

# The Role of Internal Control Systems in Improving the Quality of Cloud Accounting Service

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The research aims to establish an integrated relationship between internal control systems and methods of cloud accounting within the banking business. Internal control systems are a safety valve that saves economic units assets and ensures the correctness of their financial statements from errors and fraud and manipulation by employees of these units, as well as motivating employees to abide by the laws. With the development of technologies available through the Web with the emergence and the steady increase in Internet speeds available to users, many Economic applications allow for the use of the Internet through what is known today as cloud accounting. This technology has provided its users with many additional features, including: saving expenses and providing information services to a larger sector of beneficiaries. It also provides the beneficiary and information institutions the opportunity to store information, transfer and share from anywhere and at any time without the commitment to use the personal computer. These actions (storage, processing, transfer and sharing) on external servers are available on the Internet cloud while ensuring the security of this information and protecting it from hackers or viruses. An organisation that is sound is a weak organisation that loses its integrated components to achieve its objectives. A proper internal control system forms the basis for a strong control environment.

**Keywords:** Internal control systems ‘cloud accounting ‘Integration ‘efficiency ‘effectiveness

## **Introduction**

With the development of technologies available through the web and the accelerated flow of publicly accessible Internet, companies have made their applications available online using modern technology, which has benefited users on a large scale as well as many companies and is the basis of internal control. Due to its importance, it has been given great attention by the departments responsible for banks as they represent the first line of defence in preventing, repelling and minimising the risks that can be exposed to banks to ensure the computational health of what is recorded in the records, protect the assets of the bank, as well as raise the efficiency of employees and encourage them to adhere to the administrative and financial policies set.

## **Research Methodology**

### **The research Issue**

The research problem lies in the poor integration of internal control systems in Iraqi banks with modern technologies in cloud computing and software, as well as the weak foundations of internal control work in banks, despite the introduction of electronic accounting information systems (cloud computing) in its work widely.

### **Aims of the research**

The research has a set of objectives, which can be summarised as follows:

1. Highlight the role and effectiveness of internal control systems in electronic information systems (cloud computing).
2. Examine possibility of applying cloud computing extensively in Iraqi banks.
3. Achieve efficiency and effectiveness of Iraqi banks through the integration of internal control systems and cloud computing.

### **Research hypothesis:**

Integration between internal control systems and cloud computing (electronic information system) leads to efficiency and effectiveness in the banking business and significant customer satisfaction.

### **Research importance**

The importance comes through the application of modern information technology, which is difficult to use without training and full knowledge of the software and how to integrate the systems of internal control and cloud computing.

### **The research sample:**

A group of Iraqi banks, the public and private sectors, including Rafidain Bank, Rashid, the Gulf, Baghdad and the Iraqi Trade Bank.

### **Concept of internal control systems**

The system of internal control is only "a system operating within the economic unit, where adopted by the management of that unit as a means of protection, prevention and treatment of all cases of unintended deviation, which in turn reduces financial and administrative corruption in economic units of various activity" (Al-Bakwa and Ahmad, 2012: 174).

Internal control systems can also be defined as organisational plans that regulate the functioning of economic units in a manner that ensures the protection of assets and the safety of the performance of workers and achieve high efficiency in economic units by applying policies set by senior management and optimal use Resources available to them with high economic and productivity and in a manner that maintains a balance between quality and production and achieve the objectives set" (Almondi, 2013: 15).

"The definition of internal control has evolved over recent years with the development of different models of internal control. Including compliance with internal policies, asset protection, prevention and detection of fraud and error, accuracy and completeness of accounting records, and timely and reliable financial information. "(Ofori, 2011: 7)  
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### **Objectives of the internal control systems (Bishops, 2013: 205), (Dish et al., 2006: 25)**

1. Ensure the authenticity and reliability of information so that management can rely on it.
2. Protect assets and records from risks.
3. Upgrade production efficiency.
4. Comply with administrative policies and regulations.

