



## How to Increase the Quality of Accounting Information System and Accounting Information Quality in Bandung's Higher Educations?

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**Abstract:** The existence of information becomes a very important part for individuals. The process of processing data into information is the main activity carried out by each individual. The process of processing data into information provides benefits not only for individuals, but also for organizations. Information is crucial for individuals and organizations. Information plays an important role in all aspects of life, both individuals and organizations. This study aims to determine the effect of information technology and organizational structure on the quality of accounting information systems and the effect of the quality of accounting information systems on the quality of accounting information at universities in Bandung. The population of this research is all universities in Bandung, with a sample of 30 universities with 3 observation units from each university. The research results are processed using the SEM-PLS approach with the help of the Wrap-PLS application. The results of the study came from 28 universities with a questionnaire return rate of 78 respondents, showing the results that there is an influence between information technology and organizational structure on the quality of accounting information systems and there is an influence between the quality of accounting information systems on the quality of accounting information.

**Keywords:** Information Technology, Organizational Structure, Quality of Accounting Information Systems, Quality of Accounting Information

### INTRODUCTION

In the era of globalization, the world has become very complex, where the existence of information is a very important part for individuals (Azhar Susanto, 2013: 11). As revealed by Davis and Olson (1985:4) that the process of processing data into information is the main activity carried out by each individual. The process of processing data into information provides benefits not only for individuals, but also for organizations (Hoffer, et al, 2011: 2).

Agree with Hoffer, Wilkinson, et al (2000:4) states that information is crucial for individuals and organizations. Likewise, Azhar Susanto (2013:11) argues that, Information plays an important role in all aspects of life, both individuals and organizations.

Managers and non-managers in an organization use this information in making decisions (Wilkinson, et al, 2000:4). A similar statement was put forward by Romney and Steinbart (2015: 31) that when making decisions, managers and non-managers must process data into useful information. Useful information depends on the quality attached to that information (Wilkinson, et al, 2000:18).

Quality information has several characteristics including relevant, reliable, complete, timely, understandable, verifiable, and accessible (Romney and Steinbart, (2015: 30). The same thing was expressed by Bocij, et al (2014: 12), that quality information has dimensions, namely Accuracy, Relevance, Completeness, Conciseness, and Scope. Then Hall (2011:13-14) explains that the characteristics of quality information are relevance, timeliness, accuracy, completeness and summarization. Similar statements were put forward by Gelinass and Dull (2008 : 20-21) which states that the characteristics of quality information are Understandability, Relevance, Timeliness, Predictive Value, Verifiability, Neutrality, Comparability, Accuracy, and Completeness.

In fact, there are problems regarding information that is not of good quality, as stated by Thomas Suyatno (2015) as the General Chairperson (ABPPTSI) of the Center, that there are problems with 205 PTS foundations in Indonesia regarding financial management which experience delays in preparing financial reports. In line with the opinion of Harry Azhar Azis (2015) who explained that there were debt problems to third parties in three ministries/agencies of Rp. 1.21 trillion which could not be traced and were not supported by adequate evidence. Accounting information that is not qualified makes an organization not synergized, resulting in the organization making decisions that deviate from what it should be (Azhar Susanto, 2013: 2). Quality accounting information comes from data processing which is a representation of the end result of a quality accounting information system (Wilkinson, et al, 2000: 7). Without a quality Accounting Information System, data will be difficult to transform into quality Accounting Information (Valacich, et al, 2016: 48).

Quality accounting information is the output of a quality accounting information system (Bocij, et al, 2014: 588). The same thing was stated by Gelinass and Dull (2008:17), that a quality Accounting Information System transforms data into quality Accounting Information. A similar statement was put forward by Bodnar and Hopwood (2013: 1) that quality accounting information is produced from a quality accounting information system environment. Accounting Information Systems in organizations present a quality Accounting Information to users in supporting their work (Romney and Steinbart, 2015: 30) which is supported by research by Rapina (2014), Sri Dewi Anggadani (2013) and Alrabei (2014) which reveals that the quality of the System Accounting Information affects the Quality of Accounting Information Systems.

