

## Conference Paper

# The Effect of ICT Literation in Government Financial Management in Industry 4.0 Era

**Garda Yaumil Akhir and Ety Murwaningsari**

Department Accounting, Economics and Business Faculty, Trisakti University - Indonesia

### Abstract

In this Industry 4.0 era, ICT things grows so rapidly. The use of technology in daily work is a common thing. Thus, no exception, in the field of government. This extensive utilization of ICT then requires every civil servant to have sufficient knowledge in ICT. This study aimed to determine the effect of ICT Literation in moderating treasurer's competence and implementation of acrual based accounting system for determining the quality of financial report in Ministry of Finance. The method used in this study is literature study method, documents study, and questionnaire. We found that in general, ICT Literation is moderating the relationship between treasurer's, implementation of acrual based accounting system and financial report's quality. Furthermore, in partial analysis, we found that ICT Literation affect treasurer's competence in postive and significant ways, but for implementation of acrual based accounting system the effect is not significant.

**Keywords:** Acrual Based Accounting System, Financial Report's Quality, Human Resource's Competence, ICT Literation.

Corresponding Author:

Garda Yaumil Akhir  
 garda.akhir@gmail.com

Received: 7 February 2020

Accepted: 9 March 2020

Published: 23 March 2020

Publishing services provided by  
**Knowledge E**

© Garda Yaumil Akhir and Ety Murwaningsari. This article is distributed under the terms of the [Creative Commons](#)

[Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICE-BEES 2019 Conference Committee.

## 1. Introduction

The progress of state financial management in Indonesia continues to produce positive results from year to year. In 2018, for example, the 2017 State Financial Statement (LKPP) of the fiscal year received a Fair Without Exception (WTP) opinion from the Supreme Audit Agency (BPK). This opinion is the second in a row, that has been obtained since the government submitted/compiled LKPP in 2004.

This opinion indicates many things, including the improvement of state financial management. As we know, the Indonesian Government only had a law on managing its own state finances in 2003, through Law number 17 of 2003 which regulates the overall state's finance. This law is the starting point, considering that the government was still referring to the Dutch Indies inheritance regulation, namely Indische Comptabiliteiswet (ICW), Reglement voorhetAAdministratief (RAB) Staatsblad 1933 Number 381, and Instructure en verdure bepalingen voorAde Algemene Rakenhower

 **OPEN ACCESS**

(IAR) Staatsblad 1933 Number 320. Then Law number 17 of 2003 is a milestone in the reform of the state's finance sector which essentially reinforces the definition of the country's own finances. After that, in 2004 the government re-issued the state financial regulations, namely Law number 1 of 2004 which discussed the state's treasury and the arrangements for evaluation of management and responsibility of state's finance through Law number 15 of 2004. That three laws are then commonly known as the state's finance law package.

The state financial management reform process did not stop there, because according to the mandate of Law Number 17 of 2003, the government had to apply the accrual accounting basis in 2008 (five years after the regulation was issued). Government's efforts in implementing the accrual basis adjustment process were carried out in various ways, including in 2005, the government regulated accounting standard (SAP) through Government Regulation Number 24 of 2005 concerning SAP Based Cash Towards Accrual. This rule is expected to be able to bridge the change process from the cash basis to the full accrual basis. While the accrual-based SAP itself can only be issued by the government in 2010 through Government Regulation Number 71 of 2010.

The challenge of managing state's finance is not only in terms of regulations, but also may other aspects. The complexity of state financial reports also occurs due to the extent of government-owned accounting units which must then be consolidated into one financial report (LKPP). The number of central government entities is approximately 24,000 financial management units (called the work unit in the State Finance Law). With a number that is quite big, the consolidation process is carried out in stages starting from the work unit level to the level of ministries/institutions using a reliable financial reporting system (Afandi, 2017). The system was then presented by the government which is part of the implementation of the Integrated Financial Management Information System (IFMIS) program in accordance with Minister of Finance Regulation Number 97 of 2017. The use of this technology is a government effort in facing the industrial era 4.0 where technology becomes important in every business process in managing state's finance.

