

The Influence of Charismatic Leadership Style and Organizational Structure on the Quality of Accounting Information Systems and Its Implications on the Quality of Accounting Information

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Abstract

The goal of this research is to discover whether Charismatic Leadership Style, and Organizational Structure can affect the quality of Accounting Information Systems and how the implications for the quality of Accounting Information. This kind of study employs quantitative methods. Quantitative methods place a strong emphasis on the statistically processed numerical information (numbers) analysis. This study's population consists of 150 manufacturing enterprises in Bandung city. The sample was taken by using a simple random sampling method, it is a sampling approach based on random sampling, regardless of rank or population level. After randomization, the number of samples turns out to be 52 companies. SEM-PLS (Partial Least Square – Structural Equation Modeling) is used as a data analysis technique which employs the inner and outer models. Validity and reliability are evaluated using the outer model, while to quantify the relationship among constructs used the inner model. The outcome indicates that the Charismatic Leadership Style has no effect on the quality of the accounting information system and Organizational Structure partially affects the Quality of Accounting Information Systems, and quality of the Accounting Information System has a significant effect on the Quality of Accounting Information.

Keywords: *Charismatic Leadership Style, Organizational Structure, Quality of accounting information system, Quality of accounting information.*



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INTRODUCTION

There are many developments in the business world, especially in information technology that now created some information systems. To generate financial information, companies require an accounting information system. (Purnama and Rudy, 2017). Financial information is also needed by external users that will use the financial reports to assess the past, project the future, and acquire further information (Bodnar & Hopwood, 2013:2).

Financial information is always related to data, information is data that has been processed into a form which is useful for its users and has benefits for making a decision. Information comes from data so if an error occurs in data processing, it will produce low quality information (Kusuma, 2016).

The firm uses an accounting information system to store and gather data, then converts that data into information, so it can be used to secure organizational assets and data owned by the company (Marshall and Steinbart, 2017: 11).

Accounting information system in the company must be well integrated to produce quality accounting information. If not, it will generate poor information, even manipulations and deviations to the accounting information (financial statements) results, so that the accounting information (financial statements) becomes inaccurate and untrusted.

There are several phenomena related to information systems that occur in Indonesia, one of them can be seen from what happened at the Regional Asset Revenue Management Agency of North Maluku Province. The Regional Revenue and Expenditure Budget (*APBD*) of North Maluku Province has not run normally, because the regional development information system (*SIPD*) has errors when inputting. According to Purbaya (2021) Head of the *APBD* of North Maluku Province "The *SIPD*-jammed so that the search process cannot be carried out, this was experienced by all districts in North Maluku".

The quality of the accounting information system is a system that has been combined from multiple accounting information system components that are related and function harmoniously to transform financial data into financial information required by its users. (Kuraesin, 2016). Organizational structure is an aspect that can affect the accounting information system. Robbins (2017: 531) states that organizational structure determines how a task from work is formally grouped, divided, and coordinated.

The deployment of a successful accounting information system is also influenced by leadership (Fitriati, 2015). The quality of the accounting information system in a company can be improved if they can form the best possible leadership style. Activities within a company will not be effective if there is no leadership style, because the ideal leader must have a good leadership style, in order to improve employee performance. (Suswandera, 2018).

This study is a replication of Fitriati's (2015) research on the influence of leadership style on the success of accounting information systems and their impact on the quality of accounting information. The differences between this study and Fitriati's (2015) research are : 1) Leadership style, the effectiveness of accounting information systems, and the standard of accounting information were the previously studied variables, However, this study added organizational structure, the effectiveness of the accounting information systems, and charismatic leadership style as additional independent factors. 2) The population and sample in the previous study were accounting staff from Muhammadiyah University in Central Java, Indonesia and the population was 37 universities. While the population and sample here are accounting staff of manufacturing companies in Bandung and the sample is 52 accounting staff respondents.

Hence, the objectives to be achieved in this research are:

1) assessing the level of influence a charismatic leadership style has on the quality of accounting information systems.

2) assessing the level of influence the organizational structure has on the quality of accounting information systems.

3) assessing the level of influence the quality of accounting information systems has on the quality of accounting information.

