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Development of Integrated Zakat, Infaq and Shadaqoh Information System: Evidence in Amil Zakat Institutions

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ABSTRACT

Objective – The purpose of this study is the development of integrated information systems and models, developing and developing information systems of zakat, infaq, and shadaqoh (ZIS) which are integrated in the Amil Zakat District / City Institution in West Java, Indonesia's West Java Province has the potential for zakat collection, but it is still not effective.

Methodology – This research program was conducted to measure the effect of ZIS information systems on the quality of accounting information as measured by the quality of financial statements, in order to establish a strategy for obtaining muzakki satisfaction in West Java Province. This study will identify the relationship model between them. The research program was conducted in 27 cities/regencies in West Java Province of Indonesia

Findings – The research used a series of different research approaches such as structured review and qualitative work with interviews or focus group discussions to develop key factors for the success of information systems and Partial Least Squares Structural Equation Modeling as an analysis method.

Novelty – The results of this study indicate that an integrated ZIS information system has an impact on the quality of accounting information measured by the quality of financial statements.

Type of Paper: Empirical

Keywords: information systems, zakat, infaq, shodaqoh, information.

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JEL Classification: E6, H2, H3.

1. Introduction

Zakat, infaq and shodaqoh from the community are funds that have the potential to be collected, but based on the following data in figure 1 that this shows the potential for zakat collection has still not reached the target (not yet effective).

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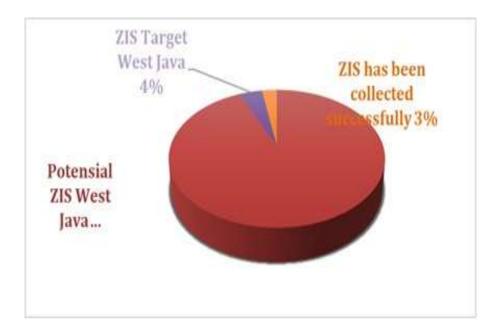


Figure 1. Comparison of the acquisition of ZIS and the potential of ZIS in West Java

The ineffectiveness of zakat management organizations in collecting and distributing zakat is due to information that is not good because it has not been oriented towards strengthening information systems (Nana Mintarti, 2012). Meanwhile Yusuf Wibisono (2010) emphasized that in its management, most zakat management organizations have not done it professionally, transparently and accountably. M Fuad Nasar (2013) stated that the zakat reporting system that is nationally integrated is based on the real data of muzakki, because the system of collecting and distributing zakat throughout the country must be strengthened with appropriate, accountable and easily accessible mechanisms for the community. Amar Muslih (2018) as treasurer of LAZISNU in Bandung stated that ZIS data processing is not fully computerized, does not have a web-based information system development plan to reach easier and wider muzakki and ZIS reports sometimes experience delays even muzakki does not get reports so optimization ZIS information for muzakki obtains satisfaction with the performance of zakat managers.

Based on the aforementioned phenomena, the information system in the zakat, infaq, shadaqah management environment must continue to be optimized and important to be investigated because it can identify the information system at the West Java Amil Zakat Institution (LAZ) has been running well or not and this research can determine the quality of information accounting in the form of reports produced by the Amil Zakat Institution (LAZ).

The contribution of this research is to provide information on the importance of developing an Integrated ZIS Information System for organizations in the form of Amil Zakat (LAZ) Regencies / Cities in West Java, so as to produce quality ZIS reports as a form of accountability for ZIS managers to the public and foster public trust in leaving zakat funds to the LAZ organization. This research was conducted through a survey on each selected sample so that the variables raised can be answered and overcome the phenomena that occur.

2. Literature Review and Framework

2.1 Literature Review

Information systems according to Simkin et al. (2013: 5) states that the information system is a collection of data and processing that produces the information needed for its users. Furthermore, Stair & Reynolds (2010: 57; Ahmad et. al, 2013; Alzoubi et al, 2011) states that quality information systems generally meet criteria such as flexible, efficient, accessible and timely. Furthermore Laudon & Laudon (2014: 580) add that quality information systems combine technical efficiency with sensitivity to organizational and human needs leading to higher satisfaction and productivity (Sri Dewi Anggadini, 2017; Chen, 2011).