Performance objectives should focus on asset protection, operational efficiency and risk management. The purpose of the information requires accurate records and adequate disclosure. The objectives of the obligation require that the internal laws, regulations and policies of the economic unit are properly implemented (Abbas & Iqbal, 2012: 532).

In order to achieve the objectives of the unit, the internal control carries out its tasks in three ways (Romney & Steinbart, 2000: 19):

1. Preventive control: Determined through the detection and identification of problems in performance to prevent errors and abuses before they occur and reduce the violations and dangers that may be exposed to the unit. Its components derive from the efficiency and good training of staff and integrity and the separation of conflicting duties regarding the actual control over assets, accounting entries, customer signatures, etc.
2. Detection warning: It works to detect problems in performance as soon as they occur and allow early treatment and the amendment of controls to prevent such things from occurring.
3. Remedial control: It includes a set of procedures to determine the cause of the problem in the performance of the unit and correct the deficiencies.

### **Internal Control Types:**

1. Accounting Control: It encompasses the organisational plan, procedures and all means of coordination aimed at examining the accounting data recorded in the books, as well as the accounts and the degree of reliability. (Abdullah, 2012: 193). It also involves the disbursement and the extent to which the disbursements actually match the planned financial allocations. To ensure registration in the records and books of financial operations was done in accordance with accounting standards and customs, the accounting control is also concerned with examining the accounting system and the internal control system and ensuring the proper application of policies, procedures and instructions related to the financial and accounting matters of the unit with the most important observations concerning abnormal matters and deviations encountered by the auditor during his work (Ameri, 2014: 46).

2. Administrative Control: Administrative control is defined as the organisational plan, procedures, policies and all documents and records related to the decision-making process and the implementation of financial operations directly related to individuals responsible for achieving the objectives of the economic unit. Economic unity and development of operational capabilities and the development of organisational plans reduce the possibility of errors by diagnosing deficiencies and proposing appropriate solutions. This is called the Audit Committee Management Control (as a line Organised and associated methods and procedures for special operations, which helps administration to impose its authority in these operations) (Bishops 2009: 208).

Administrative control consists of multiple means in order to achieve its objectives, the most important include: (Abu Haiba, 2012: 26-27)

- Estimated budgets and standard costs
- Study of business (study of time and movement)

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•Statistical analysis

**Internal Control Components:** (Arens et al, 2005: 282)

1. Control environment: It is a description of the policies, procedures, actions, general direction, senior management and the owners of the economic unit associated with internal controls.
2. Risk assessment is the identification and analysis of management of the appropriate risks for the preparation of the financial statements in accordance with the International Financial Reporting Framework.
3. Control activities: represent the procedures and policies set by the administration to meet its objectives for financial reporting purposes.
4. Information and communication: The methods used to identify, compile, record and report on the operations of the economic unit.
5. Follow-up: is the continuous and periodic evaluation of management on the effectiveness, design and operation of internal control to identify weaknesses. It is to follow up on compliance with the internal control system.

**Elements of Internal Control:** (Thomas & Hackney, 2009: 379-380)

1. Asset protection
2. Follow up on compliance with the internal control system
3. The availability of the necessary competence among workers within the economic unit and putting them in appropriate positions.
4. Advanced accounting system
5. Clear and efficient organisational structure

**Determinants of the internal control system**

The internal control system faces several limitations that occur for two reasons:

1. Decision-making by working individuals may be wrong, or through human failure some errors may occur.
2. An order may occur between two or more individuals working in the internal control system, or the unit administration itself may violate the system. (Ramos, 2008: 28)
3. The effectiveness of the internal control system in the process of detecting errors is determined by the following determinants (Gomaa, 2016: 513):
  - a. fatigue, negligence and inappropriate behaviour among employees, and lack of understanding of policies and procedures due to lack of scientific qualification and lack of courses and training.
4. Design controls poorly. Violation of controls by two or more individuals engaged in oversight.
- 5 - The excesses of the administration on the internal control system to achieve some gains.
6. Exceeding the costs of implementing internal control of benefits.