LITERATURE REVIEW

Charismatic Leadership Style

According to Robbins (2017:420) leadership is the ability to influence someone or organization to achieve a certain goal or vision. Meanwhile, according to Luthans (2011; 473) charismatic leadership is a leader who has the ability to lead by exemplifying and motivating his employees with his charismatic attitudes and abilities. Gibson (2011:351) reveals that charismatic leadership is the ability to influence employees by using supernatural gifts and attractiveness.

From some of the definitions above, it can be concluded that the charismatic leadership style is able to inspire, create a motivational atmosphere and influence their followers to achieve a vision or set of goals to be achieved in an organization. (Robbins, 2017:420; Luthans, 2011;473; Gibson, 2011:351).

The dimensions and indicators of charismatic leadership style characteristics are as follows:

1. *Envisioning* (Griffin 2014: 355)
2. Personal Risk (Robbins 2017;431)
3. have sensitivity to member's needs (Robbins 2017;431)
4. Shows great behavior (Robbins 2017;431)
5. *Enabling* (Griffin 2014: 355)

Organizational structure

Robbins (2017: 531) argues that organizational structure determines how work tasks are formally grouped, divided and coordinated. A manager must consider six key factors when designing an organizational structure. A way to understand organizational structure is to look at an organizational chart. An organization chart describes each job in the organization and the formal reporting relationships between those jobs. This was said by Colquit (2016: 482-483).

Besides, there is an understanding of the organizational structure according to Greenberg and Baron (2010:5 8) as a distribution of duties, responsibilities, and authority inside the organization takes a formal form between persons and organizations.

From all the notions expressed by the experts Robbins (2017:531), Colquit (2016:482-483), Gibson (2011:8), and Greenberg and Baron (2010: 548) it can be conclude that the notion of organizational structure is a formal pattern to ascertain how duties are distributed among and managed between persons and collectives.

The organizational structure dimensions used in this study are:

- a. span of control
- b. centralization
- c. formalization
- d. Departmentalization

Accounting Information System Quality

According to Laudon (2012: 548) a quality information system is a system that integrates technology expertise with awareness of organizational and human requirements to improve work performance and productivity. Another opinion expressed by Reynolds and Stair (2010: 57) A good information system is adaptable, effective, obtainable, and reliable. The ability of an accounting information system to deliver high-quality information depends on the seamless integration of all pertinent components and subcomponents defined as a quality accounting information system. (Susanto, 2013: 14).

From those definitions of the quality of the accounting information system above, it can be determined that the accounting information system's quality is an information system that combines technical efficiency and the integration of all pertinent components and subcomponents to produce quality, adaptable, effective, obtainable, and reliable information. (Laudon, 2012:548 ; Reynolds dan Stair, 2010:57 ; Susanto, 2013: 14).

The indicators utilized in this study for each facet of the quality of the accounting information system are as follows :

1. *Reliability*

- a. A quality system is expected to produce reliable information (Reynolds dan Stair 2018: 519).
- b. To process data reliably and comprehensively, a high-quality accounting information system is essential (Romney dan Steinbart 2017: 635).

2. *Timeliness*

- a. The system produces outputs in a timely manner to meet organizational and operational objectives (Reynolds dan Stair 2018: 519).

3. *Availability*

- a. An accounting information system with high-quality is expected to provide convenience and data availability when accessing the system (Romney dan Steinbart 2017: 635).

4. *Ease of use*

- a. A system that managers and employees can learn and use easily is essential to ensure that people will work with the system productively (Reynolds dan Stair 2018: 519).

Accounting Information Quality

Romney (2017: 3) defines that data collected and processed to provide meaning and facilitate decision-making is referred to as information.

Marakas, (2013: 415) argues that high-quality information is information products with traits, attributes, or qualities that make the information more useful to them. While information quality has numerous characteristics, it is useful to conceive of it in terms of three dimensions: time, content, and form.

