

Information Technology Governance Control Level in Jordanian Banks Using: Control Objectives for Information and Related Technology (COBIT 5)

Dr. Nedal M. Alramahi
Zarqa University – Jordan

Dr. Abdallah I. Barakat
Shaqra University – Saudi Arabia

Hossam Haddad
Zarqa University - Jordan

Abstract

Information technology is considered a sensitive part for most strategies in the global market competition. There are plenty of factors indicating expansion in the world of information technology, the matter that places greater demands on the control of the environment for information technology and augments the need to mitigate risk and cost control related to the IT environment information. Hence, the importance of emphasizing the horizons of information, and the existence of effective controls on the IT environment should be designed for information technology services used by several parties, managers, auditors and owners.

This should facilitate controls and offer the opportunity to re-engineer the applications of the existing regulatory environment, which requires a comprehensive review and redesign of the regulatory controls.

To respond to any changes in the business environment, executives must ensure that information technology works with the greatest possible efficiency to help achieve goals and objectives. Growing competitive advantage, ensuring compliance and continuity, security and privacy are essential in order to achieve effective management for Information Technology related risks as well as maximal benefits in technology investment.

Keywords: Business goal, Enterprise Governance of IT, IT governance, Organizational structure, Risk management.

1. Introduction

Our contemporary world features a high degree of complexity, interdependency and change particularly in economic and financial matters, accounting and auditing being the results of rapid technological developments and successive production methods and instruments, and the means of communication and information systems and its transfer. In addition, the emergence of new organizational forms, and multinational corporations caused an increase in the intensity of competition and gravity, the matter that requires quick and effective decisions so that the organization can continue to compete and maintain its advantages in the market. This requires the availability of current and accurate information to assist in making rational economic decisions [04] and [09].

This matter requires the construction of an information system that is designed to determine the type and size of the data, as well as methods for its collection, processing and analysis. In addition, it helps in the creation of effective monitoring as well as auditing outcomes when they turn raw data into useful information and reliable decision-making and performance evaluation tools [03].

In order to assess the degree of meeting sources of information technology to information requirements of the organization and measuring the impact of the effectiveness and efficiency of these standards, as well as confidentiality, presence, commitment compatibility, and reliability of information for IT operations, COBIT aims "to research, develop, publish and promote an authoritative, up-to-date, international set of generally accepted information technology control objectives for day-to-day use by business managers, IT professionals and assurance professionals. The framework provides good practices across a domain and process framework, where the business orientation of COBIT consists of linking business goals to IT goals, providing metrics and maturity models to measure their achievement, and identifying the associated responsibilities of business and IT process owners [07].

An entity's use of IT can improve the effectiveness and efficiency of internal control by consistently processing large volume of transaction and data; IT also enhances the timeliness and accuracy of information. However, there are also numerous risks associated with the use of IT. For example, management may rely on systems that contain programmed errors that result in inaccurately processed data or allows the processing of data that is incorrect, there is also risk of unauthorized access to data and software programs that could result in unauthorized changes to master files and programs, the extent and nature of these risks vary depending on the nature and characteristics of the information systems, as a result when auditors gain an understanding of internal

control, they must consider how IT risks could result in misstatements. The use of IT affects the way in which transaction are initiated, recorded, processed and reported, in less sophisticated systems, records exist in paper form and are subject to manual controls such as authorization and approval[01].

A client's use of IT may also affect internal controls over financial reporting, operations, or compliance objectives. The impacts of IT may be limited to specific business units or operation functions, or it may affect all aspects of an entity's internal control[02].

2. Study Theoretical Frame

When the client's system become more complex, it's likely that auditors will need to increase their understanding of system controls to design effective tests of controls and substantive test. An auditor or outside professional with IT skills may also be needed to understand or test IT controls. The impact of IT on the audit process includes five categories of control management design and implements to provide reasonable assurance that management's control objectives will be met[08].

