Selected Operational Audit Tools and Techniques

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Abstract: The purpose of this paper is to find out how audit techniques are assisted by computerization and the benefits that can be obtained from auditing techniques with computerized assistance. This study uses a descriptive approach. The data source used is secondary data obtained from several books and scientific journals related to the topics discussed. The results of this study indicate that computerized auditing techniques can help make it easier for auditors to find fraud, who are now also using the latest techniques along with developments and the computer world which is of course difficult to find auditors with simple audit techniques. For this reason, auditors are required to be able to quickly adapt to changing times by being able to apply audit techniques assisted by certain software that can be used.

Keywords: Audit technique, Computerization, Auditor, Fraud, Benefits.

INTRODUCTION

In the computer audit approach, the audit is carried out using a computer or software to support the audit. Auditing with the computer is not mutually exclusive with other audit approaches; that is, audits with the computer are usually carried out in audits around and through the computer. On the other hand, audits around the computer and audits through the computer can also be carried out without computer assistance. In connection with the development of information technology that has affected the work environment of an organization, there has been a shift in the manual administration system to electronic so that it indirectly requires auditors to use appropriate audit techniques,

The positive impact of the development of information technology systems has given birth to an audit assist technique which is expected to facilitate the work of auditors, namely Computer Assisted Audit Techniques (CAATs). Even if it is optimized it can support the implementation of the Auditor's duties in detecting fraud. CAATs is the use of computers in inspection activities. CAATs is a tool that assists the Auditor in achieving the purpose of the examination which refers to the examination procedure (audit) specifically for testing Data and Software.

The use of Computer Assisted Auditing Techniques in audits has also been regulated in the Professional Standards of Public Accountants (IAPI, 2011), PSA No. 59 (SA Section 327) concerning Computer Assisted Audit Techniques. This standard describes the types and benefits of CAATs, considerations in using CAATs, steps in using CAATs, documentation of examination results with CAATs, and the use of CAATs in a small business computer environment.

The benefits of CAATs (IAPI, 2011) are:
- Tests of details of transactions and balances-such as, use of audit software to test all (a sample) of transactions in computer files.
- Analytical review procedures-such as, use of audit software to identify unusual elements or fluctuations.
- Test of control over the general control of computer information systemssuch as, the use of test data to test access procedures to program libraries (program libraries).
- Testing of controls over computer information system application controls -such as, the use of test data to test the functioning of programmed procedures;
- Accessing files, namely the ability to read files with different records and different formats.
- Grouping data based on certain criteria.
- Organizing files, such as sorting and merging.
- Generate reports, edit and format output.
- Make equations with logical rational operations.

In this case the Auditor must be aware that the use of CAATs in certain circumstances may require him to have far more computer knowledge than he has in other circumstances.

Auditors must also consider the suitability of computer facilities and computer-based business process systems required, to be taken into account.

Many computerized systems in carrying out certain tasks do not produce visible evidence. So in this situation, it is not practical for the Auditor to do the test manually.

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LITERATURE REVIEW

Technology

In general, the notion of technology is science that studies skills in creating tools to processing methods to help complete various human jobs.

According to Iskandar Alisyahbana (1980) Technology has been known to humans for millions of years because of the urge to live a more comfortable, more prosperous and more prosperous life. So since the beginning of civilization there has actually been technology, although the term "technology" has not been used. The term "technology" comes from "techne" or ways and "logos" or knowledge. So the notion of technology according to him is a way of doing things to meet human needs with the help of reason and tools, so that it seems to extend, strengthen or make more powerful the limbs, senses and human brain.

Furthermore, according to Roger (1983) technology is a design (design) for action aids that reduces uncertainty in causal relationships in achieving a desired thing.

Information Technology

According to Wikipedia, the notion of Information technology is a general term for technology to assist humans in creating, changing, storing, communicating, and disseminating information. Information technology is a technology that has a function in processing data, processing data, obtaining, compiling, storing, changing data in all kinds of ways to obtain useful or quality information.

