
THE IMPACT OF INTERNAL CONTROL ON THE QUALITY OF ACCOUNTING INFORMATION SYSTEMS-AN EMPIRICAL STUDY ON ELECTRIC INDUSTRY COMPANIES IN THE REPUBLIC OF IRAQ

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Abstract

The research aims to determine the extent of the impact of Internal Control on the Quality of Accounting Information Systems in electric industry companies in the Republic of Iraq. The study utilized a descriptive-analytical research method, with the research population consisting of employees in electric industry companies within the Republic of Iraq. The research sample size was 357 individuals.

The research findings concluded that there is a statistically significant relationship between Internal Control and the Quality of Accounting Information Systems in electric industry companies within the Republic of Iraq. As a result, the research recommends the Enhance Internal Control Mechanisms and relevant operations and Prioritize Risk Assessment.

Keywords: Quality of Accounting Information Systems, The Regulatory Environment, Control Activities, Electric Industry Companies.

Introduction

In the modern business environment, the effective management of accounting information systems (AIS) is crucial for organizations to ensure the accuracy, reliability, and integrity of financial data. Accounting information systems serve as the backbone of financial reporting, decision-making processes, and organizational control mechanisms. One important factor that influences the quality of AIS is the implementation of robust internal control systems (Al-Okaily, 2021). This research aims to examine the impact of internal control on the quality of accounting information systems in the context of electric industry companies in the Republic of Iraq.

Internal control refers to the processes and procedures implemented within an organization to safeguard assets, ensure compliance with regulations, and enhance the reliability of financial reporting. It encompasses the establishment of control activities, risk assessment, information

and communication systems, and the monitoring of controls. Effective internal control systems play a critical role in reducing the risk of errors, fraud, and misstatements in financial information, thereby enhancing the overall quality of accounting information systems (Otoo, et al, 2023).

The electric industry in the Republic of Iraq holds strategic importance for the country's economic development. As the demand for electricity continues to grow, it becomes imperative to ensure the reliability and accuracy of financial information within electric industry companies (Sattar, 2012). However, the unique characteristics and challenges faced by this sector, such as complex operational processes, regulatory requirements, and geopolitical factors, necessitate a comprehensive understanding of the impact of internal control on the quality of AIS in this specific context.

This empirical study seeks to investigate the relationship between internal control and the quality of accounting information systems in electric industry companies in the Republic of Iraq. By examining the perceptions, practices, and outcomes of internal control implementation, this research aims to provide valuable insights into the strategies and mechanisms that contribute to the enhancement of AIS quality in this industry.

Previous Studies

Studies in Internal Control:

study (Gontara, et al, 2023) examine the association between internal control quality (ICQ) and audit report lag (ARL) and to test whether family directors affect the relationship. ICQ is measured by using the framework developed by Michelon et al. (2015), while ARL is measured as the number of days from fiscal year-end to the date of the auditor's report. Using a sample of 190 French companies over the period of 2016–2019, the authors document that ICQ is negatively associated with ARL, suggesting that ICQ represents a key determinant of audit delay. When testing for the moderating effect of family directors on this relationship, findings show that under high percentage of family directors on the board, this relationship becomes insignificant.

study (Otoo, et al, 2023) Internal control systems are critical to an organization's efficiency and promotes the adherence to norms and rules. The purpose of this study is to evaluate the impact of internal control systems on banking industry effectiveness. Data were collected from 15 commercial and 20 rural banks. The hypothesized relationships were supported by the data. A structural equation modeling was applied in testing the conceptual model and hypothesis. Confirmatory factor analysis was conducted to establish validity and reliability of the dimensions. The results show that organizational effectiveness was significantly impacted by three dimensions of internal control systems: control activities, control environments and risk assessment. However, the impact of monitoring of control on organizational effectiveness was not significant. The results also show a nonsignificant impact of information and communication on organizational effectiveness.

study (Abdo, et al, 2022) aims to assess the influence of emotional intelligence (EI) on the perceived internal control performance in the Lebanese companies. The goal of this study is to decide whether there is a connection between “emotional intelligence” and perceived efficacy of “internal control” in Lebanese organizations. For the benefit and purpose of this research, a quantitative methodology will be applied. The data was collected by the use of self-

directed and pre-coded questionnaires to test hypotheses made, making it deductive research. The findings showed that the personality traits of the members of the audit team play a key role in cultivating a control climate that is more conducive to effective control. Moreover, personality traits were key in boosting trust and openness in communication that can be seen as antecedents to having a system where all key auditing professionals within the organization can cooperate to boost the effectiveness of the internal control framework. These personality traits amplified the impact of the EI of audit manager on the overall effectiveness of the COSO framework, thus leading to improved efficiency of internal controls.

study (Burt, & Libby, 2021) aims to examine whether the increase in the professional identity of internal auditors, as defined through their professional group expectations, enhances the judgments of internal auditors about the severity of internal control concerns when their organizational identity is high. The study tests the hypothesis using an experimental approach with internal auditors as participants. The results support the hypothesis that professional identity reduces the relationship between organizational identity and the perceived severity of specific weaknesses in internal control. An increased prominence of professional identity leads to a more intense evaluation of specific weaknesses in internal control when organizational identity is high than when it is low.

