The Risks of Accounting Information Systems

Yousef A.Baker El-Ebiary[1], Nahg Abdul Majid Alawi[2]
[1]Faculty of Informatics and Computing, University of Sultan Zainal Abidin (UniSZA), Malaysia
[2]Geomatika University College, Kuala Lumpur, Malaysia. And researcher, University of Aden, Aden, Yemen

ABSTRACT
This research aims to identify the risks facing electronic accounting information systems in banks operating in India, and identify the most important reasons that lead to those risks and the procedures that prevent those risks. The researcher used what was discussed in previous studies and researches interested in this area, as well as the identification of the procedures and control methods used by banks operating in India to face those risks that may face their electronic accounting information systems. Consequently, some conclusions were drawn that contribute to the identification of the most important risks facing the electronic accounting information systems in banks and to make recommendations in this area. The study also used the research methodology in reaching the results of the study A number of results have been reached to ensure continuity and operational readiness of information systems.

Keywords: *Information Systems (IS), Accounting Information Systems, Electronic banking, Electronic Accounting Risks.*

I. INTRODUCTION

The current generation is the generation of the information and communication revolution, and facts is the maximum critical feature of the remaining decades of the twentieth century, in which the improvement of records generation has brought about an boom inside the extent of data that ought to be processed and saved and the gadget appreciably, which complicate the manner of manage and manage, has unfold packages of technology information in diverse fields and in any respect tiers, using computer systems in the processing of accounting data has end up a necessary and very crucial step for the manufacturing and intake of information in the facility [1].

The cutting-edge technology is the era of the data and verbal exchange revolution, and records is the most important function of the last decades of the twentieth century, in which the development of records technology has caused an increase in the quantity of records that must be processed and saved and the machine considerably, which complicate the technique of manage and manipulate, has unfold programs of era records in numerous fields and in any respect ranges, the usage of computer systems within the processing of accounting facts has end up a necessary and really vital step for the production and consumption of statistics within the facility [1].

The speedy improvement of data technology and the widespread deployment of consumer-pleasant systems and programs, as well as the preference of companies to accumulate and implement the contemporary structures and electronic packages is a fundamental motivation for the usage of computers and the performance of many accounting functions and functions faster and greater accurately, however on the other hand, this superb technological development can also convey there are many vital risks associated with the safety and integration of digital accounting structures, because the improvement in computer systems and data technology has not been accompanied by a comparable improvement inside the practices and controls, nor has it kept pace with this development. similarly, the expertise, enjoy and attention of workers in those institutions [2]. consequently, the accounting data device in any established order should include the means and controls of facts for you to offer reviews containing dependable statistics by way of users of the information machine.

Accountants have a vital role in the development and assessment of manage and security features in the accounting statistics system. they work intently with gadget designers during the development of the accounting information gadget to make sure that the manipulate and safety features are adequate and good enough, and the introduction of the computer within the facts machine affects the method of manipulate and security of records [3]. no matter the blessings of precision and speed of records automation, manipulate troubles can result in simpler statistics manipulation and inaccurate output.

Consequently, a new task and excellent duty for the control of data systems within the facility is the need to provide the means and methods necessary to make sure the continuity of the paintings of those structures nicely

and cautious planning to face all the risks that might lead to disruption or prevent working, and if this happens, be capable of restart as quickly as possible, this crucial and very necessary feature is referred to as the protection and protection of information structures. this feature is intended to guard automatic assets from intentional and unintentional threats and threats that could cause unauthorized operations including modification, detection, or sabotage of records or software program [4].

In view of the surroundings in Hindi, the transition of labor in banks running from the guide machine to the digital gadget, and this requires the control of banks to work on the provisions of supervision of banking on the way to hold the safety of banking records systems.

Hence, this study targets to discover the diverse dangers that threaten the safety of the electronic accounting facts structures and to pick out the reasons for their occurrence and the protection measures used to stand the ones risks [5].

II. THE STUDY PROBLEM

The trouble of the observe dangers that threaten the security of electronic accounting facts systems in banks running in India and the diploma of recurrence, which threaten the security of the accounting data structures, electronic wherein the operating banks. this could be accomplished via figuring out the nature of the dangers to the safety of digital accounting statistics systems in the environment of banks working in India [6]. and the motives for the prevalence of numerous dangers to the protection of electronic accounting records systems at banks.

