

# THE RELEVANCE OF COMPUTERIZED ACCOUNTING INFORMATION AND ITS EFFECT ON IMPROVING THE EFFECTIVENESS OF EXTERNAL AUDITING IN YEMEN COMMERCIAL BANKS: A SURVEY STUDY

Amro A. S. Alammari 1 🖾 🝺, Dr. Parameshwara 2 🖂

<sup>1</sup> Ph.D. Scholar, Department of Studies in Commerce, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India <sup>2</sup> Associate professor and Chairman, Department of Studies in Commerce, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India





Received 21 November 2022 Accepted 22 December 2022 Published 06 January 2023

CorrespondingAuthor

Amro A. S. Alammari, amro1988\_07@hotmail.com

**DOI**10.29121/granthaalayah.v10.i12. 2022.4966

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright:©2022The Author(s).This work is licensed under a Creative<br/>CommonsAttribution4.0International License.

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



# ABSTRACT

The main objective of this study was to investigate the relationship between the relevance of computerized accounting information and the effectiveness of external auditing in Yemen commercial banks. To achieve this goal, the study used a quantitative research approach, and 350 questionnaires were distributed to workers at the administrative levels in Yemen commercial banks and external auditing offices that audit banks. The number of rounded questionnaires valid for statistical analysis reached 300, i.e., 86% of the distributed questionnaires. The findings of the regression model show that the unstandardized coefficient B for the relevance of CAIS is 0.724, which is significant as the p-value is less than 0.05.and this signifies that one-unit variation (increase) in the relevance of CAIS leads to a variation of 0.724 units of variation (raise) in the effectiveness of external audits in commercial banks in the Republic of Yemen. It was concluded that the computerized accounting systems were designed with relevancy in mind, which reflected favorably on the effectiveness of the external audit. This indicates that the results produced by computerized accounting information systems are effectively relevant to the results produced by an external audit. Overall, the study suggests that in order to improve the effectiveness of external auditing in Yemen commercial banks, it is important to ensure that the computerized accounting information being used is relevant and accurate. Therefore, it is safe to say that there is a positive connection between the relevance of computerized accounting information and the external audit's effectiveness.

Keywords: Relevance, Computerized Accounting Information System, External Audit

## **1. INTRODUCTION**

Because businesses are becoming increasingly automated, as well as the enormous progress that has been made in electronic computer technology over the last decade, as well as the fundamental leap that has resulted from this development in the environment of accounting information systems since this technology helps a great deal in the operation of accounting data with high speed and high accuracy, as well as the production of quick reports Alammari and Parameswara (2021), as a consequence of this, the work of the accountant as well as the auditor changed in response to the introduction of computerized accounting information systems. This is because the work of the machine shortened a significant amount of human effort and made it more accurate in many instances; however, on the other hand, it made this work more complicated and required - whether from the accountant or Auditor - computer skills. As a consequence, the work of the accountant as well as the auditor changed in response to the introduction of computerized accounting information systems. Many controls over an organization's business processes are designed, implemented, and maintained by the information technology (IT) department. IT plays a crucial role in gathering, processing, and storing data that is summarised and reported in financial statements Cannon and Crowe (2004).

As a consequence of the adoption of the activities and transactions of the economic unit on the electronic computer, computerized accounting information systems imposed a new reality on the audit profession, and this led to the necessity for the audit profession and auditors to keep pace with this development Curtis et al. (2009). Auditing is crucial in organizations that use computerized accounting systems because it allows business owners (shareholders) to be assured that the financial statement that is provided to them is accurate Boynton and Johnson (2005). This is why auditing is necessary (present a true and fair view). According to Maigoshi et al. (2018), when accounting information is relevant, it can be used to see the future of accounting reporting. Therefore, it is the responsibility of the external auditor to carry out this obligation, which entails conducting an investigation of the transactions and presenting their findings to the shareholders as well as the general public.

Before businesses may utilize financial statements as a basis for decisionmaking, the companies need to first satisfy themselves that the statements are accurate. They do this by staffing the organization with auditors who perform independent appraisal functions established within an organization as a service to the organization to assist members of the organization in effectively discharging their obligations. These auditors are known as internal auditors Rahman et al. (2015).

