

Proposed Development Framework for Accounting Information System and Integrated Reporting

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ABSTRACT

The purpose of this research is to study the research gap, so it can describe the level of significance and the role of various factors that influence the development of accounting system implementation and its impact on the integrated reporting.

Keywords : SIA, Integrated reported, Developmen framework.

I. INTRODUCTION

The development of accounting information technology has long been going on. The main reasons for using technology-based accounting are efficiency, time and cost savings. In addition, the reason for the increased effectiveness to get the output of financial statements correctly and precisely to trigger the growing use of information technology in the field of accounting. In the organizational and corporate pyramids, the tasks and functions of accounting are at the operational and transactional levels. This level has the characteristics of technical work, repetitive, procedural, standard and also can make bored. these characteristics make information technology needed in the development of accounting field.

The development of accounting information technology at this time have a big effect on accounting information system (SIA) in a company. The impact that can be felt is the processing of data that changes from the manual system to the computer system. Therefore, internal control within the AIS will also affect the increase in the amount and quality of information in financial reporting. The development of accounting in the case of computer-

based SIA will result in financial statements affecting auditing practices.

Process changes in the AIS will affect the audit process because the audit is a field of practice that uses financial statements (accounting products) as its object. So the progress of IT will also produce software that allows the audit process. In the future, the accountant will be a profession whose activities are closely related to IT. The development of an AIS and audit process as a result of IT advancements and accounting developments will create opportunities for accountants. This opportunity can be exploited by accountants who have sufficient knowledge about SIA and computer-based audit. Conversely, accountants who do not have sufficient knowledge about SIA and computer-based audits will be displaced because they are unable to provide services required by clients.

Currently, we have seen many of the terms of enterprise systems, e-business, business intelligence, conforming to assurance and compliance standards, IT governance, business continuity management, privacy management, business process improvement, mobile and remote computing, XBRL and knowledge management which shows that the world of

accounting will be increasingly complex in the future. This development does not necessarily make accounting more complicated, but makes the world of accounting more interesting. From this development also, the role and function of accountants can cover three areas: designer, user and auditor (auditor). In these three roles, accountants will need IT in improving the quality of their work.

Human effort to create a new breakthrough in the field of technology would greatly support the work process that initially takes a relatively long time to be completed with a relatively short time with satisfactory results, although with modern technology expenditure or operational costs required will be more and more. An accounting information system is an organizational component that collects, classifies, processes, analyzes and communicates financial information. To provide a clear picture of the terms data and information in relation to the process of providing information in the problems or areas of accounting information systems, the following are given a definition that can be described through the writing that discusses the application of information technology systems to accounting information systems. Information technology system to accounting information system is a useful thing as supporting the development of accounting information system. Accounting information is the most important part of all information required by management. Accounting information is mainly related to financial data of a company. Generally the resulting financial statements consist of Balance Sheet, Income-Loss Report, Capital Changes Report (Unearned Profit Report), Statements of Financial Position Changes or Cash Flow Statements.

The use of information technology for problem-solving approach associated with accounting will be able to simplify the processes associated with the processing of data information, in this case the accounting transactions. Problem-solving approach using accounting information system using hardware

(hardware) in the form of computer devices, and using software (software) is the applications that are supporting an accounting information system itself. The problem that arises is how to maximize an accounting information system for use in an organization so it can be perceived benefits of information technology itself. The limitations of existing problems are the transaction processing cycle, the use of information technology and the development of the accounting system itself.

Accounting information is the most important part of all information required by management. Accounting information is mainly related to financial data of a company. In order for existing financial data can be utilized by the management and outside parties of the company, then the data needs to be arranged in appropriate forms. In order to produce the appropriate information, also needed a system that regulates the flow and processing of accounting data within the company. Accounting information generated from a system can be divided into two, namely: financial accounting information and management accounting information. Financial accounting is prepared primarily to produce information usually in the form of financial statements aimed at parties outside the company.

Accounting data processing will be done more quickly when used computer. This can happen because the computer's ability to process data far exceeds human speed. With the development of increasingly advanced computer technology, more and more companies are using computer services to process accounting data. On the one hand, computers are a very useful tool in accounting information systems. On the other hand, however, different monitoring techniques are required which are used in a manual manner to ensure accuracy and security in processing data and safeguarding company property.

II. THEORY AND LITERATURE REVIEW

2.1. Pengaruh of information technology to Accounting process

Changes in the accounting process will affect the audit process because the audit is a field of practice that uses financial statements (product accounting) as its object. Auditing practice aims to provide an opinion on the fairness of the presentation of financial statements produced by SIA. With the progress made in accounting related to computer-based SIA in producing financial reports, auditing practices will be affected. The development of Information Technology also affects the development of the audit process. According to Arens, there are three auditing approaches to EDP audits, such as auditing around the computer, auditing through the computer, and computer-assisted audit (auditing with computer).