Quality Accounting Information Systems must be integrated (Azhar Susanto, (2013: 16). Then Heidmann (2008: 87-90) Quality Accounting Information Systems have dimensions including: Integration, Flexibility, Accessibility, Formalization and Media Richness. The same thing was expressed by (Barrier, 2002: 263) that a quality Accounting Information System has a perspective including Easy to Use, Easy of Learning, Flexibility in Use and Security. Furthermore, Stair and Reynolds, (2012:32) explains that a quality Accounting Information System has characteristics such as Flexible , Efficient, Accessible and Timely. A similar statement was put forward by Duggan and Reichgelt, (2006:312) that this quality Accounting Information System is explained through Reliable, Cost Effective Hardware, and Software which fully documents assigned work without involving obstacles and failures. Agreeing with Duggan and Reichgelt, Khosrow (2011:963, 1351 and 1451) men say that a quality Accounting Information System has characteristics including Easy of Use,

Functionality, Reliability, Flexibility, Data Quality, Portability, Integration, Easy to Learn, User Requirements, Customization, and Performance.

In fact, the non-integrated Accounting Information System was explained by Bambang Dwi Anggono (2015) as the Directorate of e-Government of the Ministry of Communication and Information of the Republic of Indonesia that, so far the e-Government implemented by the government is still considered to be running separately. A similar statement was made by Usman Abdhali Watik (2011) as Deputy Chair of the Central Information Commission that the government has not been able to properly integrate all data on state assets and assets. Furthermore, Bayu M. Hasani (2015) Head of the Tanjung Priok Port Authority explained that electronic information and communication systems have not been fully operational and integrated in the document clearance process, fleet (ships and trucks) and goods. Then, according to R. Yudi Ramdan (2015) as the Head of the Bureau of Public Relations and International Cooperation of the BPK, that the information system is not integrated between BNP2TKI and the Ministry of Manpower which makes development and supervision policies out of sync.

The real condition which indicates that the Accounting Information System cannot be accessed is explained by Hermawan (2014) as the Head of the Bandung Regency Fisheries and Agriculture Service, that the banking system is difficult for farmers to access, especially small farmers, so that it has a negative impact. Then, Enrico Vermy (2012) as the Head of the DKI Jakarta Transportation Service Parking UPT, that the leakage of parking tax payments was due to monitoring difficulties due to a system that was difficult to access. Furthermore, Klosse Harahap (2014) as the Head of BKD Tapaluni Tengah, stated that when confirmed he confirmed that there were difficult problems accessing the official Menpan website. Likewise, Indra Munaswar (2015) as the Coordinator of BPJS Watch, explained that the online system implemented by BPJS is sometimes difficult to access.

In everyday life, accounting information systems are unreliable, as explained by Harry Azhar Azis (2015) that the recording of KKKS asset mutations cannot be explained because they have not been supported by an adequate system to ensure data accuracy. The same thing was stated by Untung Nugroho (2014), Deputy Director of Supervision of the Financial Services Authority (OJK) Regional 4, that Bank Jateng's financial reports cannot be trusted due to problematic system applications, so there are data differences with Bank Indonesia (BI). A similar statement was made by Sudirman Said (2015) as the Minister of Energy and Mineral Resources, explaining that PLN needs to reorganize its accounting system. Furthermore, Engkan Iskandar (2015) as the Head of the Ciamis District Health Office explained that the current Health Information System (SIK) has not been able to provide accurate data and information.

The phenomenon regarding the inflexible Accounting Information System was stated by Muhammad Nasir (2015) as the Minister of Research, Technology and Higher Education (Menristekdikti), that the Legal Entity State University Financial System (PTN-BH) has so far been lacking in flexibility and it is feared that it will hamper the development there is. A similar statement was made by Salis S. Aprilian (2016) as the President Director of the NGL Agency, that the two systems (FLNG and OLNG) do not have high flexibility, are unreliable and do not have wide multiplier effects.

Researchers formulate problems in research as follows:

1. What influence information technology on Accounting Information System Quality.
2. What influence organizational structure on Accounting Information System Quality.
3. What influence Accounting Information System Quality on Accounting Information Quality

## **METHODS**

In this study, using primary data. For the context of this study, primary data was obtained and collected by researchers through a list of questions compiled through

questionnaires addressed to respondents, with the aim of obtaining facts and factual information from respondents.