III. PREVIOUS STUDIES

The significance of the dangers of electronic accounting facts structures is one of the maximum vital and relatively recent subjects, as by way of reviewing the preceding research and researches associated with this subject matter, there may be an absence inside the Arab world as an example in this situation with the provision of a few research in the western global [7]. the relative novelty of this situation, regardless of its essential importance to many establishments and banks.

It have to be mentioned that the few researches carried out on this situation geared toward identifying the capacity dangers that may face or threaten the safety of those structures and pick out the causes and try to increase a list of the most vital dangers that could face the security of electronic accounting structures, and then attempt to check the volume and importance of those hazard in exercise via a sequence of area research performed in this regard, by means of figuring out the frequency of prevalence and the quantity of financial losses as a result of them [8].

The extent to which managers of MIS are aware of the security risks facing the security of electronic accounting systems in the PC and PC environment as well as the computer network.

And he has risen Loch He and his companions developed a list of twelve possible risks to the security of electronic accounting information systems. The theoretical researches available as well as trying to test the extent and importance of these risks in practice through field research, and the list included the following risks: [9]

1. Unintentional (unintentional) input of improper data by the enterprise's employees.
2. Intentional (intentional) input of improper data by the enterprise's employees.
3. Unintentional destruction of data by facility employees.
4. Deliberate destruction of data by facility personnel.
5. Unauthorized passage of data / system by facility personnel.
6. Insufficient control over the means Media Such as tapes and magnetic disks.
7. Poor control over manual handling of computer inputs and outputs.
8. Unauthorized access to data / system by third parties (information hackers Hackers).
9. Unauthorized access to data / system by competitors.
10. Introducing computer viruses into the system or programs.
11. Insufficient physical controls.
12. Natural disasters such as fires, floods, power outages, etc.

The researchers conducted a survey of 657 MIS managers in the United States. The study participants were asked to rank the three most important risks related to the security of electronic accounting information systems from the proposed list of risks. The natural and unintended events of the organization's employees were classified among the three significant risks in all IT environments. The study participants also gave more importance to internal risks than external risks to the security of electronic accounting information systems [10]. The study that the rate of destruction is intentional and data entry is not intentional improper data by employees of the facility and as well as inadequate supervision on the means, such as tapes and magnetic disks are the three most important risks facing the security of information systems with regard to personal computer devices.

While the study showed that the three most important risks related to large computers are the unintentional

introduction of improper data by the staff of the facility, Natural screw ups, and the inadvertent destruction of facts through the facility employees, whilst the have a look at showed that herbal screw ups and unauthorized get admission to information/device from before third parties (data hackers) and susceptible physical controls are the 3 maximum critical threats to the security of electronic accounting statistics systems within the pc network environment [11].

IV. ELECTRONIC ACCOUNTING INFORMATION SYSTEMS

Accounting is a social technological know-how and a carrier hobby that serves many interested events and customers, whether internal or out of doors the organization. therefore, the want for accounting stems from the need for information that could assist them meet the desires of those involved and users to assist them make appropriate financial decisions.

Data systems or statistics generation is one of the essential regions that accountants should know and apprehend, as accountants depend upon a massive quantity of facts of their work, which can be received via the accounting data gadget, that is a powerful device to offer the necessary facts to control or enterprise [12].

Information systems have become an essential element in the enterprise and dependable in various areas to support their activities in order to achieve their desired objectives, whether those goals are profit-seeking or non-profit.

Information systems are the main source of management to provide them with the necessary information to make the appropriate decisions that help them to perform their functions in the right and optimal manner and to reach the desired goals in the best ways and examples. The main Information Systems environment elements are Technology, Organization and Users, see figure 1, [13]:

Figure 1: IS's Environment Elements

To study the information systems and to identify the aspects should know its main approaches, namely: Technical Approach, Behavioral Approach and Sociotechnical Approach, see Figure 2, [14]:

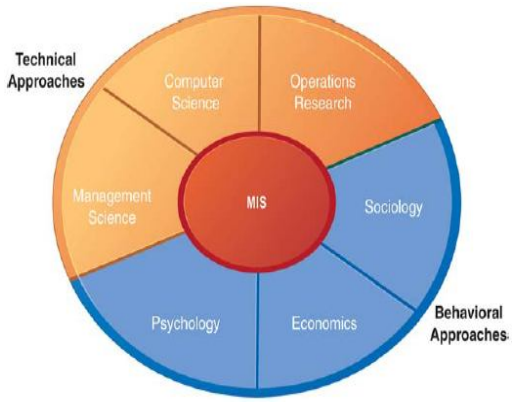

Figure 2: Information System Approaches

Technical method: the technical method focuses on arithmetic-based fashions in the look at of statistics structures, as well as the bodily generation of these structures, which consist of regions that make contributions to the technical front on computer science, administrative technology and operations research, and computer science is concerned with the status quo of theories of computing and methods and methods of processing and storing records in a powerful way [15]. The management of the research on the development of decision-making models and management practices, while the science of operations researches highlights the mathematical techniques to choose the best transactions for the institution such as transport and inventory control and the costs of movements.

