



**INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS  
OF UGANDA**

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**CONTINUOUS AUDITING AND MONITORING:  
GUIDANCE FOR INTERNAL AUDITORS**

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## **ABOUT ICPAU**

The Institute of Certified Public Accountants of Uganda (ICPAU) was established in 1992 by the Accountants Act, Cap 266. This has now been repealed and replaced by the Accountants Act, 2013.

The functions of the Institute as prescribed by the Act are to regulate and maintain the Standard of Accountancy in Uganda and to prescribe and regulate the conduct of accountants and practising accountants in Uganda. Under its legal mandate, the Institute prescribes professional standards to be applied in the preparation and auditing of financial reports in Uganda.

### **Vision**

To be a world class professional accountancy institute.

### **Mission**

To develop and promote the accountancy profession in Uganda and beyond.

### **Core Values**

- 1) Professional Excellence
- 2) Accountability
- 3) Integrity
- 4) Innovation

### **International Affiliations**

The Institute is a member of the International Federation of Accountants (IFAC) and the Pan African Federation of Accountants (PAFA).

**DISCLAIMER**

This paper is specially prepared to guide internal auditors in the implementation of continuous auditing and monitoring in their organisations.

Internal auditors should utilize the paper in light of their professional judgment and the facts and circumstances involved in their organisations and each particular engagement.

ICPAU disclaims any responsibility or liability that may occur, directly or indirectly, as a consequence of the use and application of this Guide.

# **CONTINUOUS AUDITING AND MONITORING: GUIDANCE FOR INTERNAL AUDITORS**

## **1.0 PURPOSE**

The rapidly evolving and complex business environment is forcing organisations to continue searching for innovative ways to efficiently meet corporate objectives in the everchanging regulatory and business environment. Consequently, organisations are advancing continuous auditing and monitoring around their processes, transactions, systems, and controls as a practical way to deal with complex business requirements. When executed together, continuous auditing and monitoring offer broad benefits leading to improved business performance. This paper was prepared to promote awareness of continuous auditing and monitoring among internal audit functions in Uganda.

## **2.0 CONTINUOUS AUDITING AND MONITORING EXPLAINED**

The Institute of Internal Auditors defines continuous auditing as any method used by auditors to perform audit-related activities on a more continuous or continual basis. Continuous auditing is achieved through ongoing risk and control assessments enabled by technology-based audit techniques such as generalized audit software, spreadsheet software, or scripts developed using audit-specific software, specialized audit utilities, computer-aided audit tools (CAATs), commercially packaged solutions, and custom-developed production systems.

Basically, continuous auditing involves using technology to measure and report risk indicators on a continual basis. This changes the audit paradigm from periodic reviews of a sample of transactions to ongoing testing of 100% of transactions which leads to more timely assurance and reporting on business performance or regulatory compliance. In addition, continuous risk assessment allows auditors to have a better understanding of the business environment and the risks to the company.

Continuous auditing is really just auditing but on a more frequent basis than traditional auditing. Continuous auditing is enabled by technology which makes it easy to collect and analyse data quickly. Continuous auditing, however, is more direct and instantaneous in producing reports. Management looks at this data to ensure whatever metric they are looking at stays within the tolerable range and if it does not, that it is appropriately managed.

Continuous monitoring on the other hand refers to the automated feedback mechanism that allows management to have greater visibility into the organisation which ensures that the systems and controls are operating effectively and transactions are processed appropriately. Continuous monitoring encompasses the processes that management

puts in place to ensure that the policies, procedures, and business processes are operating effectively.

Since management is responsible for internal controls, it should have the means to determine on an ongoing basis, whether the controls are operating as designed. By being able to identify and correct control deficiencies on a timely basis, the overall control system can be improved. The continuous monitoring process should therefore be owned and performed by management as part of its responsibility to implement and maintain effective control systems.

Basically, the principles of continuous monitoring include to<sup>1</sup>:

- Define the control points within business processes
- Identify the control objectives and assurance assertions for each control point
- Establish a series of automated tests that will indicate whether transactions comply with all the relevant control objectives and assurance assertions
- Investigate transactions that appear to have failed control tests
- Correct transaction and control weaknesses

### **3.0 CONTINUOUS AUDITING AND CONTINUOUS MONITORING DIFFERENTIATED**

While both continuous auditing and continuous monitoring usually use IT-enabled tools to monitor processes, transactions, and accounts to enhance the efficiency and effectiveness of efforts of internal audit and management and lie on the same premise that a specific area of interest is being evaluated frequently and regularly, continuous auditing is actually not the same as continuous monitoring.

The key distinctions between the two lies in:

a) Who owns the activity

Continuous auditing is an independent function that management does not oversee. Recommendations from the auditing activities are submitted to the audit committee or board of directors. Continuous monitoring, however, is owned and implemented by management to provide management information such as inefficiencies and weaknesses in business processes.

b) The nature of the functions

There is an inverse relationship between continuous auditing and continuous monitoring. The audit activity's approach to and amount of continuous auditing depends on the extent to which management has implemented continuous monitoring. Continuous auditing efforts will be intensive in cases where continuous monitoring is inadequate or inconsistent. Where continuous monitoring has not been well implemented, then there will be a need for detailed testing using continuous auditing

techniques. Similarly, detailed continuous auditing techniques may not be necessary when there is comprehensive continuous monitoring.

c) Output of the functions

With continuous auditing, management uses the data produced to identify anomalies or exceptions that symbolize particular issues. The existence of an exception or anomaly is an issue that needs to be resolved. But with continuous auditing, the auditor still uses professional judgment to decide if an exception is something worth looking at in more detail.