The following are various opinions regarding information technology:

Oxford Dictionary (1995): Information technology is the study or use of electronic equipment, especially computers, to store, analyze and distribute any kind of information, including words, numbers and pictures.

Martin (1999): Information technology is not only limited to on computer technology (hardware and software) used to process and store information, but also includes communication technology to transmit information.

Lucas (2000): Information technology is any form of technology applied to process and transmit information in electronic form. Microcomputers, mainframe computers, barcode readers, transaction processing software, spreadsheet software, and communication and network equipment are examples of information technology. • Williams and Sawyer (2003):

Computer

According to McGraw-Hill (2001), a computer is an electronic calculating machine that is fast and can receive digital input information, then processes it according to a program stored in its memory, and produces output in the form of information.

Susanto (2009) said that what is called a computer is a group of electronic devices consisting of input commands, tools that process input, and output equipment that provides information and works automatically.

According to the American Standard Institute, a computer is a data processor (data processor) that can perform larger and faster calculations, including large arithmetic calculations or logical operations without human intervention to operate it during processing.

Auditing

Auditing is a systematic process carried out by someone who has competence and is independent regarding the acquisition and assessment of evidence objectively.

According to (Wilkinson, 2000), accounting information systems in carrying out activities require specific elements that vary depending on the level of automation of the accounting information system.

METHODS

We use descriptive research method in formulating this research where this research method describes the characteristics of the phenomenon under study. So that in this research method, the main focus of what we are researching is explaining the object of research, therefore we formulate that this computer-based audit system provides the best service to its clients, with quality audit work, on time, as well as cost efficiency and cost efficiency. personnel in auditing. In general, CAATT or (Computer-Assisted Audit Tools And Techniques) is any use of information technology as a tool in audit activities.

When the auditor chooses to use computer-assisted audit techniques, the auditor can choose the approach he uses, namely whether to perform application tests or perform substantive tests. Auditors often use this tool in gathering accounting data to test application controls and in performing substantive tests. In addition, this

CAATT has the advantage that input documents or the absence of an audit trail can require the auditor to use computer-aided audit techniques in conducting audits.implementation of substantive controls and controls and effectiveness and efficiency of audit procedures can be increased by the use of computer-assisted audit techniques but it is still recognized that this system has weaknesses, including the lack of knowledge development of system audits on staff audits and spending large enough funds to develop this system audit more perfect.

RESULT AND DISCUSSION

Result

Auditors are now relying on computerization in carrying out the task. There is a possible threat that many audit clients intentionally omit or omit most of their paper documents and replace them with electronic documents that are led only in computerized form. This requires an audit to have the ability of computerized audit tools such as, the auditor must be equipped with an understanding of alternative tools and approaches to test the operation of computerized systems and collect and analyze data contained in computerized files. An auditor who is not able to use computerized audit tools effectively will be in a very advantageous position today and also tend to be more easily deceived by clients or irresponsible parties if they make fraud.

The following are some reasons for an auditor to use computers in his primary auditing practice:

- Increased productivity because auditors can complete routine tasks faster, increase consistency, and focus more on important issues
- Audited tasks that may be impractical or impossible to perform manually may become complete

- Reduction due to reduced time required to complete audit work
- The competitive advantage gained and the client's perception of the auditor, the company, and the quality of the services provided are improved
- Ability to cope with difficult tasks without appropriate staff upgrades

From the explanation above, we can see that auditors must be able to adapt to the times by applying computerization in auditing techniques. For this reason, auditors need to improve their ability to use computers because computerization actually makes it easier for auditors to find fraud. So, the purpose of writing this paper is to find out what audit tools and techniques have been affected by computerization and find out the benefits in more depth in audit activities.