Behavioral technique: statistics structures are involved with behavioral troubles that have accelerated with the improvement and management of facts systems over the long term. These issues, such as the integration of strategic business, organization, application, use and management, cannot combine well with the models used in the artistic approach, i.e., the technical approach cannot be relied solely on its interpretation or analysis [16]. For example, sociologists are interested in studying the collective use of information systems and how the use of these systems affects individuals, groups and institutions, while political science is concerned with the implications of the use of information in the field of politics. Psychologists have studied information systems to learn about individuals' responses, reactions and attitudes towards dealing with information systems and how they absorb developments in information technology and the extent to which these innovations are applied in practice to their organizations. Economists

are interested in studying information systems to identify systems that affect control and costs within the organization and the market. It should be noted that the behavioral approach does not neglect the technological aspect, where information technology is considered to affect the problem or behavioral issue always, and that the focus in this approach is not always on the solution Not only technological, but also changes, attitudes, management, organizational policy and behaviour.

Social approach: The study of information systems increased in the 1940s and focused on computer-based information systems in business institutions and government agencies, and information systems have become combining the work of computer science and administrative science and operations research with practice towards the development of systems solutions for real world problems, and management of information technology sources and also concerned with behavioral and psychological issues for individuals dealers with those systems [17]. Based on the understanding of multiple approaches to information systems, there is no single approach to dealing with information systems effectively, as the success and failure of information is rarely all technical or behavioral, so you must understand the multiple areas and approaches related to information systems, and from the point of view of the technical and social input, the performance of the institution Optimization can be achieved by combining social (behavioral) systems with the technical systems used in production, and the application of the technical social approach of the systems helps to avoid the purely technological approach to information technology.

V. ROLES OF ACCOUNTING AS AN INFORMATION SYSTEM

Accounting plays its function as a statistics machine in a continuous and included technique that may be described in three consecutive steps, [18]:

1. Stock the economic transactions related to the activity of the status quo and constitute it in the form of basic facts (raw) recorded within the books.
2. Function or process the simple facts according to a fixed of accounting ideas and principles. those information, after processing in the accounting machine, grow to be economic records that serves the purposes of the customers of this facts.
3. Talk processed facts to stakeholders thru a set of monetary reviews.

The above steps are representative of the core components of the system in terms of data entry, operation, processing and thus obtaining the outputs represented in the financial reports.

Accounting Information Systems is study of modern information systems is that important and necessary in the current era, which is the age of technology and computer. It has been in the past reliance in the operation of the accounting system on manual data processing because of the lack of modern technologies, but with the rapid development in the world of computers has become a trend towards the operation of the information system through the computer.

It is clear from the above that the accounting information systems seek to achieve the specific objective of providing the necessary information (financial and quantitative) in order to provide beneficiaries (internal and external) to help them in making economic decisions [19].

The delivery of information to the beneficiaries is an essential level for the electronic accounting records structures, which can be exposed to many dangers to the safety of the digital accounting statistics systems, the most crucial of that's the destruction or robbery of these outputs or the unauthorized copying of those outputs or delivery to persons no longer entitled to them get right of entry to them, and consequently the leakage of that facts influences the safety of the electronic accounting records structures of the organization.

VI. RISKS OF ELECTRONIC ACCOUNTING INFORMATION SYSTEMS

Digital accounting statistics systems are one of the systems that face many risks that can affect the achievement of the targets of these systems due to their dependence on the laptop, in which the super development of computer systems and records systems coincided with the development in records era and the rate of the spread of this information and use electronically, using digital information many risks and issues affecting the security of data, whether or not those dangers intentional or unintended [20].

Therefore, there is growing interest in providing the means and methods necessary to protect the information systems and control their operations and to ensure the continuity of the work of these systems properly and in the required manner designed for them.