Studies in Quality of Accounting Information Systems:

study (Al-Dmour, et al, 2023) aims to empirically investigate the role of accounting information quality (AIQ) as a mediating factor in the relationship between knowledge management (KM) processes and business performance (BP) of the financial institutions (FI) operating in Jordan. An integrated conceptual framework was developed for the study, drawing from a literature review and knowledge-based theory. It comprises three main components: knowledge management processes (acquisition, integration, and utilization), business performance (financial and non-financial indicators), and accounting information quality (AIQ) based on the International Accounting Standard Board's framework. Data collection involved a self-administered questionnaire distributed to 247 respondents, primarily financial institutions (commercial banks and insurance companies) in Jordan. The main findings supported accounting information as a mediator factor in enhancing the relationship between the FIs' KM process and BP (FI) operating in Jordan.

study (Thoa & Nhi, 2022) examines how financial autonomy in public organizations impacts the quality of financial accounting information and its relationship with leadership support and elements of the accounting information system. The study employs SEM with reflective scales for measurement and utilizes PLS-SEM analysis using Smart PLS 3.2.7 software to test hypotheses. Data is collected via survey questionnaires using 7-point Likert scales from 164 Vietnamese public organizations with different levels of financial autonomy. This research has three primary findings: firstly, FA has a positive direct effect on FAIQ and SL. Secondly, SL influences FAIQ through four mediate variables including AM, HW, SW and CN. Finally, SL also acts as a mediate variable in the relationship of FA and FAIQ.

study (Al-Hashimy & Yusof, 2021) aimed to assess the impact of computerized accounting information systems (CAIS) on the performance of construction companies in Iraq and identify relevant factors. It examined the literature on construction company performance and

discussed the role of CAIS elements in modern construction companies. The study also addressed the influence of company size on performance and presented data collection methods for understanding the impact of CAIS, company culture, and size on constrained operations. Results showed varying CAIS effectiveness levels, emphasizing significant and insignificant factors. A proposed framework for CAIS and construction system performance was developed, offering insights for future studies on improving construction company performance.

Commentary on Previous Studies:

The previous studies have highlighted a research gap in terms of the applied field, which is characterized by the lack of attention to and investigation of Internal Control and Quality of Accounting Information Systems in electrical industries in Iraq. This is the primary focus of the current research, which aims to study Internal Control and Quality of Accounting Information Systems and their relationship, with an application to the electrical industries in Iraq.

Previous studies have examined Internal Control in relation to various other variables, both independently and dependently, across diverse applied domains and sectors in several countries. Some of the key variables and their applied domains include: the impact of internal control systems on the effectiveness of the banking industry (Otoo, et al, 2023). The examination of the influence of emotional intelligence (EI) on perceived internal control performance in Lebanese companies (Abdo, et al, 2022). examining the impact of internal auditors (Burt, & Libby, 2021).

Additionally, there are studies that have delved into Quality of Accounting Information Systems concerning various other variables, including: the role of accounting information quality as a mediating factor in the relationship between knowledge management processes and business performance of the financial institutions (Al-Dmour, et al, 2023). how financial autonomy in public organizations impacts the quality of financial accounting information and its relationship with leadership support and elements of the accounting information system (Thoa & Nhi, 2022), the impact of computerized accounting information systems (CAIS) on the performance of construction companies (Al-Hashimy & Yusof, 2021).

The current research aligns with previous studies in utilizing a descriptive-analytical methodology, deemed the most appropriate approach for this type of research. It also shares commonality with most prior studies in using surveys as a research tool. The research has drawn from the references and literature emphasized in previous studies to streamline the research process, determine research axes, and select the research methodology and statistical methods employed in these studies.

The research gap identified in previous studies can be summarized as follows:

The current research differs from previous studies in that prior studies have mainly been applied in service-oriented organizations such as banks, universities, and hospitals. There is a noticeable scarcity of studies that have addressed the impact of the study factors (Quality of Accounting Information Systems and Internal Control).

There has been a neglect of examining the relationship and impact between Internal Control and Quality of Accounting Information Systems.

Additionally, there is a shortage of research that has explored the relationship between variables and the influence of Internal Control on Quality of Accounting Information Systems in various organizations, institutions, and sectors.

Therefore, the current research aims to address these gaps by investigating the topics of Internal Control and Quality of Accounting Information Systems in the electrical industries in Iraq. This research seeks to bridge the existing void by examining the relationship and impact of Internal Control on Quality of Accounting Information Systems in a unique and underrepresented context.

