



The extent of the impact of information technology governance and its application mechanisms on the quality of accounting information in bank accounts - the Cobit framework as a model



Dr. Amel Merzah Sakhil¹, Shaymaa Nihro Jabal², Naseer Faisal Najm³

^{1,2,3} Al-Furat Al-Awsat Technical University – Iraq

dw.amel@atu.edu.iq

dw.shym@atu.edu.iq

naseer.najm@atu.edu.iq

Abstract. IT governance is an element of corporate governance, aims to improve the general management of information technology and extract improved value from investment in information and technology, and has a great role to play in improving the quality of accounting information. In order to provide quality information technology and oversight practices that contribute to strengthening the Department's needs in determining the appropriate level of information technology security and follow-up, An appropriate framework has to be applied that contributes to linking information technology with various operations in financial institutions, helping to reduce gaps between different departments and reduce risks. Through the application of one of the mechanisms of IT governance framework COBiT, and the research problem was knowing the extent to which IT governance and the mechanisms for applying it to the quality of accounting information in bank accounts using (Cobit Framework) Model, BaseResearch into a fundamental hypothesis, IT governance and application mechanisms affect the quality of accounting information in bank accounts using The research has reached a number of conclusions, the most important of which are:



The bank has oversight agencies and procedures to ensure compliance with the rules and laws on the governance of information technology technology to improve the efficiency of the business, which in turn contributes to the quality of accounting information in bank accounts. The research recommended that there should be a formal framework for managing the risks of information technology at the bank, which would result in a lack of identification of the relevant risks and plans to reduce them. The study included supplements complementing research purposes followed by a list of research sources.

Keywords: IT governance, quality accounting information, cobit.

Introduction

The banking system is instrumental in mobilizing financial and human resources and pushing them towards the development goals that society aspires to, and the more in its dealings with the aspirations of society, the more they interact, the more banks commit themselves to a modern framework. (Cobit Frame) ensures that it keeps pace with recent developments, Thus, the effectiveness of this organ in advancing the process of development is more successful. On this basis, the important role banks can play to achieve the aspirations of countries and their peoples for progress, renaissance and stability is clearly demonstrated. In line with these developments in information technology, there is a need to apply an integrated framework of protection and control in information technology in order to achieve an effective direction and adequate control processes. This contributes to the quality of accounting information in bank accounts, and with the great development of the business sector the world is now moving towards a working environment in which many modern technologies social networking platforms, cloud computing and data analysis techniques, and as this evolution increases the business success rate but at the same time refers to other concerns and risks related to the management and governance of information technology, This has led to the need for radical solutions for IT risk scenarios, which is why a cobit framework has been created (COBIT) is an effective solution that helps facilitate corporate and enterprise IT governance.

1. First: The Methodology



1.1. Problem Study

Banking is a professional business of varying dimensions due to the diversity of banking operations, which is imperative for business organizations (Banks) strive to advance its reality, by investing in and possessing tools that contribute to raising the efficiency of the business, and strive to achieve its mission and objectives, by adhering to the requirements of (Framework), which contributes to providing a specific level of control by examining and auditing data, to prepare the necessary management reports for the control process, and to achieve an effective direction and adequate and efficient oversight processes, thus contributing quality accounting information to bank accounts. In the light of the above, the problem of the study can be formulated to:

How does IT governance and application mechanisms (COPIT framework) affect the quality of accounting information in bank accounts?

1.2. Hypotheses Study

The study's hypothesis is:

Information technology governance and application mechanisms (COPIT framework) affect the quality of accounting information in bank accounts.

1.3. Importance Study

The importance of the study stems from the importance of Iraqi banks, through their contribution to raising the level of economic development, and adherence to the requirements (Cobit Framework) contributes to determining the level of performance, assists in examining and evaluating operational activities, and internal control systems, which is positively reflected in the interests of management and public shareholders that contribute to the quality of accounting information in bank accounts.

