

INFORMATION TECHNOLOGY AUDIT BY INTERNAL AUDITORS

SHABAN MOHAMMADI¹, ALI MOHAMMADI² & MINA ALMASI³

¹Department of Accounting, Hakim Nezami, University of Quchan, Iran ²Department of Accounting, Quchan Branch, Islamic Azad University, Quchan, Iran ³Department of Management, Hamedan Branch, Islamic Azad University, Hamedan, Iran

ABSTRACT

In this paper, the objective pursued, the first objective is to provide the estimated time that the internal auditors on audit organization's IT (Information Technology) spend. the second objective of this paper is to identify the key variables associated IT audits by internal auditors. because this study is to investigate the use of sophisticated information technologies in order to maintain a competitive advantage and to realize the economic benefits is essential.

KEYWORDS: It Audit, Internal Audit, Information Systems, Certified Chartered Accountant

INTRODUCTION

The staff at various levels of the business units to perform daily activities of their IT systems. In fact, electronic documents are replacing paper documents. In fact, it can be difficult to find companies that at least one of the areas of financial reporting, operational and compliance purposes, they should not use the information. computer information systems and information technology have become an essential component of most organizations. consequently, in cases such as for ensuring that systems are controlled enough, safe enough, and as i mentioned, the act is required for IT audits. thus, factors that are associated with this type of audit, are important. curtise and colleagues (Curtise et al., 2009) observed that the Supervisory board on account of public companies require auditors to the need to develop and maintain internal controls and auditing skills in the field of IT systems has. in addition, the Sarbanes Oxley Act (Sox) complete reliance on external auditors to provide guidance to companies in the field of IT audits is difficult. due to the nature of information systems within the organization, responsibilities are increasingly responsible for internal auditors to audit the organization, while Sachs (2002), put heavy pressure on internal auditors within the organization is (Smart Pros, 2009).before Sachs (2002) were common in organizations that independent auditors to assist in the planning, implementation and control system audits, including audits of information technology use. but Sachs (2002), the situation has changed in two important ways. first, the incumbent auditors, other authorized to provide specific services, such as financial information systems design and implementation of internal audit outsourcing services are (SOX, 2000); second, Sachs (2002), exclusively the responsibility of documenting and evaluating the systems of internal control to the management of outsourced which in turn delegated this responsibility to the internal auditors have significant costs (Aguilar, 2006).because internal auditors are increasingly recognized as an effective mechanism of corporate governance, internal audit, significant costs in many organizations is inevitable. Sachs major stock exchanges such rules and regulations by the New York Stock Exchange for companies listed on the stock exchange has created a limited space to avoid the cost of internal audit in America. also, the laws of many other countries such as the UK and Australia, all companies to have an internal audit has been encouraging. considerable costs of internal audits, are related to the complexity of modern information technology, so that investments

in companies with high rate have increased during the past decade. to accomplish the second goal of the research is to investigate the variables that potentially with IT audits conducted by the internal auditor associate. IT audits include aspects of computer information systems, evaluation, proper implementation, operation and management of computer resources (Hall and Singleton, 2005). IT audits also included the evaluation of information systems by reviewing documents, personal interviews and review of large data sets using computer programs. auditing standards require an IT audit should be performed when:

- Customer use of complex business systems and relies heavily on IT controls.
- Customer many changes in IT systems are created or replaced.
- The client has been widely shared data between internal organizational systems.
- Customer use of emerging technologies.
- high level of audit documentation is electronic.

In the next sections, respectively, on the concept and definition of IT audit, IT audit due to the types of IT audit and risk factors associated with IT audit by the Internal auditor discussed.

IT Audit and it's Definition

Audit of Information technology was first introduced in the mid-1960s. Since then it has had a tremendous advances in information technology have occurred. with the arrival of these new technologies in the field of trade, huge changes in information technology audit coatings. IT audit, IT-based system to help auditors in the process of planning, executing, controlling, and directing the audit is completed. advances in information technology have led firms to conduct trade of new tools such as electronic exchange of data and databases used. In fact, users demand the audit profession has changed and they want to know what the comments are corporate auditors about the reliability of data updates. so we can say that the progress of information technology has increased the demand for IT audit. audit IT audit and audit automatic processing of computer data call. this type of audit, an audit of the electronic data processing is also called. IT Audit, enables auditors to audit issues directly and through modern communication tools to access. In fact, today many companies use different systems for processing electronic data processing accounting data, the only way to check and validate reports, audit information technology. IT audit or audit of information systems, IT infrastructure is a test of controls. In fact, systematic process of collecting and evaluating information technology audit objective evidence supporting one or more claims of the information systems, procedures and operations of an organization. assessment of evidence obtained during the audit shows that information systems are safe, properly maintained and operation data in an efficient organizational goals are met. This type of audit may coincide with the audited financial statements, internal audit, or other forms of accreditation services to be performed. IT audit should not be confused with the financial audit. although there may be some slight similarities exist between the audit, but the goal is primary a financial audit, assess whether the financial statements of a company with accepted accounting principles and standards compliant or not. The main tasks of an IT audit, evaluation of system performance and security programs, especially the ability of organizations to support transmission and distribution assets and correct information between authorized persons. However, the question that arises is that the IT auditor should be what kind of experience? the answer is specialized in the field of IT audit, there is no experience require this type of audit. IT auditors as auditors of the financial or operational start, while others come from other professions IT audit IT. however, the association for information systems audit and Control for IT auditors globally