#### **4.0 BENEFITS OF CONTINUOUS AUDITING AND MONITORING**

The outcomes of continuous auditing and monitoring are generally similar and they include the following:

a) Risk assessment

As organisations deal with an unprecedented range of risks and challenges, there's a greater need to automate the risk monitoring process to enable a continuous risk assessment process. Continuous auditing techniques enable auditors to identify and assess risk, as well as establish intelligent and dynamic thresholds that respond to changes in the organization. Continuous auditing supports risk identification and assessment, contributing to the development of the audit plan as well as the objectives of specific audits. Continuous auditing is a unifying framework that brings control assurance, risk assessment, audit planning, digital analysis as well as audit tools, techniques, and technologies together to support detailed testing of the effectiveness of controls and micro-audit issues to prepare the annual audit plan and development of audit objectives for individual testing.

b) Cost Optimisation

Continuous auditing and monitoring, when well implemented enable organizations to achieve improvements in business processes and operations to optimize costs and enhance profitability. This is because they enable organizations to:

- Automate controls, processes, and operations to streamline operations and drive efficiencies.
- Deploy monitoring activities that help them leverage the benefits of such efforts and prevent them from lapsing back into inefficient patterns.

c) Fraud Management

Continuous auditing and monitoring techniques allow management and internal auditors to shift focus from traditional retrospective/detective activities to proactive/preventive activities to reduce the risk of fraud. Forensic-based continuous

auditing and monitoring tools and techniques can be used to perform sophisticated analytical tests, computer-based cross-matching, and non-obvious relationship identification to discern potentially fraudulent activities and misconduct that can remain unnoticed using traditional review techniques such as the periodic short-term analyses of financial transactions, say on a monthly, quarterly or annual basis. Continuous auditing and monitoring allow organizations to identify potentially fraudulent transactions on a daily, weekly, or monthly basis.

#### d) Promotion of Regulatory Compliance

Continuous monitoring can help organizations set up systems that ensure all business processes and transactions are compliant with laws and regulations which over time leads to a reduction of the costs of compliance with regulations and policies. In the current complex business environment, many organizations face a lot of pressure to comply with numerous laws and regulations. This means that they are under pressure to consider innovative ways of using data analysis to gather relevant compliance information electronically to assist with the establishment of compliance evaluation processes and systems. Continuous auditing and monitoring techniques automate existing regulatory compliance efforts.

#### e) Cash and Working Capital Management

Continuous auditing and monitoring can help create and support efficient and effective use of working capital. Through regular cash monitoring and accurate forecasting of cash and working capital levels, management can obtain a clearer view of the company's current position and identify opportunities and potential risks.

All in all, continuous auditing and monitoring techniques help organizations manage risk, reduce costs, improve performance, and create value.

## 5.0 PRACTICAL APPLICATIONS FOR CONTINUOUS AUDITING

Continuous auditing supports audit activities throughout the audit process right from audit plan development to follow-up of audit findings as shown below:

#### a) Audit Plan Development

During the audit planning stage, continuous auditing helps internal auditors to quickly identify changes in risks and potential exposure which enables them to conduct audits that are more responsive to risk. Rather than scheduling audits according to a standard cycle, continuous auditing allows the frequency of audits to be based on risk factors in the business processes. Data analytics should be used to support the development of leading indicators to trigger specific audits or areas to include in audit plans. Specifically, ongoing risk assessment can be used in the:

- Application of more strategic context to audit plans



- Allocation of scarce, highly skilled audit resources to areas that represent the greatest risk exposure for the organization
- Assessment of risk mitigation activities
- Development of areas of focus and strategic themes for internal audits
- Scope and objectives of individual audit engagements

#### b) Audit Engagement Support

Continuous auditing also contributes to individual audit engagements by supporting tasks such as:

- Refining the engagement scope to better focus on risk. Continuous auditing techniques support ongoing risk assessment to better understand business processes.
- Performing audit testing in situations where the audit objectives cannot be accomplished by comparison data alone.
- Drilling down to identify risk indicators and assess critical controls
- Detecting symptoms of fraud, waste, and abuse through the identification of anomalies.

Continuous monitoring techniques can be useful in aspects such as the examination of transactional data, evaluation of system configurations, testing of general ledger account balances, or scanning incident and error management.

#### c) Follow Up on Audit Findings

Continuous auditing techniques can be leveraged by internal auditors to follow up on the implementation of audit recommendations and to ascertain if the implemented recommendations are having the desired effect.

#### d) Identification of Control Deficiencies

Continuous monitoring provides clear insights into the effectiveness of internal controls which provides management as well as risk and compliance officers with independent and timely assurance over internal controls. For example, continuous assessment of transactional data against internal controls can rapidly highlight errors and anomalies for management's immediate review and action.

