The Use of Continuous Audit to Improve the Effectiveness and Efficiency of Internal Audit Activities: A Practical Study of Distribution Sharia Company in Indonesia

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ABSTRACT

The implementation of technology has encouraged internal auditors to develop continuous audits as a practical method for obtaining useful information from a set of company electronic data related to internal audit activities at all stages. Continuous audit methods allow internal auditors to process the entire population of transaction data to identify risk and internal control weaknesses that are more likely to be the subject of an audit finding. XYZ is a distribution company that continues to expand its business with more than 200 branches in Indonesia especially in sharia business. However, a large number of branches and transactions face limited internal auditors, high audit costs, low levels of audit coverage, and potential human error, which are an obstacle. This research is a design science that proposes the use of DMADV six sigma methodology as a problem-solving method to enhance the effectiveness and efficiency of internal audit activity by applying technology and audit concept in the continuous audit system. This research revealed that the internal audit cost can decrease by 45,5% to IDR 528.000.000 and audit coverage can increase by almost double to 86,3% in a year.

Abstrak: Penerapan teknologi telah mendorong auditor internal untuk mengembangkan audit berkelanjutan sebagai metode praktis untuk memperoleh informasi berguna dari sekumpulan data elektronik perusahaan terkait aktivitas audit internal di semua tahapan. Metode audit berkelanjutan memungkinkan auditor internal memproses seluruh populasi data transaksi untuk mengidentifikasi risiko dan kelemahan pengendalian internal yang lebih mungkin menjadi subjek temuan audit. XYZ merupakan perusahaan distribusi yang terus mengembangkan bisnisnya dengan lebih dari 200 cabang di Indonesia terutama pada bisnis syariah. Namun banyaknya cabang dan transaksi menghadapi keterbatasan auditor internal, tingginya biaya audit, rendahnya tingkat cakupan audit, dan potensi kesalahan manusia menjadi kendala. Penelitian ini merupakan ilmu desain yang mengusulkan

penggunaan metodologi six sigma DMADV sebagai metode pemecahan masalah untuk meningkatkan efektivitas dan efisiensi aktivitas audit internal dengan menerapkan teknologi dan konsep audit dalam sistem audit berkelanjutan. Penelitian ini mengungkapkan bahwa biaya audit internal dapat turun sebesar 45,5% menjadi Rp 528.000.000 dan cakupan audit dapat meningkat hampir dua kali lipat menjadi 86,3% dalam setahun.
Kata kunci: *audit internal, audit berkelanjutan, pengendalian internal*

INTRODUCTION

The development of a dynamic and complex business environment, globalization, high consumer demands, intense business competition, and advances in innovation technology have led to the need for companies to manage their activities more effectively and efficiently so that company goals can be achieved. One of the companies that continues to grow is XYZ (anonymous), a distribution company with more than 200 branches throughout Indonesia. Recognizing the importance of increasing effectiveness and efficiency, especially in identifying and anticipating business risks, one of the strategies adopted is internal audit activities. Internal audit is an independent and objective activity designed to add value and improve the organization's operations and help the organization achieve its objectives by evaluating and improving the effectiveness of risk management, internal control, and governance [21].

The internal audit activities start with planning, implementation, follow-up, and reporting [21]. A large number of branches use high costs to carry out these activities. This condition makes the level of confidence in risk management, internal control, and governance low. Internal audits need to keep up with business developments by responding more quickly to changes and emerging risks. Advancement in technological innovation has created opportunities for continuous risk and internal control review. In addition, internal audits must face the fact that audit evidence is increasingly dominated by evidence in the form of electronic data generated by computer-based information systems [6]. The operation of a technology-based integrated system that is accurate and timely is expected to make the company increase the level of confidence in risk management, internal control, and governance in all of its business [18]. The continuous audit will support the internal audit's ability to provide adequate assurance on an ongoing basis [1].

A continuous audit is defined as a technology-based audit method that is used to conduct a review of risk and internal control in a more thorough, continuous, and real-time that enables effective and efficient internal audit activity [19]. A continuous audit consists of identifying internal control objectives that are implemented in business processes and automatically testing significant key activities and transactions [20]. A continuous audit can be applied to various internal audit activities such as at the stage of developing an audit plan, supporting audit engagement, and following up on audit findings [20]. Continuous auditing is designed to enable the detection, follow-up, and reporting of audit findings faster and easier compared to using traditional audit

approaches. By performing a full population analysis to facilitate further action with a focus on transactions that are more likely to be at risk exposes and internal control weaknesses, a continuous audit shall increase the internal auditor performances [20]. With the implementation of continuous audits, internal auditors are no longer limited to the traditional sampling approach but can now examine the entire population of transactions. Examining the entire population can significantly increase audit quality by offering audit evidence on a larger and more complete scale [15].

