

NAVIGATING UNCERTAINTY: A CONTINGENCY THEORY APPROACH TO ASSESSING THE IMPACT OF ACCOUNTING INFORMATION SYSTEMS ON SME PERFORMANCE

Nur Diana

Universitas Islam Malang

Nurdiana2016@unisma.ac.id

ABSTRACT

The global sector has faced repercussions from the COVID-19 pandemic, particularly impacting small and medium-sized enterprises (SMEs) and detrimentally affecting organizational performance, planning, control, and systems. Consequently, SMEs have responded by taking specific measures related to utilizing accounting information systems to mitigate these challenges, thereby influencing SME performance through environmental and organizational factors. This research aims to provide empirical evidence regarding the influence of business experience and strategy on SME performance, with accounting information systems acting as a mediator. The study adopts an explanatory causality approach by employing primary data sources, survey techniques, and a sample of SME owners and managers. The collected data is analyzed through simple random sampling, individual units of analysis, a one-shot study time horizon, and path analysis. The findings indicate a positive impact of business experience on accounting information systems. Additionally, SME performance is negatively affected by business experience. Furthermore, the study reveals that the accounting information system, as a mediator, contributes to enhanced SME performance resulting from business experience.

Keywords: performance of SMEs, accounting information system, business experience, business strategy

INTRODUCTION

The financial statement is a structured summary of the financial condition and history of transactions carried out by an entity. The objective of reporting financial is to provide decision-makers with useful information and management accountability of resources that are already entrusted (International Federation of Accountants, 2005). Moreover, in the scope of public sector. When relevance, reliability, completeness, time accuracy, purposes, and verifiability could be felt by users, then information could be

said as useful information (Fitriati and Mulyani, 2015). A particular form of information is used as user requirements for the process of decision-making. Qualified information is essential for the interested party who used that information to reduce uncertainty and knowledge upgrade on the specific concern areas (Ulric J. Gelinas, Steve G. Sutton, and James E. Hunton, 2005). To measure accounting information quality, assessing relevance, reliability, understandability, and comparability of information is needed (International Federation of Accountants, 2000).

The information quality of financial statements that the government publishes in public has to meet standards to be trusted and used by people. This information is one that people could rely on for making a decision (Suwardjono, 2011). Information becomes an essential consideration for a manager to determine a way to develop operations activity and avoid risks that could make a company suffer a loss (Romney & Steinbart, 2014). Information may benefit from a compiled strategy to minimize unpredictable events, improve decisions, and improve the ability to arrange and schedule organization activities. Consider the information that is a wishful move for doing an activity (Stair & Reynold, 2001).

Government Regulation Number 65 in 2010 concerning the Regional Financial Information System explains that every development process activity on government has to not across from good governance principles. Good governance itself is the principle of maintaining constructive and comprehensive interactions between society, private sector, and state domain (Sedarmayanti, 2012). One of the principles of good governance that must be adhered to is accountability. The organization's ability to explain the situation, including the decisions taken and the activities undertaken. Government accountability must be maintained through the provision of quality information to the interested party.

In reality, Indonesia still lacks quality financial reports that could be considered material for an interested party (Setiyawati & Doktoralina, 2019). There are still a lot of inconsistent data presented and many irregularities that the Supreme Audit Agency (BPK) has been able to find in conducting audits of government financial reports. There is a 2,887 audit issue of revenue and expenditure budget control, then there is 1,252 IC structures issue (BPK, 2018). The Central Sulawesi Provincial Government as one of the accounting entities, is required to prepare local government financial reports as a form of accountability for the use of public funds. The BPK audits the Central Sulawesi Provincial Government's Financial Statements. From 2014 to 2018, the Central Sulawesi Provincial Government received an Unqualified BPK opinion and received an award from the Indonesian Ministry of Finance. This consecutive valuation from BPK is become exceptional achievement even though it is far from the center of government. Eventhough received unqualified opinion in province level, four from nine regencies in Central Sulawesi valuation receive qualified opinion from BPK that consist of Donggala, Tolitoli, Bangkep, and Morut (Simanjuntak, 2019). Weaknesses that made these four regency receive a qualified opinion because there is the internal control system issue founded, inadequate administration of fixed assets.

