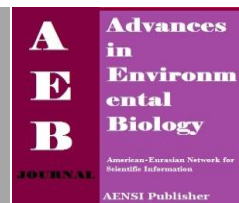




AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: <http://www.aensiweb.com/aeb.html>

Information Technology (It) Audit Software Adoption: Discussion on Its Impact from the Perspective of Four Different Countries

¹Siti Norwahida Shukeri, ²Wan Nordin Wan Hussin, ²Norhani Ariffin

¹School of Business Innovation and Technopreneurship, UniMAP Kangar, Perlis, Malaysia

²College of Business, UUM Sintok, Kedah, Malaysia

ARTICLE INFO

Article history:

Received 25 January 2014

Received in revised form

2 June April 2014

Accepted 6 June 2014

Available online 15 June 2014

Key words:

IT Audit software, Internal Audit Function, Malaysia

ABSTRACT

The audit process is evolving from the manual audit of accounting systems with paper documentation to on-line and paperless system. Auditors are realizing that manual audits are not efficient and effective (Rezaee, Elam and Sharbatoghlie, 2001). By seeking new uses for computers and communications, auditors improve their ability to review systems and information and manage their activities more effectively. Automated tools allow auditors to increase individual productivity as well as their audit function. The aim of this paper is to provide a review of the adoption of IT Audit Software among auditors in four different countries; Arab Saudi, Norway, United Kingdom (UK) and United States. This paper shed light on advantages and disadvantages of adopting information technology (IT) in auditing process.

© 2014 AENSI Publisher All rights reserved.

To Cite This Article: Siti Norwahida Shukeri, Wan Nordin Wan Hussin, Norhani Ariffin, Information Technology (It) Audit Software Adoption: Discussion on Its Impact from the Perspective of Four Different Countries. *Adv. Environ. Biol.*, 8(9), 455-458, 2014

INTRODUCTION

The importance of information technology (IT) auditing has grown with increased reliance on IT for business operations and new regulations regarding the assurance of IT for these operations. IT increases the accuracy and speed of transaction processing and can even lead to competitive advantages. In auditing profession, reliable audit software to detect misstatement and fraud are highly needed. Auditing is a very time consuming and resource intensive process. Organizations normally conduct audit process based on periodic scale because of high cost for human capital and due to resource constraints; many organizations audit only the most risky transaction based on the risk detection. Various computer-assisted auditing tools and techniques (CAATs) have been developed to assist auditors in performing audits on computerized accountancy data [2]. Availability of newest audit software and latest information and communications technology (ICT) tools has made audit process efficient and less labor intensive. For that reason to improve the auditing profession, it is possible to have appropriate automated system and audit software in place for continuous monitoring, risk management and assurance of good corporate governance within the organization [12].

Factors that give an influence to the internal auditor to use IT software are normally based on it perceived benefits. Organization has improved their information systems to implement new technologies that provide more control over the processing of economics transactions [5]. The usage of IT in auditing process not only provide more control but also its adoption will likely to have improved control and monitoring activities which eventually provide better prevention and detection of misstatement. Such proper monitoring is needed by the internal audit function to ensure the quality of financial reporting and give public confidence towards the work of auditors.

However, the pace of IT penetration in accounting audit process has been slow, and research on IT adoption in auditing also is still limited and far between. Curtis and Payne found that the adoption of CAATs to improve efficiency and effectiveness of audit engagements is still under-utilized in public accounting firm. To reflect the true demand of financial reporting fraudulent detection mechanism especially after the Enron incident, the adoption of IT in audit process supposed to be in place since before. Lack of adoption of IT in accounting audit directly inhibits the realization of benefits that IT auditing software can bring and promise. Immense emphasis has been given to leveraging IT and implementing IT security and privacy. Not only that, in order to improve the effectiveness of audit process, various accounting body and regulations has put more regulations and specific guidance on the use of CAATs such as ICASA, 1998, IAASB, 2003a and AASB, 2001).

Corresponding Author: Siti Norwahida Shukeri, School of Business Innovation and Technopreneurship, UniMAP Kangar, Perlis, Malaysia
Tel: +604 979 7720 Email: sitonorwahida@unimap.edu.my

The remainder of this paper is as follows: In the next section, a review of literature regarding IT audit and financial reporting quality will be discussed. Next section discusses on the research methodology and followed by the discussion and analyses of the impact of IT audit software adoption on financial reporting quality. Last part provides some concluding comments and future research suggestions.

Background and Literature Review:

Given the tremendous growth in the use of information technology by all types of organizations since the late 1980s, it is important for researchers and practitioners to examine more recent misstatement to ensure high quality of financial reporting disclosed to public. Companies nowadays have revised their information systems to implement more powerful and sophisticated technologies and software that provide more control over the processing of business transactions [10]. Those systems benefited the users on its ability to limit the occurrence of misstatements in the processing of transactions.