To explore and study different data sets in the audit process. CAATT represents an innovative approach to performing data analysis, because supports very large data records at no significant additional cost. Sometimes, users encounter other difficulties: they can't fulfill their data set or to prepare their data to create input data useful, to perform their analysis. In this case, where the audit presents proposal extraction and data analysis, based on datasets obtained from the platform As a basic procedure to reach a specific answer using CAATT as the main tool for extracting and analyzing the data.

DISCUSSION

Some Technical Tools and Audit Analysis

Auditors can also use the same software tools as the programming staff or additional tools used by auditors.

Table No-1 There are various query and analysis tools, as shown in the table:

Product	Features	Platforms
Access	A database program that provides data selection, analysis, and reporting	Client/Server, personal computers, notebooks, personal digital assistants
ACL	General audit software that reads files from most formats and provides data selection, analysis, and reporting	Mainframes, clients, personal computers, notebooks
Excel	Spreadsheet software that provides analysis, calculation, graphing, and reporting	clients, personal computers, notebooks, PDAs
	A programming language that provides data	

	selection, analysis, and reporting	
CA-Examine		Mainframe
CA-Easytrieve	A programming language that provides data selection, analysis, and reporting	
		Mainframes and Unix
SAS, SPSS	A programming language that provides data selection, analysis, and reporting	
		Mainframe

Source: (Sandra S. & Frederick G., 2009)

Some Things Auditors can Do Using Some of the Software Above:

Application Testing

Once the controls are identified, the next step in the audit is to verify the effectiveness of the controls. This can be achieved by Submitting a set of test data that will produce known results if the application is functioning properly as well as, Evaluating application results because However, auditors need to understand the application processing logic that the application simulates or evaluate application results.

Data Analysis

Organizations develop a lot of information from their transaction processing systems. The auditor can use this information to gain a thorough understanding of an area to identify general trends and decide where to focus audit tests. For example, when performing an account audit, accounts receivable, auditors can quickly age accounts payable or receivable and then look in more detail at items for days or more than a certain dollar value. CAAT can also be used to scan for invalid values or combinations of values indicating damage to the control or potential for deception. CAAT can also be used to merge two files, identifying order gaps in checks or purchase orders files, and check for duplicates.

Compliance Test

Auditor information systems can help determine compliance with specific procedures for operational and financial audits can be achieved by developing programs to detect data exceeds the expected value.

Spreadsheet Control

Spreadsheets may seem relatively easy due to their wide use. However, the risks presented cannot be significant if the spreadsheet results are relied on for decision making Some of the key controls that minimize risk in spreadsheet development:
Understand the requirements before creating a Data source spreadsheet.

Guarantee that the data used is valid, reliable and can be authenticated to the original source Design review.
Peer review or Documentation system professional.
Formulas, macro commands and any changes to the application must be documented externally and within the Logic verification application.
Check for reasonableness and comparison with known output Rain level.
Formal training in spreadsheet or application design, testing and searching implementation of Extension audit.
Review of informal designs or formal audit procedures Support commitment.
Continuous application maintenance and support from IT personnel.

Database Control

Departmental databases must be protected with controls that prevent unauthorized changes to data. Data accuracy can also be improved by limiting the number of freeform fields and providing a key entry code with a lookup value for a full description.

Database integrity controls can include:
Referential integrity. Prevent deleting key value from related table.
Transaction integrity. Returns the value of the failed transaction.
Entity integrity. Create unique record identification.
Value limits. Limit value to selected range.
Concurrent update protection. Prevent data contention.
Backup and restore protection. Ability to back up important information and applications and restore to continue.
Test protection. Perform tests at the system, application, and unit levels.

Use of Audit Techniques: Computer Assisted Audit Techniques (CAATs)

CAAT can be used in a variety of ways to evaluate application integrity, determine compliance with procedures, and continuously monitor processing results. Information Systems auditors review application systems to gain an understanding of controls in place to ensure data accuracy and completeness. When adequate application controls are identified, the auditor performs tests to verify their effectiveness. However, when controls are inadequate, auditors should: perform more in-depth tests to verify data integrity. To perform these tests, the auditor can use CAATs. Using such automation techniques, auditors can evaluate larger volumes of data and quickly perform data analysis to gather a broader view of a process.