Research Problem

The Quality of Accounting Information Systems carries significant importance in providing accurate and transparent information that contributes to evaluating the performance of companies and making informed financial decisions by investors and stakeholders (Al-Dmour, et al, 2023). The application of Internal Control principles constitutes an influential factor in enhancing the quality, documentation, and credibility of Quality of Accounting Information Systems (Abdo, et al, 2022). The challenges of the contemporary business environment underscore the importance of achieving transparency and integrity in presenting financial information. In this context, the problem of the impact of Internal Control on the Quality of Accounting Information Systems arises as a subject worthy of analysis and study, especially concerning electrical industry companies in the Republic of Iraq.

Therefore, the research problem can be defined through the following questions:

To what extent is Internal Control emphasized in electrical industry companies in Iraq?

How much attention is given to the dimensions of Quality of Accounting Information Systems in electrical industry companies in Iraq?

What is the impact of Internal Control on the Quality of Accounting Information Systems in electrical industry companies in Iraq?

Objectives of Research

The research aims to:

Assess the level of emphasis on achieving Internal Control in electrical industry companies in the Republic of Iraq.

Investigate the degree of attention given to the dimensions of Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq.

Determine the extent of the impact of Internal Control on the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq.

Provide a set of recommendations and proposals for officials and leaders in electrical industry companies in the Republic of Iraq based on the research findings, which can be generalized and utilized in practical applications.

Research Significances:

The importance of this research lies in the following:

This research is significant as it attempts to contribute to filling the research gap in studies and research on the concept of Internal Control, specifically regarding regulatory practices that impact the Quality of Accounting Information Systems. The study responds to the calls made by numerous previous studies for further research in these areas, which are highly important in enriching the scientific research library and research centers, especially those focused on management studies. Additionally, this research can provide a database to assist researchers and scholars in conducting further research in this field.

The importance of this research stems from the growing role of Internal Control over the past two decades as a vital and necessary capability for organizations to address environmental challenges, manage continuous change processes, and achieve sustainable competitive advantages. Furthermore, the significance of the research lies in its examination of a vital administrative topic that has become essential to the core operations of electrical industry companies in Iraq, operating in an environment characterized by development, change, and innovation. Emphasizing Internal Control is one of the fundamental means for these companies to reach a stage of excellence in achieving their goals أعلى النموذج.

Research Variables:

Independent variable: Internal Control

Internal control is defined as "the organizational plan, methods, and coordinated measures adopted by an entity to safeguard its assets, verify the accuracy of accounting data and the reliability of Trust, promote operational efficiency, and encourage adherence to established managerial policies" (Abdul Jabbar, 2013).

Internal Control is measured through the following dimensions:

The Regulatory Environment: It includes policies and procedures that reflect the directions of top management and the board of directors regarding control and its importance to the company. It forms the fundamental foundation and umbrella for the other control components (Gontara, et al, 2023).

Control Activities: These are the policies and procedures that help ensure the implementation of management's directives and take necessary actions to address risks and achieve the company's predefined objectives (Burt, & Libby, 2021).

Risk Assessment: It involves identifying the risks facing the company, analyzing them, understanding their causes, assessing their severity, and evaluating their impact on Trust (Gontara, et al, 2023).

Dependent Variable: Quality of Accounting Information Systems.

Quality of Accounting Information Systems refers to the system's ability to produce accurate, reliable, and relevant financial data, crucial for effective financial management and compliance (Thoa & Nhi, 2022).

The Quality of Accounting Information Systems has been measured through a set of dimensions, which include:

Trust: Trust in Accounting Information Systems (AIS) signifies stakeholders' confidence in the system's accuracy, security, and ethical handling of financial data, crucial for credibility and effective support of decision-making and financial reporting (Al-Dmour, et al, 2023).

Suitability: Suitability in Accounting Information Systems (AIS) signifies the system's alignment with an organization's unique requirements, ensuring that its features, data, and functionalities effectively support financial, managerial, and reporting needs (Thoa & Nhi, 2022).

System security: System Security in Accounting Information Systems (AIS) pertains to protective measures that safeguard financial data integrity, confidentiality, and availability. It encompasses strategies against unauthorized access, data breaches, and cyber threats to ensure trustworthy financial information and system functionality (Al-Hashimy & Yusof, 2021).

The general framework for the current research variables is illustrated in Figure (1) as follows:

