The Forming Factors of Accounting Information System Performance in the Framework of Involvement and Capability of Accounting Information System Users

Hani Fitria Rahmani
Univertas Nasional Pasim

ARTICLE INFO

Keywords:
User Involvement, User Ability, Performance, Accounting Information Systems

ABSTRACT

The problem of this study is the lack of involvement and the ability of users to have an impact on reporting existing accounting information systems. Reporting the accounting information system is one form of performance that needs to be achieved by the existing accounting information system. The purpose of this study is to determine the factors that influence the performance of accounting information systems, namely the involvement and abilities of users of accounting information systems. This study took a sample of all BOS Fund Subrayon Junior High School District Education Agency Operators. Kab. West Bandung with saturated sample technique. Data collection is done by survey method. The analysis technique in this study uses multiple linear regression analysis. The results of the analysis show that the factors that influence the performance of the accounting information system are user involvement, user abilities which results that user involvement and user abilities have a positive and significant effect on the performance of accounting information systems. Contributions from the results of this study provide advice to the relevant agencies to make improvements to the variables examined in this study so that the performance of the information system is running optimally.

E-mail:
hanifr18@gmail.com

1. Introduction

One of the goals of the birth of the Unitary Republic of Indonesia is to educate the life of the nation. Therefore, starting in 2004 the Government issued is Bantuan Operasional Sekolah (BOS) policy to support the nine-year compulsory education program. The mechanism for distributing BOS funds is categorized as a grant so that the distribution is done by transferring BOS funds from the Rekening Kas Umum Negara (RKUN) to the Provincial (Rekening Kas Umum Daerah) and then to each school’s account (Permendikbud No.26 of 2017).

In 2017 through the Ministry of Home Affairs Circular Letter Number 910/106 / SJ dated January 11, 2017 concerning Budgeting Technical Guidelines. Implementation and Administration and Accountability of BOS Funds for State Education Units organized by Regencies and Cities in the Regional Revenue and Expenditure Budget, according to the circular, there were changes in reporting procedures for BOS funds requested by elementary and junior high schools from the regional financial reporting system, then in 2017 reporting becomes part of the regional financial reporting system.

In the 4.0 era demanded organizations to become dependent on technology, the company’s main facilities to produce quality information and at the same time become one of the business strategies for companies is information technology (Hendarti and Gui, 2008). So as to produce quality information and simplify the process of reporting BOS funds, in 2017 the West Bandung Regency Government through the Education Office developed a BOS fund processing application named the School Financial Management System as shown in the Fig below which is intended to integrate the reporting of BOS funds into the Accounting Information System (AIS) of West Bandung Regency Government.
Based on observations made on the junior subrayon of the West Bandung regency education office conducted on the junior subrayon operator in participating in the use of the school financial management system application, there is a phenomenon that occurs in the reporting of BOS quarter 2 and 3 of 2018 in subrayon 04 as the difference between the estimated cash book balance general with the final balance of SuratPermintaanPengesahanPendapatandanBelanja (SP3B) requested to BadanPengelolaKeuanganDaerah (BPKD) of west Bandung regency as requested in the table below.

**Table 1**

<table>
<thead>
<tr>
<th>BOS Report</th>
<th>Ending Balance Of Cash Book</th>
<th>Ending Balance Of SP3B</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 1</td>
<td>4,396,925</td>
<td>4,396,925</td>
<td>0</td>
</tr>
<tr>
<td>Quarter 2</td>
<td>33,748,129</td>
<td>33,723,129</td>
<td>25,000</td>
</tr>
<tr>
<td>Quarter 3</td>
<td>46,645,537</td>
<td>47,609,168</td>
<td>963,531</td>
</tr>
<tr>
<td>Quarter 4</td>
<td>10,713,861</td>
<td>10,713,861</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: BOS KBB Team

Based on the above table, it is known that there is a difference in the reporting input on the books and the school financial management system due to user input errors which indicates the lack of ability of the users of the school financial management system. Taufiqurokhman (2009: 25) ability or competence is as an underlying characteristic of a person and related to the effectiveness of individual performance in his work.

The lack of ability of the user of the system can be regarded as a natural thing because the use of the system has only been running for two years. Besides the phenomenon related to the performance of the school financial management system there is a mismatch of data between the shopping account code in the school financial management system and the accounting information system as shown in the table below.