Auditing around the computer is an audit of the organization of computer information systems without using the capabilities of the equipment itself, the processing in the computer is considered true, what is in the computer is considered a "black box" so that the audit is only done around the box. This approach focuses on inputs and outputs. If in inspection the output states the correct result of a set of inputs on the processing system, then the transaction processing operation is considered correct. As organizations expand their use of Information Technology, internal control is often embedded in applications that are only visible in electronic format. When traditional source documents, such as invoices, purchase orders, billing archives, and accounting records, such as sales journals, inventory lists, etc. only in electronic format the auditor should change the audit approach. This approach is often called auditing through the computer.

There are three categories of testing of strategy testing when auditing through a computer, ie exam data approach, parallel simulation, and embedded audit

module approach. In auditing with computer to help the overall implementation of auditing program used micro computer. Auditing with computer is intended to automate the auditing process. The computer's micro will transform some audit functions. Auditing with computer uses software to perform tests on internal control of client organizations (including compliance tests) and substantive tests of client records and files.

Based on the above description, it appears that auditing with computer leads to the application of expert system in the world of auditing. Expert systems are intensive knowledge-intensive programs that capture human expertise in a limited area of knowledge. In the expert system human knowledge is modeled or represented in a way that can be processed by a computer. The conditions in the preparation of the financial statements are executed in the IF-THEN construction. If the condition is true (true), then an action is taken. The standards of public accounting professionals state that the audit work should be performed by an auditor or more, who has sufficient technical expertise and training as an auditor. However, for the purposes of EDP audit, the auditor in question other than having audit and accounting expertise must also have computer skills.

Advances in Information Technology affect the development of accounting. The role of Information Technology on the development of accounting at each time is different. The more advanced the Information Technology, the more its influence on the field of accounting science. Advances in Information Technology affect the development of Accounting Information Systems in terms of data processing, internal control of the company, and increasing the number and quality of information in financial reporting and so on. With the progress that has been achieved in the field of accounting related to computer-based Accounting Information System in generating financial statements, the auditing practices

and accounting data management process will be affected.

2.2.Accounting and Information Technology

The role of information technology in assisting the accounting process within the company / organization has long been going on. The main reasons for using IT in accounting are efficiency, time and cost savings. Other reasons include increased effectiveness, achieving results / outputs of financial statements correctly. Another reason is that added with the protection of corporate assets. In short the benefits of IT in Accounting are:

- ✓ Makes job easier (makes job easier).
- ✓ Helpful (usefull).
- ✓ Increase productivity.
- ✓ Enhance effectiveness (enchance effectiveness).
- ✓ Develop job performance (improve job performance)

2.3.Function of Information System

Any organization that uses a computer to process transaction data has an information system function. The function of the information system is responsible for data processing (DP). Data processing is a fundamental accounting information system application in every organization. The function of information systems in organizations has evolved from simple organizational structures comprising only a few people to complex structures that include many qualified specialists. Each accounting information system will carry out its five main functions:

1. Collect and store data from all company activities and transactions.
2. Processing data into useful information management.
3. Manage the existing data into groups that have been set by the company.
4. Controlling enough data control so that the assets of an organization or company are maintained.

The information producer provides enough information for the management to do the planning, execute the planning and control the activity.

2.4.Accounting and System Development

The term accounting information system includes system development activities which, according to the perspective of the accountant or auditor, are conducted professionally. Accountants may undertake system development activities, either internally for their company, or as an external consultant. Some objectives of the nature of system development such as system development projects generally include three main stages:

1. System analysis

Includes formulation and evaluation of solutions to system problems. Emphasis in system analysis is the overall goal of the system. The fundamental thing in this case is reciprocity, profit and loss, in achieving the goals of the system. The general purpose of system analysis can be summarized as follows:

- ✓ To improve the quality of information.
- ✓ To improve internal control.
- ✓ To minimize costs.

These goals are interconnected and sometimes conflicting with one another. The subject of profit and loss should be determined in choosing between austerity objectives and benefits, or between simplicity and a realistic but complex system. Sometimes, the profit and loss evaluation method is subjective because the actors involved are difficult to quantify.

2. System design

Includes evaluation of the effectiveness and relative efficiency of system design options in terms of overall needs. System design is the process of specifying the details of the solution chosen by the system analysis process.