Most prior research does not address the practical implementation of continuous audits. Therefore, it is crucial to develop a framework and methodology that can guide internal auditors in effectively applying continuous audits in the internal audit activity. This research uses a design science research approach that emphasizes the application of a concept for problem-solving purposes [9]. This study proves the concept of previous research so that it is expected to provide an overview of the practical application of technology and continuous audit methods to increase the effectiveness and efficiency of internal audit activities at XYZ. The expected contribution includes providing solutions for companies even in different industries to overcome the limitation of the number of internal auditors, high audit cost, low levels of audit coverage, and internal auditors' errors in conducting audit engagement. Overall, this research contributes to both the academic and professional community by addressing the broad movement of applying technology to internal audit activity and is expected to be a trigger for further research in the internal audit field.

1. COSO Integrated Control Framework

COSO internal control – integrated framework is an internal control model introduced by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). This model is widely used as a basis for evaluating and developing internal control. The COSO internal control structure is known as an integrated internal control framework and has five interrelated components. The following are the components of internal control based on the COSO framework, including [8]:

1. Control environment

Management actions that reflect the attitude of the elements of the organization as a whole in internal control including the culture and values are used as role models.

2. Risk assessment

Management actions to identify and analyze relevant risks in the organization's activities are in accordance with the predetermined risk appetite.

3. Control activities

Policies and procedures that help ensure that the necessary actions are taken to address risks in order to achieve organizational objectives.

4. Information and communication

Actions to record, process, and report appropriate information to maintain accountability, integrity, availability, and quality of data and information

5. Monitoring

Assessment of the quality of internal control on an ongoing basis to ensure that internal control has been running and the necessary adjustments have been made according to existing conditions.

2. Internal Audit

The Institute of Internal Auditor (IIA) defines an internal audit as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. Internal auditors provide objective assurance and insights to executive management and the boards of directors and managers in organizations. Internal auditors conduct a variety of activities including risk assessments, internal control evaluations, financial and operational audits, fraud investigations, and consulting projects. The internal audit activities consist of the processes in the audit which are [21,22]:

a. Planning

The auditor obtains information about the types of activities to be carried out, the nature of the activities, and their relative importance, and to obtain general information that helps in the early planning of the audit.

b. Field Work

The auditor analyzes activities to determine the effectiveness of management and its relationship with the standards.

c. Reporting

The auditor prepares a report containing the findings during the audit. The purpose of this report is to follow up on those responsible for the findings.

d. Follow up

The auditor evaluates the adequacy, effectiveness, and timeliness of actions taken by management on the reported observations and recommendations, in the context of the auditor providing recommendations. Then the auditor conducts a follow-up review of the management actions.

3. Continuous Audit

According to the IIA's Global Technology Audit Guide (GTAG), a continuous audit is the automated, systematic, repeated, and timely performance of internal audit activities regarding an organization's risk and internal controls. The continuous audit is achieved through risk assessment and continuous internal control that employ the application of technology using several methods including generalized audit software, spreadsheet software, computer-assisted audit techniques, commercially packaged solutions, and custom-developed systems. The use of technology-based audit methods must

be flexible in optimizing the timeliness of data anomaly identification, analysis of patterns and trends, detailed analysis of transactions against threshold standards, testing of controls, and comparative analysis between indicators. The principle of a continuous audit is to take a collection of data from a company information system, then process it automatically based on predetermined indicator formulation for later analysis and follow-up by internal auditors with field verification. Continuous audits have several benefits, including [20]:

a. Optimizing the use of company resources more effectively and efficiently.
b. Reducing internal audit costs.
c. Creating an accurate and sustainable risk assessment and internal control process.
d. Providing timely reporting of changes in internal control risks or weaknesses thereby increasing opportunities for quick improvement.
e. Encouraging a better understanding of business performance, risks, and internal control.