The earlier study found several factors that could affect accounting information quality. The factors that often being examined last decade include competency (Aier, Comprix, Gunlock, & Lee, 2005; Cohen, Krishnamoorthy, & Wright, 2004; Demerjian, Lev, Lewis, & McVay, 2013; Indriasih, 2014; Mulyani & Arum, 2016; Siahaan, Gultom, & Lumbanraja, 2016; Tee, Bowen, Doyle, & Rohde, 2007), Accounting Information System (AIS) (Fitriati, Mulyani, & Street, 2015; Ives, Olson, & Baroudi, 1983; Mulyani, 2008; Nicolaou, 2000; Sajady, Dastgir, & Hashem Nejad, 2008; Susanto, 2016a; Wisna, 2016), and Internal Control (IC) (Bédard, 2011; Brink, 2011; Mulyani & Arum, 2016; Tee et al., 2007; Zinkin, 2013).

Competence is an individual characteristic that is related to criterion effective work and excellent performance in doing a job. Competency has seven components: individual, mental, interpersonal, organizational, executive, specialized, and environmental (Rahimian, Arash, Abbaspour, & Delavar, 2016). Furthermore, it is completed by communication, personnel, logic, business and leadership indicators (Chianchana & Wichian, 2016). In the governance environment, competence is about an ability possessed civil servants with knowledge, skills, and attitudes of behavior to do duties (Government Regulation No 101 of 2000). Adequate competence of civil servants' apparatus on accounting will drive their work more effectively and efficiently to produce high-quality financial reports. Organizational performance could improve significantly if the organization always improves its competency (Siahaan et al., 2016). The government apparatus accounting competence has an effect on financial statements quality information (Indriasih, 2014). Earlier studies show human resources competency (COMP) has contributed to affect accounting information quality (Aier et al., 2005; Demerjian et al., 2013; Indriasih, 2014; Mulyani & Arum, 2016).

Accounting information comes from the integrated AIS of the organization. AIS is a integrated mechanism in a system that collects, records, stores, and processes data to make an useful information for decision-makers (Romney and Steinbart, 2014). AIS is an set of resources that include people and equipment that designed for transform financial and other data into set of integrated information (O'brien, 1995). AIS built up for process data of accounting from all over sources into various accounting information needed by users to reduce risk while decisions is made (Susanto, 2016b). Six constructs that build AIS successfulness are system quality, service quality, net benefits, user satisfaction, system use, and information quality (DeLone and McLean, 2003). The experts proposed the terms of effectiveness, quality, and success rate of the AIS (Susanto, 2016b). An information system's effectiveness is determined by the user's perception of how the system provides information needed (Ives et al., 1983). A perception of user satisfaction depends on information generates from the system (Nicolaou, 2000). AIS caused the improvement of managers' decision- making process by increasing the financial reports qualities and facilitate of company's transactions (Sajady et al., 2008). AIS's success has implications benefit for accounting information quality (Fitriati & Mulyani, 2015). One that influences accounting information quality is AIS quality (Fitriati & Mulyani, 2015; Sajady et al., 2008; Susanto, 2016b; Wisna, 2016).

IC is designed to provide reasonable assurance of achieving performance with the entity's objectives in the operations, compliance and reporting activities of the board of directors, management, other personnel in the entity (Coso, 2013). IC provides reasonable assurance to ensure operations, financial reporting, and compliance with relevant laws and regulations (Zinkin, 2013). In this study, the COSO framework being used and this framework identify five components of useful IC, namely: control environment, risk assessment, control activities, information and communication, and monitoring of activities. Based on Government Regulation Number 60 of 2008, IC has matched all tasks and functions already organization do with the measurements determined effectively and efficiently for the leadership's interests in achieving good governance. Reliable and accurate accounting information is the output that the IC provides over prepare financial reporting (Brink, 2011). Bédard (2011) suggests that IC effectiveness will drive accounting information quality into a higher degree (Bédard, 2011; Doyle, Ge, & McVay, 2007; Mulyani & Arum, 2016).