The population is a generalization area consisting of: subjects/objects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2015: 119). The population in this study were all tertiary institutions in the city of Bandung totaling 160 tertiary institutions.

The sample is part of the number of characteristics possessed by the population studied (Sugiyono, 2015: 120). Sekaran and Bougie stated (2014: 244), sampling is the process of determining the exact number of elements from a population, so that the research sample will provide an understanding of the characteristics which may later be generalized from the population elements. In this study using the rule of thumb put forward by Hair, et al (2014) regarding the use of PLS-SEM statistical analysis, totaling 30 universities, where this calculation starts from the number of arrow directions in the structural model multiplied by 10. Thus, in this sample study research amounted to 30 universities.

The unit of analysis leads to the level of aggregation of data collected during the data analysis process (Sekaran and Bougie, 2014: 104). The unit of analysis in this study is the accounting department in all tertiary institutions in the city of Bandung.

## RESULT AND DISCUSSION

The location of the research was conducted at universities in Bandung, both state universities and private universities registered at LLDIKTI Regional IV. There will be 160 universities in Bandung in 2021. The random sample in this study totaled 30 tertiary institutions (attached), but in reality the sample data collected did not fully comply with the sampling results using the rule of thumb. The sample obtained in this study came from returning questionnaires from the entire target population so that a total of 28 universities were collected. This is due to the low response rate of the target population. The respondents in this study were managers or heads of accounting and finance departments and related staff at tertiary institutions. The number of respondents who filled out the research questionnaire was 78 people

### Model Evaluation

#### Evaluation of the First Stage Measurement model (First Order)

##### 1. Indicator Validity

**Table 1. Estimation Results of Evaluation of the First Stage Measurement Model (Part 1)**

No	Dimensions	Indicators	Faktor Loading					
			Estimate (O)	Standard Deviation (STDEV)	Statistic-t (( O/STDEV ))	p-Value	Sig	R <sup>2</sup>
1	Functionality	DF1	0.947	0.011	88.622	0.00	Significant	0.89
2		DF2	0.944	0.013	71.018	0.00	Significant	0.89
3	Compatibility	DK1	0.914	0.015	61.459	0.00	Significant	0.83
4		DK2	0.896	0.027	33.037	0.00	Significant	0.80
5	Maintainability	DM1	0.796	0.05	15.84	0.00	Significant	0.63
6		DM1	0.837	0.038	22.286	0.00	Significant	0.71
7	Chain Of Command	DCOC1	0.934	0.013	69.43	0.00	Significant	0.87

8		DCOC2	0.918	0.018	51.29	0.00	Significant	0.84
9	Span Of Control	DSPOC1	0.876	0.034	25.517	0.00	Significant	0.77
10		DSPOC2	0.905	0.021	43.911	0.00	Significant	0.82
11	Accessibility	DA1	0.878	0.021	42,001	0.00	Significant	0.77
12		DA2	0.869	0.029	29.629	0.00	Significant	0.76
13	Flexibility	DF1	0.859	0.035	24.684	0.00	Significant	0.74
14		DF2	0.826	0.042	19.533	0.00	Significant	0.68
15	Integration	DI1	0.932	0.017	54.748	0.00	Significant	0.87
16		DI2	0.95	0.007	134.888	0.00	Significant	0.91
17	Reliability	DR1	0.76	0.06	12.744	0.00	Significant	0.58
18		DR2	0.843	0.054	15.733	0.00	Significant	0.72
19	Accurate	DAC1	0.779	0.021	41.558	0.00	Significant	0.61
20		DAC2	0.811	0.02	45.847	0.00	Significant	0.66
21	Complete	DCO1	0.819	0.029	30.887	0.00	Significant	0.68
22		DCO2	0.842	0.02	36.577	0.00	Significant	0.71
23	Relevance	DRE1	0.814	0.025	23.356	0.00	Significant	0.67
24		DRE2	0.722	0.07	11.738	0.00	Significant	0.53
25	Timeliness	DT1	0.872	0.015	61.77	0.00	Significant	0.77
26		DT2	0.833	0.014	64.467	0.00	Significant	0.69

Source: Processed research results

The validity of each reflective indicator can be seen from the significance of its loading factor. If the test is significant, then the indicator is said to be valid in measuring the dimensions or constructs. Based on the results of the validity test using a significance level of 0.05, it can be concluded that all loading factors are different from zero (significant) so that it can be stated that all indicators are valid to measure their dimensions. Based on table 1, the value of R2 is more than zero with a significance level of 0.05. So that the indicators used in this study are significant.