The transactions that deviate from expectations or are considered anomalous and deemed material are identified as exceptions by the continuous audit and require attention. A continuous audit is often considered an audit by exception. If the continuous audit system does not generate an exception, then there is the assumption that the controls are working as intended and there are no anomalous material transactions [24].

A continuous audit can be used to support all internal audit activities which are the development of an audit plan, support for audit engagements, and follow-up on recommendations audit [20].
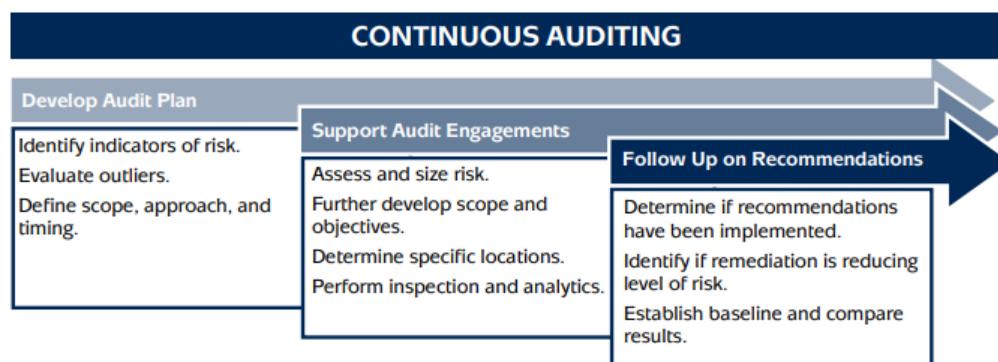
Figure 1. Continuous Audit in Internal Audit Activity

a. Develop an Audit Plan

During the audit plan development phase, a continuous audit can help to define a risk-based audit universe by quickly identifying changing risks and potential risk exposures. The results of the continuous audit are used to support the development of key indicators to determine the scope of the audit area included in the audit plan or decide to

immediately conduct field verification if there is a significant increase in risk without adequate explanation.

b. Support Audit Engagement

A continuous audit can be an integral part of the audit and the results of a continuous audit can be improved by verification during the audit. A continuous audit during the audit allows the auditor to redefine the scope of the audit based on risk considerations, conduct audit testing in more depth by considering the continuous audit results, identify risk indicators and assess important internal controls, and detect fraud symptoms through the identification of transaction data anomalies. Thus, the auditor can trace in detail to evaluate causes and take the necessary actions more quickly and easily.

c. Follow up on Recommendations

Utilizing continuous audit results as a measuring tool to assess commitment and consistency of follow-up on audit findings by management is an effective way to ensure improvement. After the audit, the auditor can use a continuous audit to determine whether the audit recommendations have been implemented and the results are as expected.

The key steps for implementing a continuous audit include [20]:

1. Establish a continuous audit strategy

Risk mapping and internal control in business processes are carried out in this step, prioritizing objectives, coordinating with operational management, and getting top management support.

2. Data retrieval

In this step, the company's information system environment is carried out, security regulations, determining system capabilities, developing auditor technical capabilities, assessing data source reliability, and data validation.

3. Determine continuous audit indicators

During this step, a continuous audit is designed and developed based on risk criteria and indicators as well as internal controls that focus on important business processes and transactions. Several things that are crucial at this stage include determining the objectives of internal control, determining and prioritizing important internal controls, and determining the expected internal control performance standards.

4. Follow-up and reporting

In this step, continuous audit methodology and procedures are developed, follow-up mechanisms for continuous audit results, and the determination of reporting standards are carried out to related parties.

5. DMADV Six Sigma

The DMADV six sigma analysis approach is a methodology to improve business processes by using intensive problem analysis which consists of five steps, which are [13]:

1. Define

    In this step, the process improvement goals are defined in line with the company strategy. The define step is the stage in determining the problem and providing the limits of improvement.

2. Measure

    In this step, the current process performance measurement is carried out so that it can be compared with the target set. The measuring step aims to measure the current level of process performance that can be used to measure the improvement of the performance.

3. Analyze

    In this step, analyze the causal relationship of various factors studied to determine the dominant factors that need to be controlled. The purpose of the analysis phase is to understand the information and data collection and use that data to analyze improvements.

4. Design

    In this step optimizing the process using analysis to determine and control the optimum condition of the process. At the design stage, it is hoped that there will be changes to the process that can improve the process. Various recommendations as a corrective action plan can be given in accordance with the problems that were successfully analyzed in the previous step.