3. Implementation of the system.

It is the process of placing new and revised procedures and methods into operation. System implementation includes testing of solutions prior to implementation, documentation of solutions, and review of the system at the beginning of its operation. It aims to verify that the system functions match the design specifications.

2.5. Behavioral Considerations in System Development

Management, users, and system staff need to be involved in the design of information systems and their follow-up activities. Generally, a design group or project team that includes users, analysts and management representatives, is formed to identify needs, develop technical specifications, and implement new systems. Technical, organizational, and project management issues will arise in implementing information systems. The new information system creates new working relationships among existing personnel, task changes, and perhaps changes in formal organizational structures. Technical factors, behaviors, situations, and related personnel should be considered in their entirety. Failure to do so will result in useless system output, although technically the system is good enough. Furthermore, continuous cooperation from the user is required to operate the system (provide input, verify output) after the system is implemented. User cooperation required for successful operation of the system should be believed at the time of system design, not after. Most accounting applications are routine. To ensure conformity with production schedules, ongoing relationships between users and information systems personnel are important. Lists of inputs, reports and more are usually the responsibility of the system group, but for the implementation and maintenance of this list it is necessary to work with the users.

The philosophy of user-oriented design helps shape behavior and approaches to system development that carefully considers the organizational context. Users should be involved in the design of the application.

Careful attention to output, both to quantity and format, in the design stage will prevent the user from reworking the data or requesting a new report form when the system is up and running. Output should be directed to user decisions must understand the nature and purpose of output in order to utilize it. Employee training should be included in the design stage, not starting after the system is installed. Finally, the system should be prepared to be able to receive and make changes after it starts operating. Users usually ask for anticipatory changes to this possibility and other factors that have been described are very important in user-oriented philosophy in system design.

2.6.Literature Review

In Kettinger et al, (1994) Information Technology will bring the company in favorable conditions of ease of entering the market, product differentiation, and cost efficiency. With the ease of the company will be able to improve its performance. So the use of IT strategically will be able to bring the company increase profitability which is one of the performance indicators. Another study by Clemons et al. (1993) states that information technology has the ability to lower the cost of coordination between companies



with agents outside the company without increasing the risk of the transaction concerned.

In Mardia Rahmi (2013) the utilization of technology is the level of information technology integration on the implementation of accounting tasks, the utilization of IT integration level in the implementation of accounting tasks consist of: a. The accounting / finance section has enough computers to perform the task b. Internet network has been installed in the work unit c. Computer network has been used as a liaison between work units in the delivery of data and information required d. The process of accounting from the beginning of the

transaction to the making of financial statements made by computerized e. Financial transaction data processing using software in accordance with the legislation f. Accounting and managerial reports are generated from integrated information systems g. Regular maintenance of equipment. h. Obsolete / damaged equipment is recorded and repaired on time According to Jensen and Meckling, (1976) regarding the theory of the company in its development always try to maintain competitive keungulan in business with the aim to improve the performance and value of the company. Success or failure of this company will be largely determined by the decisions or strategies taken by the company. The council plays a very significant role even the main role in determining the company's strategy. In the financial literature, agency theory (Theory Theory) plays an important role in explaining the relationship between principals and agents in performing their functions and authority respectively. Agent conflicts often arise because of asymmetry of information due to differences in interests between the principal and the agent, which will bring problems between the various parties involved. Given the separation of roles between shareholders as principals and managers as agents, managers will ultimately have significant control over how they allocate their funds.

III. PROPOSED RESEARCH METHODOLOGY

In this study using Mediation Testing with Mediation Regression Analysis is a hypothesized causal chain where one variable affects the second variable which, in turn, affects the third variable. The intervening variable, Z, is the mediator. It "mediates" the relationship between the predictor, X, and the result, Graphically, mediation can be described in the following way:

Paths a and b are called direct effects. The mediational effect in which X leads to Y through Z is called an

indirect effect. The indirect effect represents a part of the relationship between X and Y mediated by Z.

Testing for mediation

Baron and Kenny (1986) proposed a four-step approach in which multiple regression analyzes were performed and the significance of the coefficients was examined at each step. Take a look at the diagram below to follow the description.

Step 1. Perform a regression analysis with X predicting Y (line c) ., Step 2. Perform a regression analysis with X predicting Z to test path a ., Step 3. Perform a regression analysis with Z predicting Y to test the significance of path b ., Step 4. Perform regression analysis with X and Z predict Y ., In this case, mediation is supported if the partial direct effect for the c path differs nonsignificantly from zero and path b is significantly greater than zero. If c does not differ much from zero, the result is consistent with the full mediation model. If path b is significant after controlling the direct effect of X (line c), but path c is significant, the model is consistent with partial mediation.