The implementation of IFMIS in various countries has shown many facts, including in South Africa, it is found that IT skills and literacy (ICT Skills) need to be owned by every system user. The capacity and competence of human resources in terms of IT needs to be built because it can greatly support the implementation of IFMIS (Hendriks, 2012). This is also in line with the results of Chene's research (2009) regarding the experience of applying IFMIS in various countries, where an increase in understanding of IT users is a major factor in the successful implementation of an integrated accounting system.

## 2. Literature Review

### 2.1. Agency Theory

Agency theory was the main theory underlying this research, where the government has a responsibility to the community as the trustee. This responsibility according to Mardiasmo (2004), is part of public accountability which consists of two types, namely: 1) vertical accountability, interpreted as accountability for the management of funds delivered to parties with higher positions, 2) horizontal accountability, interpreted as accountability from the government which must be conveyed to the public at large. Financial statements are one of the tools that describe the level of government financial accountability. And for the financial statements, according to Law Number 15 of 2004, an audit was conducted by an independent party, the Supreme Audit Agency (BPK).

### 2.2. Treasurer Competency

Treasurer competency (or human resource's competence) is an important part of the process of managing state finances, especially in terms of accounting. Human resource competency is also the most important factor for the organization in achieving its objectives, so that every organization needs to pay attention to the quality of its resources. According to Murwaningsari, Basaria, & Rachmawati (2009), each employee has the responsibility to take actions that are a reflection of the priority goals of each work unit. In a work unit, the responsibility of the treasurer is to carry out the duties and functions in his position as financial manager. The responsibility of each government employee has been stated in the job description.

With a purpose of standardization on the competence of the treasurer around the state, the government has begun implementing treasury certification programs. This program is regulated in Presidential Regulation Number 7 of 2016. This certification process is currently underway and is targeted to have reached 31,000 certified treasurers in this year (Handayaningsih, 2016).

### 2.3. Accounting Information System

Accounting Information System can be described as part of an information system that aims to be able to produce financial information with the main goal of being able to provide good and qualified financial reports. There are six components that are owned

by accounting information systems, which are interrelated and interact with each other in achieving the expected goals. Among these components are (Romney & Steinbart, 2016):

1. User.
2. Procedures for collecting, processing, and storing transaction data.
3. Organizational business processes.
4. Application (software).
5. Completeness of infrastructure, includes: computer devices, computer supporting devices, and network devices that are used to communicate between users in the system.
6. Internal control tools and system security.

## 2.4. Accrual Based Accounting Standards

According to Mahmudi (2016), the accounting basis consists of 4 bases as follows:

1. **Cash Basis.** It is a standard that uses changes in (literally) cash as a basis for recognition or recording of transactions. So that each new transaction will be recorded only after the cash changes occurred.
2. **Accrual Basis.** In contrast to the cash basis, the accrual basis underlies transactions only when a transaction and event actually takes place regardless of the increase or decrease in cash. Thus, every new transaction is carried out recognition and recording of accounting in the financial statements at the time/period when they occur, or in other words is when rights/obligations occur.
3. **Modified Cash Basis.** While the modified cash basis is a combination of accrual and cash basis. In simple terms, the modified cash basis is uses the cash basis for transactions in the current budget year and then make adjustments at the end of each reporting period using the accrual basis.
4. **Modified Accrual Basis.** This basis is almost similar to the modified cash basis, which is a combination of accrual basis and cash basis. The difference in the basis of modification accruals, transactions are recorded mostly using the accrual basis, while for the post or other transactions use the cash basis as the basis for recording.

In Indonesia, only 3 accounting basis are known, including the cash basis, cash towards accruals basis, and the full accrual basis. Whereas at present, the accrual basis is used as the basis for accounting in the preparation of government financial reports.