## Cloud accounting

With the development of modern technologies on the Internet, and the increase in the use of the Internet, many organisations have tended to make their applications available for use through the Internet where this technology has provided Internet users with so-called cloud computing additional advanced features of saving expenses and the provision of information services to a larger sector. It also provides the user and organisations with the ability to store, process, transmit and share information from anywhere in the world at any time using any browser or operating system without the obligation to use the PC as a tool for storage and processing.

### The concept of cloud accounting:

The concept of cloud accounting is important due to the multiplicity and diversity of its applications. The local view is made easier for the user and those resources include space for data storage, backup and self-sync. Also important are the programmatic processing capabilities, task scheduling, email pushing and remote printing, which, when connected to the network, can control these resources through a simple software interface that simplifies and ignores many details and internal processes (Shlot, 2013: 24). The concept of cloud computing is defined as: “Technology that relies on the transfer of processing and storage space of the computer to the so-called cloud, a server device accessed through the Internet. IT programs are shifting from products to services, and the cloud computing infrastructure relies on sophisticated data centers that offer large storage areas for users and provide some software as services to users. It relies on the possibilities provided by Web technologies 0.2” (Rizk, 2013).

The concept of cloud computing has also been defined as “a new pay-as-you-go model to flexibly access hardware and software resources through the Internet and allow companies to reduce costs and increase performance” (Sumaidaie, 2012: 78). The concept that seems to have brought together all these elements is defined by the US National Standards and Technology Institute (NIST), which states that cloud computing is a model for enabling on-demand permanent and convenient network access and sharing a range of computing resources (networks, servers, storage, applications and services). These can be deployed and provided quickly with minimal effort by management or interaction with the service provider "(Grance & Mell, 2011).

### Cloud accounting Goals

It is clear from the above concepts that cloud computing technology seeks to achieve the following objectives (Eid, 2013: 33):

1. Make the computer just a transit station to access the server, which contains storage space that enables the beneficiary to deal with his data.
2. Provide storage space for high-quality information.

3. Provide access to information and easy retrieval at any time and from any place where the Internet is available.
4. There is no need to back up the information stored on personal computers or external storage devices such as disks or flash and others.
5. Availability of most operational and application software free of charge (often), which saves the beneficiary cost, time and maintenance.
6. The availability of information sharing between the beneficiaries and the ease of circulation and transmission over the Internet, regardless of the size of that information and file formats.
7. Provides the beneficiary with the possibility to remotely process his information related to the creation, deletion, or modification of files, or to determine the levels of access to them, in addition to organisation procedures in their preservation with the information stored on personal computers or external storage devices such as disks or flash and others.

### **Cloud accounting Components:**

To deal with cloud computing, the following elements must be available (Chloe, 2015: 5):

1. Beneficiary or customer: who will use this technology and benefit from its services through the use of his personal computer or mobile phone, which is required to be connected to the Internet.
2. Platforms: the donors of this service provide gigantic servers in storage capacity and the speed of data processing such as Apple Google.
- 3-Infrastructure: the infrastructure of the cloud, which depends on the provision of the service and includes the availability of personal computers and the Internet and storage space for information.
4. Applications: the application programs that can be operated by the beneficiary in the cloud, and include word processing and presentation software, tables and information transfer services and sharing.

### **The challenges of cloud accounting**

The new cloud computing model offers a number of benefits and advantages over previous computing models, and there are many organisations that adopt it. However, there are still a number of challenges, which are currently being addressed by researchers and practitioners on the ground (Ali, 2018, 14-15). These challenges are outlined below.

1. Performance: The biggest performance problem may be for some transaction-oriented and other data-intensive applications, in which cloud computing may lack proper performance. Users away from cloud providers may also experience high latency and inactivity.
2. Security and Privacy: - Companies are still concerned about security when using cloud computing. Customers are concerned about being attacked when critical information and IT resources are outside the firewall. Solving the security problem assumes that cloud computing providers follow standard security practices.