**Table 2**

<table>
<thead>
<tr>
<th>Account Code On AIS of School</th>
<th>Shopping Description</th>
<th>Account Code on AIS BPKD</th>
<th>Shopping Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2.1.05.01</td>
<td>Honorarium TenagaAhli/Narasumber /Instruktur</td>
<td>5.2.2.29.02</td>
<td>BelanjaJasaTenagaAhli</td>
</tr>
</tbody>
</table>

In the table above, there is a difference in the account code for expert expenditure between the school system and BPKD where this reflects the lack of user involvement in terms of supervision and results in perceived lack of quality information, one of which is the accounting information produced by the financial department. Lack of involvement and ability of users has an impact on
reporting existing accounting information systems. Reporting the accounting information system is one form of performance that needs to be achieved by the accounting information system that is in the Subrayon Junior High School of West Bandung Regency Education Office.

According to Perbarini (2014) who in his research found that User Involvement, Personal Engineering Capabilities, and Education and Training Programs had a significant effect on the performance of the AIS. Almilia and Briliantien (2007) stated other things, from the research that has been done, the factors that influence the performance of AIS are only top management support, while other factors such as training and education programs, user involvement and personal technical ability do not affect the performance of the AIS. Surya and Suardikha’s research (2016) supports Perbarini’s research (2014) with the result that training and education, top management support, information system development, and user involvement have a positive and significant impact on the performance of the AIS as measured by user satisfaction.

2. Method

The research method used in this study is an associative method with a quantitative approach. The unit of analysis in this study is the individual, the BOS Subrayon Junior High School Fund Operators. West Bandung consisting of 5 subrayons with each subrayon operator having 6 people. The data collection technique used was a questionnaire. The questionnaire is a set of questions that have been designed in advance where the respondent was given alternative answer choices in accordance with his opinion (Bambang S. Soedibjo, 2013: 114). The questionnaire is used using a closed system, meaning that respondents are asked to make choices between the answers that have been provided by researchers. In a simple population can be defined as a collection of subjects or measurements of the problem to be studied (Bambang S. Soedibjo, 2013: 101). In this study, the population is all Operators of the BOS Fund Sub-District Education Office in West Bandung Regency and this study uses a saturated or census sampling, which is a sampling technique when all population members are used as samples.

2.1 Variable Operations

The following operational variables in this study:

a. Involvement of AIS Users (X1), with dimensions of relationships, insights, responsibilities, user desires, value of satisfaction, time, and cost
b. Ability of users of AIS (X2) with dimensions of knowledge, abilities, and expertise
c. Performance of AIS (Y) with dimensions of satisfaction of users of accounting information systems and the quality of users of accounting information systems

2.2 Data Analysis Method

a. Multiple Linear Regression Analysis

Associative data analysis aims to find out two or more variables. The method used for data analysis is multiple regression analysis. This Regression Analysis aims to obtain a comprehensive picture of the relationship between the independent variable and the dependent variable both partially and simultaneously, the regression model in this study is as follows:

\[ y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e \]

Information:

- \( y_1 \) = Accounting Information System Performance
- \( \beta_0 \) = Constant
- \( \beta_1, \beta_2 \) = Regression Coefficient
- \( X_1 \) = Involvement of Users
- \( X_2 \) = Ability of users
- \( e \) = Standard error/ random error

This model is estimated through:

\[ \hat{y} = b_0 + b1X_1 + b2X2 \]

To estimated \( b_0 \) and \( b1 \) as estimators of the population regression coefficient \( \beta_0 \) and \( \beta_1 \) the least squares method is used with the formula:
2.3 T Test (Test the partial regression coefficient)

Sugiyono (2008: 265), one of the assumptions of the regression analysis is that linearity means whether the regression lines X and Y form linear or not. According to Bambang S. Soedibjo (2013: 207) in determining the value of the t arithmetic the following formula can be used:

\[ t = \frac{\hat{b}_1}{s_{\hat{b}_1}} \]

(Bambang S. Soedibjo, 2013 : 205-206)

2.4 F test (Test the regression coefficient simultaneously)

Bambang S. Soedibjo (2013: 228) to see how well the multiple regression equation matches the observational data is to use the F-test calculated with the following formula:

\[ F = \frac{MSR}{MSE} \]

2.5 Coefficient of Determination

In the regression analysis, it is necessary to have a measurement method to find out how much the line equation is made to fit or match the sample data. According to Bambang S. Soedibjo (2013: 205), the coefficient of determination is a measure to find out how much the proportion of the total variation can be explained by the line equation. The coefficient of determination is notified by \( R^2 \) obtained from the correlation coefficient between \( x \) and \( y \).