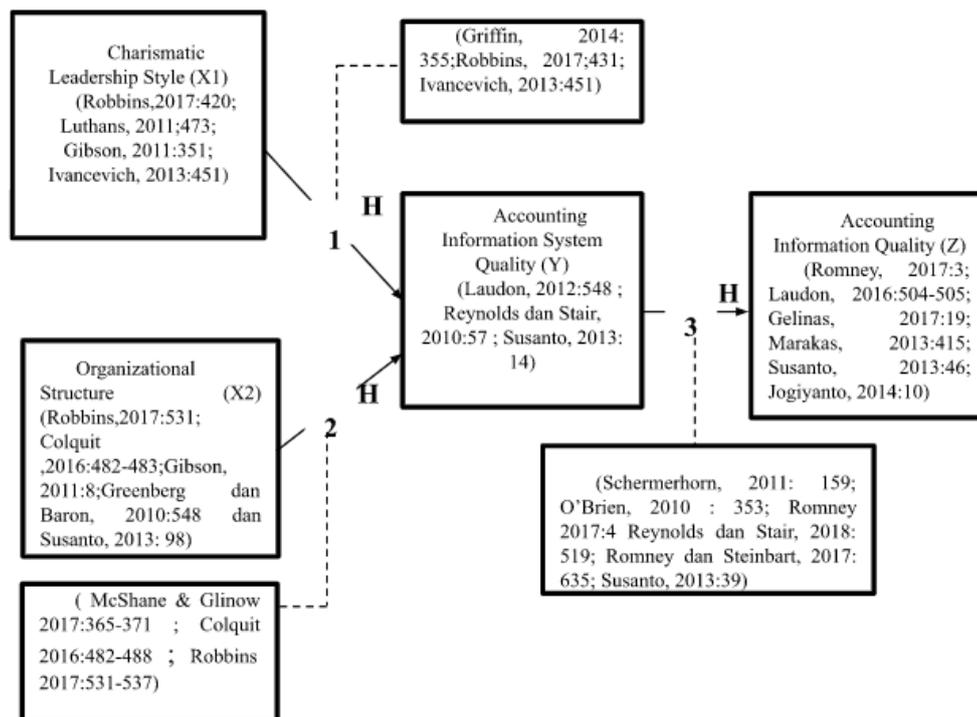
Meanwhile, according to Susanto (2013: 46), quality information is information that must have accuracy, timeliness, completeness and according to needs.

From the above explanations regarding the quality of accounting information, it can be concluded that the quality of accounting information is data that has been processed so that it produces information that is more valuable to them for decision making which has relevant, timely, accurate and complete criteria (Romney, 2017:3; Marakas, 2013:415; Susanto, 2013:46).

The characteristics and indicators of accounting information quality are as follows :

1. Timely
 - a. The information needed will be available at any time (Schermerhorn 2011: 159).
 - b. Information on the past, present, and future can be provided (O'Brien 2010: 353).
2. Relevant
 - a. Reduce ambiguity, make better decisions, or validate prior predictions (Romney 2017: 4).
 - b. The information must be complete, up-to-date or always updated and sufficient for the task at hand (Schermerhorn 2011: 159).
3. Understandable
 - a. Users will find the information clear and simple to understand. (Schermerhorn 2011: 159).
 - b. Presented in a useful and understandable format (Romney 2017: 4).
4. Accuracy
 - a. Available information must be error-free (O'Brien 2010: 353).
 - b. Information must be accurate, and reliable (Schermerhorn 2011: 159).
 - c. Reliable Free from error or bias (Romney 2017: 4).

Research Model :



Picture 1
Thinking Framework Chart

Hypothesis

Based on the above framework, the hypotheses proposed in this study are:

H1 : Charismatic leadership style affects the quality of accounting information systems.

H2 : Organizational structure affects the quality of accounting information systems.

H3 : The quality of the accounting information system affects the quality of accounting information.

RESEARCH METHODOLOGY

Explanatory research was used in this study, with quantitative research being the research approach. The population of this study comprises of 150 manufacturing businesses in the city of Bandung. This study's sample size is 52 people. This study's sample approach is probability sampling using the basic random sampling method.