5. Verify

    The goal to be achieved at the verification step is to prevent the system from returning to its original procedure or condition. At the verification stage, the results of the repair process are conveyed, and ensure that everyone who works has been trained to carry out new repair proceduresfollows.

METHODS

The continuous audit framework proposed in this research was developed by following the design science approach. Design science is a research methodology that seeks the creation of new knowledge or understanding intended to solve real-world problems through the design of novel or innovative artifacts and the evaluation of such artifacts [9]. The research was conducted on a problem in XYZ's internal audit activity to obtain better results than before. This research was conducted with the following step:
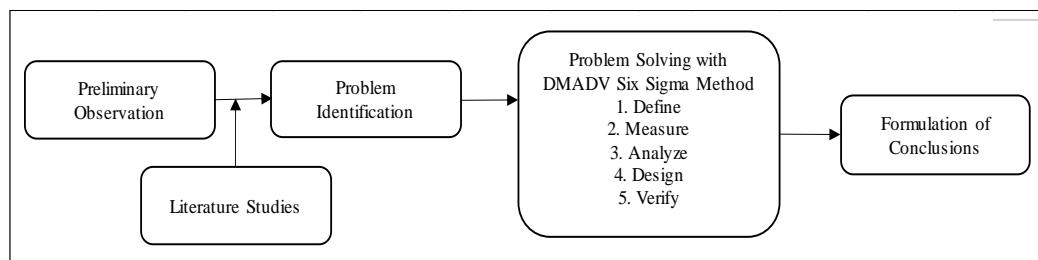
Figure 2. Research Step

a. Preliminary observation

The initial step is conducting preliminary observations (survey) to collect information and data related to the internal audit activities. The activities carried out in this early stage are observing the current situation and conditions in the company and conducting interviews with the parties regarding the problems. The observation period is from January to June 2022 (6 months).

b. Literature studies

A literature study is a method of studying literature, books, journal, and other prior research that is relevant to the problems in this research. These theories will be used as a guide to analyze and improve the internal audit process that occurs.

c. Problem identification

The next step is to identify the problems facing the company based on initial observations. The problem is how the internal audit process will be effective and efficient in order to evaluate the internal control system quickly and accurately.

d. Problem-solving with DMADV six sigma method

This stage describes in detail and fixated the problems that occur and their causes as well as the improvements that can be proposed. The method used at this stage is defining, measuring, analyzing, designing, and verifying (DMADV) which are a business process management methodology that aims to determine the needs of the business and solve the problem.

e. Formulation of conclusions

At this stage, conclusions that are related to the results of the research are drawn so that they could be achieved and provide suggestions. Those suggestions are expected to be useful for the company or the development of internal audit knowledge in the future variables.

RESULT AND DISCUSSION
XYZ General Description

The main activity of XYZ is to distribute the company's products throughout Indonesia. Currently, XYZ has more than 278 branches spread throughout Indonesia. To carry out its activities, XYZ makes an organizational structure in the branch to handle its operations that consist sales department and an operational department. XYZ's branch activities in general are distribution activities which include receiving, storing, and selling products to consumers. XYZ's internal audit team consists of 10 people (with relatively the same experiences) to carry out the audit process in all branches of the company. The activities carried out in the internal audit process are as follows:
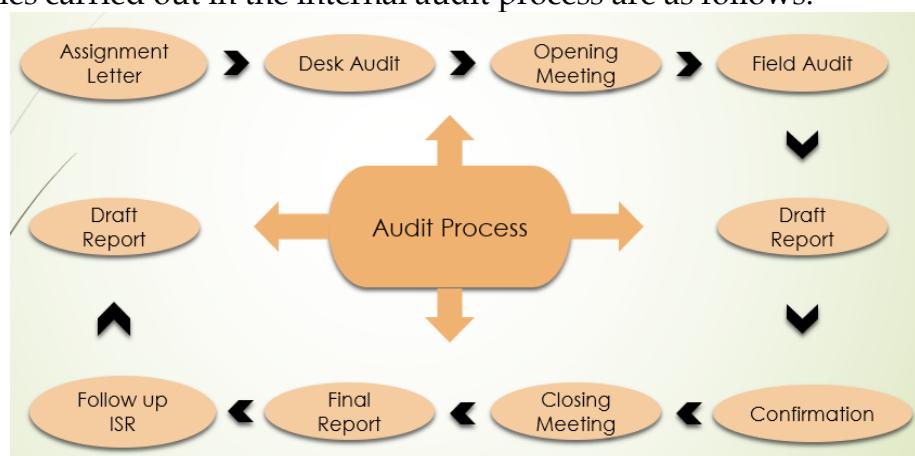
Figure 3. Internal Audit Process