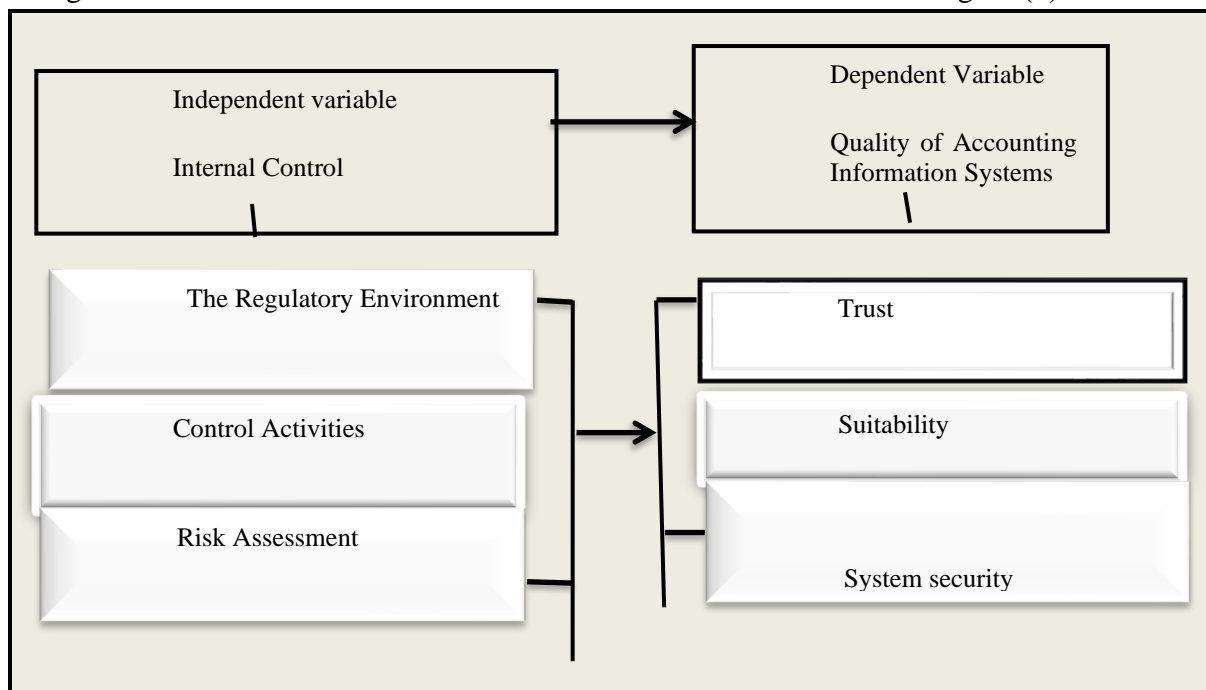


Figure (1): The General Framework for Research Variables.

Research hypotheses

The main hypothesis of the study: "There is a statistically significant relationship between Internal Control and the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq." This main hypothesis gives rise to several subsidiary hypotheses, which are:

There is a statistically significant relationship between Internal Control and the Trust as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq.

There is a statistically significant relationship between Internal Control and the Suitability as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq.

There is a statistically significant relationship between Internal Control and the System security as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq.

Research Design

Research Methodology

Based on the nature of the research topic and the information sought to uncover the impact of Internal Control on the Quality of Accounting Information Systems, the research relied on the descriptive-analytical methodology. To achieve this, two types of data were collected from the following sources:

Secondary Data: These are data obtained to build the theoretical framework from books, articles, and previous Arabic and foreign studies that addressed topics related to Internal Control and the Quality of Accounting Information Systems.

Primary Data: These are data collected through a field survey in the empirical study to test the validity or invalidity of the hypotheses. This research aimed to complement the theoretical data to gain a comprehensive understanding of the subject. This was achieved through a field survey conducted with employees in electrical industry companies in Iraq to obtain this data.

Research Population and Sample

The population of this study consists of electrical industry companies in the Republic of Iraq. Therefore, the researcher selected a stratified random sample, calculated by assuming that the phenomenon under study exists in the population with a proportion of 50%. Using a confidence level of 95% (with a 5% margin of error) in the sample size equation, the sample size is determined as follows:

$$n = \frac{NP(1-P)Z^2}{(N-1)d^2 + P(1-P)Z^2}$$

Where:

n: Required sample size.

N: Size of the study population.

P: The assumed proportion of the phenomenon under study in the population, considered to be 50%.

D: The margin of error, ± 0.05 .

Z²: The standard score corresponding to a confidence level of 95%, which is 1.96.

The size of the study population is 5200. After substituting these values into the equation, the sample size becomes 357.

Search Tool Evaluation

The survey tool was used as the primary instrument for obtaining initial data from the research community. The survey tool was designed in light of the research objectives to test the research hypotheses, which were developed based on a review of previous studies. The survey tool included the following sections:

First Axis: Internal Control: This involves identifying the level of attention to Internal Control in electric industry companies in Iraq, by measuring the availability of the following

dimensions: (The Regulatory Environment - Control Activities - Risk Assessment). These dimensions were measured through 24 statements.

Second Axis: Quality of Accounting Information Systems: This involves identifying the level of attention to the Quality of Accounting Information Systems in electric industry companies in Iraq, by measuring the availability of the following dimensions: (Trust - suitability - System security). These dimensions were measured through 25 statements.

The stability of the survey tool was verified through Cronbach's alpha coefficient to assess the internal consistency and self-consistency of the research variables. Additionally, the internal consistency of the survey tool was verified by calculating the correlation coefficient between each item (question) within the survey item groups and the overall score of the group. Below are the results of the validity and stability testing of the survey tool for each dimension of the research variables.

Validity and Reliability of the Research Instrument

The stability of the survey instrument was verified using Cronbach's Alpha coefficient, and the results are presented in the following Table (1), which illustrates the validity and reliability testing results of the research instrument.