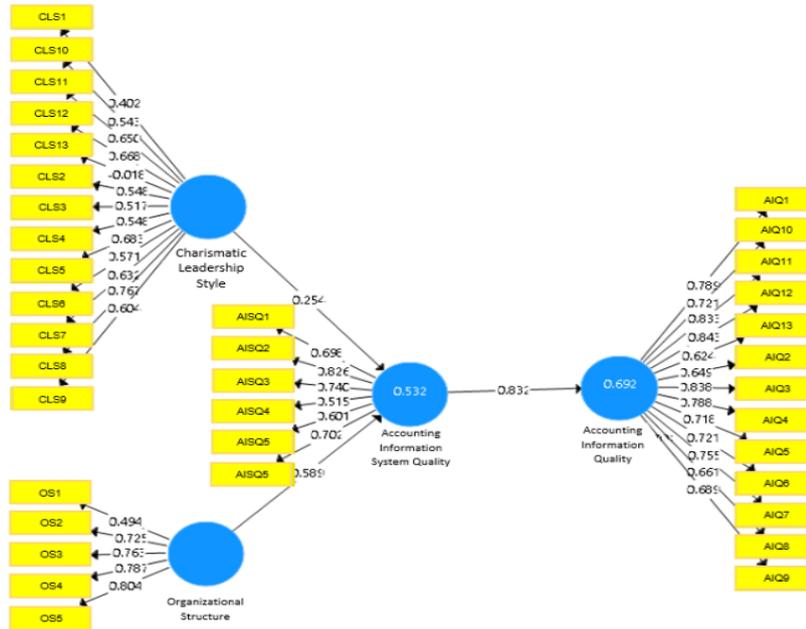
Primary data is the type of data that will be used in this study, the data were obtained through questionnaires which will be filled in directly by respondents. SEM - PLS (Partial Least Square - Structural Equation Modeling) is the data analysis technique used in this study.

RESULTS

Measurement Model Testing (*Outer Model*)

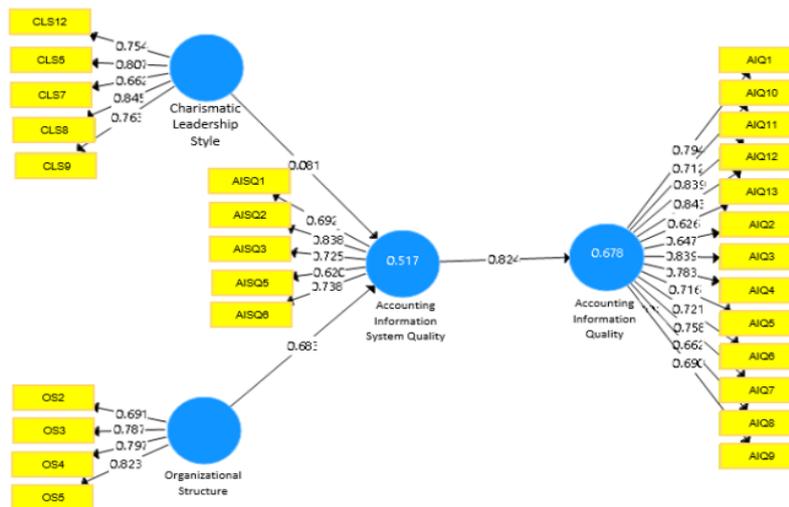
To examine validity and reliability, a measurement model is applied.

The first test is convergent validity, Ghazali (2015: 74) states that the loading factor value for each construct indicator demonstrates the convergent validity test. The loading factor value must be greater than 0.70 to be considered valid, according to the rule of thumb commonly employed to measure convergent validity. However, in development stage research, a loading scale of 0.50 to 0.60 is acceptable. In reflective indicators, if the loading factor value is smaller than 0.60, it must be removed from the measurement model. The following picture are the output results for the loading factor value :



Picture 2. Path Diagram and Loading Factor Value
 Source : Processed Data Output (2022)

Based on Picture 2. above, in variable X1 (charismatic leadership style) there are 8 indicators that must be eliminated, namely CLS1, CLS2, CLS3, CLS4, CLS6, CLS10, CLS11 and CLS13. Meanwhile, for variable X2 (organizational structure) OS1 must be eliminated and for variable Y AISQ4 must be eliminated. Because there are several indicators that are removed, the final path diagram will be formed as follows:



Picture 2. Final Path Diagram and Loading Factor Value
 Source : Processed Data Output