**Indicator Reliability**

Measuring the reliability of an indicator can be seen from the value of R2. An indicator is said to be reliable if its R2 value is not less than 0.50. Based on the results of the reliability testing of the indicators presented in table 4.8, it can be concluded that all indicators have an R2 value (column d) of more than 0.50. Therefore, all indicators have a good level of reliability.

**Table 2. Estimation Results of Evaluation of the First Stage Measurement Model (Section 2)**

No	Dimensions	R2	Indicators	CR	AVE	Dimensions
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	Indicator s	Validity	Reliabil ity	Validity	Reliability				
(a)	(b)	©	(d)	(e)	(f)	(g)	(h)	(e)	(f)
1	Functionality	DF1	0.896809	Valid	Reliable	0.901	0.820	Valid	Reliable
2		DF2	0.891136	Valid	Reliable				
3	Compatibility	DK1	0.835396	Valid	Reliable	0.944	0.894	Valid	Reliable
4		DK2	0.802816	Valid	Reliable				
5	Maintainability	DM1	0.633616	Valid	Reliable	0.800	0.667	Valid	Reliable
6		DM1	0.700569	Valid	Reliable				
7	Chain Of Command	DCOC1	0.872356	Valid	Reliable	0.923	0.857	Valid	Reliable
8		DCOC2	0.842724	Valid	Reliable				
9	Span Of Control	DSPOC1	0.767376	Valid	Reliable	0.884	0.793	Valid	Reliable
10		DSPOC2	0.819025	Valid	Reliable				
11	Accessibility	DA1	0.770884	Valid	Reliable	0.866	0.763	Valid	Reliable
12		DA2	0.755161	Valid	Reliable				
13	Flexibility	DF1	0.737881	Valid	Reliable	0.830	0.710	Valid	Reliable
14		DF2	0.682276	Valid	Reliable				
15	Integration	DI1	0.868624	Valid	Reliable	0.891	0.942	Valid	Reliable
16		DI2	0.9025	Valid	Reliable				
17	Reliability	DR1	0.5776	Valid	Reliable	0.783	0.644	Valid	Reliable
18		DR2	0.710649	Valid	Reliable				
19	Accurate	DAC1	0.606841	Valid	Reliable	0.885	0.793	Valid	Reliable
20		DAC2	0.657721	Valid	Reliable				
21	Complete	DCO1	0.670761	Valid	Reliable	0.894	0.809	Valid	Reliable
22		DCO2	0.708964	Valid	Reliable				
23	Relevance	DRE1	0.662596	Valid	Reliable	0.827	0.706	Valid	Reliable
24		DRE2	0.521284	Valid	Reliable				
25	Timeliness	DT1	0.760384	Valid	Reliable	0.930	0.869	Valid	Reliable
26		DT2	0.693889	Valid	Reliable				

Source: Processed research results



Based on the results of data processing in table 2 above, it can be seen that all dimensions have an AVE value of more than 0.50, which means that all dimensions have indicators with a good degree of convergence validity. Internal Consistency Reliability Per Dimension Indicator is measured through Composite Reliability with a minimum value of 0.70. Table 2 column g shows the results of data processing, where the CR value is greater than 0.70, which means that the indicators for each dimension have good internal consistency.

