Auditor Involvement in Systems Development Phases

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Abstract: The purpose of this study is to analyze the role of auditors in the system development stage. Auditors are people who have certain expertise or qualifications in the field of finance. The main task of an auditor is to carry out audit activities, in other words the auditor is the person who has the authority to review and verify the truth of all financial statements. Auditors are also responsible for ensuring that companies do not violate tax laws. System development itself is the preparation of a new system to replace the old system as a whole or to improve an existing system. Internal auditors in systems development can have a direct impact on the subject of information systems, and can also have an indirect impact through the role of internal auditors in system maintenance (as an intervention) information systems. The results of the analysis in this study indicate that the role and involvement of auditors in system development is very influential. This can be seen from the auditor's own function in the development of the current system.

Keywords: Auditor, System Development and Internal Auditor.

INTRODUCTION

Audit is a term for an examination process. The meaning of audit itself is more often associated with an examination of the presentation of the company's financial statements. an audit is an inspection of the books to a physical examination to ensure a department within an organization or company has followed a documented recording system. The audit also functions to ensure that the bookkeeping and corporate governance system is free from misstatement or fraud and serves to ensure the accuracy of financial reports presented by the organization or company. The person who conducts the audit is called the auditor. Auditor is a profession tasked with conducting auditing activities, especially on financial-related reports from a company, institution or agency. In other words, the auditor is someone who has the authority to review and verify the accuracy of all financial statements. Auditors are also responsible for ensuring that the company does not violate tax laws. So, it is not surprising that auditors are people who have special skills and qualifications to carry out audit tasks on financial records.

System development is the preparation of a new system to replace the old system as a whole or improve the existing system. System development must be supported by competent personnel in their respective fields. In system development there are several things that become the main factors, namely; System Planning (System Planning), Determine system projects to be developed, and Define system projects developed and carried out by systems analysts.

LITERATURE REVIEW

The use of the system in a company will experience changes in accordance with the development of the business world and advances in information technology. There are several opinions that explain the definition of system development, including:

System development is a project that must go through an evaluation process like any other project implementation. (Amsa, 2008). System development can mean developing a new system to replace the old system as a whole or to improve an existing system (us, 2008).

When a system no longer follows changes, it is necessary to develop a system. The development of information systems is used either in whole or in part to be improved into a new, better system. For this reason, the support of information technology tools is needed to make a better information system. According to Hall and Singleton, (2007), the main activities in the establishment of the SDLC consist of: from:

System planning (*project planning*). This plan links various system or application projects with strategic objectives company System planning occurs at two levels, namely strategic planning and project planning. Careful planning is an effective control technique in terms of both cost and time because it can reduce the risk of producing unwanted systems.

System analysis (*system analysis*). The systems

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analysis is the basis for all other stages of the SDLC because the results of this stage report present various findings from analysis and various recommendation for the new system. There are two stages in systems analysis, the first is a survey of the existing system, then the needs analysis stage user. Analysis which no appropriate will produce Improper system _ also.

System conceptual design. The purpose of this stage is to generate several system concepts to meet the various needs identified in the system analysis. Various design alternatives will enter the system selection stage of the SDLC where the costs and benefits of the system are compared and finally selected most system _ optimal.

System *selection* and evaluation is a procedure for selecting one system from a series of conceptual designs which will be forwarded to the detailed design stage. To structure decision-making process and reduce unwanted risks, the process of evaluating and selecting this system is carried out in two ways steps do studies appropriateness which detailed and do analysis cost-benefit.

Detailed design (*detailed design)*. The goal is to produce an explanation detailed on system which proposed in accordance with system requirements that have been identified in the systems analysis and conform to the design conceptual. In Step this, all component system (user views, database tables, processes and controls) are completely specified which then these components are formally presented in a detailed design report which will then be used to create a blueprint system.

System programming and testing. This stage is used to select a programming language from the various available languages and which are suitable for the related application. In addition, testing is carried out on the system that has been made through a testing methodology, *offline testing* before used by *online* , and test data.

System implementation (*system implementation)*. In this stage , the basic structure data will made and filled with data equipment will bought and installed, employee trained, system documented, and system which newly installed. Therefore, in this stage everything needed by the new system is prepared and involves various efforts from

designers, programmer, administrator base data, user, and accountant.

According to Hall and Singketon, (2007) in system development there are several participants who can be classified into four general groups, namely:

System Professional (System Professional—SP)
SPs are analysts, systems technicians, and programmers. These are the people who will actually build the system. They collect various facts about problems in the existing system, analyze these facts, and formulate solutions to overcome these problems. The result of their efforts was a new system.