3. Control: Some IT departments are concerned that cloud providers have full control over platforms. Cloud providers do not typically design and do business for specific companies.
4. Data transfer rate costs: With cloud computing, companies can save money on hardware and software. However, it can bear the high data rate charges for the network.
5. Accuracy and Reliability: Cloud computing still does not provide permanent reliability around the clock, as there have been some cases where cloud computing services suffer from power outages for a few hours. In the future, we expect to see more cloud computing providers, richer services, established standards, and better practices.

### Disadvantages of cloud accounting

1. Security: the problem of the security and privacy of information, so users are afraid of the possibility of others to share their information.
- 2.

The first axis cloud computing										
Items	Percentage	Standard division	Average	Sample volume	Not agree strongly	Not agree	Neutral	Agreed	Strongly agreed	Sample direction
1	50.4	1.08	2.52	50	6	25	10	5	4	Not agree
2	78.4	0.91	3.92	50	0	4	11	20	15	agree
3	48	1.13	2.4	50	10	22	10	4	4	Not agree
4	34	0.78	1.7	50	25	15	10	0	0	Not agree strongly
5	38	0.83	1.9	50	20	15	15	0	0	Not agree
6	36.8	0.76	1.84	50	19	20	11	0	0	Not agree
7	90	0.5	4.5	50	0	0	0	25	25	Agree strongly
8	29.6	0.5	1.48	50	26	24	0	0	0	Not agree strongly
9	32	0.49	1.6	50	20	30	0	0	0	Not agree strongly
The second axis: internal control										
Items	Percentage	Standard division	Average	Sample volume	Not agree strongly	Not agree	Neutral	Agree	Agree strongly	Sample direction
1	87.2	0.66	4.36	50	0	0	5	22	23	Agree strongly
2	100	0	5	50	0	0	0	0	50	Agree strongly
3	52.8	1.09	2.64	50	10	10	20	8	2	Neutral
4	84	1.17	4.2	50	5	0	0	20	25	Agree strongly
5	68.4	1.44	3.42	50	10	1	12	12	15	agree

6	63.2	1.41	3.16	50	10	5	13	11	11	neutral
7	68	1.2	3.4	50	5	5	15	15	10	agree
8	36	0.75	1.8	50	20	20	10	0	0	Not agree
9	77.2	1.44	3.86	50	7	3	5	10	25	Agree strongly

2. Privacy and Data Ownership: The problem of intellectual property rights protection is one of the concerns of users of these services, there is no guarantee that the intellectual property rights of users will not be violated.

3. Ensuring the level of service: The problem of the availability of the Internet is one of the main problems, especially in developing countries, as the service requires Internet access.

### The Applied Side

First: Analysis of questionnaire forms given to sample of the study

Representing a group of Iraqi government banks and private banks, 50 questionnaires were distributed to the employees of the mentioned banks in order to obtain data for the purpose of achieving integration between internal control systems and cloud computing, which is widely used in some Iraqi banks. For the purpose of achieving the objectives of the research, the questionnaires were analysed to prove or deny the research hypothesis

Table prepared by the researcher using the program SPSS

### Cloud accounting Analysis

1- First paragraph: The bank has an electronic application through which the money is circulated, where the arithmetic average (2.52) is greater than 1.40 and less than 4.19, which indicates that the sample is looking neutral for this phase. To identify the extent of the deviation of the responses of individuals to paragraph (1), the arithmetic mean of the standard deviation amounted to 1.08. In this sense, there is less dispersion and more homogeneity, as the percentage 54.4% indicates the direction of the sample (neutral), and how few Iraqi banks are using electronic applications. The employees participating in the questionnaire do not know the electronic applications that achieve customer satisfaction.

