

THE INFLUENCE OF THE QUALITY ACCOUNTING INFORMATION SYSTEM TO THE QUALITY OF ACCOUNTING INFORMATION - EVIDENCE IN INDONESIA

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Managers as stakeholders use accounting strategic management in implementing their business strategy. The essence of strategic management accounting is to create satisfaction for its customers which is known as the concept of value chain analysis. Currently the implementation of strategic management accounting has used information technology known as Accounting Information systems. Accounting Information systems produce Accounting Information that managers use in making strategic decisions in any company.

This study used descriptive and verificative methods. Respondents in this study were 60 functional managers SOEs in Bandung Indonesia. Quality data tested by Validity and Reliability test. Statistical tests use structural equation model-PLS. Results of this study is Accounting Information Systems have a significant effect on the of accounting information on SOEs in Bandung City -Indonesia

Keywords : *Quality of Accounting Information Systems, Quality of Accounting Information, State Owner Enterprises*

INTRODUCTION

Reference [1] argues that competitive advantage will be achieved when management at various levels of organizational organizations used accounting information systems to produce accounting information that supports strategic advantage, tactical excellence and operational excellence. Furthermore, [1] stated that management at the highest level uses accounting information systems to change the company's direction in achieving strategic advantage by providing product and service information from standard databases accessible via web browsers by business partners and by consumers. The middle management uses accounting information system to determine the right type of strategic planning information used that can generate tactical benefits for an organization through service improvement to improve customer satisfaction by providing flexibility to customers to be able to access information related to products and services owned company directly. Management at the operational level uses an accounting information system to ensure that the company's operations run

efficiently and achieve superior corporate operations.

Accounting information systems are an important instrument in establishing corporate value [2] because organizations need accounting information to achieve competitive advantage [3] The availability of a accounting information system enables an organization to increase revenue or reduce its costs by providing Accounting Information that can assist managers in making better decisions or accounting information that can improve the implementation of business processes within an organization [2]. The quality of accounting information is an important resource [4] and strengthen various individuals within an organization. The quality accounting information impacts the quality of communication. Increasing the quality of communication will also enhance integration within an organization. The increased integration of an organization will improve the organizers' understanding of the organization in looking at changes around the organization so that organizers will be quick and accurate in response to any changes that arise [5].

The quality of Accounting Information will be influenced by the quality of accounting information systems used by an organization [3]. [6] argues that a quality accounting information system affects the quality of Accounting Information. Similarly with this opinion, [7] states that ineffective accounting information systems can reduce the quality of financial transactions processing that impact on the resulting low quality of Accounting Information. According to [8] the effectiveness of accounting information systems is the success of accounting information systems in achieving the goals set. Meanwhile, according to [9] the effectiveness to show the quality of accounting information systems. Then [10] states the Quality of Accounting information system is the satisfaction of users of accounting information in obtaining the desired accounting information.

Reference [11] argued that the effectiveness of accounting information systems is the ability of accounting information systems in providing Accounting Information needed by managers in a timely and appropriate time. Similarly, the statement proposed by [12] that the effectiveness of accounting information systems is the availability of relevant Accounting Information in the decision-making process. So the Quality of Accounting information system is the success of the use of accounting information system (system use) and the achievement of user satisfaction accounting information system (user satisfaction) to the accounting information it produces [13].

Effectiveness of accounting information systems will be influenced by a variety of factors, [14] suggests that today's organizations are generally hardening business strategies with the use of information systems to improve organizational performance. [15] argue the right business strategy is an important factor in managing accounting information systems within an organization. Similarly, the statement [16] states business strategy is one of the factors that affect the development and use of accounting information systems in an organization.

Reference [1] argues that business strategy affects accounting information systems in terms of generating information that management can use at various levels of the organization to achieve competitive advantage. Similar opinion is expressed by [17] that to achieve competitive advantage required accounting information system which is a provider of information for organizations that can be used organization to increase sales (market place) higher.

In general, business strategy exists in all business units, divisions or product levels that refer to how an organization competes in each type of activity and

strives to achieve competitive advantage with its competitors [18]. The same opinion is expressed by [19] that business strategy is an important factor to enhance the position of competitive advantage in an organization by using industry specific to appropriate market segmentation. Based on that opinion can be said that the business strategy affect the accounting information system in generating information that can be used to increase sales higher, establishing specific industries in the right market segmentation so as to achieve competitive advantage in an organization.