Table (1): Reliability Coefficients (Split-Half Method and Cronbach's Alpha)

Domain	Number of Items	Cronbach's Alpha	Self-Reliability*
The Regulatory Environment	7	0.823	0.923
Control Activities	7	0.942	0.975
Risk Assessment	8	0.956	0.988
Internal Control	21	0.907	0.962
Trust	7	0.833	0.923
Suitability	7	0.964	0.982
System security	7	0.937	0.965
Quality of Accounting Information Systems	21	0.911	0.957
All Domains Together	42	0.975	0.957

At a significance level of 0.05

The table number (1) indicates that the Cronbach's Alpha coefficient values for each domain range from good to high, ranging from (0.823-0.964), while it reached (0.975) for all items in the survey list. Similarly, the self-reliability values are high for each domain, ranging from (0.923-0.988), while it reached (0.957) for all items in the survey list. This means that the reliability coefficient is high.

Statistical Analysis of Research Sample Characteristics

The following are the demographic characteristics of the research sample based on gender, educational level, years of experience, and age, using descriptive statistics represented in both frequency and percentage. Table number (2) illustrates the frequency and relative distribution of the research sample's demographics.

Table (2): Distribution of the Research Sample أعلى النموذج

Gender	Frequency	Percentage (%)
Male	213	59.66%
Female	144	40.34%
Educational Level	Frequency	Percentage (%)
Less than Bachelor's	85	23.8%
Bachelor's	161	45%
Postgraduate	111	31.2%
Years of Experience	Frequency	Percentage (%)
Less than 5 years	196	54.6%
5 - 10 years	84	23.3%
10 - 15 years	62	17.4%
15 years or more	15	4.7%
Age Group	Frequency	Percentage (%)
Less than 30 years	85	23.8%
30 - 40 years	185	51.8%
40 - 50 years	52	14.6%
50 years or more	35	9.8%
Total	357	100%

From the table above, it is evident that males represent 213 individuals from the selected sample of employees in electrical industry companies in the Republic of Iraq, accounting for 59.66% of the total sample size of 357 individuals, while females make up 40.34% of the sample. The educational level of the sample is notably high, with 31.2% of individuals holding postgraduate degrees (diploma, master's, or doctoral), compared to 45% with bachelor's degrees, and 23.8% having qualifications lower than a bachelor's degree. The distribution of employees based on years of experience shows that the majority (54.6%) have less than 5 years of experience, followed by those with 5 to less than 10 years of experience at 23.3% of the total sample. Additionally, employees with 10 to 15 years of experience account for 17.4% of the sample, while those with 15 years or more of experience constitute 4.7% of the total sample.

All age groups of employees in electrical industry companies in the Republic of Iraq are represented in the sample. Employees aged 30 to 40 years are the most highly represented, comprising 51.8% of the total sample. Employees under 30 years of age make up 23.8% of the research sample. Employees aged 40 to 50 years and those aged 50 years or older account for 14.6% and 9.8% of the sample, respectively.

Statistical Analysis of Research Variables

Statistical Analysis of Internal Control

A variable for Internal Control was measured using three mechanisms (The Regulatory Environment, Control Activities, Risk Assessment). Table number (3) illustrates the research sample's responses regarding the mechanisms and the Internal Control variable. Additionally,

Table (3): Descriptive Measures for Internal Control Mechanisms

Variable	Number of Items	Mean	Standard Deviation	Variance Ratio	Rank	t-Value	
						t-Value	p-Value
The Regulatory Environment	7	3.21	0.523	64.2%	3	35.6	0.000
Control Activities	7	3.45	0.674	69%	2	22.8	0.000
Risk Assessment	7	3.53	0.690	70.9%	1	24.6	0.000
Internal Control	21	3.40	0.540	68.03%	-	34.4	0.000

The table number (3) indicates a positive trend among the selected sample of employees in electrical industry companies in the Republic of Iraq towards Internal Control with its three mechanisms (The Regulatory Environment, Control Activities, Risk Assessment). This is evident with a standard deviation of 0.540 and a variance ratio of 68.03%. The calculated mean value is 3.40, which is higher than the midpoint of the Likert five-point scale, representing neutrality. This statistical significance is observed at a 0.01 level according to the t-test results. Table 3 indicate that Risk Assessment mechanisms are considered the most significant aspect of Internal Control in Iraqi electrical industry companies, with a mean score of 3.53, signifying statistical significance at a 0.01 level. Control Activities mechanisms follow with a mean score of 3.45, and The Regulatory Environment mechanisms have a mean score of 3.21. The t-test results show statistical significance at a 0.01 level, reflecting a positive view of Internal Control mechanisms among the research sample.

Statistical Analysis of Quality of Accounting Information Systems

"Quality of Accounting Information Systems Variable was measured through three dimensions (Trust, Suitability, and System security). Table number (4) presents the responses of the research sample regarding the dimensions and the Quality of Accounting Information Systems Variable.

