiveness of the internal control system, and a positive signal means that the higher the level of implementation, service and support, the more effective the internal control system is. Although it is the strongest relationship after the main hypothesis, it is less powerful compared to the other mechanisms, the calculated significance level (0.000) when compared to the dependent significance level ($\alpha = 0.01$), we find that 0.000 is less than 0.01, and this confirms that the discovered relationship is of very high statistical significance and cannot be traced back to coincidence. Therefore, the hypothesis of nullity (H_0) is rejected because its condition is not met, and the third sub-hypothesis that there is a statistically significant relationship between the two variables is accepted. This finding confirms that delivery, service and support are an important and positively influential factor in building and enhancing the effectiveness of the internal control system.

Fourth Sub-Hypothesis: There is a statistically significant relationship between the application of COBIT monitoring, evaluation, and estimation processes and the effectiveness of the internal control system: The use of Pearson's correlation coefficient to assess the nature, strength, and direction of the relationship between the independent variable, which is the monitoring, evaluation, and estimation (MEA) processes, and the dependent variable, which is the effectiveness of the internal control system (ICE). The analysis was performed on a sample size of $N=26$ and it was found that the value of Pearson's correlation coefficient was ($r = 0.816$). This value is classified within the range of the very strong correlation. The positive indication indicates that the relationship is direct (positive). This means that the more monitoring, evaluation and evaluation processes are applied, the more positively this will be reflected in the effectiveness of the internal control system, the calculated significance level (Sig.) The value of (0.000), comparing this value with the approved level of significance ($\alpha = 0.01$), we find that ($0.000 < 0.01$). This confirms that the discovered relationship is of very high statistical significance, which supports its validity and not being the result of chance, and therefore the hypothesis of nullity (H_0) is rejected because its statistical condition is not met, and the fourth sub-hypothesis (H_1) is accepted, which states that there is a statistically significant relationship between the application of the control, evaluation and estimation processes of the internal control system. This finding demonstrates that effective monitoring and evaluation are a critical element of governance, as they contribute substantially and positively to improving the performance of the internal control system and enhancing its ability to detect errors

Hypotheses of Impact:

الفرضية الرئيسية الثانية هنالك تأثير ذو دلالة احصائية لتطبيق اليات حوكمة الشركات وفقا لكوبت على فاعلية نظام الرقابة الداخلية

Table 4 Model Summery				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922 ^a	.849	.820	1.12572
a. Predictors: (Constant), MEA, DSS, BAI, APO				

This part measures the good fit of the model to the data, i.e. the extent to which the independent variables (MEA, DSS, BAI, APO) are able to interpret the variance in the dependent variable (ICE), as the value of ($R=0.922$) was ($R=0.922$), where this value indicates that there is a very strong and positive correlation between the independent variables combined and the dependent variable, and the value of the determination coefficient was ($R^2=0.849$): which means that 84.9 of the total variance in the dependent variable (ICE – effectiveness of the internal control system) can be explained by the four independent variables combined (APO, BAI, DSS, MEA). This is a very high and excellent level of interpretation, the value of the Adjusted Determination Coefficient ($R^2: 0.820$): this value is an estimate of the model's ability to interpret in the larger study population, and it is slightly lower than R^2 due to its adjustment for the number of independent variables and the sample size, and still indicates a high interpretive power (82.0%), and

the standard error was 1.12572 Which means that the predictions made by the model are largely accurate

Table 5. ANOVA results for the regression model predicting internal control system effectiveness

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	149.850	4	37.462	29.562	.000 ^b
	Residual	26.612	21	1.267		
	Total	176.462	25			
a. Dependent Variable: ICE						
b. Predictors: (Constant), MEA, DSS, BAI, APO						

Analysis of variance (ANOVA) determines whether the model as a whole is statistically significant, i.e., whether the independent variables combined have a significant effect on the dependent variable, the calculated value of (F) (29.562) indicates a relatively high value, indicating that the variance explained by the regression model (149.850) is significantly greater than the unexplained variance (26.612). Since (.sig=0.000) is less than (0.05), this proves that the model as a whole has a very high statistical significance at the level of 0.000. It means that the independent variables (APO, BAI, DSS, MEA) TOGETHER HAVE A SIGNIFICANT AND SIGNIFICANT IMPACT ON THE EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEM (ICE). This conclusively supports the main hypothesis.