LITELATURE REVIEW

1. Accounting Information System

Accounting information system is an integration of various physical and nonphysical components that are interrelated in harmony to process financial data into financial information used by users in the decision-making process [5]. The accounting information system becomes an important part of an organization [4] in providing reliable accounting information for decision analysis or as decision makers related to business transactions [20].

Accounting information system is classified into 2 (two) subsystems, namely financial accounting information system and accounting information system [21]. Reference [22] argue that the two sub accounting systems are different goals, the nature of the inputs and the types of processes used to convert inputs into outputs. Financial accounting information systems are intended for corporate external users, while accounting information systems produce information intended for internal users, such as managers, executives and employees in decision making.

Reference [21] states Management accounting system is a sub accounting information system that performs activities of recording, processing, and communicating financial information to internal users in accordance with management options. Then [22] states that the management accounting system provides the information needed for specific management purposes, such as to evaluate the accuracy of design decisions, to increase productivity, lower costs, expand market share, and increase profits. Similarly according to [23]) accounting information system provides Accounting Information that can be used to improve productivity, efficiency and control which is an important factor for the achievement of competitive advantage.

Based on these various definitions can be explained that accounting information system is an accounting information system that serves to provide Account-

ing Information that used by company management in generating strategic decisions for competitive advantage

2. Quality of Accounting Information

Information is a source of strength for an organization. Information can inform the organization of how the current operating performance is performing and help estimate and strategize on how to operate in the future. The ability to understand, digest, analyze and filter information is the key to growth and success for any professional in any industry. Information is available throughout the organization. Sales, marketing, human resources and managers need information to run their departments and make everyday decisions [24].

The term information has much been defined by experts, [25] uses the term "information" as data that has been transformed into meaningful and useful forms for users who need it. Similarly stated by [24] information is data that has been converted into a form that has meaning and useful. In line with the statement [1] argues that information is data that has been processed into something more meaningful.

Accounting Information is information that produced by a accounting information system intended for strategic decision making [26]. Similar to the previous statement Accounting Information can be defined as accounting information use is intended for the company's management in determining the strategic policy for competitive advantage [27].

furthermore [28] argued Accounting Information refers to Accounting information that contains financial information generated from the flow of financial resources in the organization, production information generated from the physical flow of resources in the organization, employee information generated from the flow of people in the organization, and marketing information resulting from interaction with the market for products organizational products with the aim to be used by company managers in determining strategic policies. Based on these definitions it can be concluded that Accounting Information is financial and non-financial information that results from the entire processing cycle of a company's business transactions used by managers for the company's competitive advantage

The term "quality of accounting information" is used to express useful accounting information in the decision making process [8] and [1]. In contrast to these statements [25] argue that the quality of accounting information is accounting information that can be used in decision making by reducing

uncertainty, increasing knowledge of problems that occur and increasing success in the planning and scheduling process on various activities.

There are several criteria that can be used to measure the quality of accounting information, [25] measure the quality of accounting information from the point of view of content dimension, form dimension and time characteristic dimension. Characteristics The quality of accounting information based on the time dimension is timeliness and is presented based on the time period. The quality feature Accounting information according to the content dimension (content) is information presented accurately (accuracy), in accordance with the actual conditions (relevance), and completeness (completeness). Furthermore, the characteristic quality of accounting information according to the location dimension is that information can be obtained easily and the location to obtain such information is safe from the reach of unauthorized parties. while the characteristic quality of accounting information according to form dimension (form) is information presented clearly (clarity) and presented in an adequate and informative format (presentation).

3. Conceptual Framework and Hypotheses

Reference [34] states there are three main factors that affect the effectiveness of Accounting Information Systems consisting of: Information technology, business strategy and organizational culture. Furthermore [35] states the effectiveness of accounting information systems are influenced by business strategy which is the latest major approach in managing information systems. Then [36] argues in the modern system / present there is a growing interdependence between the company's information systems with business strategy and business capabilities of the company. Similarly [37] also states that Business strategy is the pattern of the most widespread/diffuse decision-making resources allocation and other more specific decisions, which affect the information system and information technology.