Components of internal control are 1. Control environment 2.risk assessment 3. Control activities 4. Information and communication, and 5.Monitoring.

The IT auditing framework landscape is continually changing. COSO may represent the tried-and-true framework for some auditors, while others see COBIT as the way to firmly get hold of a wily IT environment by combining client relationship with audit, management and technological expertise [06].

COBIT 5 provides a comprehensive framework that assists enterprises in achieving their objectives for the governance and management of enterprise IT. Simply stated, it helps enterprises create optimal value from IT by maintaining a balance between realizing benefits and optimizing risk levels and resource use. COBIT 5 enables IT to be governed and managed in a holistic manner for the entire enterprise, taking in the full end-to-end business and IT functional areas of responsibility, considering the IT-related interests of internal and external stakeholders. COBIT 5 is generic and useful for enterprises of all sizes, whether commercial, not-for-profit or in the public sector.

The COBIT 5 processes are split into governance and management "areas". These two areas contain a total of 5 domains and 37 processes:

Governance of Enterprise IT

Evaluate, Direct and Monitor (EDM) – 5 processes

Management of Enterprise IT

Align, Plan and organize (APO) – 13 processes

Build, Acquire and Implement (BAI) – 10 processes

Deliver, Service and Support (DSS) – 6 processes

Monitor Evaluate and Assess (MEA) - 3 processes

It is positioned at a high level and has been aligned and harmonized with other more detailed IT standards and good practices such as COSO, ITIL, ISO 27000, CMMI, TOGAF and PMBOK. COBIT acts as an integrator of these different guidance materials, summarizing key objectives under one umbrella framework that links the good practice models with governance and business requirements. What distinguishes the idea in this issue is the way of reversing the truth to the financial statements in Jordanian banks rather than through investment in technology, and the suitability of the technology in applying IT governance effectively using COBIT 5[16].

Banks & COBIT

The bank's IT audit management recognized that a new methodology is required for the assessment of the effectiveness and efficiency of the bank's IT internal control environment. Moreover, IT audit management decided to establish a standardized and well-defined method of planning and implementing IT audits, thus, the bank decided to consider widely accepted control-based frameworks.[17].

Escrows

Software escrow is an insurance policy to make sure there is access to the source code should the vendor no longer maintains the software for the organization, which offers an alternative. It provides benefits for user organizations as well as software developers, and explains where and how active software escrow underpins COBIT 5 objectives. Active software escrow can meet many of the concerns about business continuity addressed in COBIT 5, including [05]:

- Disaster recovery
- Reduced dependency on key employees
- Quality deposits
- Verification

BSC & COBIT 5

It adds the level of governance needed to ensure that benefits are delivered, risk is reduced, resources are optimized and, most important, and stakeholder transparency is established. While the governance function does have process goals and metrics for measuring success, the most important element of driving transparency in COBIT 5 is that it embraces an updated version, compared to COBIT 4.1, of the balanced scorecard (BSC) methodology for structuring and communicating performance measurement and places it more prominently at the front of the framework in the goals cascade. This approach enables IT organizations to establish a culture of performance management and accountability [18].

3. Literature Review

Ribeiro and Gomes study (2009), [12] entitled 'Information technology: Governance by using COBIT applied in Polytechnic High Public Portuguese Educational Institution Viana do Castelo'. Polytechnic High Public Portuguese Educational Institution adopted COBIT to control information technology objectives that cover all activities related to information technology and its governance within the frame of ISO 9001 standard certification to all information technology services and its confidentiality in High Public Portuguese Educational Institution. Through the implementation of COBIT frame the institute was able to ensure the services quality certification and to manage and control all information technology and information secret results positively and effectively. The frame is deemed suitable for implementation and for information technology governance in governmental studies institutes in information secrecy and information technology areas.