A study by Messier *et al.*, [10] examined whether the usage of information technology used by the auditors affect the audit procedures. The study also investigated whether the causes of misstatements are different if the auditors are not using computerized system in audit process. Basically what the study seek to explore is to find out whether the adoption of any computerized accounting software can help auditor to detect misstatement and to what extent does that accounting software able to influence their audit process and procedures. The study examined on the six public accounting firms in Norway which include Big 5 and largest national firm where they are agreed to provide data on a misstatement from a sample of their clients. The study found out that there has been significant change in the cause of misstatements and the procedures to detect misstatements. The study has met the initial objective where they hypothesize that the adoption of information technology in auditing procedures and process will have a positive impact in detecting misstatement. The study also found that the adoption of information technology have an impact to the way of auditors do their audit work. Missing and poorly designed controls and excessive workload for accounting personnel was more likely to be causes of misstatements in computerized business process than those that not being computerized.

One of the well-known and widely used information technology (IT) audit software by the auditors is Generalized Audit Software (GAS). GAS is the tool used by auditors to automate various audit tasks. As most accounting transactions are now computerized, auditing of accounting data is also expected to be computerized as well. Ahmi and Kent, [2] investigated the utilization of GAS by external auditors in the UK. This study has provided a summary of previous literature on GAS and study by Bierstaker, Burnaby and Thibodeau showed that without new software technology, the company takes two or three years to completely transfer their old software to enterprise wide computing platforms. Thus it shows that old software delay the work of accounting personnel. The study from the UK by Ahmi and Kent, 2013 shows that the usage of GAS is relatively low where about 73% of their auditors make no use of GAS. Among the reason investigated is because of lacking in terms of the personnel's experience regarding the system and the learning curve and audit process is lengthy which will increase costs and became a strong reason why the company did not use the IT audit software.

The usage of IT audit software is also widely applicable to financial services sector since this type of organizations involves directly and widely with the information system and technology. Thus to audit these companies, the auditors definitely require a sophisticated and powerful software. A study by Debreceeny, Lee, Neo and Toh, [4] examined the nature and extent of the utilization of CAATs, one of the powerful IT audit software in financial institutions in United States. The impact of using CAATs is the auditor can formulate a range of alternative hypotheses for a particular potential misstatement in the subject matter and then test those hypotheses immediately using datasets drawn from the accounting information system. The extensive use of information system available online such as online internet banking resulted in the extensive use of IT audit software by the auditors in banking industry. Some of the tasks that facilitate the audit process include verifying extensions and footings, re-performing a variety of calculations, detecting of any unusual transactions, do the aging analysis of accounts like loan receivables etc. Basically the impact of adopting the IT audit software is pervasive and have more pros compared to its weaknesses.

Razi and Madani, [12] have done a study from the context of Saudi Arabia perspectives. They examined the factors that influence the adoption of audit software in Saudi Arabia. Factors such as perceived benefit, organizational readiness, external pressures, financial cost, competitive pressure, government pressure and security has become an essential means of converting to more sophisticated audit software. The impact of adopting IT audit software is the system is protected against unauthorized physical and logical access and also the system of IT audit software is definitely complete, accurate, timely and in accordance with the entity's transaction approval. Thus, it will give a positive effect to the audit process and procedure and resulted in high quality of financial reporting.

Research Methodology:

The study has been designed to review four main previous studies on audit software from four different

countries; United Kingdom, Saudi Arabia, United States and Norway. We conducted a review on its objective, scope of study, data collection process and their findings.

Discussion and Analysis:

From the above discussion, it can be highlighted that the impact of the adoption of IT audit software are pervasive. A study from Saudi Arabia showed that the perceived benefits of the system allows no unauthorized users to access the accounting system of an organization. Apart of that, the system also allows timely audit process and complete audit process, which resulted to good quality of financial reporting. In Norway, their auditors believe that the adoption of IT audit software help them to detect misstatement within timely manner and usage of those system also change their ways of doing auditing. Whereas in United States, their auditors believe the impact of using CAATs is the auditor can formulate a range of alternative hypotheses for a particular potential misstatement in the subject matter and then test those hypotheses immediately using datasets drawn from the accounting information system. However, study in United Kingdom by Ahmi and Kent, [2] showed different results where they found about 73% of their auditors make no use of GAS. The underlying reason is because of high cost to adopt and less number of experienced IT personnel to work on new software. However, their auditor believes that the use of IT audit software make the auditor's work more faster and reliable.