End User (EU).
The EU is the party using the system. There are many end users at various levels within a company, including managers, operations personnel, accountants, and internal auditors.

Stakeholders (Stakeholders)
Stakeholders are people inside or outside the company who have an interest in the related system but are not the end users of the system. These people include accountants, internal and external auditors, and the internal steering committee that oversees system development.

Accountant/Auditor (Accountant/Auditor)
Accountants/auditors are professionals who handle various control, accounting, and auditing issues for systems development. This involvement should also include internal auditors, particularly Information Systems auditors.

Auditors are parties who provide information needed by managers to carry out their responsibilities effectively. The audit acts as an independent assessor to review the company's operations by measuring and evaluating the adequacy of controls as well as efficiency and effectiveness performance company. Sawyer's, (2005) in "*Internal Auditing*" define audit internal as:

"The systematic and objective assessment that internal auditors make of the different operations and controls within the organization to determine is

Information finance and operation has accurate and reliable;
The risks faced by the company have been identified and minimized;
Rules _ external as well as policy and procedure internal which can accepted has followed;

Criteria operation that satisfying has fulfilled;
source _ power has used efficiently and economically; and
organization 's objectives have been achieved effectively—all done with the aim of consulting with management and assisting members of the organization in carrying out their responsibilities effectively. effective".

In Hall and Singleton, (2007), as a party that plays a role in system development, auditors have a role in each stage of the SDLC, namely:

The role of auditors in planning system
Auditors routinely check the systems planning stage in the SDLC because careful system planning is a cost effective control and can reduce the risk of producing a system that is no needed, no desired, and no effective. Auditor internal and external stakeholders to ensure that there is a system planning that adequate.

The role of Auditors in Analysis System
Auditor Company (external and internal) is holder interest in system which proposed. Often various feature audit advanced cannot be easily added to an existing system , so accountants/auditors should be involved in a proposed system requirements analysis to determine whether the system is a candidate which are good for advanced auditing features and, if so, which features are best suited for the system.

The Role of Auditors in Conceptual Design System
Auditor is holder interest in all system finance and hence, has an interest in the conceptual design stage of the system. Could whether or not something system audited depends part on its design characteristics. A number of technique audit computer require system designed with feature audit special which is unity from system the.

The Role of Auditors in Evaluation and Selection System
Attention main auditor is appropriateness economy system which proposed has been measured as accurately as possible or not. In particular, the auditor must ensure that five Thing:

Only avoidable costs are used in calculating the benefits of savings cost,
Use level flower which reasonable in measure Mark now flow cash,

Cost which arise very and cost repeated reported by complete and accurate,
is a realistic use of life span in comparing alternatives project,
Intangible benefits are given a financial value that reasonable.
The role of internal auditors in design detailed In the detailed design stage the internal auditor acts as a joint quality assurance group

METHOD
The approach we use is a descriptive approach where the results in this study we can through the collection of previous literature and examples to describe the role of the Auditor in System Development and the data we use is Secondary Data, which according to Indriantoro and Supomo, (2002) states that secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties). Secondary data in this study were obtained from reference sources published to the public (text books, articles, scientific journals, etc.) as well as references that are not published to the public (thesis, thesis).

RESULTS AND DISCUSSION
RESULTS
The use of the system in a company will experience changes in accordance with the development of the business world and advances in information technology. According to Romney and Steinbart, (2006), there are several reasons why companies change their systems, including:

Changes in user or business needs Improvements. Competition, business growth or consolidation, mergers, new regulations or changes in regional and global relations can change the structure and objectives of the organization. In order to remain responsive to the needs of the company, the system must also change.

Technology changes. As technology advances and becomes cheaper, organizations can take advantage of new or old capabilities that were too expensive in the past.

Business process improvement. Many companies have business processes that require updating.

Competitive advantage. Improvements in the quality, quantity, and speed of information can

result in product or service improvements and can help reduce costs.

Productivity gain. The computer will automate administrative and routine work, significantly reducing the time to perform other tasks.

Growth. The company grows bigger than its system and must upgrade or replace the system as a whole.
shrinkage. Companies often move from centralized mainframes to PC networks or internet-based systems to take advantage of their price/performance ratio.

When a system no longer follows these changes, it is necessary to develop a system. Information system development means the act of changing, replacing, or compiling an information system that has been used either in whole or in part to be improved into a new, better system (Putra and Subiyakto, 2006). To make the information system better, it is necessary to support information technology tools.