**Discriminant Validity**

Evaluation of discriminant validity for each indicator on the dimension can be seen based on the Fornell-Larcker Criteria in table 3. The criterion value in a dimension must be greater for the dimension itself compared to other dimensions (Hair, et al, 2014: 105). Table 3 shows that all criterion values for each dimension (which are on the main diagonal) are greater than the criterion values for other dimensions (outside the main diagonal). Therefore, the indicators on these dimensions have good discriminant validity

**Table 3. Fornell Larcker Criterion for Discrimination Validity of First Stage Measurement Models**

	Funct	Comp	Maint	ChainOC	SpanOC	Access	Flexi	Integ	Relia	Acc	Comp	Relev	Timel
<b>Funct</b>	0.945												
<b>Comp</b>	0.716	0.905											
<b>Maint</b>	0.717	0.618	0.817										
<b>ChainOC</b>	0.321	0.414	0.469	0.926									
<b>SpanOC</b>	0.567	0.502	0.227	0.606	0.89								
<b>Access</b>	0.584	0.420	0.452	0.413	0.413	0.873							
<b>Flexi</b>	0.310	0.324	0.209	0.701	0.643	0.653	0.842						
<b>Inte</b>	0.449	0.301	0.421	0.582	0.564	0.628	0.673	0.944					
<b>Relia</b>	0.513	0.441	0.363	0.519	0.708	0.647	0.642	0.553	0.803				
<b>Acc</b>	0.575	0.460	0.532	0.338	0.520	0.635	0.461	0.461	0.635	0.890			
<b>Comp</b>	0.495	0.345	0.316	0.314	0.567	0.620	0.414	0.414	0.699	0.77	0.899		
<b>Relev</b>	0.539	0.366	0.489	0.421	0.534	0.704	0.588	0.588	0.669	0.784	0.786	0.840	
<b>Timel</b>	0.493	0.298	0.310	0.421	0.644	0.597	0.507	0.507	0.685	0.690	0.789	0.750	0.932

Source: Processed Research Reseulth

**Evaluation of the Second Stage Measurement Model (Second Order)**

In the evaluation of the second stage of the measurement model (ie the relationship between dimensions and constructs), in this study there is only one type of measurement model to be discussed, namely the reflective measurement model.

1) Dimensional Validity

The validity of each dimension can be seen from the significance of its loading factor. If the test is significant, then the dimension is said to be valid in measuring the construct. Based on the results of the validity test using a significance level of 0.05, it can be concluded that all loading factors are different from zero (significant) so that it can be stated that all dimensions are valid to measure the construct. Based on table 3, the value of R2 is more than zero with a significance level of 0.05. So that the dimensions used in this study are significant.

2) Dimensional Reliability

Measuring the reliability of a dimension can be seen from the value of R2. An indicator is said to be reliable if its R2 value is not less than 0.50. Based on the results of the reliability testing of the indicators presented in table 4, it can be concluded that all

dimensions have an R2 value (column d) of more than 0.50. Therefore, all dimensions have a good level of reliability

3) Dimensional Convergence Validity per Construct

Based on the results of data processing in table 4 below, it can be seen that all dimensions have an AVE value of more than 0.50, which means that all dimensions have indicators with a good degree of convergence validity.

4) Internal Consistency Reliability Per Construct Dimension

Internal Consistency Reliability Dimensions Per Construct is measured through Composite Reliability with a minimum value of 0.70. Table 4.8 column g shows the results of data processing, where the CR value is greater than 0.70, which means that the dimensions of each construct have good internal consistence

**Table 4. Evaluation of the Reflective Measurement Model in the Second Stage (Part 1)**

No	Construct	Dimension	Loading Factors					
			Estimate (O)	Standard Deviation (STDEV)	Statistics-t ((O/STDEV)	p-Value	Significant	R <sup>2</sup>
(a)	(b)	©	(d)	(e)	(f)	(g)	(h)	(i)
1	Information Technology	Funct	0.925	0.012	74.335	0.000	Significant	0.836
2		Comp	0.872	0.038	22.829	0.000		
3		Maint	0.863	0.056	15.550	0.000		
4	Organizational Structure	Chain Of Command	0.869	0.042	20.550	0.000	Significant	0.790
5		Span Of Control	0.898	0.022	40.333	0.000		
6	Quality of AIS	Access	0.857	0.043	19.869	0.000	Significant	0.745
7		Flexi	0.865	0.032	26.944	0.000		
8		Integ	0.818	0.047	17.428	0.000		
9	IA Quality	Reliab	0.844	0.035	25.858	0.000	Significant	0.693
10		Accu	0.888	0.031	28.644	0.000		
11		Relev	0.916	0.02	45.219	0.000		
12		Comp	0.872	0.038	22.839	0.000		
13		Timel	0.891	0.026	34.760	0.000		