Table 6. Regression coefficients for predictors of internal control system effectiveness

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.333	2.098		-.635	.532
	APO	.680	.305	.298	2.230	.037
	BAI	.969	.326	.380	2.976	.007
	DSS	.161	.268	.070	.600	.555
	MEA	.687	.309	.301	2.222	.037
a. Dependent Variable: ICE						

The results of the regression analysis showed that three out of four independent variables (APO, BAI, MEA) respectively reached their significance (Sig. (0.007, 0.037, 0.037) was statistically significant at a significance level of 0.05, confirming a significant linear relationship between these processes and the effectiveness of internal control. In contrast, the DSS variable had no statistically significant effect on ICE. Its morale reached (Sig.=0.555)

Sub-hypotheses of influence

COBIT الفرضية الفرعية الاولى هناك تأثير ذو دلالة احصائية لتطبيق عمليات الموائمة التخطيط والتنظيم وفقا على فاعلية نظام الرقابة الداخلية

Table 7. Model summary for the effect of APO on internal control system effectiveness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813 ^a	.661	.646	1.57982
a. Predictors: (Constant), APO				

The value of (correlation coefficient) (R) is (.813a), which is very close to 1, indicating that there is a strong and positive correlation between the application of planning and organization (APO) processes and the effectiveness of the internal control system (ICE), and the value of the coefficient of determination (R²) is (.661) means that the independent variable (APO) explains or contributes to the explanation of 66.1% of the total variance in the dependent variable (ICE). This is a very high interpretation ratio.

Table 8. ANOVA results for the effect of APO on internal control system effectiveness

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	116.561	1	116.561	46.702	.000 ^b
	Residual	59.900	24	2.496		
	Total	176.462	25			
a. Dependent Variable: ICE						
b. Predictors: (Constant), APO						

Through the above analysis of variance table (ANOVA), this table is used to test the statistical significance of the model as a whole, i.e. whether the independent variable (APO) has a significant effect on the dependent variable (ICE) or not, where the test value of (F) is (46.702) which is high, which supports the existence of a substantial variation between the sum of the squares of the regression and the residual. Since the significance level (Sig.=0.000) is less than 5%, the model is statistically significant, meaning that the independent variable (APO) has a significant statistical effect on the dependent variable (ICE).

Table 9. Regression coefficients for the effect of APO on internal control system effectiveness

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.127	2.555		1.224	.233
	APO	1.855	.271	.813	6.834	.000
a. Dependent Variable: ICE						

The Coefficients table shows the strength and direction of the impact for each individual variable, where the regression coefficient (B) is 1.855 (positive), which means that an increase of one unit in the application of planning and organization (APO) processes leads to an increase of (1.855) units in the effectiveness of the control system

Internal (ICE), with other factors constant. This confirms the positive trend of the effect, statistical significance (Sig.): the significance value of the APO is (0.000). Since this value is less than (0.05), this effect is very statistically significant. Based on the results of the above tables, which showed a strong correlation value (0.813), high explanatory power (0.661), and a high statistical significance of the independent variable (Sig. = 0.000): we reject the null hypothesis (H0) and accept the alternative hypothesis (Ha) There is a statistically significant effect of the application of planning adaptation processes Regulation according to COBIT on the effectiveness of the internal control system:

Second Sub-Hypothesis: There is a Statistically Significant Effect of the Application of Construction, Acquisition and Implementation Processes According to COBIT on the Effectiveness of the Internal Control System

Simple Linear Regression analysis was used to test this relationship, where BAI (Build, Acquisition and Implementation) represents the independent variable, and ICE (Internal Control System Effectiveness) represents the dependent variable.