3.5G technology or also called super 3G is an increase of 3G technology, especially in data transfer speeds that are more than 3G technology (> 2Mbps) so that it can serve multimedia communications such as internet access and Video Sharing (Bocij et al, 2008). HSDPA (Hi Speed Downlink Packet Accees) is included in 3.5G technology. First phase HSDPA with a capacity of 4.1Mbps. Then following phase 2 with a capacity of 11Mbps and maximum capacity downlink the peak data rate reaches 14Mbit / s. HSDPA network speed in a residential environment can achieve 3.7Mbps data download speeds. A person who is driving on a highway with a speed of 100Km / hour can access the internet with a speed of 1.2Mbps. Meanwhile, users in crowded office environments can still enjoy streaming video even though it only gets 300Kbps (Chaffey et all, 2005; Rio Yunanto, 2012)

According to Sri Dewi Anggadini (2017), the quality of information is an information product that has characteristics, attributes or qualities that make information more valuable (Deden A. Wahab, 2017; Daoud et all, 2013). Information has three dimensions, namely time, content and form. Accounting is an information system that provides information to interested parties regarding the economic and business activities of an entity. Based on this, the quality of accounting information is information that has value for interested parties in economic decision making resulting from AISs and reflects the economic condition of an entity (Sri Dewi Anggadini, 2015; Gorla et all, 2010).

2.2 Framework

Bodnar & Hopwood (2014: 15) states that AISs which include the use of information technology generate information for users. Agree with Weber (1999: 897) that the quality of information produced by an information system is influenced by the quality of the information system. Research conducted by Masclet & Goujon (2012) that information systems can be applied well in the community, where the main function of information systems is to produce information (Beest et al, 2009).

H: Information system effect on quality of accounting information

3. The Methodology

Data analysis in this study was conducted with 2 (two) types of analysis to fit the research objectives, namely:

- Descriptive analysis aims to explain the characteristics of the variables under study to support problem solving to obtain operational advice.
- Verification analysis aims to determine the relationship between variables through testing hypotheses using structural modeling (Structural Equation Model-PLS) to answer the problem formulation and answer the hypothesis.

PLS-SEM is used because the measurement model built involves a formative measurement model and the sample size used is small (30 to 80). In PLS-SEM there are two sub-models, namely:

- a) Outer model that specifies the relationship between latent variables and indicators or their manifest variables (measurement model). The measurement model often called the outer model shows how the manifest or observed variable presents a latent variable to be measured. Outer models consist of reflective models and formative models.
- b) Inner model which specifies the relationship between latent variables (structural models). Structural models often referred to as inner models show the strength of estimates between latent variables or constructs.

3.1 Population and Sample

The population in this study is the organization of the Amil Zakat Institution (LAZ) in West Java, as many as 27 cities / districts, namely organizations that are active in collecting zakat, infaq and shodaqoh funds. Furthermore, the samples in this study are 20 cities / regencies that have the highest and smallest amount of zakat, infaq and shodaqoh receipts.

3.2 Variable Description

The variables raised in this study are the dependent variable and the independent variable. Which includes an independent variable is an information system that has indicators in the form of integration, flexibility and reliability. While accounting information is the dependent variable, which means that the size of this variable depends on the independent variable. Indicators of accounting information variables are accurate, relevant, timely and complete.

4. Result

The result specifies the relationship between latent variables (structural models). Structural models often refer to the strength of estimates between latent variables or constructs.

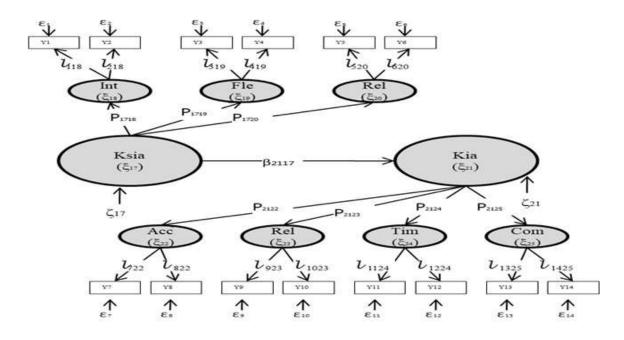


Figure 2

Recapitulation of Test Results Validity of Research Instruments X

Table 4.1 Results Validity

Item	Correlation
variable	Item - Total
1	0.691
2	0.886
3	0.665
4	0.719
5	0.565
6	0.743
7	0.715
8	0.825

The results of testing the validity of this questionnaire item indicate that all questions used can be declared valid to measure the dependent and independent variables.

Table 4.2 Recapitulation of Test Results Validity of Research Instruments Y

Item	Correlation
Variable	Item – Total
1	0.752
2	0.615
3	0.476
4	0.318
5	0.844
6	0.658
7	0.750
8	0.539

Regarding the validity of variables X and Y have a minimum level of validity of 0.30 so it can be said to be valid.