To audit a computerized accounting system, the auditor needs to have a reasonable knowledge of the different kinds of hardware and software that are utilized in the company. As a direct result of the accounting scandals and the heightened restrictions, the field of information technology auditing has been going through an exciting period during the past several years Nelson (2017).

## **2. PROBLEM STATEMENT**

Companies and institutions have become heavily dependent on electronic technology and software applications to carry out their financial and administrative work, as well as the remarkable development in most different economic sectors and the consequent need for auditors to provide their services at the highest level of quality. This study, therefore, seeks to answer the following fundamental question:

What is the effect of computerized accounting information relevance on improving the effectiveness of external auditing?

### **3. OBJECTIVES OF THE STUDY**

The main objective of this study is to know the relevance of computerized accounting information and its effect on improving the effectiveness of external auditing in Yemen commercial banks, which has been identified through the following sub-objective:

- To assess the extent to which computerized systems are used to support the external audit process in commercial banks in Yemen.
- To evaluate the benefits and drawbacks of using computerized systems for accounting and external auditing in commercial banks in Yemen.
- To study the relationship between the relevance of computerized accounting information and improving the effectiveness of external audits.

#### 4. RESEARCH HYPOTHESIS

H<sub>1</sub>: There is a positive relationship between the relevance of computerized accounting information and improving the effectiveness of external audits.

#### **5. LITERATURE REVIEW**

Okoye and Tennyson (2011) conducted a study on the impact of computerized accounting systems on external audit functions in audit businesses based in Asaba, Nigeria. The researchers used a questionnaire to collect data from external auditors and employed the t-test to analyze the data. The results of the study showed that an auditor's computer knowledge plays a significant role in their ability to effectively audit a computerized accounting system, but that certain factors can serve as limitations to the effectiveness of the audit. The researchers concluded that in order to improve the effectiveness of external audit functions in a computerized accounting system, these limiting factors must be addressed. Kombo (2013) conducted a study on the effects of computerized accounting systems (CAS) on the auditing process at the Mtwara District Council (MDC) in Tanzania. The study had several specific objectives, including investigating the contributions of CAS to the effectiveness and efficiency of the auditing process, identifying factors that influence the effectiveness and efficiency of the auditing process in CAS, and identifying problems that organizations face in using CAS. The study used a sample of 30 participants and employed a combination of questionnaires, observations, and documentary footage to collect data. The results of the study showed that the contributions of CAS to the efficacy and efficiency of the auditing process were moderate and identified several factors that influence the effectiveness and efficiency of the auditing process in CAS, including knowledge of CAS, quality of audit planning, and stakeholder forces. The study also identified several issues that MDC faced in using CAS, including prices, competent people requirements, and employee password sharing. The researcher recommended that management focus on training employees to improve their abilities and ability to work in a computerized environment and that management also encourage the segregation of jobs to strengthen the internal control system. Ernest (2015) elaborated on detailed information about the concept of auditing to its relevance in a computerized accounting system. The study also explains briefly what computer, auditing, and computerized accounting system mean and looks at how to audit an accounting system that uses computers. The study also looked at the trend between accounting systems that are done by hand and those that are done by computers. Based on the The Relevance of Computerized Accounting Information and Its Effect on Improving the Effectiveness of External Auditing in Yemen Commercial Banks: A Survey Study