Calculation of the coefficient of determination according to Bambang S. Soedibjo (2013: 227), as follows

\[ R^2 = \frac{SSR}{SST} \]

Information:
- \( R^2 \) : Coefficient of Determination
- \( SSR \) : Regression diversity
- \( SST \) : Total diversity.

3. Results and Discussion

3.1 Result

To find out the magnitude of the influence of the independent variables on the dependent variable either partially or simultaneously, the researchers conducted statistical calculations using multiple regression analysis models using SPSS version 25 software, the results of statistical calculations including the results of multiple regression analysis, the results of the f test, the results of the coefficient of determination analysis and cross products with the following results:

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of Multiple Regression Analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1</td>
<td>2.978</td>
<td>4.877</td>
</tr>
<tr>
<td>Keterlibatan</td>
<td></td>
<td>.257</td>
<td>.124</td>
</tr>
<tr>
<td>Kemampuan</td>
<td></td>
<td>.719</td>
<td>.148</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Kinerja SIA

Source : 2019 Primary Data Results

From the results of statistical calculations using the help of SPSS software version 25, the f test results are also obtained as follows:
In addition, the statistical calculations carried out by researchers also obtained the results of the analysis of the coefficient of determination as follows:

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>215.094</td>
<td>2</td>
<td>107.547</td>
<td>18.366</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>158.106</td>
<td>27</td>
<td>5.856</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>373.200</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.759a</td>
<td>.576</td>
<td>.545</td>
<td>2.420</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Kemampuan, Keterlibatan

Source: 2019 Primary Data Results

The next statistical calculation results obtained by researchers from the results of statistical calculations using SPSS version 25 software also obtained the cross product value of each variable as follows:

we can write the multiple regression equation for the research data used as follows:

\[ Y = 2.978 + 0.256X1 + 0.719X2 \]

Based on these equations it can be described as follows:

a. Constant 2.978 means that when the involvement and ability variables of the AIS users are 0, the AIS performance value is 2.97.

b. The regression coefficient of the AIS user involvement variable is 0.257 which means that if the value of the AIS user involvement variable is increased by 1 unit it will increase the value of the AIS performance variable by 0.257 and the positive value indicated by the regression coefficient means that the coefficient has a positive effect.

c. The regression coefficient of the AIS user ability variable worth 0.719 means that if the value of the AIS user ability variable is increased by 1 unit it will increase the value of the AIS performance variable by 0.719 and the positive value indicated by the regression coefficient means that the coefficient has a positive effect.

3.2 Discussion

The Amount of Influence of User Engagement on Accounting Information System Performance

Based on the description above, it can be concluded that the SIA user involvement variable has an influence on the SIA performance variable while the magnitude of the influence of the SIA user engagement variable on the SIA performance variable based on the results of the calculation of the Effective Contribution is as follows:

\[ SE_{Engagement} = \frac{0.257 \times 2.978 \times 0.256 \times 0.716}{115.094} \times 100\% = 12.2\% \]

The calculation results show that the SIA user involvement variable can determine changes in the SIA performance variable by 12.2%. To find out whether the influence is significant or not can be known from the calculated t value of each variable compared to the t table value.

The t value of the SIA user involvement variable as shown in Table 7 is 2.072 with degrees of freedom \((np-1 = 30-2.1 = 27)\) with a significance of 0.05 then a t table value of 2.052 is obtained so that the t value is greater than t table then \(H_1\) is accepted which means that the user involvement variable SIA has a significant positive effect on the SIA performance variable.

Based on these results it seems clear that the involvement of good SIA users will lead to higher...
SIA performance. It is not easy to involve SIA users in developing a system because sometimes the third party appointed as a partner does not want to involve the user directly for various reasons.