Panopoulos study (2012), [11] entitled: Integrating Control Objectives for Information Technology 4.1 in internal auditing. The study was carried out on Hellenic Post Bank in Athens Exchange Market. The study aimed to adopt a new approach to evaluate bank's information technology internal auditing environment. The approach resulted in merging auditing budgets for more projects and optimal use of auditing resources, better harmony between auditing and information technology, business objectives and providing common language of information technology, auditing and middle management. The experience proved the necessity to adopt common framework in all banks as final result.

Stekhoven study (2012) [14] entitled Escrow's Software efficiency in companies adopting of Cobit5. The study provides an explanation of Escrow's Software efficient role based on Cobit5. The study concentrates on advantages provided by the software to its users of the companies, and computerized programs developers. The study concluded that Escrow's Software provides many continuous business concerns introduced in COBIT 5 such refunding the losses, reducing the dependence on main employees and software compliance with advanced technical standards

Suer study (2013), [15] entitled: Using COBIT 5 for Balanced Scorecard in order to guide and materialize performance improvement. The study content include focusing on transparency element directed to COBIT 5 compared with COBIT 4.1, by employing Balanced Scorecard (B.S.C) methodology to design and provide performance measurement and place it at forefront of COBIT 5 framework to serve the company and information technology fully and comprehensively. The study concluded that COBIT 5 is a distinct starting point of any company, and any maturity level while it is considered a comprehensive framework and requires a high level of maturity, but it does not hinder the use lower mature levels, therefore the establishment can design balanced performance and improve it. The existence of balanced approach within COBIT 5 offers a range of easy objectives that can be used at any stage of mature, and it provide users with the ability to determine the trend they set and how to measure this trend.

Skafy and Al-Theebah study (2013), [13] entitled, KULAKOM- Jordan Company Information technology governance level. The study was based on COBIT 5 framework dimensions through designing a questionnaire which was distributed within a company of KULAKOM- Jordan, The study recommended on the basis of statistical analysis that company of KULAKOM- Jordan has to devote more attention to information technology governance, because there are some weaknesses points in alignment, planning, organizing, services delivery, support, monitoring, evaluation and quality assurance, which directly affect company's reputation and revenues. In addition, there is a possibility to apply information technology governance in many companies with multiple domains, where studies show that there is a close relationship between information technology governance and company's revenue, which improves marketing companies' reputation and competitiveness with other companies.

Otuori, study (2013), [10] entitled: Factors that determine commercial banks financial performance in Kenya. Study results showed that private factors of each bank affect commercial banks performance in Kenya, save financial liquidity variable, and the capital ability and management efficiency significantly affect commercial banks performance in Kenya, but liquidity impact on financial performance is not significant. The relationship

between financial performance and asset quality was negative, which indicates that a n weak asset quality or bad loans is correlated with weak banking performance. The study concluded that factors which are under management control are the most factors that determine commercial banks financial performance in Kenya , which is consistent with efficient organizational structure theory, which includes managerial efficiency that lead to financial performance optimizations.

4. RESEARCH METHODOLOGY:

The Financial or/and accounting information system represents the basic foundation upon which management and shareholders depend on in making planned decisions through data and information provided by the system about the circumstances of the property.

The research problem is centered in the following: Determining the level of available information technology governance in Jordanian banks and whether these banks could be classified within a governance scale implementing the framework of the "control objectives for information and related technology 5." Do Jordanian banks provide adequate protection and security to information technology to reach their goals compared to standards?, The extent of the application of the framework of the "control objectives for information and related technology by 5" in Jordanian banks.