There is also Average Variance Extracted (AVE) which is used in testing convergent validity. The Average Variance Extracted (AVE) value is expected to be greater than 0.50 and all variables that have been tested have an AVE value of more than 0.50. For more details, the AVE results can be seen in the table below:

Table 1. *Average Variance Extracted (AVE) value*

| Variable | AVE value |
|---|-----------|
| Charismatic Leadership Style (X1) | 0.591 |
| Organizational Structure (X2) | 0.603 |
| Accounting Information System Quality (Y) | 0.527 |
| Accounting Information Quality (Z) | 0.554 |

Source : Processed Data Output (2022)

The cross loading table can be used to test the second test, discriminant validity, which is satisfied if an indicator's loading value is greater than the cross loading value Solimun (2017: 39).

Table 2. *Cross Loading*

| Indicator | CLS (X1) | OS (X2) | AISQ (Y) | AIQ (Z) |
|-----------|----------|---------|----------|---------|
| GKK5 | 0.807 | 0.294 | 0.301 | 0.435 |
| GKK7 | 0.662 | 0.255 | 0.166 | 0.300 |
| GKK8 | 0.845 | 0.292 | 0.289 | 0.384 |
| GKK9 | 0.763 | 0.296 | 0.239 | 0.476 |
| GKK12 | 0.754 | 0.401 | 0.332 | 0.516 |
| SO2 | 0.294 | 0.691 | 0.516 | 0.451 |
| SO3 | 0.307 | 0.787 | 0.534 | 0.557 |
| SO4 | 0.349 | 0.797 | 0.601 | 0.709 |
| SO5 | 0.308 | 0.823 | 0.565 | 0.584 |
| KSIA1 | 0.221 | 0.508 | 0.678 | 0.620 |
| KSIA2 | 0.379 | 0.601 | 0.692 | 0.567 |
| KSIA3 | 0.178 | 0.444 | 0.838 | 0.837 |
| KSIA5 | 0.294 | 0.419 | 0.725 | 0.517 |
| KSIA6 | 0.178 | 0.603 | 0.620 | 0.516 |
| KIA1 | 0.478 | 0.680 | 0.652 | 0.794 |
| KIA2 | 0.265 | 0.614 | 0.546 | 0.647 |
| KIA3 | 0.573 | 0.64 | 0.675 | 0.839 |
| KIA4 | 0.367 | 0.568 | 0.682 | 0.783 |
| KIA5 | 0.247 | 0.473 | 0.497 | 0.716 |
| KIA6 | 0.389 | 0.574 | 0.671 | 0.721 |
| KIA7 | 0.450 | 0.480 | 0.549 | 0.758 |
| KIA8 | 0.325 | 0.390 | 0.505 | 0.662 |
| KIA9 | 0.348 | 0.399 | 0.578 | 0.690 |
| KIA10 | 0.394 | 0.524 | 0.678 | 0.712 |
| KIA11 | 0.510 | 0.675 | 0.652 | 0.839 |
| KIA12 | 0.510 | 0.682 | 0.676 | 0.843 |
| KIA13 | 0.502 | 0.442 | 0.526 | 0.626 |

The third test is reliability testing. Cronbach's Alpha and Composite Dependability are two ways for determining the reliability of a construct using reflected indicators. The Composite Dependability score must be greater than 0.70, and Cronbach's Alpha must be greater than 0.60, according to the Rule of Thumb for determining construct reliability.

Table 3. Reliability test results

| Variable | Cronbach's Alpha | Composite Reliability |
|---|------------------|-----------------------|
| Charismatic Leadership Style (X1) | 0.828 | 0.878 |
| Organizational Structure (X2) | 0.932 | 0.941 |
| Accounting Information System Quality (Y) | 0.774 | 0.847 |
| Accounting Information Quality (Z) | 0.778 | 0.858 |

Based on the table above, the variables measured have a Cronbach's Alpha and Composite Reliability value greater than 0.7 so it can be said that all latent variables are reliable.

Structural Model Testing (*Inner Model*)

The R-square for each dependent latent variable can be used to test the structural model. According to Ghozali (2014) there are 3 levels of categories for the range of R-square values, namely the low category with an R-square value of 1 - 40%, the medium category with an R-square value of 41 - 70% and the high category with an R-square value of 71 - 100%. Goodness of fit in PLS can be determined by the Q2 value. The Q2 value has the same meaning as the coefficient of determination (R-Square) in regression analysis.