The Amount of Effect of User Ability on Accounting Information System Performance Based on table 7 it is known that the regression coefficient value of the ability of the user of the AIS is 0.719 which means that if the value of the variable of the ability of the user of the AIS is increased by 1 unit then it will increase the value of the SIA performance variable of 0.719 and the positive value shown by the regression coefficient means that the coefficient has a positive effect.

Based on the description above, it can be concluded that the ability of the user of the AIS has an influence on the performance of the AIS as for the magnitude of the effect of the ability of the user of the AIS on the variable of the AIS based on the results of the calculation of the Effective Contribution is as follows:

\[
SE \text{ Ability} = \frac{0.719 \times 0.576}{21.504} \times 100% \\
= 0.454 \times 100% = 45.4%
\]

The calculation results show that the SIA user involvement variable can determine changes in the SIA performance variable by 45.4%. To find out whether the influence is significant or not can be known from the calculated t value of each variable compared to the t table value.

The t value of the SIA user involvement variable variable as shown in table 4.5 is 4.874 with degrees of freedom (np-1 = 30-2-1 = 27) with a significance of 0.05, the t table value of 2.052 is obtained so that the t value is greater than t table then H_1 is accepted, which means that the user ability variable SIA has a significant positive effect on the SIA performance variable.

These results show that the ability of users of SIA is one of the important factors in the success of SIA performance because no matter how sophisticated or powerful a system is, it will be of no use if it is not supported by adequate resources. Therefore the action of the West Bandung Regency Education Office recruiting operators with an average educational background of D3 and some also S1 is an appropriate action because the user’s ability determines the success of the AIS 45.4%.

The Amount of Effect of Involvement and Capability of Users Together - Together Against the Performance of Accounting Information Systems To find out the magnitude of the influence of the involvement and ability variables of users on the performance of the AIS obtained from the coefficient of determination obtained from R Square as shown in table 7.

Based on table 7 it is known that the R value of the data in this study is 0.759, the value indicates the closeness of the relationship between the independent variables in this study is 75.9%. As well as in the table also known R Square data values of this study amounted to 0.576 which shows how much the variability of the dependent variable that can be explained by the independent variables.

Based on these results it is known that the involvement and ability variables of the user can influence the AIS performance variable of 0.576 or 57.6% the rest is determined by other factors not explained in this study by 42.3%.

Total influence or total effective contribution = Total Influence X1 + Total Influence X 2 = 12.2% + 45.4% = 57.6%

This value is the same as the value of \( R^2 \) = 0.576 or R Square = 57.6%

To find out whether the effect is significant or not, the F test in table 4 shows the F value of this study is 18,366 with degrees of freedom (np-1 = 30-2-1 = 27) with a significance of 0.05 obtained F table of 3.35 thus it can be stated that the F table is greater than the F table then H_1 is accepted which means that the AIS involvement and user variables together have a significant positive effect on the AIS performance variable.

4. Conclusion

Based on the results of the analysis that has been done in this study, it can be concluded that the results of the involvement and ability of users of the performance of accounting information systems is a significant effect, this means that every time there is an increase in involvement and ability of users there will also be an increase in the performance of accounting information systems.

District Education Office West Bandung needs to continue to conduct socialization and training of BOS Subrayon Junior High School Fund Operators to increase the involvement and ability of AIS users to minimize the implications that will arise in the performance of accounting information systems in the future.
Factors that influence the performance of accounting information systems in this study are the involvement and ability of users of the AIS, this is a limitation of the study because there are still many variables that can be examined on the performance of the AIS, besides the questionnaire as an analysis tool to find answers that sometimes do not show the actual situation, so it needs to be developed further to be better.

Suggestions from this research are expected that further research can develop the limitations that exist in this study by increasing the number of independent variables to be studied and because the policy of integrating BOS funds into LKPD should vary in the number of research sites in order to obtain deeper and more comprehensive results.

In addition, the advice for the education office is to control the suitability of the output produced by the AIS with needs, improve communication with the operator, as well as increase the duration of the use of the AIS so that the performance of the AIS better

5. References

[8] Peraturan menteri pendidikan dan kebudayaan No.26 Tahun 2017 tentang petunjuk teknis biaya operasional sekolah