2- Second paragraph: The bank deals with Visa and MasterCard cards, where the mean was 3.92, which is greater than 3.40 and less than 4.19, which indicates that the sample is looking in agreement for this statement. To determine the extent of deviation of the responses of individuals to paragraph (2) from its mean, it is noted that the standard deviation reached was 0.91%, that is, it is less dispersed and more homogeneous, as the percentage (78.4%), which means that the sample trend towards agreement. This indicates that the research sample deals mostly with electronic payment cards.

3- Third paragraph: for “the bank has an ATM through which the funds are withdrawn by customers,” the arithmetic average was 2.04 which is greater than 3.40 and less than 4.19,

which indicates that the sample looks neutral in view of this statement. This is because the bank takes into consideration paragraph (3) to identify the extent of deviation of the responses of individuals to paragraph (3) from its mean. It is noted that the standard deviation reached 1.13, meaning that it is less dispersed and more homogeneous. The percentage 48% means that Sample orientation is neutral. This gives the impression that many banks, although they deal with electronic payment cards, do not have ATMs, but rely on the distribution outlets through private offices, especially at government banks.

4-Fourth paragraph: for “The internal control system at the bank has an electronic audit,” the arithmetic average was 1.07, which is greater than 3.40 and less than 4.19, which indicates that the sample is looking towards disagreement for this statement as the bank takes a look paragraph 4 to identify the extent of deviation of individuals' responses to paragraph (4) from its mean. It is noted that the standard deviation was 0.78, meaning that it is less dispersed and more homogeneous as the percentage 34%, which means that the sample trends towards I do not agree. In the light of those answers, this paragraph shows us the weakness of the control of Iraqi banks on electronic transactions and the difficulty of auditing, which leads to financial breaches and may expose the bank to electronic breaches for lack of software for electronic audit.

5-The fifth paragraph: for, the internal control of the bank has electronic programs to track operations,” the mean was 1.09, which is greater than 3.40 and less than 4.19, which indicates that the sample is looking towards disagree for this statement as the bank takes into consideration paragraph (5). To determine the extent of deviation of the responses of individuals to paragraph 5 from its mean, it is noted that the standard deviation reached 0.83, meaning that it is less dispersed and more homogeneous as the percentage (38%), which means that the sample inclines towards “not agreed.” This means that Iraqi banks do not have any electronic programs to track banking operations.

6- The sixth paragraph: for, a comparison is made between the manual system and the electronic system and the verification of operations, the bank takes into account paragraph 1 to identify the extent of deviation of the responses of individuals from the mean. It is noted that the standard deviation of 0.76, meaning that there is less dispersion and more homogeneity, as the percentage 36.8% means that the trend is towards not agreed. This means that there is no comparison between manual work and electronic work to check the validity of electronic data and the validity and accuracy of the software used by banks.

7-Seventh Paragraph: for, there is concern among employees of the internal control organs about the lack of knowledge of cloud computing, the arithmetic average 4.5, which is greater than 2.60 and less than 3.39, which indicates that the sample tends towards “strongly agreed” for this phase as the bank takes into consideration paragraph 2 in a neutral manner. To identify the extent of deviation of the responses of individuals to paragraph 2 from its mean, it is noted that the standard deviation reached 0.5, meaning that it is less dispersion and more homogeneous, as the percentage is 90%. This means that the sample tends towards “strongly agreed.” This clearly shows that all employees in the internal control systems are very

concerned about the use of cloud computing because of their lack of knowledge and clarity regarding the banking business.

8-Eighth Paragraph: for, there is an integrated audit program to audit transactions done through cloud computing, where the arithmetic average (1.48) is greater than 3.40 and less than 4.19, which indicates that the sample tends towards “disagree” for this statement as the bank takes into consideration paragraph 3 to identify the extent of deviation of the responses of individuals to paragraph 3 from its mean. It is noted that the standard deviation reached 0.5, meaning that it is less dispersed and more homogeneous. the percentage 29.6% means that the sample tended towards “not agreed”. This means that electronic audit programs do not exist in banks, which leads to the difficulty of integration between internal control systems and cloud computing.