Source: Processed research results

**Table 5. Evaluation of the Reflective Measurement Model in the Second Stage (Section 2)**

No	Construct	Dimension	R2	Dimensions		CR	AVE	Construct	
				Validity	Reliability			Validity	Reliability
(a)	(b)	©	(d)	(e)	(f)	(g)	(h)	(e)	(f)



1	Information Technology	Funct	0.856	Valid	Reliable	0.918	0.788	Valid	Reliable
2		Comp	0.760	Valid	Reliable				
3		Maint	0.745	Valid	Reliable				
4	Organizational Structure	Chain Of Command	0.755	Valid	Reliable	0.877	0.781	Valid	Reliable
5		Span Of Control	0.806	Valid	Reliable				
6	Kualitas SIA	Access	0.734	Valid	Reliable	0.910	0.717	Valid	Reliable
7		Flexi	0.748	Valid	Reliable				
8		Integ	0.669	Valid	Reliable				
9		Reliab	0.712	Valid	Reliable				
10	Kualitas IA	Accu	0.789	Valid	Reliable	0.947	0.816	Valid	Reliable
11		Relev	0.839	Valid	Reliable				
12		Comp	0.760	Valid	Reliable				
13		Timel	0.794	Valid	Reliable				

Source: Processed research results

### Structural Model Evaluation

**Table 6. Structural Model Evaluation**

No	Exogen	Endogen	Intervening	Path Coefficient						
				Estimate	Standard Deviation (STDEV)	Statistic-t ( O/STDEV )	P-Value	Significant	VIF	Colinearity
1	IT	KSIA		0.173	0.083	2.071	0.042	Significant	1.411	Non-Col
2	SO	KSIA		0.528	0.065	8.119	0.000	Significant	1.411	Non-Col
3	KSIA	KIA		0.683	0.075	9.136	0.000	Significant	1.000	Non-Col
4	IT	KIA	KSIA	0.133	0.069	1.929	0.057	Non-Sig		
5	SO	KIA	KSIA	0.774	0.048	16.127	0.000	Significant		

Source: Processed research result

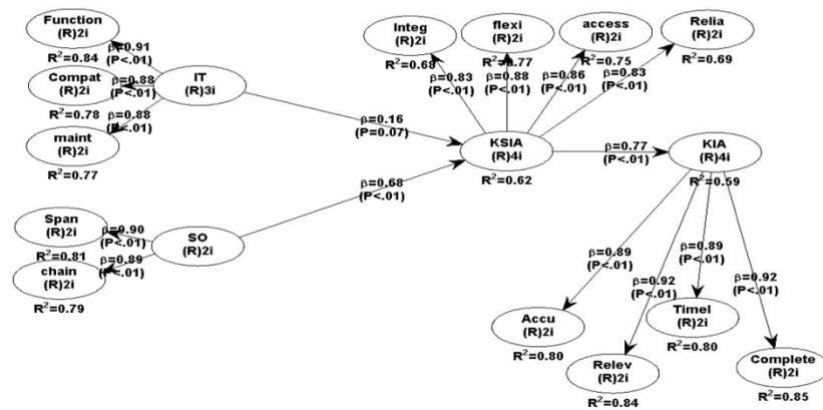


Figure 1. Research result

The following is a description of the significance of the effect of the independent variables on the dependent variable:

**The Effect of Information Technology on the Quality of Accounting Information Systems**

Information Technology is hypothesized to have an influence on the Quality of Accounting Information Systems.