1.4. Objectives study

- 1- Clarification of the concept of IT governance
- 2- (Highlight one of the modern frameworks (cobit Frame 2-
3. Identify the extent to which Iraqi banks comply with the requirements of the COBT framework and its impact on the quality of accounting information in bank accounts.
4. Examine and test the relationship between the efficiency of Iraqi banks' operations and their compliance with COBiT requirements



and their role in the quality of accounting information in bank accounts.

1.5. Sample and Research Tools

The researcher used a tool for this study questionnaire form (questionnaire) designed by using a study (valid, 2014), has been adjusted to suit this study and its requirements, where it is designed on the basis of a quinquennial Licert scale (totally agreed, "agreed, neutral, disagree, disagree) These terms were given weight "between five (5) fully agreed" to one (1) not fully agreed "so as to give objective results, this form was distributed in reality (20 forms), on the study sample (a group of accountants and auditors working at the Iraqi Bank of Commerce) The extent to which administrative decision-making methods affect the performance of accountants and auditors in their rush to work and develop the Directorate of the Municipality of Diwaniyah, analysed by the Statistical Program (SPSS).

2. Second – Lecturer review

- 1- (Saleh , 2014) – entitled(Control of information systems using COBIT) Research published by the journal Baghdad College of Economics University.

The study aimed at highlighting the governance, management and control of up-to-date technology on information to achieve the goals and found that COBT is universally recognized as the tool that provides guidance on information technology, auditing accounts and information technology control groups as best practices and recommended the need to adopt both government institutions and institutions for information governance concepts.

- 2- (Ghazal and Abadi, 2012), entitled(Quality of accounting information and its impact on the rationalization of investment decisions in securities).

The study aims to demonstrate the quality and important aspects of accounting information that reflect its objectivity and usefulness and illustrate its impact on the rationalization of their investment decisions in securities. The research concludes that the investment process is of great importance as a vital and effective element for increasing income and wealth and achieving economic and social development.

After surveying previous studies, we note that the current research differs in the determination of the level of application of information technology governance applied in banks according to the framework (COPiT) and that the



compliance of banks with the requirements (Framework), contributes to providing a specific level of control by examining and auditing data, to prepare the necessary management reports for the supervisory process, and to achieve an effective direction and adequate and efficient oversight processes, thereby effectively contributing the quality of accounting information..

3. Third: Theoretical side

1- The extent to which IT governance and its application mechanisms affect the quality of accounting information in bank accounts.

A- IT governance.

Corporate governance of ICT is regarded as "the system through which the current and future use of ICT is guided and controlled". This includes assessing and guiding the use of ICT to support and monitor the Organization's use of ICT to achieve plans. The standard includes the Organization's ICT strategy and policies.

Organizations consist of multiple departments and sections with different responsibilities and objectives, all of which work together and overlap their responsibilities in order to achieve the organization's objectives. To organize the roles of those sections with each other and reduce the gap between them, here comes the role of governance, what governance means and what its objectives are and how they can be applied in the field of information technology. (Baraka, 2022)

B- The meaning of governance

Governance is a set of laws, rules and procedures aimed at achieving quality and excellence in performance by choosing the right and effective methods for managing organizations and achieving their goals

In short, governance is a particular system for controlling relationships between key actors that influence organizations' performance, helping to organize work and identify responsibilities for achieving long-term goals (Jean,2006).

C- Governance objectives

There are many goals that can be achieved in organizations when applying governance to them, such as:

1-Develop rules and principles for the management and oversight of organizations and institutions.