Previous research has generated empirical evidence that supports the concept of the influence of business strategy on the effectiveness of accounting information systems. The results of research conducted by [38], [39], [40] and [41] prove that business strategy has significant effect on accounting information system. Furthermore, the influence of business strategy on accounting information system is also evident in the research conducted [14], [42], [43], and [44] hows empirical evidence that business strategy influential Significant to the effectiveness of accounting

information systems.

Similarly, the results of research conducted by [45] provide empirical evidence that business strategy significantly influence the performance of Accounting Information Systems. Based on theories and empirical evidence obtained from previous research that has been done by the researchers can be said that business strategy affect the accounting information system.

The formulation of the research hypothesis is the third step in the study. hypothesis is a logically suspected relationship between two or more variables in the formulation of propositions that can be tested empirically. In accordance with the framework that has been described in the previous paragraph, it can be formulated research hypotheses. The formulation of the hypothesis is as follows:

Hypothesis: Quality of Accounting Information System affects the Quality of Accounting Information

DATA AND METHODOLOGY

This study uses primary data, in the form of respondents' statements about the variables studied were collected through the distribution of questionnaires. Respondents in this study were the sales manager, accounting manager and management accounting manager with a total of 60 respondents.

Research data will be analyzed by using descriptive analysis and verificative analysis. Descriptive analysis used to describe the variables studied and obtain operational advice. Using descriptive statistics to perform descriptive analysis, Descriptive statistics are statistical measures used to describe research results. In this study, variables with formative measurement model were measured

using component factor analysis method. while for variables with reflective measurement model, analyzed by using score factor analysis method .

The verificative analysis aims to test the research hypothesis that has been formulated previously. The proper analytical tool for performing verification is Covariance Based-Structural Equation Modeling or known as CB-SEM using Lisrell 8.50 software tool. According to [46] The use of Structural Equation Modeling (SEM) allows researchers to unite some unobserved variables indirectly measured by the indicator and can be used to calculate measurement errors on observed variables.

In this study the data will be analyzed using Structural Equation Model (CB-SEM) and the tools used are software Lisrell 8.5, it must be determined in advance the minimum sample size in order to perform data analysis using Covarian Based-Structural Equation Model (CB-SEM). Mueller, RO & Hancock, GR (2005) argue that the ratio of sample size to parameters to be estimated should be at least 5: 1, preferably larger. Based on the rule of thumb expressed by Mueller, RO & Hancock, GR (2005), the minimum sample size in this study is 85 units of management accounting on BUMN Indonesia obtained from 5 times the number of parameters (t) studied. Based on these provisions, the minimum sample size in this study is 85 units of management accounting at State-Owned Enterprises in Indonesia which is determined based on simple random sampling technique that is randomized with random number table using Microsoft Excel.

RESULT AND DISCUSSION

1. Result

a. Descriptive Analysis

Tabel 1. Construct Score for Descriptive Analysis

| Variabel | Statistic Measures | | | | |
|--|--------------------|------|------|---------------|----------|
| | Min | Max | Mean | Std Deviation | Criteria |
| Quality of Accounting Information System | 2,40 | 4,90 | 3,78 | 0,59 | High |
| Quality Of Accounting Information | 2,45 | 5,00 | 4,08 | 0,50 | High |

Source: result of descriptive statistic

Base on the table, the business strategy variables are known have an average score of 2.0 and are included in the low category. Then variable variable effectiveness of accounting information system and

quality of Accounting Information stated included in high category with score average 3,78 and 4,08.

Respondents responses on each variable, are as follow

Description Variable Quality of Accounting Information Systems.

Effectiveness accounting information system is formed through two (2) dimensions: system usage and user satisfaction, then each dimension will be measured by four indicators operationalized into eight items statement. The following is presented recapitulation average score responder on each

Tabel 2. Mean Score Quality of Accounting Information System

| Dimension | Min | Max | Mean | Std Deviation | Criteria |
|-----------------------|------|------|------|---------------|----------|
| Flexible | 2,43 | 5,00 | 3,84 | 0,55 | High |
| Proccessing Integrity | 1,97 | 5,00 | 3,76 | 0,59 | High |
| Reliability | 1,15 | 4,5 | 3,80 | 0,56 | High |

Source: result of descriptive statistic

Based on the respondents responses, known the average score of flexible, Proccessing Integrity and reliability dimensions is 3.84, 3,76 and 3.80 are included in the high category. The results of the study show SOEs companies in Indonesia has implemented a system of Accounting Information effectively.