recognized certification as a certified Information systems auditor grants. the title suggests that professionals get past the hard test and gain experience, training and personal competencies, skills needed to do something that they expected to obtain and have. IT audit to be "the process of gathering and analyzing evidence in IT environments to achieve the goals of pre-defined audit" defined. audit objectives vary depending on the nature of the audit. the financial audit, the primary objective of the audit report, an independent report on the integrity and fairness of the financial statements will be audited entity. however, if the activities of the unit so remarkable computerized audit, the auditor should be to what extent the IT system relied on the opinions of professional. of the auditor's procedures and actions to achieve such a comment is assumed, the so called IT auditing, the Information systems audit completely generalized because of the complexity and cost of large-scale information systems. as time goes beyond information-processing computer to perform a task. computers were initially used only in large organizations that charge high prices and exorbitant costs of their operations on coming, the advent of microcomputers and the rapid decline in the price of computer technology, intermediate institutions are also able to use the advantages of computers in processing the data. even in small organizations and small broad access to powerful computers and computer software packages has led to the widespread deployment. as a result, auditors are increasingly faced with the challenge of gathering audit evidence of the IT environment. the large number and variety of risks need to audit the IT people.

A Variety of Factors Related to IT Auditing

Professional audit, IT audit have been introduced to different categories, but three regular and special way to carry out an audit of information technology there. First, the audit process of technological innovation. the purpose of this audit, planning is a form of risk for current and future projects. the audit examined the types of technologies used by the company and also to assess the market for these technologies, organization and evaluation of each project component industries of the project or product related organizations, groups. other forms of information technology audit, the audit of innovations. the audit, as the name implies, means of innovation capabilities of audit firms compared to other competitors. this type of auditing, research facilities and research and development company to test and evaluate the evidence supporting the new products generated deals. The third form of IT audit, audit technological status. the audit also technologies that already exist in the companies and technologies that the company needs to achieve it, check. section 404 of the Sarbanes Oxley Act, requires that managers limited effectiveness of internal control systems in their organization over the course of financial reporting and the independent auditors to assess the effectiveness of the systems of internal control requires to verify. due to the increasing use of sophisticated technologies such as enterprise resource management systems by companies, evaluating the effectiveness of internal controls increased use of IT audit procedures need to.Gelinas and colleagues (Gelinas et al., 2008) believe that Sachs (2002) the importance of knowledge related to accounting information systems for auditors has increased. similar laws in other countries (such as law firms in Australia and the UK) is responsible for management and auditors with respect to the internal control systems has increased. While Gelinas and colleagues (2008) primarily related to the importance of accounting information systems refer to independent auditors, the internal auditors have expressed similar argument could be made, so that the internal auditor's knowledge and expertise can help manage the system organizations to accomplish the sax section 404.I presented the results of a skill set by Bush, broad. although he stated that the level of IT skills are necessary for the auditor to believe that at least 25% of the stated conditions requires an amount of experience. these findings indicate that the IT skills that have been identified by Bush I may auditors IT professionals with different ratings and different experience levels are used. IT audit skills largely because IT auditors to audit and should be in the field of information technology and professional expertise. Information Systems