Facts security records protection is described from an academic factor of view as "science that examines theories and strategies to provide records safety towards threats to it and assaults against it." from a technical point of view, statistics safety is described as "the method, gear and methods vital to make sure the protection of records from threats." [21]. from a criminal viewpoint, information safety is defined as "the problem of research and measures to protect confidentiality and integrity of the content and availability of data and to

fight the sports of assault or the exploitation of their systems in the commission of crime [22].

Academic information security is defined as: "To examine the policies and strategies that should be pursued to protect information from the various attacks that may be exposed to them and the risks that may threaten them." [23].

Technically, information security has been defined as: "The set of means, measures and procedures that must be provided to ensure that information is protected from risks arising from both within and outside the protected information environment" [24].

Information security is also defined as "technical policies, procedures and standards that are used to prevent unintentional access, theft or destruction of records." [25].

Information security "is the policies, practices and technology that must be within the organization to trade business movements electronically over the networks with a reasonable and assured security, this security applies to all activities and movements and electronic storage and to business companies, customers, regulators and anyone else could be at risk of penetration. The definition focuses on the technical security of information and focuses on providing policies and procedures to protect information [26].

The cyber security and information protection is a science that research the theories, techniques and legal guidelines which might be worried with defensive statistics protection from the dangers that it could face, applying the manner, techniques and approaches essential to offer such safety, confronting and overcoming dangers, and enacting strict legal guidelines to prevent and punish such dangers in the destiny. the software of facts safety in all components of clinical, sensible and felony has a widespread effect on growing self-assurance in the accounting data gadget.

Elements that assist penetrate the accounting data gadget, [27]:

Electronic accounting facts systems are much less comfortable than manual records systems, due to the reliance of electronic accounting structures to save their statistics in digital documents that a large quantity of human beings can get admission to and view, therefore, the digital accounting statistics structures had been uncovered to many risks that may threaten its safety because of more than a few the elements are as mentioned:

1. Electronic information systems contain a huge amount of data and therefore it is difficult to make hard copies of them.
2. The difficulty of detecting errors resulting from the change in the electronic accounting information system because it cannot deal or read their records only by the computer, which does not detect any change.
3. Difficulty reviewing the procedures that are done through the computer because they are invisible and invisible.
4. Difficult to change automated systems compared to manual systems.
5. The potential of automated systems to be misused by non-FAO experts if they are called upon to develop systems.
6. Risks to automated systems can destroy all FAO records and are therefore more dangerous to automated systems than manual systems.
7. Reduced documentation through which the system can be reviewed leads to low manual security.
8. The potential of automated systems to occur errors or misuse of the system in the process of data operation because of the multiple operations in the automated system.
9. Poor control of the automated system due to the user's direct connection to the information systems.
10. Technological development in remote communication has facilitated the process of connecting to information systems from anywhere and hence unauthorized access or misuse of information systems.
11. The use of many applications in different locations of the same database leads to the possibility of hacking computer viruses and thus the possibility of destroying or changing the database of the information system.

Through the above the control of the institution must work to protect its facts in all forms, whether or not paper or non-paper, and that the electronic accounting statistics gadget is more inclined than other structures and therefore the control need to placed regulations on users to restriction the opportunity of manipulation and/or tampering with information from events inner or outdoor the organization.

risks to electronic accounting facts systems: information safety is a critical trouble in all levels of the coaching of accounting records systems. statistics and records safety has emerged as one of the most critical factors of manipulate to be implemented to statistics through continuous making plans all through the lifestyles cycle of the accounting records systems used.

Intended risks are considered to be riskier to the performance of systems effectiveness and are even extra in electronic systems. the seriousness of statistics safety troubles lies in numerous aspects, such as lowering the overall performance of computer structures, or sabotage completely which leads to disruption of essential offerings to the power, even as the other facet involves the confidentiality and integrity of records where get entry to eavesdropping on private statistics or trade. tremendous cloth or moral losses [28].