The importance of research is presented through the following:

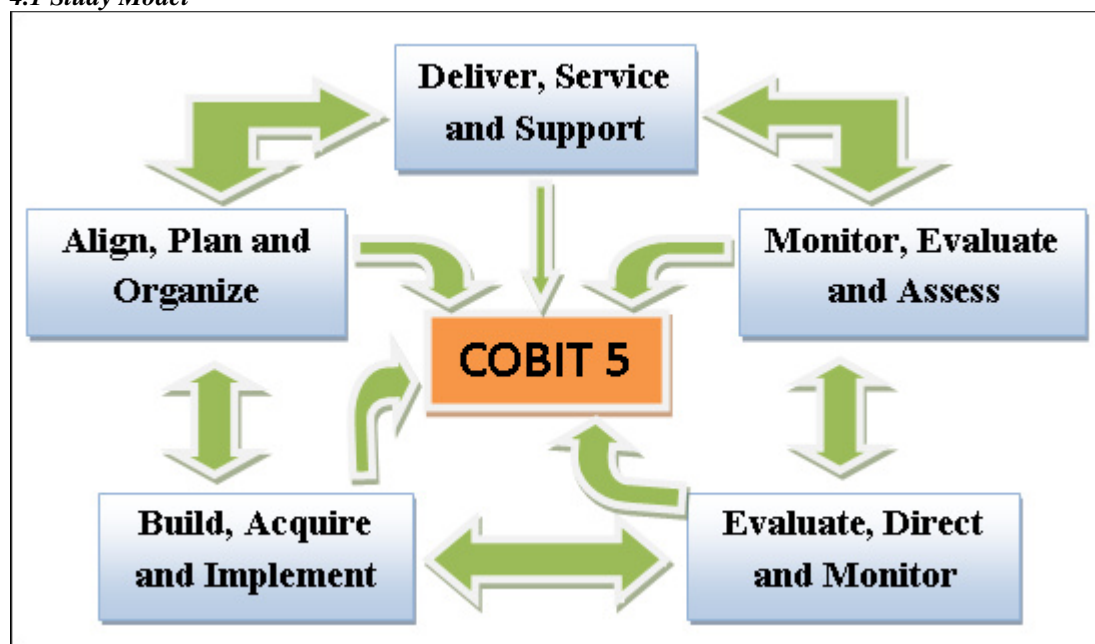
- 1 - The uncertainty of the conditions prevailing at all times as a result of intense competition and the evolution in all levels of economic fields.
- 2 - The possibility of implementing the framework of the "control objectives for information and related technology 5" in setting priorities to improve, implement and ensure the governance of information technology in organizations as an urgent need in the midst of competition to obtain information.
- 3 - Studying the gubernatorial level of process information technology and its impact on the level of performance in Jordanian banks using the framework of the "control objectives for information and related technology 5."
- 4 -Addressing the impact of information technology governance dimensions of the combined five banks and examining all of the dimensions separately.

This study follows a quantitative curriculum through the test applying COBIT 5 framework in Jordanian banks. It will be done through a questionnaire distributed to each of the managers (internal audit, compliance, information systems) then surveys will be collected and analyzed to reach results for the total value of the level of governance of information technology in these banks. Analysis of the results will be performed and their comparison with the most important books, references, research periodicals, standards and websites that are related to the subject matter. In light of what will be deduced from the results through a review of studies related to the subject matter, construction of hypotheses and the formulation of the theoretical study of search and that of the field study will be based.

This positive approach has spread its use in accounting research in the explanation, interpretation and prediction of the behavior of a particular phenomenon. In fact, in order for the developed study to cover the practical side, an investigation of this approach will be used:

- A - List style survey (questionnaire)
- B - Data Analysis Method

4.1 Study Model



4.2 Research Hypotheses

The current study examines the following hypotheses in null form:

H0: Jordanian banks do not apply the principles of the framework (COBIT5) on the control objectives for information and related technology.