Conclusion and Future Research Suggestion:

This study is significant as it has several implications for research. Firstly, it provides further evidence on the benefit of IT audit software in reducing the incidence of management fraud or reporting irregularities. This has implications for regulators. Regulators can consider key attributes in setting up the internal audit committees with necessary pre requisites such as to include academic qualification and professional training regarding IT Audit. Following this, policy makers can ensure mechanisms are in place to train potential internal auditor or existing internal auditor to acquire the attributes of the internal audit experts, and hence add value to the financial reporting quality. Furthermore, the accounting profession and market regulators can determine ways to enhance internal audit performance and improve the reliability of financial reporting [9] as well as improving the quality of the accounting profession.

To date, there appear to have been very few research studies conducted in relation to the IT Audit of private sector companies and because of this limited study conducted, this study propose to future research to further investigate the empirical evidence on the relationship between IT audit software and financial reporting quality. To the best of our knowledge, none of the studies in Malaysia have carried out research in relation to the audit technology i.e IT Audit with financial reporting quality. It is hoped that this study reflect to the regulator's demand towards the prevention of corrupts and fraudulent activities within the organization.

Quoting from the Governor of the Institute of Internal Auditors Malaysia, Ranjit Singh said there needs to be a system in place to identify fraud and ensure issues are raised, before it occurred. In this respect, the internal auditor's role in relation to fraud risk management becomes important. Thus, we believe that this study is the right platform to improve the effectiveness of internal auditors.

ACKNOWLEDGMENTS

Special thanks and dedication goes to the Ministry of Education, Malaysia for funding this research project under the "Fundamental Research Grant Scheme 9003:00370)" to allow this project run smoothly.

REFERENCES

- [1] Md. Ali, A., A. Ahmi, A. Ali and M.Z. Ghazali, 2009. Internal Audit in the Federal Organizations of Malaysia: is there light at the end of the long dark tunnel?. *The Southern African Journal of Accountability and Auditing Research*, 9: 23-38.
- [2] Ahmi, A. and S. Kent, 2013. The Utilisation of Generalized Audit Software (GAS) by External Auditors. *Managerial Auditing Journal*, 28(2): 88-113.
- [3] Azham, M.A., J.D. Gloeck, A. Azharudin, A. Aidi, H.S. Mohd., 2007. Internal Audit in the State and Local Governments of Malaysia. *The Southern African Journal of Accountability and Auditing Research*. 7: 25-57.
- [4] Debreceeny, R., S. Lee, W. Neo and J.S. Toh, 2005. Employing Generalized Audit Software In The Financial Services Sector: Challenges and Opportunities. *Managerial Auditing Journal*, 20(6): 605-618.
- [5] Elliott, R.K., 1994. The Future of Audits. *Journal of Accountancy*, 178: 74-82.
- [6] IFAC, 2009. IAESB Proposed Framework for International Education for Professional Accountants Exposure Draft. IFAC, USA : New York. Retrieved on September 20, 2009, from <http://www.ifac.org>.

- [7] Jackson, R.A., 2004. Get the most out of audit tools. *Internal Auditor*, 61(4): 36-44.
- [8] Vasarhelyi, M.A., M. Alles, S. Kuenkaikaew and J. Littley. The acceptance and adoption of continuous auditing by internal auditors: A micro analysis. *International Journal of Accounting Information Systems*, 13: 267–281.
- [9] McMullen, D. and K. Raghunandan, 1996. Enhancing Audit Committee Effectiveness. *Journal of Accountancy*, 182(2): 79–84.
- [10] Messier, F.M., A. Eilifsen, and L.A. Austen, 2004. Auditor Detected Mistatements and The Effect of Information Technology. *International Journal of Auditing*. 8: 223–235.
- [11] Moorthy, M.K., A. Seetharaman, Z. Mohamed, M. Gopalan and L.H. San, The impact of Information Technology on Internal Auditing. *African Journal of Business Management*. 5(9): 3523–3539.
- [12] Razi, M.A. and H.H. Madani, 2013. An Analysis of Attributes That Impact Adoption of Audit Software – An Emprical Study in Saudi Arabia. *International Journal of Accountinh and Information Management*. 21(2): 170–188.
- [13] Roufaiel, N.S. and V. Dorweiler, 1994. White-collar Computer Crimes: A Threat to Auditors and Organization. *Managerial Auditing Journal*, 9(3): 3–12.
- [14] Zabihollah Rezaee, Z., R. Elam, A. Sharbatoghlie 2001. Continuous auditing: the audit of the future. *Managerial Auditing Journal*, 16(3): 150–158.
- [15] Zakaria, H.M.N., 2004. Tanggungjawab dan Cabaran Jabatan Audit Negara Kearah Meningkatkan Akauntabiliti Sektor Awam. Paper presented at the 2nd Profesional Talk Series entitled *Akauntabiliti Dalam Sektor Awam* organized by the IFSALGAR on 16 September at Universiti Utara Malaysia, Sintok, Kedah.