Table 10. Model summary for the effect of BAI on internal control system effectiveness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.827 ^a	.685	.671	1.52299
a. Predictors: (Constant), BAI				

The Model Summary analysis showed that the value of the correlation coefficient, which represents the strength and direction of the linear relationship between the two variables. It reached .827a, which indicates a very strong and positive correlation between BAI and ICE. The R square coefficient was .685, which explains that 68.5% of the variation in the effectiveness of internal control is attributed to changes in construction, acquisition and implementation. This is a high interpretation ratio. The modified coefficient of determination confirms the strength of the model

Table 11. ANOVA results for the effect of BAI on internal control system effectiveness

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	120.793	1	120.793	52.077	.000 ^b
	Residual	55.668	24	2.320		
	Total	176.462	25			
a. Dependent Variable: ICE						
b. Predictors: (Constant), BAI						

Variance analysis (ANOVAa) was used to test whether the regression model as a whole was statistically significant as the calculated value of (F) was (52.077) and the significance level was (0.000) less than the standard significance level (0.05), this confirms that the regression model is statistically significant. This means that the linear relationship between construction, acquisition and implementation processes and the effectiveness of the internal control system is real

Table 12. Regression coefficients for the effect of BAI on internal control system effectiveness

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.034	2.571		.791	.437
	BAI	2.111	.292	.827	7.216	.000
a. Dependent Variable: ICE						

Non-standard regression coefficient (B) The regression coefficient of +2.111 (BAI) is positive, which indicates a direct effect, as an increase of one unit in the application of construction, acquisition and implementation processes leads to an increase of 2.111 in the effectiveness of the internal control system, and the statistical t-value reached (7.216) and the corresponding significance level reached (0.000) which is much lower than (0.05), this coefficient is very statistically significant. Accordingly, the second sub-hypothesis is accepted, which states that there is a statistically significant effect of the application of the construction, acquisition and implementation processes on the effectiveness of the internal control system.

Third Sub-Hypothesis: There is a Statistically Significant Effect of the Application of Connections, Service and Support Operations according to COBIT on the Effectiveness of the Internal Control System

Table 13. Model summary for the effect of DSS on internal control system effectiveness

Model Summary				
Model	R	R Square (² R)	Adjusted R Square	Std. Error of the Estimate
1	.672 ^a	.451	.429	2.00839
a. Predictors: (Constant), DSS				

The model summary table shows how well the model is in interpreting the variance in the dependent variable (ICE) where the value of the correlation coefficient was (R=.672a) where this value indicates a strong and positive correlation between the connectivity, service and support (DSS) processes and the effectiveness of the internal control system, the value of the determination coefficient was (²R=0.451). This means that 45.1% of the overall variation in ICE effectiveness can be explained by Delivery, Service, and Support (DSS), with Adjusted ²R hope: a value of 0.429. Community-level model quality estimation, which is a relatively good value and indicates a reasonable explanatory capacity of the model

Table 14. ANOVA results for the effect of DSS on internal control system effectiveness

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	79.655	1	79.655	19.748	.000 ^b
	Residual	96.807	24	4.034		
	Total	176.462	25			
a. Dependent Variable: ICE						
b. Predictors: (Constant), DSS						

In the ANOVAa table, we can see that the calculated F value of 19.748 indicates that the variance in the effectiveness of the internal control system (ICE) interpreted by the DSS regression model is about 19.7 times greater than the unexplained variance attributable to random error or other external factors, and since the significance level is less than 5%. This confirms that the linear regression model is valid and statistically significant, and that Connection, Service, and Support (DSS) processes contribute significantly to predicting the effectiveness of the Internal Control System (ICE).

Table 15. Regression coefficients for the effect of DSS on internal control system effectiveness

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.773	3.105		2.181	.039
	DSS	1.534	.345	.672	4.444	.000
a. Dependent Variable: ICE						

Through this table we determine the coefficients of the test subhypothesis, the non-standard regression coefficient ($B = 1.534$): DSS shows that there is a direct positive effect of DSS on ICE., Statistical Significance of the Variable ($0.001 > 0.000$): DSS confirms the acceptance of the subhypothesis that there is a statistically significant effect of delivery, service, and support operations on the effectiveness of the internal control system.