1. Preliminary Observation

Preliminary observations were made on the activities of 10 internal auditors for 6 months of observation (January - June 2022). The following are the details of internal audit activities, with the average time of each process per branch.

Table 1. Average Time Audit Process

No	Activity	Detail Activity	Average Time (hours)
1	Planning`	Producing assignment letter	0,5
2		Conducting desk audit	24
3	Field Work	Conducting opening meeting audit	2
4		Conducting field audit	88
5		Producing draft audit report	8
6		Conducting confirmation meeting	16
7		Conducting closing meeting	4
8	Reporting	Producing final audit report	16
9	Follow-up	Conducting follow-up recommendation audit	24
		Total Time (hours)	**158,5**

From the table above, it is known that the average time in conducting the internal audit activity for an auditor in each branch is 158,5 days or almost 20 working days, or equivalent to one month. Therefore, with 10 auditors, it is possible to audit 10 branches in one month and 120 branches in one year so that the audit coverage for a year is 43.17% of the total 278 branches. The longest activity is the field audit, which is 88 hours (11 days). In relation to costs in the implementation of the audit process, field audit activities for one branch incur costs as follows:

Table 2. Current field audit costs (in IDR)

Days (a)	Meal allowance/ day (b)	Pocket allowance/ day (c)	Accommodation/ Day (d)	Transportation/ Day (e)	Total cost/ Assignment (f) ax (b+c+d+e)	Total cost/ Year f x 120 branch
11	80.000	100.000	500.000	200.000	9.680.000	1.161600.000

Note: 120 branches is the target audit activitiy for a year

2. **Problem Identification**

   From preliminary observation, it is known that the total field audit cost for a year is IDR 1.161.600.000. However, the audit coverage is still low for 120 branches (43,1%). This research will focus to identify improvement solutions to reduce the field audit cost and at the same time will increase the audit coverage.

3. **Problem-Solving with DMADV Six Sigma Method**

   a. Define

      At this stage, there are identified problems which are the cost of carrying out field audits in one year is high (IDR 1.161.600.000) and the level of audit coverage in one year is still 43.1% of the total company's branches. From the field audit process activities carried out, it was found that the main problem was that the field audit activity was the longest activity, which was 88 hours (11 days). Therefore, analysis and measurement will be carried out as well as making improvements so that this process can run more effectively and efficiently.

   b. Measure

      At this stage, standard time measurements are carried out in field audit activities for one branch by one auditor. Field audit activities consist of 20 items which are executed manually by the auditor by processing data that must first be retrieved from the ERP system (SAP), and then analyzed and summarized. This long audit examination time occurs because currently, auditors are still using manual methods in retrieving, processing, and analyzing data. The absence of a support system that utilizes the application of information technology is the cause of this problem. The detailed current field audit examination can be explained in table 3.

Table 3. Current field audit examination measurement

No.	Key Control Objective	Time (hours)	No.	Key Control Objective	Time (hours)
1	Ensuring that customers who do not make transactions for 3 consecutive months will be deactivated.		11	Ensuring the provision of Credit Limits and Terms of Payment are following the customer's ability to pay and the applicable regulations and that the balance of receivables does not exceed the credit limit	
2	Ensuring that there is no single customer has 2 or more customer codes in the system		12	Ensuring that any outstanding accounts receivable have invoices, supporting documents, and/or valid substitute documents that can be used for billing and there are a periodic and documented review	
3	Ensuring that every invoice sent is in accordance with the minimum sales order requirements		13	Ensuring the suitability of the date and value of the payment of accounts receivable in the system with the actual payment from the outlet or in accordance with the details of the payment from the customer	
4	Ensuring that the discount is in accordance with the applicable policies and is set in the system		14	Ensuring that every product printed on the invoice has received VAT	
5	Ensuring that COD outlet payments are made according to the invoice due		15	Ensuring the accuracy of stock balances in all warehouses (Good Stock and Bad Stock)	
6	Ensuring that every running promo program has an Action Proposal document and that its implementation is in accordance with what has been regulated in the Action Proposal or other supporting policies and fulfills the valid document requirements		16	Ensuring the bad stock scrapping process is documented and carried out accurately, both systemically and physically	
7	Ensuring the suitability of the large cash balance between the system and the actual, every major cash transaction is recorded correctly and up to date in the system and documented		17	Ensuring receipt of goods from the principal is well documented and carried out accurately	
8	Ensuring the petty cash balance between the system and the actual cash and proper record in the system		18	Ensuring that the issuance of the returned goods to the head is well documented and carried out accurately	
9	Ensuring the suitability of bank collection and operational balances between the system and the actual balance in the bank		19	Ensuring the accuracy of input stock adjustment in the system	