audit and control association, in addition to rigorous testing requirements for certification as an auditor to confirm information systems, having at least 5 years of experience as an imperative. also from an audit perspective, internal auditors that are customary audit compliance, operational and financial organizations do, you may need to have professional expertise in information technology, so that the implementation, operation and maintenance of IT systems in an organization, have the skills. If internal auditors have the skills, you will likely be able to perform IT audits and if unable to do so is not audited by other sectors such as IT (Information Systems Management) have been outsourced or done or jointly outsourcing is complete. thus, we can conclude that the knowledge and technical skills essential for IT audit. substitute for technical knowledge, professional certificates such as certificates of Information Systems Auditor, certified internal auditor or chartered accountant is issued by professional organizations or regulatory. (Tubbs, 1992; Janvrin et al., 2008), for example, evidence from the literature suggests people who have a record chartered accountant or Certified information systems auditor, they are compared to those without these documents, they will have more progress. (Wier et al., 2000) 85 percent of the jobs auditors are attributed to the in information technology, the need for or professional certificates are to be preferred to have the documents and certificates, or the way work is required to obtain these documents. this evidence suggests that the relevant professional certification such as certified Information Systems auditor or certified Internal auditor or certified management accountant, is directly related to IT auditing, but as previously mentioned, in addition to IT auditors specialized IT knowledge, skill sets needed for financial audit. Information systems audit and control association of additional skills and knowledge that is responsible for the certification audit, information systems, information systems auditor certification test are more related to time spent internal auditor by the audit information is. but since the certificates certified Internal auditor and certified management accountant general nature (eg the certification audit, information systems tend to have fewer IT), IT audit them regularly and not associated with the rule.topics related to professional certificates, continuing professional education as an important factor to prepare for audits of internal audit at the same time as the IT audit. continuous professional training in many professional organizations (such as the America society of certified public accountants, Institute of internal auditors) a requirement to maintain professional certification. for example, the institute of Internal auditors standards require that Internal auditor shall be 24 months, 80 hours of training. but probably the only part of continuing professional education that focuses on information technology, for internal auditors to audit information is useful. Internal audit, IT audit is directly related to age. some researchers believe that the audit senior managers in determining the duration of the assignment given to the various types of audits, including audits information technology, power and influence are more likely to be experienced audit Senior managers, who are interested in serving more time on traditional audit to audit IT, other factors linked with IT audit, the size of the organization. larger companies may spend more time IT audit to smaller companies. the auditors who have a bachelor's degree or higher, compared to those who were undergraduate students, more time was spent on IT auditing.

CONCLUSIONS

In this paper, the use of the literature, factors associated with IT audit by internal auditors identified. certified information systems auditor's findings show a direct relationship with the IT audit. therefore, it is reasonable to conclude that an increasing number of professionals in the information systems auditor internal auditor certification, resulting in a corresponding increase in IT audit will. certifications, certified Internal auditor and certified management accountant, an important relationship with their IT audit, IT audit is inversely related to the CPA certification. since many of the organizations internal auditors from the candidates certified accountant or other expert employ certificates, the question is whether, considering the inverse relationship between certification and audit conducted chartered accountant, certified

chartered accountant with more and more information systems auditor should be employed under whether for more investigators are needed to answer this question. another finding is that education at the basic level or at the level of expertise is directly related to IT auditing. research also indicates a direct effect on the internal auditor audits the age of information technology. Internal auditor older, more time is spent on IT auditing. finally, a similar topic for future studies could examine the differences in IT audit by various industries. For example, one would expect the IT audit by the internal auditor in technology companies, the larger of the audit in government departments.

REFERENCES

- 1. Abdolmohammadi M.J., S.R. Boss,(2010), Factors Associated with IT Audits by the Internal Audit Function, International Journal of Accounting Information Systems, 11, pp.140-151.
- 2. Curtis M.B., J.G. Jenkins, J.C. Bedard, D.R. Deis, (2009), Auditors' Training and Proficiency in Information Systems, a Research Synthesis, 23 (1), pp.79-96.
- 3. Gelinas J.R., D.L. Schwarzkopf, J.C.(2008), Thibodeau, Introducing Students to the Integrated Audit with Auditing Alchemy, Inc, J InfSyst, , 22, pp.70-151.
- 4. Janvrin D., J. Bierstaker, D.J. Lowe,(2008), An Examination of Audit Information Technology Use and Perceived Importance, AccHoriz, 22, pp.1-21.
- Merhout J.W., S.E. Buchman, (2007), Requisite Skills and Knowledge for Entry- Level IT Auditors, J In SystEduc, 18: 469-77.
- 6. Ranganathan C., C.V. Brown,(2006), ERP Investments and the Market Future of Firms: Toward an Understanding of Influential ERP Project Variables, InfSyst Res, 10 (1), pp. 73-85.
- Tubbs RM, (1992), The Effect of Experience on the Auditors Organization and Amount of Knowledge, Acc Rev, 67: 783-801.
- 8. Wier B., J.E. Hunton, J.D. (2000), Beeler, The Impact of Higher Education and Professional Certification on the Careers of Information Systems and Non-Information Systems auditors, InfSyst Control J, 5, pp.38-41.