Achieving justice, transparency and ensuring the right to accountability 2-
Protection of shareholders' and stakeholders' rights in organizations 3-





4- The distribution of roles and responsibilities through tight organizational structures. (Warfare, 2021)

D- IT governance

IT governance is one or several processes that enable IT staff to properly implement policies, strategy and work with maximum efficiency for the organization in general. Governance contributes to clarifying roles, responsibilities and decision-making mechanisms to solve challenges. IT governance is commensurate with corporate governance, a set of processes that fall under the concept of corporate governance and are designed to maintain the effectiveness and efficiency of the entire company

When IT governance is applied, information system managers collaborate with executives and managers to ensure the efficient functioning of information technology systems and manage the Organization's potential risks

IT governance is also defined as "a set of policies and procedures, usually appointed at the board or executive level. These procedures are designed to provide maximum benefit and value from the Organization's IT assets and stakeholders." (Abu Musa, 2005)

IT governance objectives

The use and application of information technology governance in organizations will achieve many of the organizations' objectives, including:

1-Ensuring the value provided to stakeholders, Providing value to stakeholders is a fundamental of governance in general and information technology governance in particular

2-Getting the most value from an organization's IT asset requires a clear understanding of how and how your organization delivers value

3-By applying an IT governance plan, you can guarantee the greatest value from those assets.

Develop an information technology strategy- 4 5-The establishment of an IT strategy has to do with defining the vision and direction of current and future investments in the Organization's IT activities. (Salle,2004)

F- IT governance frameworks

Information governance frameworks can be defined as a road map that identifies the ways in which the Organization implements and manages information technology governance and reporting within the Organization, and, most importantly, a framework The COBIT Framework is one of the most common and universally accredited business mechanisms in information technology governance. It aims to link information technology with the various processes in the organization, helping to reduce the gaps between different



departments and reduce risks. (Mind, 2013) It aims to maximize the value of information through the use of the latest technologies and practices in IT governance, where each process is determined by inputs, outputs, targets, performance measurement methods and more. The existence and application of IT governance in organizations is important for the success of IT projects and investments. Having an IT governance framework helps you think about your organization's IT assets and will therefore be able to quantify, measure and efficiently deliver IT to your organization. Then you can say that your organization's IT governance is successful. (Khanyile,2012)

G- COBT

The COBIT framework can be defined as: an internationally recognized IT governance control framework that helps organizations meet business challenges in the areas of regulatory compliance, risk management and alignment of IT strategy with organizational objective

The last version of this framework is (COBIT 2019), which was released in November 2018, and is based on COBIT 5), where it introduces new concepts and addresses the latest developments affecting enterprise information technolog.

The COBIT framework focuses on several key areas:

Protection 1-

Risk management 2-

(Abu Musa, 2005) Information management 3-

The benefits of Cobit's framework K-

The Coupet Framework offers models and guidance to help enhance the value of in-house information technology and optimize its utilization of COBIT benefits:

1-Help achieve operational excellence through effective and efficient application of enhancing the importance of in-house IT

Improve the cost of in-house IT service 2-

3-Ensure the effective and innovative use of information technology to align with the enterprise's strategic objectives

Helps manage and find solutions to information technology risks 4-

Maintains high quality information to help support business decisions 5-

6- Provides full support to IT companies that adhere to relevant policies, regulations, laws and contractual agreements directed at business

Ensure that enterprises realize the value of their investment in business technology 7-



Helps create a complete system of governance of business systems at the level of services provided to customers

8- It is concerned with increasing the value of ICT investments within the organization by ensuring that each business system for the enterprise's products or services has a business system or application of information systems

9- Rely on a unified and measured framework to map the establishment at all levels and link it in a dynamic manner, ensure the effectiveness and efficiency of the framework before starting construction and increase transparency and maximize vision in the future of the enterprises. (Haes,2015)

(Frame Components (Cobit H-

1-Framework: Organizes IT governance and provides best practices according to IT areas and links them to business needs

2- Process objections: A reference model and common language are provided to each individual in the enterprise and include descriptions of operations and areas of responsibility (from planning, construction, operation and control) for all information technology operations.

3- Control objects: Provides a full range of high-level requirements to be considered by management for effective control of each operation.

4- Management Guidelines: help better define responsibilities, agree on common objectives, measure performance, and clarify the interrelationship with other processes.