Example of Applying CAATs

The internal audit team made the decision to analyze the data files using CAATs after being informed that the audits conducted by the business were on a sample basis. By utilizing CAATs, thorough checks will be achieved and the results will provide greater assurance to the business.

Using business knowledge of file layout and expected content, mind mapping sessions are held which focus on matching data requirements with tests that will verify their eligibility. This process identifies the following tests.

The total number of records in the file is equal to the total number of records in the file header record.
The count of the number of records tagged with the specified criteria identifier matching the total for each criterion is recorded in the header record.
Check the negative balance.
Check some entries e.g. The community head office address is used as the customer's address.
Check for anomalies such as missing postal codes or birth dates.
Perform keyword matching to return groups of records that can be analyzed further. For example. The records returned by the search for the word 'lawyer' are checked to ensure they have been allocated to the correct criteria.

Testing will be achieved using Excel. Teams can identify data files to find a list of issues that are reported back to the business directly and used to convey knowledge and experience of CAATs. Along with this, the team highlighted the need for businesses to investigate possible root causes surrounding data collection procedures and lack of quality control.

Examples of Excel functions that can be used during CAATs processing:
=COUNTIF(Cell Range,Criteria cell or text)
Count the rows containing a specific criteria type, eg=COUNTIF($A$1:$A$5,"Criteria123")
=VLOOKUP(What to match,Cell Range,Display Column,Match type)
Find blanks in ColA and return ColB, eg =VLOOKUP("",$A$2:$B$5,2,FALSE)
Caution should be exercised, as using CAATs will handle a larger volume of data, so errors may become more frequent. This is normal. It is important not to be too dependent on the results but there is a need for consideration.

So a large audit firm gets support from their headquarters in terms of finance and expertise. They can support regional and branch offices by purchasing or developing software that can be used by all branches and at the same time gain economies of scale as more users for the software purchased or developed. They also have their own resources to train their staff to get used to and become experts software. It is no problem for large audit firms to implement CAATT in their audit work. If the client is using the device accounting software, audit companies also need to use CAATT software to audit via computer, otherwise, companies only audit the output of the system if they do not use CAATT during the audit session. If the client is not using any accounting software, neither is the audit firm using CAATT software.

CONCLUSION

The results of this study indicate that the current 4.0 era really needs technological assistance in carrying out audits. In this case, audit techniques using a computerized system are very important when carrying out audit procedures. Audit techniques that use computer aids make it easier for auditors to uncover data fraud which is currently also growing in the latest ways along with technological developments. There are several software that can be used when auditors use computer-assisted audit techniques including Access, ACL, Excel, CA-Examine, CA-Easytrieve, SAS, SPSS and certain other software. Some of these software can be used to make it easier for auditors to perform application testing, data analysis, compliance tests, spreadsheet control, database control and others. For audit techniques using the help of computers

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themselves, one of the techniques that can be used is the CAATs technique.

Based on this explanation, we conclude that computer-assisted audit techniques can further assist auditors in carrying out their duties. This is because in the computer there is software that can be used by auditors to solve problems faced by clients or find fraud committed by irresponsible parties. Audit techniques with the help of computerized systems are increasingly needed considering the increasingly rapid technological developments as we can see today.

The advice we can convey to the current auditors is that auditors must be able to improve their skills and knowledge in using technology and must have the ability to continue to adapt to the times. This must be done because as the times progress, the problems that will be faced by auditors will also develop and also for someone to commit fraud.

Meanwhile, we realize that the paper we write still has shortcomings because the data we use is only secondary data. For this reason, for the next research on the topic we discuss, we recommend using primary data that is in accordance with actual events in the field so that the results obtained are more accurate and factual.

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