Table 4. R-square

| | R Square | R Square Adjusted |
|---|----------|-------------------|
| Accounting Information System Quality (Y) | 0.678 | 0.672 |
| Accounting Information Quality (Z) | 0.517 | 0.498 |

Based on the table above, Q2 can be known as follows: $Q2 = 1 - (1 - R1^2) (1 - R2^2) = 1 - (1 - 0.678) (1 - 0.517) = 0.844474 = 84\%$, which means that the range of R-square value is into the high category.

Hypothesis Testing

Hypothesis testing is done by bootstrapping model using the t statistic. The p-value is used to do this hypothesis test. The hypothesis is accepted if the p-value with a significance level of 5% is equal to or less than 0.05 and the t-statistic value is equal to or greater than 1.96. If the p-value is

more than 0.05 with a significance threshold of 5% and the t-statistic is less than 1.96, the hypothesis is rejected., Ghozali (2015: 81).

Table 5. Bootstrapping Test Results

| | Original Sample Estimate | Sample Mean | Standard Deviation | T Statistics | P Values |
|--|--------------------------|-------------|--------------------|--------------|----------|
| Charismatic Leadership Style (X1) → Accounting Information System Quality (Y) | 0.081 | 0.113 | 0.095 | 0.851 | 0.395 |
| Organization Structure (X2) → Accounting Information System Quality (Y) | 0.683 | 0.677 | 0.089 | 7,656 | 0.000 |
| Accounting Information System Quality (Y) → Accounting Information Quality (Z) | 0.824 | 0.839 | 0.035 | 23.268 | 0.000 |

Hypothesis testing H1: According to table 5, the t-statistic value is 0.851 less than 1.96 and the p-value is 0.395 greater than 0.05, indicating that hypothesis H1 in this study is rejected. As a result, it can be stated that variable X1 (charismatic leadership style) has no significant effect on variable Y. (quality of accounting information systems). In this study, the charismatic leadership style cannot affect the quality of the accounting information system because there are not many leaders who use a charismatic leadership style who can articulate an attractive vision, are willing to take high personal risks, incur high costs and others. A sample size that is too small can also cause this to happen.

Hypothesis testing H2 : Based on the test calculation findings in table 5, the t-statistic value is 7.656 more than 1.96 and the p-value is 0.000 less than 0.05, indicating that hypothesis H2 in this study is accepted. This implies that variable X2 (organizational structure) has a strong influence on variable Y. (quality of accounting information systems). The findings of this study are aligned with Kuraesin's (2016) research, which shows that organizational structure influences the quality of accounting information systems.

Hypothesis testing H3: Based on the test calculation findings in table 5, the t-statistic value is 23.268, which is larger than 1.96, and the p-value is 0.000, which is less than 0.05, indicating that hypothesis H3 is accepted in this study. This shows that the accounting information system's quality has a substantial impact on the accounting information's quality. A dependable accounting information system in a business can generate quality and valuable information for its users in the decision-making process.

The findings of this study are line with the findings of Darma (2020), Puspitawati (2019), and Bachmid (2016), who found that the quality of accounting information systems affects the quality of accounting information. The accounting information system has an impact on the quality of information because, in order to obtain quality information, the organization must create a good accounting information system in order to have correct data and analysis whose results will be utilized to make choices.

CONCLUSION AND FURTHER RESEARCH

Based on the results of the research analysis above, it can be concluded that variable X1 (charismatic leadership style) has no effect on variable Y (quality of accounting information systems) due to several factors such as not many leaders who use a charismatic leadership style that can articulate an attractive vision, are willing to take high personal risks, incur high costs and others. A sample size that is too small can also cause this to happen. Variable X2 (organizational structure) has a significant effect on variable Y (quality of accounting information systems) and for variable Y (quality of accounting information systems), it has a significant effect on Variable Z (quality of accounting information).

For further research, it is recommended to conduct the same research by adding other indicators and factors that can affect these research variables. Other aspects influencing the quality of the accounting information system can also be added.

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