The risks of threats to the security of electronic accounting information systems from unique views to numerous kinds, [29]:

1. Internal risks (Internal): The employees of the establishments are the main source of internal risks to the electronic accounting information systems because the employees of the establishments are aware of the information system and more familiar with the control system applied by the enterprise, and know the strengths and weaknesses and shortcomings of this system and have the ability to deal with and access to information from Therefore, non-trustworthy employees of the company have access to the data and can destroy, alter or alter it.
2. outside dangers (external): they may be human beings outside the ability who have no direct connection to the ability, such as hackers and competitors who try to breach the machine's protection controls so that it will gain personal data approximately the facility or may be represented by way of herbal failures such as earthquakes, volcanoes and floods, which can also motive partial or overall destruction of the device inside the facility.
3. human risks: these errors can be caused by men and women deliberately and with the aim of cheating and manipulation or inadvertently due to lack of awareness, omission or blunders.
4. non-human risk: those are risks which can arise because of herbal disasters to which human beings haven't any relation, including earthquakes, volcanoes and floods, which might also harm the system as a whole or a part of it [30].

a. Risks resulting from deliberate (intentional) actions: It consists in the actions of the person intentionally such as entering the wrong data and he knows that, or his destruction of some data intentionally in order to cheat, manipulation and theft, and these risks are very risks to the system.

b. dangers from unintentional conduct: it's far the conduct of folks who are ignorant and no longer knowledgeable, along with misrepresenting information due to the fact they do now not understand the way to input or neglect the registration technique. these dangers are less harmful than meant due to the fact they can be repaired.

c. risks ensuing in material harm: these are the dangers that lead to harm to the device and computer systems or destruction of the means of storing records, which can be caused by herbal screw ups unrelated to mankind or can be because of human intentional or spontaneous manner.

d. technical and logical risks: dangers springing up from occasions that may affect the facts and its accessibility to folks authorized to achieve this whilst wanted, or to disclose exclusive data to unauthorized people, together with thru disruption of laptop memory or the creation of pc viruses which can corrupt records or part of it, and people dangers can also affect the competitive position of the organization. the foregoing dangers can be resulting from an attacker researching the organization's generation waste from rubbish and deserted papers so that you can achieve any information that would compromise the system to obtain passwords recorded on dumped papers or replaced tough disks, or some other facts that contributes to the penetration of the gadget.

e. Input risk: These are the risks resulting from the failure to record data in a timely and correct manner or the lack of accurate data transmission through the communication lines.

VII. RESULTS AND RECOMMENDATIONS

This study has reached a set of results, which is the sum of the analyzes and discussions in addition to the results of testing the hypotheses.

1. Systems associated with the Internet are more susceptible to viruses than systems not associated with the Internet.
2. Adoption Institutions heavily in its work on the automated system and thus save time and effort in the work.
3. Risks of unintentional introduction, employee involvement in password, and data and information to unauthorized persons may occur more than once a month to once a week.
4. Good management can reduce or reduce the risk of accounting information systems.
5. The application of IT security measures minimizes the risk of accounting information systems.

After reviewing the results of the study, the set of recommendations as follows:

1. It's miles vital that the senior control of banks support their records protection and paintings to establish a unique information generation branch in all banks and offer specialized team of workers in information generation to have representatives in branches with excessive enjoy and efficiency with a purpose to paintings to shield the security of accounting facts structures at banks.
2. Developing the banking network and connecting it to the internet in order to enable customers to execute their services easily and quickly without any delay, but with the provisions of banking supervision on the bank's network and setting restrictions that limit the attempt to penetrate the bank's network and obtain any information unlicensed to obtain it.
3. The banks need to establish a special section of information technology in all banks so that they have representatives in branches with experience and high

efficiency in order to work to protect the security of bank information.

4. Develop procedures to ensure the continuity of work and the readiness of information systems to work in the case of crises through the use of impervious or arranged equipment so that it can detect risks before they occur and reduce their occurrence.

5. Encrypt or encrypt information when storing, transporting and storing on different media so that no one can penetrate it.

6. Raising awareness of public and private institutions on the importance of security and information systems Setting a security policy for its information systems.

7. Establish security controls and control of all forms of information, whether paper, telecommunications and the Internet, and work on enacting the necessary legislation for information security, information systems and networks.

8. The need for a comprehensive security protection plan, which is reflected in the decrease in costs resulting from the use of partial security solutions

9. Work to clarify all security practices accepted in information systems at all levels of management, and then raise the volume of confidence in the management of institutions effectively protection measures and measurability.

10. Supervising the proper application of security procedures of information systems.

ACKNOWLEDGEMENT

This research was supported by foundation from Universiti Sultan Zainal Abidin (UniSZA), therefore we thank our Universiti Sultan Zainal Abidin (UniSZA) that provided insight and expertise that greatly assisted the research.

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