The hypothesis test is presented as follows:

Ho: $\gamma_{11} = 0$  Information Technology has no effect on the Quality of Accounting Information Systems

H1: $\gamma_{11} \neq 0$  Information Technology affects the Quality of Accounting Information Systems

Based on the results of testing the hypothesis in the table above, it can be seen that the P-Value is 0.042. This shows that the P-Value is less than 0.05, which means that Information Technology affects the Quality of Accounting Information Systems at a significance level of 5%. The effect is positive with a low effect of 0.173. This condition means that for every 1 standard deviation increase in the Information Technology score on Accounting Information System Quality, it causes an increase in the Accounting Information System Quality score on average by 0.069 assuming other variables are constant.

That is, the better the application of Information Technology, the higher the quality of the applied Accounting Information System. To follow up on the results of hypothesis testing, the authors conducted brief interviews with the Manager/Head of Accounting and Finance and their Staff. From the results of the interviews conducted, the causes of Information Technology do not affect the Quality of Accounting Information Systems or it can be interpreted that Information Technology makes a low contribution to System Quality Accounting information is the number of higher education analysis units that are the research sample still using Information Technology devices that are not up-to-date, even some of the higher education institutions that are the research sample do not yet use an accounting information system or a manual system. This results, the resulting financial reports or accounting information is not qualified.

**The Effect of Organizational Structure on the Quality of Accounting Information Systems**

Organizational Structure is hypothesized to have an influence on the Quality of Accounting Information Systems.

The hypothesis test is presented as follows:

Ho: $\gamma_{12} = 0$  Organizational Structure has no effect on the Quality of Accounting Information Systems

H1: $\gamma_{12} \neq 0$  Organizational structure affects the quality of accounting information systems

Based on the results of hypothesis testing in the table above, it can be seen that the P-Value is 0.00. This shows that the P-Value is less than 0.05, which means that Organizational Structure affects the Quality of Accounting Information Systems at a significance level of 5%. The effect is positive with a moderate effect of 0.528. This condition means that for every 1 standard deviation increase in the Organizational Structure score on Accounting Information System Quality, it causes an increase in the Accounting Information System Quality score on average by 0.065 assuming other variables are constant.

That is, the better the implementation of the Organizational Structure, the higher the quality of the applied Accounting Information System. To follow up on the results of hypothesis testing, the authors conducted brief interviews with the Manager/Head of Accounting and Finance and their Staff. From the results of the interviews conducted, the cause of Organizational Structure giving a low contribution to the Quality of Accounting Information Systems is the large number of Higher Education analysis units that are the research samples have a "fat" Organizational Structure, even in some of the tertiary institutions that are the research samples there are still employees who have more than one job description and employees who do not fully carry out the functions of the Organizational Structure because they are constrained by inappropriate educational backgrounds. This results, the resulting financial reports or accounting information is not qualified.

### **Effect of Accounting Information System Quality on Accounting Information Quality**

The quality of accounting information systems is hypothesized to have an influence on the quality of accounting information.

The hypothesis test is presented as follows:

Ho:  $\beta_{21} = 0$  The quality of accounting information systems does not affect the quality of accounting information

H1:  $\beta_{21} \neq 0$  The quality of accounting information systems affects the quality of accounting information

Based on the results of hypothesis testing in the table above, it can be seen that the P-Value is 0.00. This shows that the P-Value is less than 0.05, which means that the Quality of Accounting Information Systems affects the Quality of Accounting Information at a significance level of 5%. The effect is positive with a strong influence of 0.683. This condition means that for every 1 standard deviation increase in the score of Accounting Information Systems Quality on Accounting Information Quality, it causes an increase in the average Accounting Information Quality score of 0.075 assuming other variables are constant. That is, the better the implementation of the Accounting Information System, the higher the quality of the Accounting Information produced. To follow up on the results of hypothesis testing, the authors conducted brief interviews with the Manager/Head of Accounting and Finance and their Staff. From the results of the interviews conducted, the cause of the Quality of Information Systems giving a low contribution to the Quality of Accounting Information is the large number of Higher Education analysis units that are the sample. not yet using an Accounting Information System that is in accordance with the needs of the organization and there are even a number of Universities that do not use an Accounting Information System or manual-user in carrying out the accounting process. This results, the resulting financial reports or accounting information is not qualified.