This hypothesis can be divided to the following null hypotheses:

- 1.1. Jordanian banks do not apply the processes of evaluate, direct and monitor.
- 1.2. Jordanian banks do not apply Align, Plan and Organize processes.
- 1.3. Jordanian banks do not apply Build, Acquire and Implement processes
- 1.4. Jordanian banks do not apply Deliver, Service and Support processes
- 1.5. Jordanian banks do not apply application Monitor, Evaluate and Assess processes

4.3 Sampling

The study population consists of Jordanian banks that are managers in financial units and auditor's branches and Compliance and Information Technology Department at banks operating in Jordan, totaling 173 employees distributed over 19 banks. The study sample is represented Internal Audit and Compliance and Information Technology Department directors totaling (38) manager at studied banks. After study sample identification questionnaires were, and the returned percentage, and the percentage of valid questionnaires for statistical analysis. As shown in Table (1) as follows

Table (1)
 Valid, collected and distributed questionnaire

Job	Distributed	Collected	Response Rate	Valid Questionnaires	Percent of valid Questionnaire
Auditing Managers	13	9	69.2%	7	77.8%
Compliance Department managers	13	9	69.2%	7	77.8%
Information Technology Department managers	12	6	50%	5	83.3%
Total	38	24	63.2%	19	79.2%

5. Data collection

To achieve the study objectives, which aims to investigate the level of information technology governance level of banks operating in Jordan, the study has adopted two types of basic data collection methods, namely:

A - Primary Data:

It refers to data that has been obtained through field exploratory visits, interviews with banks management that operate in Jordan included in the study, in order to benefit from upon preparing study instrument.

B- Secondary Data:

It refers to data that has been obtained through sources and references available in Jordanian universities libraries, as well as relevant previous studies for preparation study conceptual and theoretical framework such as:

- Arabic and foreign sources, researches and literature review, journals and studies related to information technology governance topic, for the purposes of preparing study theoretical framework.

6. Study Instrument

Upon completion of study problem determination its questions and hypotheses, the researchers prepared the study instrument and develop it in a form that covers all model variables. The study instrument included in its final form to the following parts study:

6.1 Personal and occupational characteristics: These characteristics include (sex, age, educational level, years of actual experience, the section, years of experience within the bank, and professional certification).

6.2 Independent variables : Independent variable are represented by information technology governance principals, namely: (planning, organization, acquisition, implementation, delivery, support, monitoring and evaluation, guidance and follow-up.

6.3 Study Instrument Scale

Five points Likert scale has been selected, for being one of the most metrics used to measure opinions and responses, due to its ease understanding, where study sample subjects indicates their agreement level for each paragraph of the questionnaire as follows:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

A scale has been adopted for study sample subjects evaluation degree for information technology governance level dimensions divided into three levels, where calculated by dividing the difference between highest scale value (5) and lowest value (1) at three levels, namely, as follows: $(5-1) / 3 = 1.33$, so the three levels are as follows:

- A. Low agreement (1 – 2.33).
- B. Medium agreement (2.34 – 3.67)
- C. High agreement (3.68-5)

Test standard was identified amounting (3) through dividing the sum of the highest value (5) and the lowest value (1) over (2), that is $(5 + 1) / 2 = 3$, for the purpose revealing study sample subjects positive and negative responses as follows:

- A - Negative response limits are (1-2.99).
- B. Positive response limits are (3-5).

Therefore study instrument that is directed to study sample subjects in banks operating in Jordan is consisted of (70) paragraph.

6.4 Instrument Validity

Face validity has been verified through a group of experts and referees who had experience and knowledge in accounting, information technology sciences, scientific research methodology and applied statistics to take advantage of their expertise and knowledge which is reflected on instrument measurement accuracy and objective. Referees total number was (4) (see annex No.2). The purpose behind was to investigate paragraphs affiliation with study model variables, the paragraphs language formulation accuracy. All experts and referees notes were taking into account, since some paragraphs formulation were modified and some were canceled, and others were added, so the final form of the questionnaire was prepared (see annex no. 1)

6.5 Instrument Reliability

To find out the study instrument reliability Cronbach's Alpha reliability coefficient was used, for calculating instrument variables reliability coefficients (to measure the internal consistency of questionnaire paragraphs), total reliability coefficient of the whole instrument was (0.923), which is very high in order to approve study results, since the acceptable percent to generalize Humanities and Social Research results is (60%) or more., as shown in Table (2) as follows