> results of this study, it can't be said enough how important auditing is in a computerized accounting system in a society with a lot of people, business institutions, etc. When computers were added to systems, they changed how data was stored, retrieved, and managed. The main goal of an audit is to carefully look over a company's financial records and reports and make suggestions for how the company can improve based on that review. At the end of the study, it is said that manual accounting will never be completely replaced by computerized accounting, even though computerized accounting has more benefits than manual accounting. Gardi (2018) conducted a study on the effects of computerized accounting systems (CAS) on the effectiveness and efficiency of internal audits at Zanko Bank. The study used stratified sampling followed by random sampling to select a sample of 35 employees, with 30 ultimately participating in the study. The researcher analyzed the data using correlation coefficient tests and descriptive statistics and used paired sample t-tests to determine the validity of the established hypothesis. The results of the study showed that CAS had a moderate impact on the effectiveness and efficiency of auditing by speeding up transaction processing and reducing errors. The study found that audit effectiveness had a major impact on the auditing process, while audit efficiency, significance, and other CAS issues had little impact. The study also revealed that the contributions of CAS were negatively correlated with audit effectiveness and severe difficulties but positively correlated with audit efficiency and other CAS problems. Liemmuel and Eriandani (2022) conducted a study on the effect of accounting information on market prices and whether audit quality and earnings management moderate this effect. The study included a sample of 1525 publicly traded firms listed on the Indonesia Stock Exchange from 2016 to 2020, with the exception of firms in the financial sector. The researchers used purposive sampling and tested moderated regression analysis to analyze the data. The results of the study indicated that accounting information, including earnings, book value, and operating cash flow, had a positive effect on stock market prices. Additionally, the type of auditor and audit opinion strengthened the correlation between earnings and stock prices but did not moderate the effect of book value or operating cash flow on stock prices. The study also found that earnings management weakened the effect of earnings on stock prices but did not moderate the correlation of book value or operating cash flow with stock prices. The researchers concluded that their study enriched the existing literature on the value relevance of accounting information and highlighted the importance of considering factors such as audit quality and earnings management in investment decisions.

> It appears that the literature review you have provided is a summary of a number of different studies that have been conducted on the relevance of computerized accounting information and its effect on improving the effectiveness of external auditing. These studies have generally found that computerized accounting systems can significantly improve the accuracy and timeliness of financial reporting and can significantly enhance the effectiveness of external auditing by providing auditors with greater access to relevant information and by helping them to more effectively identify and report on potential issues or risks.

> However, it is also clear from the literature review that there are a number of challenges and limitations that can impact the effectiveness of computerized systems in external auditing. These challenges include factors such as a lack of knowledge or expertise in using computerized systems, inadequate controls, and security measures, and the cost and complexity of implementing and maintaining these systems.

Overall, the literature suggests that while computerized systems can offer many benefits for external auditing, it is important for organizations to carefully consider the potential challenges and limitations and to implement appropriate measures to address these issues in order to maximize the effectiveness and efficiency of their external audit processes.

#### 6. RESEARCH METHODOLOGY

Research Design is the theoretical structure within which research is conducted. Research Design indicates the sapphire design of the collection, depth, and examination of data. The design includes an outline of what the researcher plans and frames research work. It explains how samples are selected, sample size determined, how statistics are poised, and which statistical methods are used for data analysis." A quantitative research approach is being used for the study as quantitative research enables the researcher to examine associations and differences among the variable. To carry out research effectively, data is collected from primary sources. The learning is centered on exploratory and descriptive research aimed at finding a solution for the stated problems with the help of formulated hypotheses based on techniques availability. For the analysis of the data, Multiple regression is used where one independent and one dependent variable are considered.

l able 1					
Table 1 Results of Multiple Regression					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	0.636	0.123		5.175	0.000
Relevance	0.724	0.061	0.564	11.790	0.000
Adjusted R 2	0.316				
R	0.564				
F	138.997				
Significant	0.000				

# 7. DATA ANALYSIS AND RESULTS

Source Field Survey

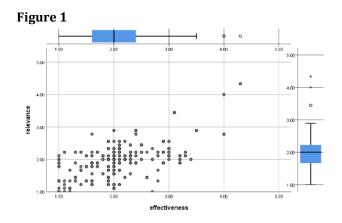


Figure 1 Scatter Plot to Show the Relevance of Effectiveness of External Audit

The regression equation created in relation to one independent variable can be expressed to predict the dependent variable as:

#### Effectiveness of external audits = 0.636 + 138.997 (relevance of CAIS).

Also, it could be seen from the previous table that the (t = 11.790), with p-value = 0.000) figures out that the predictor' relevance of CAIS' has a positive influence on the effectiveness of external audits in commercial banks in the Republic of Yemen.

On the other hand, the regression coefficient Beta is 0.564, which indicates that there is a strong effect, and this result is supported by a Pearson correlation coefficient (r = 0.564) between the related variables that have the same value of Beta. This proves that the relationship is genuine and not just by luck.

Additionally, the table above revealed the adjusted  $R^2$  value is 0.316. And this refers that if the 'relevance of CAIS' factor is taken individually, it contributes to the interpretation of 0.316 percent of the variation or change in the effectiveness of external audits in commercial banks in the Republic of Yemen, which is notable designated by the value of (F = 138.997 with a p-value less than 0.05). which was statistically significant.