Table (4): Descriptive Measures for Dimensions of Quality of Accounting Information Systems Quality

Variable	Number of Items	Mean	Standard Deviation	Variance Ratio	Rank	t-Value	
						t-Value	p-Value
Trust	7	3.54	0.632	70.8%	3	22.4	0.000
Suitability	7	3.68	0.642	73.6%	2	31.1	0.000
System security	7	3.80	0.560	70.8%	1	37.3	0.000
Quality of Accounting Information Systems Quality	21	3.67	0.554	73%	-	32.6	0.000

The table number (4) demonstrates a positive trend among the selected sample of employees in electrical industry companies in the Republic of Iraq towards the dimensions of Quality of Accounting Information Systems quality (Trust, Suitability, and System security). This is evident with a standard deviation of 0.554 and a variance ratio of 73%. The calculated mean

value is 3.67, which is higher than the midpoint of the Likert five-point scale, representing neutrality. This statistical significance is observed at a 0.01 level according to the t-test results. Additionally, table number (4) shows that the System security is considered the most prominent dimension of Quality of Accounting Information Systems quality according to the selected sample, with a mean score of 3.80, which is higher than the midpoint of the Likert five-point scale, indicating neutrality. This statistical significance is observed at a 0.01 significance level. It is followed by the Suitability with a mean score of 3.68, and finally, the Trust with a mean score of 3.54. This is considered along with the degree of dispersion of values around the mean, which is reflected in the standard deviation and variance ratio.

The correlations between the dimensions of research variables

Table Number (5): Bivariate Linear Relationships between Internal Control Mechanisms (The Regulatory Environment – Control Activities – Risk Assessment) and Dimensions of Quality of Accounting Information Systems Quality (Trust – Suitability – System security).

Table Number (5): Bivariate Linear Correlations between Research Variables

Research Variables	The Regulatory Environment	Control Activities	Risk Assessment	Trust	Suitability	System security
The Regulatory Environment	1					
Control Activities	0.688**	1				
Risk Assessment	0.725**	0.734**	1			
Trust	0.612**	0.670**	0.574**	1		
Suitability	0.644**	0.815**	0.975**	0.682**	1	
System security	0.685**	0.780**	0.934**	0.580**	0.878**	1

** The correlation coefficients are statistically significant at the 0.01 (α) level.

The table reveals statistically significant and strong positive correlations among the research variables. For instance, The Regulatory Environment exhibits a strong positive correlation of 0.688**, Control Activities with 0.734**, Risk Assessment with 0.975**, and Suitability with 0.878**. These high correlation coefficients provide robust statistical evidence of the relationships between these variables, underscoring their interdependence and emphasizing the significance of coordinated efforts to enhance Quality of Accounting Information Systems.

Testing Research Hypotheses

To achieve the objectives of this research, the main hypothesis was formulated as follows: "There is a statistically significant relationship between Internal Control and the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq."

This hypothesis was tested through the following three sub-hypotheses:

Testing the first sub-hypothesis:

The first hypothesis of this research states that "There is a statistically significant relationship between Internal Control and the Trust as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq."

Table No. (6) presents the statistical results of the multiple regression analysis regarding the effect of Internal Control mechanisms on the Trust as one of the dimensions of the Quality of Accounting Information Systems.

Table (6): Results of Multiple Regression for the Impact of Internal Control Mechanisms on the Trust

Independent Variables	Estimated Parameters	t-test			F-test		Coefficient of Determination
		Value (t)	Value (P)	Significance Level	Value (F)	Value (t)	
Constant	0.192	5.427	0.000**	Significant	48.467	0.000**	0.712
The Regulatory Environment	0.461	4.060	0.000**	Significant			
Control Activities	0.684	6.272	0.000**	Significant			
Risk Assessment	0.283	3.963	0.000**	Significant			

At a significance level of 0.05

Table No. (6) provides crucial insights from a multiple regression analysis evaluating the influence of internal control mechanisms on the Trust. The results are statistically significant and underscore the importance of these mechanisms in Quality of Accounting Information Systems. the constant value of 0.192 with a t-test value of 5.427 and a significance level of 0.000** indicates that there is a significant baseline effect on the Trust, even without considering the independent variables.

The Regulatory Environment, Control Activities, and Risk Assessment each exhibit a substantial impact on the Trust. Their respective coefficient values (0.461, 0.684, and 0.283) and corresponding t-test values (4.060, 6.272, and 3.963) with significance levels of 0.000** confirm their statistical significance. This suggests that enhancements in these internal control mechanisms positively influence the Trust.

the coefficient of determination (R-squared) at 0.712 reveals that approximately 71.2% of the variance in the Trust can be attributed to the independent variables, signifying the robustness of the model in predicting the Trust based on these internal control factors.