5- Maturity models: assess the maturity of each process's ability and help address the gaps between them. (Prasad , et al. , 2008)

2- Quality of accounting information in bank accounts.

A- The concept of the quality of accounting information.

1- the concept of quality in reports

The term quality in general means the validity of the object for the purpose for which it was prepared, or the matching of the commodity or

The service to the required specifications, and the quality of the service means its suitability for the purpose for which it is prepared. Thus, quality is a matter of relativity and limitations that the service is acceptable by the customer, and in terms of satisfying its need within the limits of the counterpart it bears. (Morning, 2011)

Quality is defined as being linked to a program that involves a greater emphasis on the final outputs of the accounting information system by reducing performance deficiencies and setting the thing to be achieved. (Voucher, 2009)



Features have emerged from attention to principles to focus on the usefulness of accounting information provided Four user evaluation qualities (AAA) were approved by the American Accounting Society in 1966 for the quality or utility of accounting information (suitability, verifiability, freedom from bias, and quantifiable)

The quality of accounting information means the credibility and utility of this information

Users, free from misrepresentation and misinformation and prepared in accordance with a set of legal, supervisory, professional and technical standards to facilitate the achievement of the objective of their use, as they are a component of production as they determine the effectiveness and efficiency of the enterprise. (Hamdi, 2011)

2- Accounting information quality standards

The quality of accounting information is available with the following criteria: (Sabihi, 2011)

a-Legal standards: Many professional institutions in many States seek to develop standards of quality and compliance with accounting information through the enactment of clear and structured legislation and laws for the functioning of these institutions with the passing of an effective organizational structure that links the performance aspects of the institution in line with the legal requirements that require the institutions to adequately disclose their performance

b- Control criteria: The oversight element is seen as one of the components of the administrative process on which both the Board of Directors and investors focus.

c-Technical criteria: The availability of technical standards leads to the development of the concept of quality of information, which in turn reflects the quality of financial reports, increases the confidence of shareholders, investors and stakeholders in the enterprise and leads to higher and greater investment.

d- Professional standards: Accounting bodies and boards are concerned with the preparation of accounting and auditing reporting standards, controlling the operation's performance, highlighting the concept of management accountability by owners to check their investments, which in turn has led to the need for fair and honest financial reporting

3- Factors affecting the quality of accounting information

The quality of accounting information in financial reports is influenced by several factors that can be summarized in:



a- Environmental factors (accounting environment): The socio-economic and political conditions in which an enterprise lives have an impact on the quality and utilization of accounting information to be provided accounting information presented in financial reports published in another State, Most researchers have demonstrated that the variability in the content of financial reports is caused by diversity and variation in environmental conditions from country to country

Accounting systems in these environments (economic, social, political and legal) Other persistent aspects of their change in different countries over time, in turn, operate in a changing environment, that the economic and social environment in particular has a significant impact on accounting structures and processes, and that this environment consists of mutually influential activities in terms of interrelationships between economic and social activities at the macro level.

b-Economic factors: All decisions associated with accounting policies must have economic consequences. If such results do not result, there will be no reason for any such decisions. The desired results end in improving the information available to investors and other users of information. The result is to make valid economic decisions and reduce the costs incurred by users of information to gather information

c-Political factors: the choice of accounting policy has economic and social implications, some of which are real and the other conceivable as such And either way some individuals think they're going to be in a better position, Others also believe they will be in a worse position as a result of the accounting policy in question. and as a result, some individuals will try to search for or maintain appropriate policy when it makes sense.

d- Legal factors: Accounting practice is severely influenced by organizations associated with institutions' laws, legal and tax legislation and other regulatory measures. Such legal legislation has undoubtedly increased the comparability and utility of such accounting information. The absence of or strict adherence to legal standards and legislation is not considered desirable and depends on the stages of economic and social development found in the various States. (Voucher, 2009)