#### e) Minimisation of Fraud, Waste, and Abuse

Continuous monitoring techniques support the identification of fraud, waste, and abuse. Since fraud is often largely a crime of opportunity, continuous monitoring facilitates proactive identification and if possible, elimination or reduction of control gaps and weaknesses. While traditional audit techniques are only able to identify incidences of fraud, waste, and abuse long after the event and sometimes long after the possibility of financial loss, continuous auditing, and monitoring techniques make it

possible to identify fraudulent and wasteful tendencies quickly which may minimize the impact of such tendencies.

However, it's worth noting the benefits of continuous auditing and monitoring are limited by issues such as how well the technology is understood and controlled, access to data by as well as the technical expertise of the auditors and management.

## **6.0 IMPLEMENTATION OF CONTINUOUS AUDITING AND MONITORING**

The steps involved in the implementation of continuous auditing and monitoring include<sup>ii</sup>:

### **a) Defining the Audit Requirements**

The audit requirements must be defined adequately by internal auditors with input from management and external auditors. This necessitates internal auditors to understand the industry, organization, business processes, related controls, and the use of technology-based solutions. This requires a significant investment of time for continuous auditing to be effective in the testing of controls, assessment of risk, or detection of fraud.

The results of this process should be:

- Identification of critical business processes that should be subject to continuous auditing. These processes should be cross-referenced with an organization's top risks.
- Understanding the availability and structure of data. A list of all business systems and the data available from these systems will show the reports available from an organization's systems.
- Evaluation and assessment of the projected benefits of the adoption of a continuous auditing process.

### **b) Obtaining Management Support**

Once the objectives have been defined, then the complete support of the audit committee and senior management must be obtained. The audit committee and senior management must be informed of the preconditions as well as how and when the results will be reported. Lack of management support leads to situations where the legitimacy of the continuous auditing activity may be questioned.

### **c) Determining the Scope of Testing**

The next step should then be to determine the extent to which detailed testing of controls and risks must be performed by the continuous auditing activity. A key factor in this determination will be the adequacy of the continuous monitoring activities. Continuous auditing techniques tend to place more reliance on well-established

monitoring activities meaning more detailed assessment of controls and risks on a more continual basis will be required where the continuous monitoring activities are found inadequate.

#### d) Identification of Information Sources

Once the scope has been determined, the next step is to identify the information required to address the defined audit objectives and to determine the possible sources of that information.

#### e) Negotiation of Access to Data

Getting the right data is critical in the implementation of continuous auditing. This involves identifying business applications to which access will be required and then working with system owners to negotiate access rights. This will also involve identifying electronic sources of information within the company. Internal auditors should have the ability to find, collect, analyse, interpret, and document automated sources of information to support the results.

#### f) Understanding of Business Processes

Once the data sources have been identified, internal auditors must understand information systems and business processes. This can be achieved through:

- Review of the general system documentation such as user manuals, system flow charts, output reports, and descriptions of system controls
- Interviews of system users, programmers and business process managers
- Review of existing standard reports and exception reports

#### g) Identification of Key Controls and Risks

The ultimate goal of continuous auditing is to ensure the effectiveness of all controls and support the mitigation of risks. This is achieved through the identification of key controls and risk categories. It is necessary that the operational environment be examined to identify where weaknesses and deficiencies may leave the entity exposed to risk.

#### h) Data Access and Use

Selection of the enabling technology is critical to the long-term success of the continuous auditing process. When selecting software for continuous auditing, the data sources, formats, and transaction volumes have to be considered. It is also important to examine the entity's computing environment and future plans for key business systems.

## i) Management and Reporting of Results

The next step is determining how often the continuous auditing tests will be run. The frequency of continuous auditing activities will range from real-time review of detailed transactions to periodic analysis of detailed transactions or summarised data. Results of all continuous auditing and monitoring activities will then have to be presented for further action. Avenues for reporting continuous auditing and monitoring results include:

- Regularly comprehensive reports at the level of detail required to support continuous monitoring and continuous auditing.
- Storing exceptions results in a secure database.
- Presenting trending information in a web-based dashboard

Continuous auditing, for example, provides information that relates to compliance with policies, procedures, and regulations which supports financial reporting activities and goals. Continuous monitoring provides information on processes, transactions, and accounts to management in a timely manner and at a low cost, with the objective of monitoring performance and supporting decision-making.

## 7.0 CONCLUSION

In response to the complex business environment as well as the escalating regulatory and governance requirements, continuous auditing and monitoring techniques provide entities with an avenue to manage risk, reduce costs, improve performance, and create value.

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<sup>i</sup> Coderre, D. (2005): Global Technology Audit Guide 3- Continuous Auditing: Implications for Assurance, Monitoring and Risk Assessment, Institute of Internal Auditors, Florida, United States

<sup>ii</sup> Coderre, D. (2005): Global Technology Audit Guide 3- Continuous Auditing: Implications for Assurance, Monitoring and Risk Assessment, Institute of Internal Auditors, Florida, United States