9-Ninth Paragraph: for, the introduction of internal control in the bank training courses on the work of cloud computing, the average of 1.6, which is greater than 2.60 and less than 3.39, indicates that the sample tends toward disagree, and the Bank takes into consideration paragraph 4 in a neutral manner. To identify the extent of deviation of the responses of individuals to paragraph 4 from its mean, it is noted that the standard deviation reached 0.49, i.e., it is less dispersed and more homogeneous, as the percentage (32%) means that the sample orientation is towards “not agreed.” This shows the lack of training courses to acquire the skills of cloud computing for bank employees to keep abreast of recent developments in software and how to integrate between internal control systems and cloud computing.

### **Analysis of internal control system**

1- The first paragraph: for, there are internal control procedures written by the auditors working on them, the average was 4.36, which is greater than 3.40 and less than 4.19, which indicates that the sample is tends towards “strongly agreed” for this statement as the bank takes into considering paragraph 1. To identify the extent of deviation of the responses of individuals to paragraph (1) from its mean, it is noted that the standard deviation reached 0.66, meaning that it is less dispersion and more homogeneity, as the percentage 87.2% means that the direction of the sample is towards “Strongly agree.” This means that banks have written internal control procedures that are adhered to for the purpose of protecting the bank's assets

2-Second paragraph: for, the internal control system is linked to the senior management, the average of the calculation (5) is greater than 3.40 and less than 4.19, which indicates that the sample is tends towards “strongly agreed” for this statement. To determine the extent to which individuals' responses to paragraph 2 deviate from their arithmetic mean, the standard deviation is zero, meaning that it is less dispersed and more homogeneous. This indicates that the internal control system is directly linked to the senior management, which gives independence to work in the verification of the financial statements.

3- third paragraph: for, the internal auditors of the bank have clear clarity in the process of conducting the transaction electronically, the arithmetic average was 2.64, which is greater than 3.40 and less than 4.19, which indicates that the sample is looking towards a neutral

view of this statement as the bank takes into considering paragraph 3. To identify the extent of deviation of the responses of individuals to paragraph 3 from its mean, it is noted that the standard deviation reached 1.09, meaning that it is less dispersion and more homogeneity, as the percentage 87.2% means that the direction of the sample is towards neutral. This means that internal auditors do not have sufficient information to answer.

4-Fourth Paragraph: for, There is a fear among the internal auditor that there are mistakes and cannot be detected, the average of the calculation (4.2), which is greater than 3.40 and less than 4.19, indicates that the sample tends towards “strongly agreed” for this statement as the bank takes into considering paragraph 4. To identify the extent of deviation of individuals' responses to paragraph 4 from its mean, it is noted that the standard deviation reached 1.17, meaning that it is less dispersed and more homogeneous. With the percentage (84%), the sample trends towards “Strongly agreed.” This confirms that there is concern among the auditors that there are mistakes that cannot be detected because the audit trail is not clear.

5- The fifth paragraph: for, there is a work plan with the internal audit system in the bank, the arithmetic average (3.42), which is greater than 2.60 and equal to 3.39, indicates that the sample is looking agreed for this statement as the bank takes into account paragraph 5 in an impartial manner. To identify the extent of deviation of the responses of individuals to paragraph 5 from its mean, it is noted that the standard deviation reached 1.44, meaning that it is less dispersed and more homogeneous, as the percentage 68.4% means that the direction of the sample is towards “Agreed.” This indicates the existence of a plan with banks for the purpose of conducting an internal audit.

6-The sixth paragraph: for, work is routine and there is no creative process in the control process, the average of 3.16, which is greater than (3.40) and less than (4.19), indicates that the sample is looking towards “agreed” for this statement as the bank takes into account paragraph 1 to determine the extent of deviation of the responses of individuals to paragraph 6. From its mean, it is noted that the standard deviation reached 1.41, meaning that it is less dispersion and more homogeneity, as the percentage 63.2% means that the direction of the sample is towards “agreed.” This means the lack of creativity in banking work, which needs to rotate employees for the purpose of getting rid of the routine of repeating the same daily work and lack of creativity.