Calculates indirect effects

There are two ways to do it. Judd and Kenny suggest ways to do this by calculating the differences between the two regression coefficients. To do these two regressions is necessary. The first regression equation is:. The second equation is:. One can obtain an indirect effect by subtracting the coefficient for X on the first equation of the coefficient for X in the second equation. (Note: be sure to use non-standard coefficients).

An equivalent way of doing this is to test two regression equations (1)

$$Y = a + b_1X + b_2Z + e \text{ and } (2) Z = a + bX + e .$$

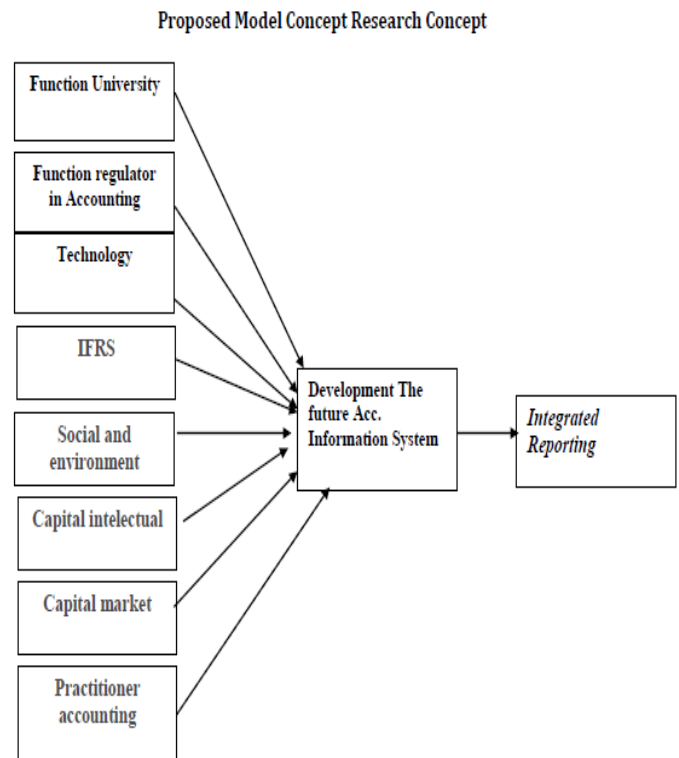
IV. PROPOSED DISCUSSION OF RESEARCH AND HYPOTHESES MODELS

Proposed Hypothesis

Based on the theory and results of previous research, this research proposes hypothesis H1 to hypothesis H11 as stated below.

H1: Changes in curriculum of accounting education in universities have a significant influence on the development of accounting information system implementation and affect the company's integrated reporting on the Indonesia Stock Exchange.
 H2: Changes in regulation or national accounting standards have a significant influence on the development of accounting information system implementation and affect the company's integrated reporting on the Indonesia Stock Exchange.
 H3: Changes in regulations or international accounting standards have a significant influence on the development of accounting information system implementation and affect the company's integrated reporting on the Indonesia Stock Exchange.
 H4: The development of information technology significantly influences the development of accounting information system implementation and impacts on the company's integrated reporting on the Indonesia Stock Exchange.
 H5: Intellectual capital development has a significant influence on the development of accounting information system implementation and has an impact on the company's integrated reporting on the Indonesia Stock Exchange.
 H6: The development of the business environment significantly influences the development of accounting information system implementation and affects the company's integrated reporting on the Indonesia Stock Exchange.
 H7: Changes in corporate culture have a significant effect on the development of accounting information system implementation and affect the company's integrated reporting on the Indonesia Stock Exchange.
 H8: Changes in audit system performed by public

accountant have a significant influence on the development of accounting information system implementation and impact on the company's integrated reporting at Indonesia Stock Exchange.
 H9: The development of social and cultural issues influences the development of accounting information system implementation and impacts on the company's integrated reporting on the Indonesia Stock Exchange.
 H10: The development of accounting information system has a significant effect on the company's integrated reporting on the Indonesia Stock Exchange.
 H11: The development of the implementation of the accounting information system and the independent variables mentioned above simultaneously affect the company's integrated reporting on the Indonesia Stock Exchange.



Type:
Using Primary Data Questionnaire with Liker Scale

V. CONCLUSION

This research chooses the sample purposively that is determining the sample which is considered to explain the problems studied in connection with the development of accounting information system and its impact on itegrated reporting. The study used primary

data through surveys using questionnaire lists to obtain an overview of the relationship between independent variables and dependent variables either directly or indirectly through the intervening variable. The samples to be used are selected from various clusters proportionally from various circles who know and are able to provide views or perceptions of the object being studied and the variables used.

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