Additionally, it is evident from Table 6 that the p-value for the F-test is less than 0.01, indicating the significance and validity of the estimated equation for the social dimension as one dimension of Quality of Accounting Information Systems as a whole. Thus, Trust levels can be predicted by measuring the extent to which Internal Control mechanisms are practiced as follows: Trust = 0.192 + 0.461 (The Regulatory Environment Mechanisms) + 0.684 (Control Activities Mechanisms) + 0.283 (Risk Assessment Mechanisms). In essence, these findings highlight the critical role played by The Regulatory Environment, Control Activities,

and Risk Assessment in enhancing Quality of Accounting Information Systems, as supported by strong statistical evidence in the regression analysis.

Testing the second sub-hypothesis:

The second hypothesis of this research states that "There is a statistically significant relationship between Internal Control and the Suitability as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq."

Table 7 illustrates the statistical results of the least squares method regarding the impact of Internal Control mechanisms on the suitability as one dimension of Quality of Accounting Information Systems in electric industries companies.

Table (7): Multiple Regression Results for the Impact of Internal Control Mechanisms on the Suitability

Independent Variables	Estimated Parameters	t-test			F-test		Coefficient of Determination
		Value (t)	Value (P)	Significance Level	Value (F)	Value (t)	
Constant	0.394	4.518	0.002**	Significant	518.321	0.000**	0.972
The Regulatory Environment	0.236	6.641	0.000**	Significant			
Control Activities	0.139	4.750	0.001**	Significant			
Risk Assessment	0.876	26.435	0.000**	Significant			

At a significance level of 0.05

Table 7 provides essential insights from another multiple regression analysis, focusing on the impact of internal control mechanisms on the Suitability. The results demonstrate significant statistical findings, emphasizing the critical role of these mechanisms in influencing suitability outcomes.

the constant value of 0.394, with a t-test value of 4.518 and a significance level of 0.002**, indicates that there is a substantial baseline effect on the suitability, even in the absence of the independent variables.

The Regulatory Environment, Control Activities, and Risk Assessment each exhibit a significant impact on the suitability. Their respective coefficient values (0.236, 0.139, and 0.876) and corresponding t-test values (6.641, 4.750, and 26.435) with significance levels of 0.000** affirm their statistical significance. This suggests that enhancements in these internal control mechanisms positively affect the suitability.

the coefficient of determination (R-squared) of 0.972 signifies that approximately 97.2% of the variance in the suitability can be explained by the independent variables. This underscores the robustness of the model in predicting the suitability based on these internal control factors. Additionally, it is evident from Table 7 that the p-value for the F-test is less than 0.01, indicating the significance and validity of the estimated equation for the economic dimension as one dimension of Quality of Accounting Information Systems as a whole. Thus, suitability levels can be predicted by measuring the extent to which Internal Control mechanisms are

practiced as follows: Suitability = 0.394 + 0.236 (The Regulatory Environment Mechanisms) + 0.139 (Control Activities Mechanisms) + 0.876 (Risk Assessment Mechanisms).

these findings underscore the vital role played by The Regulatory Environment, Control Activities, and Risk Assessment in positively influencing the suitability. The strong statistical evidence in the regression analysis emphasizes the importance of these internal control mechanisms in shaping suitability outcomes and, by extension, Quality of Accounting Information Systems.

Testing the third sub-hypothesis:

The third sub-hypothesis of this research states that "There is a statistically significant relationship between Internal Control and the System security as one of the dimensions of the Quality of Accounting Information Systems in electrical industry companies in the Republic of Iraq."

Table 8 illustrates the statistical results of the least squares method regarding the impact of Internal Control mechanisms on the statement of System security as one dimension of Quality of Accounting Information Systems in electric industries companies.

Table (8): Multiple Regression Results for the Impact of Internal Control Mechanisms on the Statement of System security

Independent Variables	Estimated Parameters	t-test			F-test		Coefficient of Determination
		Value (t)	Value (P)	Significance Level	Value (F)	Value (t)	
Constant	0.345	4.803	0.000**	Significant	262.42	0.000**	0.823
The Regulatory Environment	0.211	3.122	0.000**	Significant			
Control Activities	0.349	5.594	0.000**	Significant			
Risk Assessment	0.774	13.833	0.000**	Significant			

At a significance level of 0.05

Table 8 presents noteworthy insights from a multiple regression analysis, focusing on the impact of internal control mechanisms on the Statement of System security. The results reveal statistically significant findings that underscore the pivotal role of these mechanisms in influencing System security statements.

the constant value of 0.345, with a t-test value of 4.803 and a significance level of 0.000**, indicates a substantial baseline effect on the Statement of System security, even in the absence of the independent variables.

Furthermore, The Regulatory Environment, Control Activities, and Risk Assessment each demonstrate a significant impact on the Statement of System security. Their respective coefficient values (0.211, 0.349, and 0.774) and corresponding t-test values (3.122, 5.594, and 13.833) with significance levels of 0.000** affirm their statistical significance. This suggests that enhancements in these internal control mechanisms positively influence the Statement of System security.

the coefficient of determination (R-squared) of 0.823 indicates that approximately 82.3% of the variance in the Statement of System security can be attributed to the independent variables. This highlights the model's robustness in predicting System security statements based on these internal control factors.