Table (2)
 Results of Study Instrument reliability test (Internal Consistency of questionnaire statements)

Variable (Information Technology governance) COBIT 5 Process - Processes for Governance of Enterprise IT	No. of Paragraphs	Cronbach Alpha Reliability coefficient	Reliability percent
Align, Plan and Organise	17	0.819	%81.9
Buldi, Acquire and Implement	13	0.625	%62.5
Deliver, Service and support	19	0.709	%70.9
Evaluate, direct and Monitor	10	0.805	%80.5
Monitor, Evaluate and Assess	11	0.732	%73.2
Whole Instrument	70	0.923	%92.3

7. Statistical Techniques

After the completion of data collection process, the data were coded and entered in the computer for the purpose of extracting needed statistical results, some statistical methods were used through Statistical Package for Social Sciences (SPSS), in order to process the collected data through field study of surveyed sample, and the following statistical methods were used:

- 1) **Cronbach's alpha coefficient:** it was used to test the reliability of the study instrument under which the data were collected, in other words, is used to test (internal consistency of the paragraphs of the resolution).
- 2) **Frequencies and percentages:** frequencies and percentages were used to identify study sample characteristics of accountants and auditors in banks operating in Jordan listed in Amman Stock Market.
- 3) **Mean:** it is used to identify study sample subjects responses level regarding information governance dimensions in banks operating in Jordan.
- 4) **The standard deviation:** it has been used to determine the dispersion of study sample response from mean values .
- 5) **Variance Inflation Factors (VIF) test:** This test is used to investigate the existence or not existence of (Multi collinearity) problem between the independent variables.
- 6) **Kolmukrov - Samir Nov: (One-Sample K-S Test)** was used to investigate that data variables of the study are subject to normal distribution (Distribution Normal) or not.
- 7) **Friedman Test:** This test was to use measure the impact of information technology governance application in Jordan listed on Amman Stock Market.
- 8) **T-test for independent samples:** it was used to test the differences between two independent samples.
- 9) **One-way ANOVA:** it was used to test differences between more than two independent samples, and through (F) test.
- 10) **Least Significant Difference-LSD) for dimensions comparisons between means:** This test was used to verify that the differences for favor of any category.

8. RESULTS

The results related to study question regarding COBIT 5 framework principles concerning aims of information and associated technology control in banks operating in Jordan listed on the Amman Stock Market showed that (support and connection) ranked the first with mean (4.11) and a standard deviation of (0.22) while (Monitoring and Evaluation) principle ranked the second , with mean (4.07) and a standard deviation of (0.40) , while (planning and organization) ranked the third with mean (4.04) and a standard deviation of (0.30) , while (acquisition and implementation) principle ranked the fourth , with mean (4.00) and a standard deviation of (0.24) , and finally (orientation and control) ranked the fifth and the last of priorities and concerns of study sample subjects of managers in banks operating in Jordan , with (3.95) mean and a standard deviation of (0.27) .

The reason behind (support and connection) ranked the first in evaluation hierarchy and study sample of managers concerns is due to the importance of this principle compared to COBIT 5 framework other principles in Jordan on the one hand , and due to experiences and managers previous experiences in information and technology control objectives is deemed a key pillar to help banks operating in Jordan listed in the Amman stock Market on good coping with competitor banks and with unfamiliar situations in Amman stock market on the

other hand . On the other hand the reason behind (orientation and control) principal ranked the fifth and the in sample of managers evaluation hierarchy is due to the humility to recognize managers and their perceptions about this principle on the one hand , and lack of interest in this kind of principles framework COBIT 5 like the other principles from the other hand

9. Conclusion

after conducting this study that we can predict the factors that fall under management control and determine the factors most specific at the Jordanian banks in line with the governance information technology in particular, as well as devise the theory of efficient organizational structure, which includes that strong administrative efficiency which ultimately leads to an optimal financial performance.