Financial reporting information becomes an essential matter for who has an interest as a basis to take action. Lack of information quality of financial reporting could drive them into wrong decisions. Because Indonesia's financial statement's information quality is still in a poor position, this issue needs to be cautious. Central Sulawesi Governance became a province that BPK give an unqualified opinion in continuous years from 2014 until 2018, but issue founded in 2018, from nine regencies there is four regencies that have issue makes these regencies receive qualified oppion from BPK. This situation could be the best place to be examined factors that makes this place always obtain an unqualified opinion financial statements from BPK even tough four regencies that obain qualified oppinion. Based on the background mentioned before, this study aims to develop a model earlier research with analysis influences COMP, AIS, and IC on the financial reporting quality information. Based on the research background that already explained, the conceptual framework is shown in thefigure below:

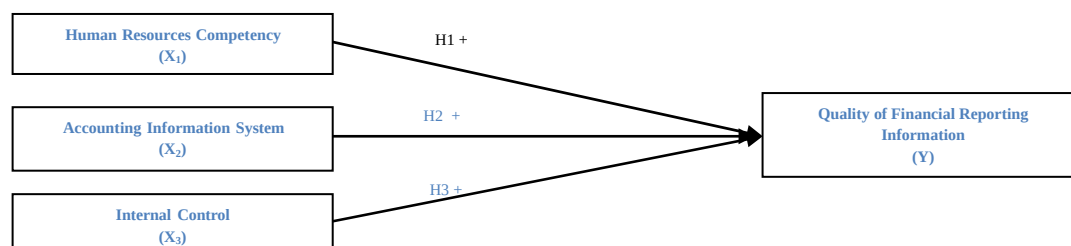


Figure 1. Conceptual Framework

RESEARCH METHOD

This research applies a quantitative descriptive approach as a basis of work. The quantitative approach starts from correlating issues with theory, build hypotheses, subject selections, gather data, and then process data so the data could be analyzed and drawn from conclusions (Bryman and Bell, 2017). Meanwhile, with describing the data,

it will explain more specific characteristics of each variable.

This research examines COMP, AIS, and IC. Indicators used in COMP adopted and developed from Cohen et al. (2004), Siahaan et al. (2016), and Tee et al. (2007). Indicators used in AIS adopted and developed from Ives et al. (1983), Nicolaou (2000), Mulyani (2008), Romney and Steinbart (2014). Meanwhile, IC adopted and developed from Brink (2011), Coso (2013), Zinkin (2013). Indicators of Quality of financial reporting information adopted and developed from Romney and Steinbart (2014) and Ulric J. Gelinas et al. (2005). This study takes place in Central Sulawesi Government as a representative image of Central Sulawesi Province that received an Unqualified BPK opinion and received an award from the Indonesian Ministry of Finance.

This study uses primary data collected by distributing questionnaires to each respondent in all local government units in the Central Sulawesi Provincial Government. Samples were taken with purposive sampling techniques. The population in this study consists of all government employee work units in the Central Sulawesi Provincial Government. Observation units are the SIMDA operator responsible for the implementation of accounting.

The Data obtained were then tested for validity and reliability so that the data is valid for processing. The data will be analyzed using Multiple Linear Analysis. T statistic was used to test the significance of each independent variable's effect on the dependent variable. From the test results, then we compare the t- value with the table value of t- at 95% confidence level ($\alpha = 0.05$) with the decision criteria: If $t \leq t$ table: H_0 accepts and H_a os reject, and if t - count $> t$ -table: H_0 is rejected and the H_a is accepted. Each hypothesis will be tested through a statistical t-test: H_0 is rejected if $t > t$ -critical, $\alpha = 0.05$ level. Thus, to test the effect of COMP, AIS, and IC toward Quality of Financial Reporting Information in Central Sulawesi Provincial Government, the models applied were:

$$AIC = \alpha + \beta_1 HRC + \beta_2 AIS + \beta_3 IC + e$$

Notes

AIC : Quality of Financial Reporting Information in Central Sulawesi Provincial Government

HRC : Human Resources Competency

AIS : Accounting Information

System IC : Internal Control

RESULTS AND DISCUSSION

Results

The response rate from all distributing questionnaires was 100% (43 of 43). Approximately half of the respondents (55,81%) were between 30-40 years old, followed by 22,26% were

<30 years old, and 20,93% who >40 years old. The Majority of the respondents (67,44%) undergraduate certificate, 23,26% having diploma certificate, and 9,30% having Highschool certificate. The Users' background range from accounting 48,84%, Social/Politic 20,93%, Teknik 11,63% and other 18,60%.