content, location and form, then each dimension will be measured by two or three indicators operationalized into nine point statement. Recapitulation of average score of responder's responses for each dimension of Quality Accounting Information Accounting variable, presented as follows:

Description of Variable Quality of Accounting Information

The variable of quality of Accounting Information is formed through four dimensions ie., time dimension,

Tabel 3. Mean Score of Efectiveness of Accounting Information

| Dimension | Min | Max | Mean | Standard deviation | Category |
|-------------|------|------|------|--------------------|----------|
| Accuracy | 2,67 | 5,00 | 4,24 | 0,54 | High |
| Relevance | 2,48 | 5,00 | 4,15 | 0,51 | High |
| Timely | 1,52 | 5,00 | 3,80 | 0,78 | High |
| Completness | 2,48 | 5,00 | 4,15 | 0,51 | High |

Source: result of descriptive statistic

Based on the responses of respondents known the average score for each dimension on the variable quality of t accounting information included in the high category. Results of the study show SOEs companies in Indonesia. has good quality Accounting Information based on content, form, time and Location.

b. Verificative Analysis

Structural Model Evaluation Results

The evaluation of structural model is aimed to know the influence of Business Strategy (X1 on the Quality of Accounting information system(Y) and its implication on quality of Accounting Information (Z). Result of data processing and modeling using LISREL software as follows:

Tabel 4. Structural model Parameters

| Dependen variabel | Mediator | Independen variabel | estimated Default | estimate | error | Z-value | P-value | R2 |
|-------------------|----------|---------------------|-------------------|----------|-------|---------|---------|--------|
| QAI | | QAIS | 0,676 | 0,571 | 0,075 | 7,618 | 0,000 | 0,2088 |

Source : Output Calculation of Lisrel 8

dimension variable Effectiveness of Accounting information system.

Based on the information obtained from table 4.5 , the interpretation of the evaluation results of the structural equation model can be explained as follows:

1. The Quality of Accounting Information System on the quality of accounting information is equal to 0.676, meaning that each increase in the Quality of Accounting Information System 1 unit, the quality of accounting information increased by 0.676 assuming other variables do not change.

c. Hypotheses Testing

After all models tested and obtained model fit with the data then the next stage is to test hypothesis, as follows: Quality of Accounting Information System hypothesized affect the quality of Accounting

| | |
|----------------------------|---|
| $H_0 : \gamma_{11} \leq 0$ | Improved Quality of accounting information system has no effect on Improving the quality of accounting information |
| $H_1 : \gamma_{11} > 0$ | Improvement Quality of accounting information system has an effect on to Improving the quality of accounting information. |

Information. To test the allegations of the study, the test hypothesis was statistically expressed as follows:

Base on the result know that, p-value of 0.000 is smaller than 0.05 then H_0 is rejected, it means the increased Quality of Accounting information system has an effect on the quality of information management accounting.

DISCUSSION

The result of hypothesis testing shows that the P-value is smaller than 0,05 so that it can be concluded that the improvement of Quality Accounting information system does have affect the Quality of Accounting information s the level of significance (p) = 0,000< 0,05. The result of

hypothesis testing shows that the Quality of Accounting information influenced by the changes that occur in the Quality Accounting information system.

Furthermore, it is known that the influence of business strategy on the Quality of Accounting information system in SOE companies in Indonesia is -0.029, it can be interpreted that the improvement of 1 unit of business strategy causes the change of accounting information system effectiveness of -0.029. The negative results show the proposed hypothesis can not be confirmed by the empirical data collected. Business strategy has no effect on the effectiveness of accounting information system is explained by some of the following conditions:

1. There are many SOE companies that use the application by buying the finished software package. The result of descriptive analysis on software procurement proves that 49.4% of state-owned enterprises in Indonesia are currently using information system applications procured through the purchase of ready-made application software packages, this is the cause of information system applications used in SOE companies currently not relevant to the needs of various users.
2. Based on the results of interviews with respondents, there are some companies have not used the application of accounting information systems in processing financial and non-financial data and there are some state-owned companies are still in the development / design, so can not be assessed optimally by the respondents

It can be said that the results of this study have not been fully able to prove the opinion put forward by [36] that the Quality of accounting information systems is influenced by business strategy which is the latest major approach in managing information systems. Then the opinion expressed by Laudon & Laudon [28] that in today's modern system there is a growing interdependence between accounting information systems (finance and management) of firms with business strategies and business processes, and opinions expressed by [31] that

business strategies used by organizations provide support for accounting information systems in providing information from the internal and external environment of the organization to managers in need.