Pay attention for banks in Jordan for “Evaluate, Direct and Monitor” because it’s take the fifth ranking between COBIT 5 principles, and that the importance of this principle in motivating workers in the banks mentioned about the best performance.

Work on deepening awareness among managers and their cultures in Jordanian banks, some paragraphs about the principles of the framework COBIT 5.

The study recommends need for deepen the awareness for managers in Jordanian banks about the principle of (support and delivery), from COBIT 5 Principles, Due to differences in access and differences in the views of managers about the dimension of COBIT 5.

Need to hold training sessions and workshops for both managers and employees in Jordanian banks, pose the most modern concepts of the principles of the COBIT 5 framework.

The study recommends adding a special section for governance of information technology to the Jordanian banks, through the Central Bank.

Make prospective studies where similar study of other variables related to the principles of the framework COBIT 5

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Questionnaire

Dear Respondent

Greeting s

The study aims to measure information technology governance level o of and its impact on **financial performance** of Jordanian banks using 5COBIT. It is an empirical study on Jordanian banks listed on the Amman Financial Market.

Kindly requested to answer all the questions you deem fit and that through your Department

1-Internal Audit

2-Information Systems

-Compliance Department

As we believe that you are the best source to get the required information, due to your experience and competence. Please be informed that all information will be confidential and will be used for scientific research purposes, hoping the results of this study will be useful for banks in Jordan and educational institutions , with my sincere thanks and gratitude to you for your exerted effort in order to accomplish this search.

Please accept best consideration

Section I: Sample Demographic information

Please tick (X) for your right choice

- 1- Gender : male female
- 2- Age : less than 30 years 31-35 36-40 41-45 46+
- 3- Education : Diploma BSC MSC PhD
- 4- Years of Experience: less than 5 years 6-10years 11-15 years 16-20 years 21 +
- 5- Section : Accounting Information Technology administration other sections
- 6- Years of Experience in the bank
- 7- Professional Certificate :CPA-CMA- CIA-CFA

First; Management

Scope	Operations	5	4	3	2	1
Planning and Organization	1	There is a definition for information technology strategy inside the bank				
	2	There is a clear definition of information structure that bank should obtain				
	3	Technological trend Is determined in the bank				
	4	The relationship between information technology and other parties Is determined				
	5	Investing in information technology is managed effectively				
	6	Communication by managerial goals and internally oriented is made				
	7	Human resource are managed by information technology				
	8	External requirements compliance is ensured				
	9	Risks are evaluated efficiently and effectively				
	10	Projects are managed and developed internally				
	11	Quality and compliance with is managed				
	12	Shareholders and their needs are linked in decisions-making determination and activities related with governance and management				

	13	There is a link between shareholders needs and practical goals (institution goals, information technology-related goals and objectives of COBIT enablers).					
	14	Value is achieved by Information Technology					
	15	All laws, regulations and framework are complied					
	16	All risks related to information technology are handled					
	17	Planning of information security policies and their confidentiality by management					
		A. Bank management is practicing methods that affect maintaining information security and confidentiality					
		B-The management determines auditors duties who are working in information security environment and their responsibilities					
		C- Bank management help manages internal auditors to deal with information security rules					
		D-Internal Audit Department deals with new developments in information technology environment I related to information security					
Acquisition	1	Acquisition and maintaining Infrastructure of information technology is made					
And	2	Bank management is keen to develop and maintain procedures					
Implementat	3	Bank management is keen to obtain and maintain the infrastructure of the Information Technology					
ion	4	Bank management is keen to develop and maintain plans implementation					
	5	Systems and programs are installed and download through legal and formal licenses.					
	6	Emergency Changes are managed through contingency plan					
	7	Modern technology can be invested by imposing modern strategy to help in value creation					
	8	Provide an environment to run efficient and flexible operations for IT					
	9	The bank qualify and train staff and manage their institutional performance					
	10	There is sufficient staff for information technology section					
	11	Assurance of quality of information technology controlled					
	12	Processed information are providing in best form					
	13	Role of Information technology auditor qualification role of by skill and efficiency to the security and confidentiality of information					
		A. Information technology auditor has needed experience and knowledge in information security field					
		B. Information technology auditor make sure of computer networks reliability in the bank					
		C- IT systems auditor has the ability to adapt with new					