Table 4.3 Recapitulation of Research Instrument Reliability Test Results

Variabel	Reliability Coefficient	
X	0,8344	
Y	0,7949	

Furthermore the variables X and Y have a minimum level of reliability of 0.70 so that it can be said to be reliable.

Reliability coefficients are calculated using the Alpha Cronbach method, and the results of the calculations obtained show a reliability coefficient of 0.8344 for X and 0.7949 for Y. Therefore, it can be seen that the measuring instruments used in this study have quite high reliability values (more of 0.7). This value is in accordance with the provisions that state that the acceptable value of reliability is at least 0.70 or between 0.70 - 0.80, so that the variable measuring instrument has good reliability to measure the variables under study. Based on the results of the calculation, obtained the regression coefficient as stated in table 4.4 below:

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		В	Std. Error	Beta		
1	(Constant)	1976935,371	326754,405		6,050	,002
	Accounting					
	Information					
	Quality	,145	,038	,858	3,740	,015

Table 4.4 Regression Coefficient and Significance Test

From the results of data processing presented in table 4.4 above, a regression equation model can be formed as follows:

$$Y = 1.976.935, 371 + 0.145 X$$

In table 4.4 it can be seen that the influence of integrated ZIS information system on the quality of accounting information is 0.015. Figures for the quality of accounting information 0.013 <from 0.05 which means the relationship between the two variables is significant, so this regression model is feasible to use to predict quality accounting information at LAZISNU West Java. While the correlation coefficient obtained from data processing with SPSS version 15.0 for Windows is as follows: n table 4.4 it can be seen that the influence of integrated ZIS information system on the quality of accounting information is 0.013. Figures for the quality of accounting information 0.015 <from 0.05 which means the relationship between the two variables is significant, so this regression model is feasible to use to predict quality accounting information at LAZISNU West Java.

While the correlation coefficient obtained from data processing with SPSS version 15.0 for Windows is as follows:

		Pemberian Kupedes	Perolehan Operasional	Laba
AISs	Pearson Correlation	1	,858(*)	
	Sig. (2-tailed)		,013	
	N	27	27	
AI	Pearson Correlation	,858(*)	1	
	Sig. (2-tailed)	,013		
	N	27	27	

Table 4.5 SPSS Correlation Statistics Table

Based on the results of manual calculations and the output of data processing using the SPSS program version 15.0 for Windows, the correlation value for the effect of integrated ZIS information system on the quality of accounting information is 0.858. This means that the relationship between factors integrated ZIS information system with the quality of accounting information is very strong (very close). This means that if the integrated ZIS information system experiences an increase, it will also be followed by an increase in the quality of accounting information.

While based on calculations using the SPSS program version 15.0 for Windows the results are:

a Dependent Variable: Accounting Information Quality

^{*} Correlation is significant at the 0.05 level (2-tailed).

Table 4.6 SPSS Model Summary Model Summary Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	, 858a	,738	,685	279004,306

a Predictors: (Constant), integrated ZIS information system

Thus based on manual calculations and using the SPSS program version 15.0 for Windows, the coefficient of determination is obtained, namely (0.858) 2 = 0.737 = 73.8%. Thus, the effect of integrated ZIS information system on the quality of accounting information is 73.8%, which means that the contribution of the integrated ZIS information system to the quality of accounting information is quite large.

Based on the test results it is known that the value of Adjusted R Square of 0.685 means that the variability of the variable quality of accounting information can be explained by the variability of ZIS information system variables of 68.5%, while the remaining 31.5% is explained by other variables not included in the regression model. The results obtained indicate the existence of other factors that also have a considerable influence on the quality of accounting information. Thus the hypothesis in this study is acceptable.

$H0 : \beta 1 = 0$	There is no influence of the integrated ZIS information system on the quality of
	accounting information

H1: $\beta 1 \neq 0$ There is the influence of the integrated ZIS information system on the quality of accounting information

5. Conclusion

Based on the previous description, it can be seen that there is an integrated ZIS information system has an impact on the quality of accounting information. The more quality information systems for zakat, infaq and shodaqoh, the accounting information in the form of ZIS receipts and expenditures reports will be more qualified in terms of accuracy, effectiveness, completeness, and relevance. The existence of accounting information, in this case, financial statements, will not be of quality without the information system being implemented, which means that the information system must meet the integration of one part with another, the system must be flexible, it can be needed anytime, when needed and then the system must be reliable. The system that is run is not easily damaged and always makes it easy for users who run it.

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b Dependent Variable: AI

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