### **Indirect Influence Between Research Variables**

An indirect effect occurs if between 1 variable and another variable there is an intervening variable or commonly referred to as an intervening variable. The magnitude of this indirect effect is obtained from the multiplication of the path coefficient values of the three variables. In this study there are 2 (two) indirect effects, namely as follows:

- a. The indirect effect of Information Technology on the Quality of Accounting Information through the Quality of Accounting Information Systems is indicated by a P-Value of 0.057, which means that it is greater than the established 5% significance level. This can be explained that based on the results of data testing, Information Technology does not have an indirect effect on the Quality of Accounting Information through the Quality of Accounting Information Systems at a significance level of 5%.
- b. The indirect effect between Organizational Structure and Quality of Accounting Information through the Quality of Accounting Information Systems is indicated by a P-Value of 0.000, which means that it is smaller than the 5% significance level set. This can be explained that based on the results of data testing, Organizational Structure has an indirect influence on the Quality of Accounting Information through the Quality of Accounting Information Systems at a significance level of 5%. This means that the better the Organizational Structure that is implemented, the Accounting Information System will be of high quality and produce quality Accounting Information as well.

### **CONCLUSION**

Based on the phenomena, problem formulation, hypotheses and research results, the authors can provide conclusions on this study as follows:

1. Information Technology affects the Quality of Accounting Information Systems so that it has an impact on improving the Quality of Accounting Information. Therefore there are several considerations for developing Information Technology, as follows:
  - a. Emphasize aspects of functionality which is reflected in capacity and speed. This capacity and speed will support employees in carrying out their duties that intersect with the Accounting Information System. By improving the capacity and speed of an Information Technology device, the Accounting Information System becomes qualified in its application
  - b. Supports aspects of compatibility that are reflected by compliance with standards and interoperability. Compliance with standards and interoperability supports employees in carrying out their functions in the organization. This is because the organization is able to provide an Accounting Information System that synergizes with the applied Information Technology, so that the Accounting Information System becomes qualified in producing Accounting Information.
  - c. Implementing Information Technology devices is easy to maintain which is reflected by the creation of space for each subsystem and the ease of upgrading. This causes employees to more easily adjust to changes outside the organization related to the preparation of accounting information within the organization. The higher the quality of the Accounting Information System supported by adequate Information Technology tools, the higher the quality of the Accounting Information produced
2. Organizational Structure affects the Quality of Accounting Information Systems so that it has an impact on improving the Quality of Accounting Information. Therefore there are several considerations for developing an Organizational Structure, as follows:
  - a. Responsibility for the work of each manager/head of section and staff must be clearly indicated in the implementation of the Accounting Information System. The duties and authorities of individuals within the organization are contained in documents that have been signed by the competent authorities. The span of management in the organization shows the position of superiors and subordinates that must be considered

- that each work carried out should be clearly accountable to whom, so that the use of the Accounting Information System is directed and able to produce quality Accounting Information
- b. Accounting Information Systems must be able to assist a leader in paying attention to effectiveness and efficiency when supervising the number of people he leads. The use of this Accounting Information System can optimally assist the supervision carried out by the leader.
3. The quality of accounting information systems affects the quality of accounting information. Therefore there are several considerations to improve the Quality of Accounting Information Systems, as follows:
- a. Able to integrate accounting information system components consisting of hardware, software, brainware, databases, procedures and telecommunications networks so as to produce integration and harmony between subsystems.
  - b. Provide data integration and subsystem integration with a view to establishing an Accounting Information System. This is done to strive for the Accounting Information System to function properly in facilitating the combination of information originating from various related systems within the organization.
  - c. Designing Accounting Information Systems with applications that are flexible and ready to be developed according to changes that occur. The designed Accounting Information System is expected to be able to adapt to user needs and be developed at any time with the intention of adapting to changes in environmental conditions related to rules or regulators from the ministry of research and higher education.
  - d. Designing an Accounting Information System with a low level of ease of access, so that users are facilitated to obtain information wherever they are, without experiencing obstacles related to the area they are located.
  - e. Striving for Accounting Information Systems to produce user-friendly Accounting Information so that users can use Accounting Information Systems in accordance with the authority of each of these users

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