		changes developments in information security methods.					
		IT systems auditors make sure of information security policies based on information technology tools					
Support and connection	1	service levels and its management Is determined					
	2	Services are managed for external parties					
	3	Bank management is keen to manage performance ,capacities and improve them					
	4	Bank management is keen to make sure of continuous service					
	5	Bank management is keen to make sure of information and systems security					
	6	Bank management is keen to identify costs and distribute them					
	7	Bank management is keen to education and train users					
	8	Bank management is keen to help and advise clients					
	9	The bank's management seeks to have specifications department and to commit with its standards					
	10	Bank management is seeking to have a role in problems and events management					
	11	The Bank's management seeks to manage and maintain data periodically					
	12	Bank's seeks to manage facilities and keep services t active and ongoing					
	13	Managing operation in an efficient and fast method					
	14	Flexibility is available in business environment for information					
	15	Existence of Control and information requirements					
	16	The success of all information technology projects related to information technology					
	17	IT helps in maintaining the sustainability of the institution					
	18	Clarity in the role of information technology					
	19	How important is the following outputs for information technology governance					
		A. Cost of effective use of information technology					
		B. The effective use of information technology to achieve growth					
		C. The effective use of information technology for assets use					
Follow Up and Evaluation	1	The process is monitored effectively					
	2	internal control adequacy is assessed					
	3	Independent confirmation Is obtained					
	4	Auditing Independence is provided					

	5	Ease of verification of safe and certified business operation					
	6	Make sure of institution compliance with legislation , applicable laws and regulations					
	7	COBIT system provides to achieve optimal use of resources					
	8	COBIT achieve benefits and create a balance between risk and optimal benefit					
	9	Shareholders are evaluated for Business Investment					
		Electronic guidance role in helping internal auditor to adapt with environment of information security technology					
		A. The Bank uses electronic guide to prove operations registration					
		B. Electronic directory helps in auditing process in mitigation of information security					
		C. Electronic directory helps internal auditor to carry out his duties accurately					
		D. The presence of databases helps in keeping and information security					
Second: Governance							
	1	Make sure of governance frame preparation and control					
	2	Make sure of delivery advantages					
	3	Make sure of reducing the risk optimally					
	4	Make sure of optimal investment of resources					
	5	To ensure transparency for shareholders					
	6	Risk management contributes in maintaining assets					
	7	Financial transparency is an important part for shareholders to achieve benefits					
	8	Decision-making strategy is based on information					
	9	Improving expenses of providing services					
		A. The existence of innovative culture for products and business					
		B. Use of business operation expenses improves the use of resources					
		C. Programs that changes business management for t better					
		D. Comply with external policies					
	10	Teamwork in risk assessment for the security and confidentiality of information					
		A. Staff of other sections collaborate with internal auditors in dealing with storing tools and information security					

		B. Bank's management direct internal auditors towards use of modern technology tools in security and confidentiality of their information					
		C. There is coordination among internal audit staff in the use of information technology tools					
		Information technology tools documents cooperation and integration in conducting electronic audit, which aims to maintain the security of information					
		D-The auditors attended seminars and conferences on environment, safety and security information					
		E. There are several specialties within Internal Audit Department that help in making optimal use of information within the bank					
	11	Government legislation and roles help internal auditor to adapt with environment, information technology					
		A. Government roles and instruction are characterized by change according to new information technology and related audit environment					
		B. There is cooperation between Internal Audit Department and the Association of Chartered Accountants in Review Jordanian laws and state legislation on the subject of information security and safety.					
		C. There is a special government committee to review the organization of the accounting profession for the IT environment of information security.					
		D. Systems and government regulations help to keep up with the IT environment.					