3- The extent to which Iraqi banks are committed to applying the COBIT framework and its impact on the quality of accounting information in bank accounts

IT has dominated all areas and sectors of business, and perhaps the most distinguished and accessible to it is the sector of the economy, specifically the



sector of financial and banking institutions "to the extent that it can no longer be dispensed with, it has become the basis of the business environment and its most important components. It promotes opportunities for survival, growth and sustainability in strong competition among banks at the global level, as a result of the continuous acceleration in the development of modern technologies that have led to the creation of new ways of providing banking services and products

With this great development in the business sector, the world is now moving towards a working environment in which many modern technologies and as this evolution increases the business success rate, At the same time, however, it refers to other concerns and risks related to the management and governance of information technology. IT risk scenarios, which led to a need for radical solutions for information technology risk scenarios, and that is why a cobit framework has been established (COBIT) as an effective solution that helps facilitate the governance of IT in companies and financial institutions (Banks), (Riad and Voise, 2012) It can be said that the basic function of banks is mainly to supply the national economy with the funds it needs to help it promote economic activity and achieve financial stability To that end, the implicit concept of the COBT Framework of Information Technology Control has been achieved through the search for information resulting from the uniform use of information technology resources that need to be managed through information technology processes and for the purpose of meeting the Organization's objectives, The information is required to be in conformity with certain standards to which Copit refers as the institution's requirements for information. When drawing up a list of requirements, Cobit unites the implicit principles of quality, which includes quality, cost and delivery. Credit requirements include efficiency, trust and conformity with the laws, and protection requirements which include confidentiality, integrity and availability of information.

Information Technology Governance (ICT) structures relationships and processes for the direction and control of the enterprise in order to achieve the objectives of the organization by adding value when balancing risks against the return on information technology and its operations

Organizations must meet the quality, confidence and security requirements of their information, as in the case of all assets. Management must also improve the use of available resources, including data, application systems, technology, facilities and people. In order for management to assume its responsibilities and achieve its objectives, it must understand the situation of





its technology systems and make decisions on the type of security and confidence that should be provided. Banks' commitment to applying an information technology framework contributes to the quality of accounting information in bank accounts. (Abu Alla, 2005)

4. Forth- Method and procedures.” - Analyzing the results of the study and testing the hypothesis

1-: Description of the respondents

Table (1) Study Sample Characteristics

sex	F	%
Male	14	70.0
Female	6	30.0
Total	20	100
old	F	%
40-30	8	40.0
50-41	7	35.0
51 and above	5	25.0
Total	20	100
academic qualification	F	%
Ph.D.	3	15.0
Master's degree	5	25.0
Bachelor's degree	12	60.0
Total	20	100
number of years of experience	F	%
less than a year	2	10.0
2-1	4	20.0
5-2	5	25.0
10-5	4	20.0
20-10	5	25.0
Total	20	100

The findings of table 1 show that 10 per cent of the study sample is female and that most legal dealers in Iraqi government banks are male (14 persons), representing 70 per cent of the bank's workforce



According to the results of Table 1, 40% of the study sample was between the ages of 30 and 40, 35% were between the ages of 41 and 50, and 25% were older than 51

Results in table 1 show that 15% of the study sample holds a PhD, 25% holds a master's degree, and 60% holds a bachelor's degree. These results indicate that the study community is highly qualified and has a good degree

Participants' experience in filling out the questionnaire is shown in table 1. According to the table above, the most common percentage of experience comes from years 25 and 10-20. This indicates that members of the school community have a wealth of professional experience and are therefore qualified to assess the impact of IT governance and its application mechanisms on the quality of accounting information in bank accounts, according to cobit

Table 2. Presentation and analysis of sample research answers regarding the extent to which information technology governance and its application mechanisms (COPIT framework) affect the quality of accounting information in bank accounts duplicates, percentages, averages of calculation and standard deviations of sample research answers