No.	Key Control Objective	Time (hours)	No.	Key Control Objective	Time (hours)
	account				
10	Ensuring that every operational expense is recorded accurately, has valid documents, and is approved according to the authorization matrix		20	Ensuring the placement of goods is done neatly; there is a separation between good stocks and bad stock products, and the warehouse is not overloaded	
otal (days)			88 (11)		

c. Analyze

At this stage, an analysis of the causes of the length of time in the field audit activities is carried out using the brainstorming method through discussions with all internal auditors facilitated by the Internal Audit Manager. Based on the brainstorming and data collection during the 6 months observation period, it is known that the causes of obstacles in the field audit are as follows:

Table 4. Causes of obstacles during the field audit

No	Causes	Number of occurrences	%
1	Data collection from ERP systems takes too long	96	28,6%
2	Processing `and analyzing large and complex data	56	16,7%
3	The laptop device does not support	29	8,6%
4	Human error when collecting data	68	20,2%
5	Human error when analyzing data	52	15,5%
6	Human error when interpreting data	34	10,4%
	Total	335	

From the results of data collection, it is known that the main problem is in the process of data collection, analysis, and interpretation of data because the level of understanding and ability of each internal auditor is different, and work devices (laptops) with different performance and the huge number of data that must be processed. Therefore, to solve the problem, a support system is needed to assist internal auditors in carrying out the field audit process. The proposed solution is the application of technology through a continuous audit system.

d. Design

At this stage, a system design is made for the continuous audit system. The following is a design for a continuous audit system.

1. Model Architecture

The continuous audit system module architecture can be described as follows:
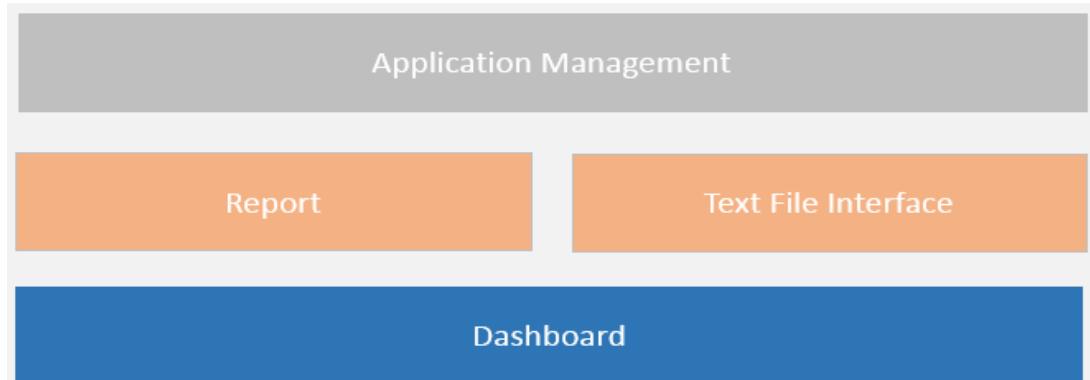
Figure 4. Continuous Audit System Module Architecture

a. Application Management

This module functions as user authentication, user access rights, user management, roles, and adding branches and roles. This module will be specially managed by the administrator.

b. Dashboard

This module functions as a dashboard visual management that has a filter period on a daily, monthly, and yearly basis. This module will be widely used by auditors and management.

c. Report

This module provides detailed reports of each scenario. This module will be widely used by auditors.

d. Text File Interface

This module functions as a connection (interface) to CSV text files in the database.