Furthermore, the P-value for the F-test in Table 16 is less than 0.01, indicating the significance and robustness of the estimated equation for the technological dimension as one of the dimensions of Quality of Accounting Information Systems as a whole. Consequently, the Statement of System security can be predicted based on the extent of Internal Control mechanisms as follows: Statement of System security = 0.345 + 0.211 (The Regulatory Environment mechanisms) + 0.349 (Control Activities mechanisms) + 0.774 (Risk Assessment mechanisms).

these findings emphasize the crucial role played by The Regulatory Environment, Control Activities, and Risk Assessment in positively impacting the Statement of System security. The strong statistical evidence in the regression analysis highlights the significance of these internal control mechanisms in shaping System security statements and, by extension, contributing to Quality of Accounting Information Systems.

Research Results

The research findings indicate a statistically significant relationship between Internal Control and Quality of Accounting Information Systems, as applied to electrical industries companies in the Republic of Iraq. This result can be interpreted as follows:

There is a positive and statistically significant relationship between Internal Control mechanisms (The Regulatory Environment, Control Activities, Risk Assessment) and the Trust as one of the dimensions of Quality of Accounting Information Systems in electrical industries companies in the Republic of Iraq.

There is a positive and statistically significant relationship between Internal Control mechanisms (The Regulatory Environment, Control Activities, Risk Assessment) and the suitability as one of the dimensions of Quality of Accounting Information Systems in electrical industries companies in the Republic of Iraq. The study shows that Risk Assessment mechanisms have a greater impact on the suitability compared to disclosure, transparency, and Control Activities.

The application of Internal Control mechanisms in electrical industries companies in the Republic of Iraq has a positive impact on Quality of Accounting Information Systems by improving the System security. Although these results support the initial expectations of the researcher, the results of multiple regression analysis should be considered to determine the precise extent of the impact of Internal Control mechanisms.

There is a statistically significant relationship between the implementation of Internal Control and Quality of Accounting Information Systems in electrical industries companies in the Republic of Iraq. This means that there is a positive and significant impact associated with Internal Control on the Quality of Accounting Information Systems in these companies. This relationship may be complex and multidimensional, depending on the specific Internal Control mechanisms analyzed in the research.

Research Recommendations

Based on the research findings, the following recommendations can be made:

Enhancing Internal Control Mechanisms: Electrical industries companies in the Republic of Iraq should prioritize strengthening their Internal Control mechanisms, including the Regulatory Environment, Control Activities, and Risk Assessment. These mechanisms have shown a positive and statistically significant relationship with both Trust and Suitability, two critical dimensions of Quality of Accounting Information Systems. A focus on improving these areas can lead to more reliable and relevant financial information.

Focus on Risk Assessment: Given that Risk Assessment mechanisms have a particularly significant impact on Suitability, companies should pay special attention to this aspect of Internal Control. Investing in risk assessment processes can enhance the suitability of accounting information systems, which is essential for meeting the specific needs and objectives of the organization.

System Security: The positive impact of Internal Control mechanisms on the Quality of Accounting Information Systems, particularly in terms of system security, highlights the importance of maintaining a secure and reliable IT infrastructure. Companies should continue to invest in system security measures to safeguard financial data and ensure the integrity of their accounting information systems.

Complex Relationship Consideration: Recognize that the relationship between Internal Control and Quality of Accounting Information Systems can be complex and multidimensional. Companies should conduct further research and analyses, including multiple regression analysis, to gain a more precise understanding of how specific Internal Control mechanisms impact accounting information system quality.

the research findings underscore the significance of Internal Control in enhancing the Quality of Accounting Information Systems in electrical industries companies in Iraq. Implementing the recommendations outlined above can contribute to more reliable financial reporting and better decision-making processes within these organizations.

Limitations and Recommendation for Future Research:

The current Research has been defined in some respects, so it is suggested that work be done to complete the scientific application in this field with future studies for applicants for graduate studies programs in Iraq universities, here are some suggested topics related to the current study topics:

Deepen the Understanding of Specific Relationships: Future studies can delve deeper into the specific relationships between internal control mechanisms and the quality of accounting information systems. In-depth investigations can clarify how each facet of internal control influences aspects of accounting information system quality.

Examine the Impact of Time: Future research can explore how the duration of implementing internal control mechanisms affects the quality of accounting information systems. Does the effectiveness of these mechanisms increase over time, or do they maintain a consistent impact?

Sectorial Variations Analysis: Studies can investigate variations in the impact of internal control mechanisms on the quality of accounting information systems across different sectors or among companies within the electrical industry.

Comparison with International Accounting Standards: Future research can benefit from comparing the findings of this study with international accounting standards. Such comparisons can provide insights into how internal control mechanisms align with global accounting practices and standards.

These recommendations can help guide and inform future research endeavors, contributing to a deeper understanding of the interplay between internal control mechanisms and accounting information system quality.

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