This can take place continuously according to the company's needs. The development or change of the whole system from the old system to the new system is called the system life cycle. The system life cycle (SLC) is the application of a systems approach to the development of computer-based information systems or subsystems (McLeod and Schell, 2004). The implementation of the SLC consists of several main activity stages, where the merging of all these stages is called the System Development Life Cycle (SDLC).

DISCUSSION

The Role of the Information System Auditor in the Development of an Accounting Information System describes several theoretical concepts which state that the participation of the information system auditor in the system development stage is beneficial in software maintenance efforts and can provide a significant contribution if it is carried out in the early stages of system development, namely the definition stage. Because at this stage all planning and system analysis are formulated through considerable consideration so that the next stage is only the stage of implementing the plans that have been prepared. In addition, audits are needed to detect problems that arise in computer-based accounting information systems. The role of the auditor in system development does not significantly affect the reliability of the information system due to the limited role of the

internal auditor, which is only limited to providing suggestions for the required system. However, other internal auditors who meet the standards and are not involved in providing such advice may act as consultants in matters relating to system development. This separation of duties is to maintain auditor independence.

CONCLUSION

System development itself is the preparation of a new system to replace the old system as a whole or improve the existing system. internal auditors in system development can have a direct effect on the mainstay of information systems and can have an indirect effect, through the role of internal auditors in system maintenance (as intervening) on information systems. In system development there are several things that become the main factors, namely; System Planning (System Planning), Determine system projects to be developed, and Define system projects developed and carried out by systems analysts. When a system no longer follows changes, it is necessary to develop a system. The systems analysis is the basis for all other phases of the SDLC as the results of this phase report present findings from the analysis and recommendations for the new system. The purpose of this stage is to generate several system concepts to meet the various needs identified in the system analysis.

REFERENCES

1. Kompas.com dengan judul "Apa Itu Audit: Definisi, Jenis, dan Tahapannya dalam Perusahaan." Klik untuk baca: https://money.kompas.com/read/2021/07/29/061710226/apa-itu-audit-definisi-jenis-dan-tahapannya-dalam-perusahaan.
2. https://123dok.com/document/rz3ewkdq-peran-auditor-internal-pengembangan-pemiliharaan-pengaruhnya-keadilan-informasi.html
3. https://text-id.123dok.com/document/rz3ewkdq-peran-auditor-internal-dalam-pengembangan-dan-pemiliharaan-sistem-serta-pengaruhnya-terhadap-keadilan-sistem-informasi.html
4. Amran, A. "Pentingnya Pemahaman Atas Struktur Pengendalian Intern Dalam Melaksanakan Audit Sistem Informasi Dan Teknologi." *Jurnal Akuntansi Fakultas Ekonomi Universitas Tarumanagara* 5.2 (2001).
5. Boynton, W.C. and Raymond, N.J, "Modern Auditing: Assurance Service and the Integrity

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Sarc. Jr. Ent. Bus. Man. vol-1, issue-6 (2022) pp-1-5

of Financial Reporting." *8th edition, WILEY, New Jersey* (2006).

6. Gondodiyoto, S. and Henny, H. "Audit Sistem Informasi Lanjutan." *Edisi pertama, Mitra Wacana Media, Jakarta* (2007).

7. Kardono, A.S. "Kajian Perundangan Terkait Assessment dan Audit Teknologi." *Analisis Sistem: Majalah Ilmiah* 12.2 (2005).

8. Nanik, S.U. "Peran Auditor Sistem Informasi Dalam Pengembangan Sistem Informasi Akuntansi." *edisi April, Fokus Ekonomi*, 2004. www.freejournal.com.

9. O'Brien, J.A. "Introduction 2 Information Systems." *McGraw-Hill, IRWIN, New York* (2005).

10. Putra, S.J. and Subiyakto, A. "Pengantar Sistem Informasi." *UIN Jakarta Press, Jakarta* (2006).

11. Rebecca, C. W. "The Information Systems Auditor's Review of the Systems Development Process and its Impact on Software Maintenance Efforts." *Journal of Information System, Spring* (1992).

12. Romney, M.B. and Paul, J.S. "Accounting Information System." *9th edition, Salemba 4, Jakarta* (2006).

13. Sawyer, L.B., Diltenhover, M.A. and Scheiner, J.H. "Sawyer's Internal Auditing." *5th edition, Buku 1, Salemba Empat, Jakarta* (2005).

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