Based on the result of data processing by using the SPSS approach, it is known that the model has met the validity and reliability of the instrument. The result of the validity test and reliability test are presented in Table 1 and Table 2. It was then followed by testing the goodness of fit of the model.

Table 1. Validity Result

No	COMP	AIS	IC	Accounting Information Quality	Status
1	0,774	0,776	0,633	0,754	Valid
2	0,855	0,859	0,740	0,743	Valid
3	0,836	0,848	0,815	0,669	Valid
4	0,702	0,839	0,708	0,603	Valid
5	0,811	0,880	0,575	0,783	Valid
6	0,814	0,753	0,732	0,843	Valid
7	-	0,777	0,800	0,761	Valid
8	-	-	0,738	0,733	Valid
9	-	-	0,706	0,649	Valid
10	-	-	0,699	-	Valid

Source: SPSS Output

Table 2. Reliability Result

No	Variable	Question's Quantity	Alpha	Status
1	Human Resources Competency (X1)	6	0,887	Reliable
2	Accounting Information System (X2)	7	0,915	Reliable
3	Internal Control (X3)	10	0,894	Reliable
4	Accounting Information Quality (Y)	9	0,887	Reliable

Source: SPSS Output

Based on the validity test results for the variables X1, X2, X3 and Y as shown in Table 1, the value of r all statements greater than 0.300. Therefore it can be concluded that all questioner statements instrument of this research variable is valid. According to Table 2 the SPSS output display shows that the Cronbach Alpha value > 0.60, which means reliable, so it can be inferred that all statement items of variables X1, X2, X3 and Y can be used as statistical measures. The the ANOVA test show F value is 42.196 with a significance level smaller than the distrust level (0,000 <0,05). Thus it can be concluded that the regression model in this study can be used for prediction.

Table 3. Multi Linear Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.874 ^a	0.764	0.746	2.00893
Coefficients^a				
Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
	B	Beta		
1 (Constant)	3.275		1.003	0.322
Variable X1	0.375	0,333	3.342	0.002
Variable X2	0.419	0,320	3.472	0.001
Variable X3	0.353	0,403	3.719	0.001
Alpha= 0.05 Sig = 0.000 ^a				

Source: SPSS Output

Multiple linear regression analysis determines the effect of independent variables with the dependent variable to test the research hypothesis. Based on table 3, the multiple linear regression equation of this study can be formulated as follows:

$$AIC = \alpha + \beta_2 AIS + \beta_3 IC + e$$

$$AIC = 3.275 + 0.375HRC + 0.419AIS + 0.353IC + e$$

The multiple linear regression equation above shows that the independent variable consisting of Human Resource Competency(X1), AIS (X2), and IC (X3) has a positive effect toward the dependent variable, Quality of Financial Reporting Information in Central Sulawesi Provincial Government (Y). Thus it can be concluded that all of the hypotheses are accepted. R Square value 0.764 (76.4%) shows the magnitude of the influence of independent variables (X1, X2, X3) simultaneously equal to 76.4% to Quality of Financial Reporting Information in Central Sulawesi Provincial Government (Y) while the rest of 23.6% is another

variable that not tested in this study. Based on Table 3, the value of the correlation coefficient (R) is 0.874 or equal to 87.4% means close to 1. If R approaches 1 then the regression model obtained is considered very strong. Furthermore, if getting closer to 0 then multiple linear regression model is considered weak. This indicates that the overall independent variables are closely related to the Quality of Financial Reporting Information in the Central Sulawesi Provincial Government.

Discussion

Based on results and analysis before, COMP affects the quality of financial statements that the Central Sulawesi Government makes. This study support earlier research that mentions COMP has essential relation with quality of government financial statement ((Aier et al., 2005; Demerjian et al., 2013; Indriasih, 2014; Mulyani & Arum, 2016). Organizational performance could improve significantly if the organization always improves its employee competency (Siahaan et al., 2016). This place dominated by undergraduate civil apparatus, so its not hard to train each of them to learn accounting skill especially if according to the majors. Adequate accounting skill competence of the civil servants' apparatus of Central Sulawesi Government could drive their work more effectively and efficiently. Of course, this will make financial reports better in information quality.