Fourth Sub-Hypothesis: There is a Statistically Significant Effect of the Application of Monitoring, Evaluation and Evaluation Processes According to COBIT on the Effectiveness of the Internal Control System

Table 16. Model summary for the effect of MEA on internal control system effectiveness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 ^a	.666	.652	1.56670
a. Predictors: (Constant), MEA				

The Model Summary table shows the quality of the conformity of the proposed model, as the correlation coefficient R is (0.816), which is a very high value, and indicates that there is a strong and positive correlation between the independent variable MEA (Control, Evaluation, and Estimation) and the dependent variable ICE. The value of ($R \text{ square} = .666$) means that 66.6% of the total variance in the ICE dependent variable is explained by the independent variable MEA included in the regression model. This is a good interpretation ratio. The value of ($\text{Adjusted } R \text{ Square} = .652$) is close to $R \text{ Square} = .666$, which confirms the quality of the model.

Table 17. ANOVA for the MEA regression model

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.552	1	117.552	47.892	.000 ^b
	Residual	58.909	24	2.455		
	Total	176.462	25			
a. Dependent Variable: ICE						

b. Predictors: (Constant), MEA

Through the ANOVA test, the value of ($F=47.892$) was reached, which is a high value, which means that the variance in the dependent variable (internal control effectiveness) ICE interpreted by the model is much larger than the variance that did not explain {Residual}. The significance level ($\text{Sig.}=0.000$), which is much less than 5%, we reject the null hypothesis and accept the alternative hypothesis.

Table 18. Coefficients of the MEA regression model

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.409	2.197		2.462	.021
	MEA	1.864	.269	.816	6.920	.000
a. Dependent Variable: ICE						

Through this table we determine the coefficients of the subhypothesis test, the non-standard regression coefficient ($B = 1.864$): DSS shows that there is a direct positive effect of (observations, evaluation, and estimation) on the fact that since the value is positive, the effect is direct. This means that increasing the MEA by one unit increases the dependent variable ICE by 1.864, and the standard regression coefficient. A beta for the comparison of the relative strength of the variables with a value close to 1.0 indicates that the effect is strong, the statistical significance of the variable ($0.001 > 0.000$): MEA confirms the acceptance of the subhypothesis that there is a statistically significant effect of monitoring, evaluation and evaluation processes on the effectiveness of the internal control system.

4. Conclusion

1. IT governance is an integral part of corporate governance and therefore helps to support their electronic operations effectively, which is reflected in the financial reporting processes of economic institutions.
2. Internal control is one of the most important defenses against the failure of economic units and is an important driver of business performance and risk management, and enables it to create and maintain the value of the economic unit, and it is an integral part of the corporate governance system
3. The COBIT framework is one of the most important frameworks that can be integrated with the internal control system and increases the robustness of its procedures to fill the gaps or weaknesses that may arise in economic units when the use of information technology increases.
4. The analytical study proved that there is a statistically significant correlation between the application of information technology governance according to COBIT and the effectiveness of the internal control system, as the correlation coefficient reached (0.908), which indicates a very strong correlation
5. The analytical study proved that there is a statistically significant effect relationship between the application of IT governance according to COBIT and the effectiveness of the internal control system, as the variance explained by the regression model (149.850) is much greater than the unexplained variance (26.612). Since ($\text{sig.}=0.000$) is less than (0.05), this proves that the model as a whole

has a very high statistical significance at the level of 0.000. It means that the independent variables (APO, BAI, DSS, MEA) TOGETHER HAVE A SIGNIFICANT AND SIGNIFICANT IMPACT ON THE EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEM (ICE). This conclusively supports the main hypothesis.

Recommendations:

1. The need for economic units to develop and organize the work of corporate governance in accordance with the latest developments and activate the work of the Information Technology Committee
2. The necessity of the participation of employees in the internal control departments to participate in the development courses, the adoption of modern electronic methods in the field of auditing and control, and the update of the internal control framework according to the latest developments such as the updated COSO model.
3. The necessity of adopting the COBIT framework according to the latest developments, such as the COBIT 2019 framework, which includes additional processes in a way that ensures the governance of the institution from the beginning to the end, in a way that contributes to strengthening and developing the work of internal control in economic units.
4. The need to provide the basic resources and infrastructure necessary for the governance of information technology because of its great role in improving the performance of economic units
5. The necessity of researchers to pay attention to the topics of e-governance and modern audit and control systems, as they represent a great importance in reducing errors, corruption and waste of resources, and benefiting economic units from these researched topics.

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