2. Computer Application

The computer application used is a website-based application that uses technology with programming language specifications such as ASP.NET 4.0 and Microsoft SQL Server 2008 R2 (Express Edition).

3. Operating System

The operating system used is at least Windows 7. While the operating system for the server is Windows Server 2008 R2 (Standard, Enterprise). The supported browsers for this application are Internet Explorer (8, 9, 10, and 11), Mozilla Firefox (Version 45), Google Chrome (Version 49), and OSX Safari 9.1.

4. System Development Methodology

At this stage, mapping of the audit area, business processes, risks, and controls attached to these business processes is carried out. In the development of this continuous audit system, the existing audit program is used as a reference in determining the process or area to be included in the audit indicators. Furthermore, the classification of

audit examinations is carried out when electronic data is available and can be analyzed automatically. The next stage is to determine the continuous audit system indicators, data sources, and design dashboard displays, graphs, or data details needed to determine transaction anomaly criteria for each audit examination.

1) Scenario audit includes indicators and weights for each scenario. The indicator shows the level of transaction anomaly which is quantified and categorized into 3 levels (numbers 1-3, from the lowest anomaly level to the highest). This indicator is determined based on SOPs, targets, or KPIs. Each indicator is given a weight, with the determination of the weight based on the judgment of the auditor by considering the risks inherent in the business process. The indicators that will be included in the continuous audit system are fundamental and critical. This indicator becomes a reference in assessing and evaluating internal control. Several audit examination activities can be carried out by taking, processing, and drawing conclusions automatically through a continuous audit system based on data obtained from ERP (SAP).

2) Define the data source
At this stage, the report and data from the ERP (SAP) required for each indicator is determined. In this process, the data collection period for each scenario is also determined according to the indicators that have been determined in the previous stage.

3) Design dashboard displays, graphs, and detailed data
Furthermore, for the desired data display on the continuous audit system dashboard, mapping is carried out to system data. The mapping data will continuously be stored in the database according to the specified data retrieval period. The dashboard displays data in the form of an opinion overview of all branches, an overview of opinions per scenario of each branch, an overview of all scenarios for each branch, and detailed anomaly data per scenario.

4) Define the procedures
The following are the technical steps for implementing a continuous audit system.
   a) Every day the branch data is extracted from the ERP system on the FTP server.
   b) Every day the continuous audit system will pull the report file automatically from the FTP server to the continuous audit system server using winSCP.
   c) The continuous audit system will analyze (query) reports according to the audit scenario, only audit findings are stored in the continuous audit system database.

d) The results of the daily query report findings will be presented in a management dashboard report, which can be accessed by interested parties.

e) Every day the branch head will receive an email informing the findings to be followed up, and every month a summary of the findings will be informed to the relevant management.

f) The results of the continuous audit system will also be the basis for determining the branch to be audited next and assisting the auditor staff in data collection and processing at the branch.

From the several continuous audit scenarios in table 5, it can be concluded that several field audit activities can be taken, processed, and concluded automatically through a continuous audit system based on data obtained from ERP (SAP). Thus, the application of this continuous audit system can reduce activities that were previously carried out manually so that it is expected to speed up the field audit examination.

e. Verify

In this stage, an analysis of the activities of the field audit is carried out after the implementation of the continuous audit system. After implementing the continuous audit system, out of 20 detailed audit examinations, 9 of them can be carried out automatically through the continuous audit system. This causes the audit carried out by the auditor to be significantly reduced so that the audit implementation time in the field can be shorter. This causes the total processing time to be reduced by 40 hours (5 days) for audit process activities in a branch. Detailed field audit examination after continuous audit implementation can be explained in table 5.

Table 5. Field audit examination after continuous audit implementation

No.	Key Control Objective	Time (hours)	No.	Key Control Objective	Time (hours)
1	Ensuring that customers who do not make transactions for 3 consecutive months will be deactivated.	4	11	Ensuring the provision of Credit Limits and Terms of Payment are following the customer's ability to pay and the applicable regulations and that the balance of receivables does not exceed the credit limit	0
2	Ensuring that there is no single customer has 2 or more customer codes in the system	4	12	Ensuring that any outstanding accounts receivable have invoices, supporting documents, and/or valid substitute documents that can be	0