AIS, as an integrated system to gather information, also proved could affect government financial statements' quality information. This found supports an earlier study that mentions AIS has a great potential effect on financial statements' quality information (Fitriati & Mulyani, 2015; Sajady et al., 2008; Susanto, 2016b; Wisna, 2016). AIS process accounting and other data that come from all over sources into integrated accounting information that is needed by users that have the interest to minimize risk and probability decisions will be made (Susanto, 2016b). Implementation of AIS that already effective on that Central Sulawesi Government makes it easy to obtain information provided by the system. It is good that AIS is supported by a civil servants SIMDA administrator major study structure is dominated by accounting graduates. So, making it easier to manage information in the accounting system. AIS makes managers improve the decision-making process by increase financial reports quality and facilitating organization transactions process (Sajady et al., 2008). AIS's success has implications benefit for accounting information quality (Fitriati & Mulyani, 2015).

Meanwhile result of IC toward quality information of financial statements also shows a significant effect. This result supports another earlier study that mentions IC could affect the information quality of government financial statements (Bédard, 2011; Mulyani & Arum, 2016; Tee et al., 2007). Central Sulawesi Government shows great IC when implement in preparing financial statement, each of civil servant members must not defect any of the rules that already apply. The strict control makes the IC of this area great. IC provides reasonable assurance of an organization's ability to manage operations, make financial statements, and comply with overall laws and

regulations that relevant (Zinkin, 2013). Bédard (2011) suggests that IC effectiveness drive accounting information quality into a better one.

The results already discuss each variable, this conceptual study construct found a powerful combination of variables. To fulfill one mandate accountability principle in good governance, Central Sulawesi Government must keep quality information of financial statements. The thing that allowed the Central Sulawesi government to maintain the unqualified status of the BPK in general from 2014 was that they paid attention to three factors, including competence, AIS, and IC in preparing financial reports. From three factors that being analyse, AIS become greatest factor that contribute beta coefficient among them. This means the presence of AIS in governmental organization give greater impact toward quality of financial statements than IC and competence in Central Sulawesi province. The changes in AIS give more impact on the quality of financial statements. This because information system's effectiveness is determined by the user's perception of how the system provides information needed (Ives et al., 1983). The more complete the information provide by AIS than SIMDA administrator necessities, the easier it is to produce qualified financial reports for them.

CONCLUSION

Results and decisions in this study confirm and briefly explain that COMP, AIS, and IC have a positive effect on the financial reporting information quality in Central Sulawesi Provincial Government. Moreover, this combination of variables grouped in a very strong effect on the research. From three factors that being analyse, AIS become greatest factor that contribute beta coefficient among them.

The competency of a civil servant of the SIMDA operator is essential to produce good and qualified accounting information. By improve the relatable skill with work place such as Structured Query Language (SQL) of database and accounting competence of each employee, in this case SIMDA operator, the quality of accounting information of financial statements would increase. Even though Central Province Government dominated by undergraduate employee, knowledge and skills suitable for the work field are needed continue to be improved the government's human resources competency. Quality of AIS will also enhance accounting information quality: relevance, reliability, understanding, and comparability. The presence of AIS governmental organization give greater impact toward quality of financial statements than IC and competence in Central Sulawesi province. The more complete the information provide by AIS than SIMDA administrator necessities, the easier it is to produce qualified financial reports for organization. Even though SIMDA operators already dominated by accounting undergraduate, but it not reach a half of them. Strengthening accounting undergraduate composition or conducting further training in accounting is strongly recommended for Central Sulawesi Province Government. Then last, IC also become essential matter for an organization even though has no greater coefficient beta than AIS. IC important to such as a governmental entity forenhance the accounting information quality by increasing the control environment, risk

assessment, control activities, information and communication, and monitoring activities. An effective IC system will be required and be maintained.

This study only examines the influence of COMP, AIS, and IC effectiveness in exploring accounting information quality. This research was conducted in Central Sulawesi that already obtain an unqualified opinion from BPK since 2014 consecutively, so generalize this research into a different place without considering it is not recommended. Further research expected to expand the research area and could compare one with another area so could give more accurate results for each area characteristics. The mix methods between quantitative and qualitative methods that use interview also recommended to explore specific issue that faced by SIMDA administrator. The more specific issue the more specific solutions that can be formulated.

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