The results of this study can not be said to fully confirm the results of previous research on various types of industries in various countries as conducted by: [47] generate empirical evidence that the use of innovation in business strategy affect the implementation of accounting information system. Then [40] conducted research on 62 managers in Australia, the results showed that business strategies and perceptions of environmental uncertainty are important antecedents that influence in effective accounting information systems. Next research results [41] proves that business strategy has a significant effect on Accounting information system. research conducted by David [44] The study was conducted on 112 CEOs in 218 hospitals in Spain, the results of the study prove that the satisfaction of accounting information system used is influenced by the business strategy used by the company. Similarly, the results of research conducted by [45] proves that business strategy through strategic alignment influences the success of accounting information system in companies in China.

The results of this study have confirmed previous research conducted by [48] in 2016, [49] in 2017 at universities in Indonesia, [50] in 1994 at Singapore, [51] in 2012 at Ethiopia and [52] in 2013 at Yordania, the results of these studies show that quality accounting information is influenced by the quality of the accounting information system. This research has succeeded in proving the effect of the effectiveness of accounting information systems which is characterized by the optimal of systems use and users satisfaction towards the quality of Accounting Information.

The results of this study have proven the theory that has been stated by experts, as stated by [26] that a quality accounting information system will produce quality Accounting Information. Then according to [22] the effectiveness of accounting information systems describes an information system that provides Accounting Information needed to meet certain management objectives.

Furthermore, the results of hypothesis testing provide empirical evidence that: there is no indirect effect of business strategy on the quality of Accounting Information through the effectiveness of accounting information systems. This means that: because the business strategy does not affect to the effectiveness of accounting information systems, the business strategy does not have an indirect

influence on the quality of Accounting Information on the management accounting unit of SOES in Indonesia.

This research has successfully demonstrated an interaction between "improving business strategy through the management of accounting information systems" and "improving the quality of Accounting Information" in SOEs in Indonesia. Thus it can be concluded to improve the quality of Accounting Information, company managers must be able to improve the effectiveness of accounting information systems. The effectiveness of accounting information systems can be improved if the implementation of business strategies also increases.

CONCLUSION

The result of hypothesis testing shows empirical evidence that: improvement of business strategy through Quality of Accounting information system has no effect on improvement of Accounting Information quality at significance value $(p) = 0,000 > 0,05$. This means that improving business strategy does not improve the effectiveness of accounting information systems, and if the Quality of Accounting information system does not increase then the quality of Accounting Information does not increase, thus improving business strategy does not affect the quality improvement Accounting information system. Furthermore, the influence of business strategy through the effectiveness of management information system on the quality of Accounting Information is -0.019.

REKOMENDATION

Solutions that can be offered in this research to solve the problems that occur on the influence of business strategy on the Quality of Accounting information system can be done by:

1. Implementing business strategy in achieving competitive advantage by way of practicing strategic management accounting concept in company business strategy policy through stages:
 - a. Performing Environmental Scanning through SWOT analysis (Strength, Weakness, Opportunity and Threat). With SWOT analysis, strengths and weaknesses can be analyzed based on information from internal company. Opportunities and Threats can be analyzed based on information from External companies.
 - b. Formulate a strategy (strategy formulation) by defining the vision, mission, goals to be achieved, strategy development and formation of various policies.

- c. Implementing strategy (strategy implementation), oriented towards customer value creation through Value Chain Analysis [33] through stages:
 - introduction of market share using target costing and activities based on budget
 - made products or services use activity based costing and activity-based management techniques.
 - builds Products or services based on total quality management concepts (TQM).
 - Launching Product or Service, based on the concept of just in time (JIT) and customer profitability analysis (CPA)
 - After sales service to maximize the fulfillment of customer satisfaction so that customer value can be improved.
2. implements the concept of Balance Scorecard based on 4 perspectives: financial, customer, internal business and growth and learning perspective.
3. Accommodate business strategy in information systems application by redesigning information system application according to company business strategy

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