NO.	strongly agree		agreed		neutral		disagree		strongly disagree with		mean	standard deviation
	F	%	F	%	F	%	F	%	F	%		
1	5	16.666	1	3.333	5	16.666	2	6.66	7	23.333	3.79	1.780
2	11	36.66	6	20	0	0	0	0	4	13.333	4.44	0.8
3	3	10	7	23.333	5	16.666	3	10	2	6.66	3.35	0.8
4	1	3.333	6	20	4	13.333	7	23.333	2	6.66	3.80	1.45
5	10	3.333	3	10	1	3.333	4	13.333	2	6.66	3.74	1.230
6	2	6.66	0	0	3	10	4	13.333	11	23.333	4.30	0.870
Extent to which information technology governance and application mechanisms (COPT framework) affect the quality of accounting information in bank accounts											3.8	1.2

The table above shows that the computational medium of the variables of the extent to which IT governance and the mechanisms for its application (Cobit framework) on the quality of accounting information in bank accounts amounted to (3.8) which is higher than the hypothetical medium (3) and with



a standard deviation (1.2). (The Bank has oversight agencies and procedures in place to ensure compliance with information technology rules and laws) At the highest averages (4.4) and with a standard deviation (0.8), the paragraph for (The existence of a formal framework for information technology risk management in the Bank, which entails that related risks are not identified and plans are in place to reduce them) It has the lowest arithmetic averages of 3.35 and a standard deviation of 0.8.

Table (3) Association matrix

Variables	information technology governance	Extent to which information technology governance and application mechanisms (COPT framework) affect the quality of accounting information in bank accounts.	quality of accounting information
information technology governance	1		
Extent to which information technology governance and application mechanisms (COPT framework) affect the quality of accounting information in bank accounts.	0.778**	1	
quality of accounting information	0.90**	0.950**	1

The research hypothesis that digital auditing with artificial intelligence applications can Table 3 shows the research hypothesis that IT governance and application mechanisms (COBIT framework) affect the quality of accounting information in bank accounts.

There is a correlation between IT governance and its application mechanisms (Cobit) Framework) and the quality of accounting information in bank accounts, which is a very strong package link under the morale level (0.05) where it reached (95%). While the general accounting medium of the variable was the extent to which banks adhered to COBIT's requirements (0.778)



Table 4 Using Extent to which information technology governance and application mechanisms (COPT framework) affect the quality of accounting information in bank accounts

Standard Weight	Standard error	T value	R ²	Sig.
IG.	0..025	48..320	0.792	0.001.

The results of table 5 show that the use of information technology governance and application mechanisms (COPIT framework) affects the quality of accounting information in bank accounts at a single standard weight that improves the quality of accounting information (48..320). The results also showed how IT governance helped the quality of accounting information and its impact on bank accounts explain the Accounting Information Quality Variability Fund's interpretation (0.792).

Conclusions

1- The Bank has regulatory agencies and procedures to ensure compliance with the rules and laws on IT technology.

The Bank has the system of supporting information technology services, programmes and infrastructure and assists in achieving information technology governance processes to achieve the institutional dimension of sustainable development.

The Bank's control procedures provide good information technology security that contributes to strengthening management needs.

The Bank's oversight staff are not trained in the modern uses of information technology in the field of oversight to keep pace with recent developments in the use of information systems.

2- The absence of a formal framework for the management of information technology risks at the University, which entails that related risks are not identified and plans are made to reduce them.

Recommendations

1. Interest in training the Bank's control staff on the modern uses of information technology in the field of oversight to keep pace with recent developments in the use of information systems.
2. The need for both government institutions and institutions to adopt the concepts of information technology governance as a general



framework within which the protection and security of information can be achieved.

3. A formal framework for information technology risk management should be in place in the Bank, resulting in the non-identification of related risks and the development of plans to reduce them.
4. The need for auditors to be aware of the risks of controlling information technology and the possibility of avoiding and processing it.
5. The need for further studies in ways of scrutinizing information technology activities.

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