No.	Key Control Objective	Time (hours)	No.	Key Control Objective	Time (hours)
				used for billing and there are a periodic and documented review	
3	Ensuring that every invoice sent is in accordance with the minimum sales order requirements	0	13	Ensuring the suitability of the date and value of the payment of accounts receivable in the system with the actual payment from the outlet or in accordance with the details of the payment from the customer	1
4	Ensuring that the discount is in accordance with the applicable policies and is set in the system	0	14	Ensuring that every product printed on the invoice has received VAT	1
5	Ensuring that COD outlet payments are made according to the invoice due	0	15	Ensuring the accuracy of stock balances in all warehouses (Good Stock and Bad Stock)	4
6	Ensuring that every running promo program has an Action Proposal document and that its implementation is in accordance with what has been regulated in the Action Proposal or other supporting policies and fulfills the valid document requirements	4	16	Ensuring the bad stock scrapping process is documented and carried out accurately, both systemically and physically	4
7	Ensuring the suitability of the large cash balance between the system and the actual, every major cash transaction is recorded correctly and up to date in the system and documented	4	7	Ensuring receipt of goods from the principal is well documented and carried out accurately	1
8	Ensuring the petty cash balance between the system and the actual cash and proper record in the system	4	18	Ensuring that the issuance of the returned goods to the head is well documented and carried out accurately	1

No.	Key Control Objective	Time (hours)	No.	Key Control Objective	Time (hours)
9	Ensuring the suitability of bank collection and operational balances between the system and the actual balance in the bank account	4	19	Ensuring the accuracy of input stock adjustment in the system	4
10	Ensuring that every operational expense is recorded accurately, has valid documents, and is approved according to the authorization matrix	4	20	Ensuring the placement of goods is done neatly; there is a separation between good stocks and bad stock products, and the warehouse is not overloaded	4
Total (days)			48 (6)		

Then related to the cost for each branch audit, here are the data:

Table 6. Field audit costs (in IDR) after continuous audit implementation

Days (a)	Meal allowance/ day (b)	Pocket allowance/ day (c)	Accommodation/ Day (d)	Transportation/ Day (e)	Total cost/ Assignment (f) a x (b+c+d+e)	Total cost/ Year f x 120 branch
6	80.000	100.000	500.000	200.000	5.280.000	633.600.000

The following is a comparison of the time and cost of the field audit activities before and after the implementation of the continuous audit system.

Table 7. Comparison before and after continuous audit implementation

Number of Branches	Audit coverage	Before Implementation		After Implementation		Difference (IDR)
		Days	Total Cost/ Year	Days	Total Cost/ Year	
278	120 (43,17%)	11	1.161.600.000	6	633.600.000	- 528.000.000
	240 (86,33%)		2.323.200.000		1.267.200.000	- 1.056.000.000

With the implementation of the continuous audit system, in one year the audit cost can decrease by 45,5% to IDR 528.000.000, or audit coverage increased almost double from the current (86,3%). In addition, the error rate that can be made by the auditor staff will also be drastically reduced because all calculations are carried out automatically through a continuous audit system. Thus, the same number of auditor staff can conduct more branch audits by using efficient costs.

CONCLUSION

From this research conclusions based on the results of the discussion are as follows:

1. The implementation of a continuous audit system is in line with the company's strategy which requires an internal audit function that can provide confidence in the implementation of risk management and internal controls to deal with various business risks.
2. Implementation of a continuous audit system can help overcome the limitations of internal audit resources, high audit costs, and low levels of audit coverage to evaluate the company's internal control system.
3. By implementing a continuous audit system, the effectiveness and efficiency of internal audit activity can be improved. In one year the audit cost can decrease by 45,5% to IDR 528.000.000 or audit coverage increased by almost double from the current (86,3%).

Successful continuous auditing programs promote timely decision-making, coordinated action plans, and successful issue remediation. Continuous auditing should remain flexible and responsive to changes in risk exposure and the control environment. The internal audit manager should periodically refresh the continuous audit program strategy to adapt to new priorities and themes. Over time, thresholds and control tests, and parameters for various analytics may need to be tightened or relaxed. Because there is still little discussion about the continuous audit in practice for the benefit of auditing practices in Indonesia, this research suggests that academics and practitioners in this field can develop a research area related to the theme of continuous audit research for the benefit of conceptual and practical development in the internal audit discipline.

Declaration of Competing Interest
The author declares that there is no conflict of interest.

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