The findings of the regression model show that the unstandardized coefficient B for the 'relevance of CAIS' is 0.724, which is significant as the p-value is less than 0.05.and this signifies that one-unit variation (increase) in the relevance of CAIS leads to a variation of 0.724 units of variation (raise) in the effectiveness of external audits in commercial banks in the Republic of Yemen.

This may be because the computerized accounting systems were designed with relevancy in mind, which reflected favourably on the effectiveness of the external audit. This indicates that the results produced by computerized accounting information systems are effectively relevant to the results produced by an external audit. Therefore, it is safe to say that there is a positive connection between the computerized accounting information relevance and the effectiveness of the external audit.

#### 8. CONCLUSION

Based on the findings of the study, it can be concluded that there is a positive relationship between the relevance of computerized accounting information and the effectiveness of external audits in commercial banks in Yemen. This is supported by the results of the multiple regression analysis, which showed that the relevance of computerized accounting information has a significant positive influence on the effectiveness of external audits. The findings also suggest that computerized accounting systems contribute to the efficacy and effectiveness of the auditing process by providing accurate and relevant information that can be used to improve the quality of the audit. It is recommended that commercial banks in Yemen continue to invest in computerized accounting systems and ensure that they are properly maintained and updated to ensure the relevance and accuracy of the information they provide. Additionally, it is important for auditors to have a good understanding of computerized accounting systems and their capabilities in order to effectively utilize them in the audit process.

#### **CONFLICT OF INTERESTS**

None.

#### ACKNOWLEDGMENTS

None.

#### REFERENCES

- Alammari, A. A. S., and Parameswara, A. (2021). General Control Methods In Increasing The Reliability of the Outputs of Computerised Accounting Information Systems: A Theoretical Perspective. Asia Pacific Journal of Research, 2 (Special Issue XV), 70-75.
- Boynton, W. C., and Johnson, R. N. (2005). Modern Auditing: Assurance Services and The Integrity of Financial Reporting. John Wiley and Sons.
- Cannon, D.M. and Crowe, G.A. (2004). "SOA Compliance : Will IT Sabotage Your Efforts?", The Journal of Corporate Accounting and Finance, 15 (5), 31-7. https://doi.org/10.1002/jcaf.20035.
- Curtis, M. B., Jenkins, J. G., Bedard, J. C., and Deis, D. R. (2009). Auditors' Training and Proficiency in Information Systems: A Research Synthesis. Journal of Information Systems, 23(1), 79-96. https://doi.org/10.2308/jis.2009.23.1.79.
- Nelson, D. (2017). How Contributor- How to Audit a Computerized Accounting System.
- Ernest, O. O. (2015). The Relevance of Auditing In a Computerized Accounting System. International Journal of Management and Applied Science, 1(11), 79-83.
- Gardi, B. (2018). The Effects of Computerized Accounting System on Auditing Process: A Case Study From Northern Iraq. http://dx.doi.org/10.2139/ssrn.3838327.
- Kombo, B. (2013). The Effects of Computerized Accounting System on Auditing Process : A Case Study of Mtwara District Council (Mdc) (Doctoral Dissertation, Mzumbe University).
- Liemmuel, S. E. and Eriandani, R. (2022). Relevance of Accounting Information : Audit Quality and Earnings Management As Moderating Variable. Jurnal Dinamika Akuntansi, 14(2), 69-86.
- Maigoshi, Z. S., Latif, R. A., and Kamardin, H. (2018). Change In Value-Relevance of Disclosed RPT Across Accounting Regimes: Evidence from Malaysia. Research in International Business and Finance, 44, 422–433. https://doi.org/10.1016/j.ribaf.2017.07.114.
- Okoye, E. I., and Tennyson, O. (2011). Impact of Computerized Accounting System On External Audit Functions. The University Advanced Research Journal, (3).
- Rahman, A. A. L. A., Islam, S., and Ameer, A. N. (2015). Measuring Sustainability for an Effective Information System Audit from Public Organization Perspective. In 2015 IEEE 9th International Conference on Research Challenges in Information Science (RCIS) (42-51). http://doi.org/10.1109/RCIS.2015.7128862.