7-Seventh paragraph: for, The auditors' age is an obstacle to the internal control systems in the cloud computing experiment, the arithmetic average was 3.4, which is greater than 3.40 and less than 4.19, which indicates that the sample tends towards “agreed” for this statement as the bank takes into consideration paragraph 7. To identify the extent of deviation of the responses of individuals to paragraph 2 from its mean, it is noted that the standard deviation reached 1.2, meaning that it is less dispersed and more homogeneous. The percentage (68%) means that Sample orientation is towards “agreed.” This shows that cloud computing and its use in banking need skills that are difficult to acquire by the elderly, so you need youth who can explain the software easily.

8-Eighth Paragraph: for, The bank's employees have electronic cards, the arithmetic average is 1.8, which is greater than 3.40 and less than 4.19, indicates that the sample is looking

towards “agreed” for this phase as the bank takes into account paragraph 8. To determine the extent to which individuals' responses to paragraph 8 deviate from their mean, it is noted that the standard deviation was 0.75, meaning that it is less dispersed and more homogeneous. As the percentage is 36%, this means that the sample tends towards “strongly agreed,” which highlights that there are foundations for electronic transactions through electronic cards.

9-The ninth paragraph: for, auditors find it difficult in their daily work because of the momentum of work, the average of 3.86, which is greater than 2.60 and less than 3.39, indicates that the sample is looking towards “agreed” for this statement as the bank takes into account Paragraph 9 in a neutral manner. To identify the extent of deviation of the responses of individuals to paragraph 9 from its mean, it is noted that the standard deviation reached 1.44, meaning that it is less dispersed and more homogeneous. As the percentage is 77.2%, this means that the direction of the sample is towards “Strongly agreed.” This means that internal auditors have difficulties because of the momentum.

## **Conclusions and Recommendation**

### **A. Conclusions**

- 1 – Despite the difficulty of integration between internal control systems and cloud accounting software, there are mechanisms to overcome those difficulties
- 2 - The presence of ambiguity results in a lack of clarity among the internal auditors with regard to the audit trajectory of banking operations through cloud accounting.
- 3 - Most bank employees do not have sufficient skills to deal with cloud accounting because of their age.
- 4 - Weak control of Iraqi banks on electronic transactions and the difficulty of auditing leads to financial breaches and the bank may be exposed to electronic breakthroughs for lack of software for electronic audit.
- 5 - All employees in the internal control systems are very concerned about the use of cloud accounting because of the lack of knowledge and clarity with regard to banking.
- 6 – There is a lack of creativity in banking, which needs to rotating staff for the purpose of getting rid of the routine of repeating the same daily work and lack of creativity.
- 7 - Many banks, although they deal with electronic payment cards, do not have ATMs, but rely on the distribution points through private offices, especially with government banks.
- 8-Few Iraqi banks use an electronic application and the staff involved in the questionnaire do not have knowledge of electronic applications that achieve customer satisfaction.
- 9- There is a lack of training courses to acquire cloud accounting skills for bank employees to keep abreast of recent developments in software and on how to integrate internal control systems and cloud accounting.
10. There is a fear among auditors that there are mistakes that cannot be detected because the audit trail is not clear.

## **Recommendations**

- 1- The need to establish mechanisms for banking work that can integrate internal control systems and cloud accounting from these mechanisms. Training auditors and electronic audit programs.
- 2 - It is better to acquire internal auditors cloud accounting skills to reduce the lack of clarity in the course of review.
- 3 – There is a need to employ young people who skills appropriate for the work of cloud accounting.
- 4 - It is important to have access to electronic audit programs and to train the staff of internal audit agencies in those programs for the purpose of reducing violations
- 5 – There is a need to popularise the culture of the use of electronic cards widely and the development of ATMs and electronic payment devices in stores and markets
- 6 – There is a need to achieve customer satisfaction by providing the best banking services through the use of electronic applications in mobile devices.

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