## 2.5. State Treasury and Budget System (SPAN)

SPAN (Sistem Perbendaharaan dan Anggaran Negara) is one of the main financial information systems used by the Government (Ministries and Institutions) in the process of recording and financial reporting using the accrual basis accounting. SPAN is a form of implementation of the Government Financial Management and Revenue Administration Project (GFMRAP) program, or in Indonesian terms, where SPAN is a major part of the program. While GFMRAP is part of the Financial Management System Reform Program, which is the application of the IFMIS (Integrated Financial Management Information System) concept. This reform is carried out through activities at the Ministry of Finance's Directorate General of Budget unit, for the Budget Preparation section and for the units of the Directorate General of Treasury of the Ministry of Finance, for the Budget Execution and Responsibility Accounting section (Nugroho, Basuki, & Fanani, 2017).

## 2.6. Institutional Level Financial Application System (SAKTI)

Within the scope of the Ministry/Institution, the implementation of an Integrated State Financial Management Information System is carried out by improving the business portion of state financial management by using integrated applications in the form of SAKTI (Sistem Akuntansi Tingkat Instansi) applications. The SAKTI application is an agency level application (agency accounting system/SAI) on the K/L side prepared to support operational SPAN (state treasury general accounting system/SABUN) on the side of the finance ministry in accordance with PMK Number 233 of 2015.

## 2.7. ICT Literation

The ability and level of ICT literacy is one of the important factors in the Government's efforts to transform both the accounting information system and the accounting standards used. Although it is only a supporting factor, the level of understanding of a person/user of ICT, plays an important role in the use of a system/application itself, especially in remote areas (Indriani, 2015). So that in the current era of information technology, where most jobs have been helped by the role of information technology,

the minimum capability in terms of ICT becomes very important. Research (Musee, 2014) shows that the ability of employees to operate computers is a factor that also has an influence on IFMIS implementation.

## 2.8. Financial Report

Transactions that occur in an entity are recorded and then arranged into financial positions and are structured together into a financial statement. The final results of the accounting process carried out during the accounting period/budget period are the financial statements of the entity. This definition is in accordance with the definition of financial statements contained in Government Regulation Number 71 of 2010. While for the audit of financial statements, the BPK has the right to give one of four opinions including: Unqualified (WTP), Qualified (WDP), Adverse (TW), and Disclaimer, in accordance with Law Number 15 of 2014. According to (Abdullah, Sari, & Yusniyar, 2016), government financial statements can then be said to have good quality if the financial statements are submitted in an orderly manner every reporting period, and have received an assessment from the BPK in the form of an opinion on the financial statements. In terms of quality, government financial statements must have qualitative characteristics, including: relevant, reliable, comparable, and can be understood in accordance with PP Number 71 of 2010.

## 3. Research Methodology

### 3.1. Data Source

In this research, primary data sources were used as the basis for conducting analysis through questionnaire questions. The procedure used in determining the sample is by purposive sampling method, which by adding the following criteria:

1. The treasurer has a valid treasury certificate.
2. The Treasurer only manages one DIPA so that it has a relatively similar workload.

The results of the questionnaire are data in the form of a Likert scale, which has a score of 1 to 5 as the following table.

TABLE 1: Likert scale score values.

Answer	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

Source: Processed by author

### 3.2. Variabel Measurement

The two independent variables studied are treasurer competency and the application of accrual-based accounting systems, one moderating variable is ICT literacy, while for the dependent variable studied is quality of government's financial reports. These variables measured using instruments in the form of closed questions, then the results are measured by the Likert scale theory as listed in table 1 above.

In addition to the variables above, this study uses control variables in order to maintain / avoid bias from research on the influence of independent variables on the quality of financial statements. The control variables are: (1) the number of managed DIPA that shows the workload of financial management operators (GULTOM, 2016), (2) accountability and (3) financial report transparency (Sadjiarto, 2000), (4) consistency in applying financial reporting standards used (García Jara, Cuadrado Ebrero, & Eslava Zapata, 2011), (5) utilization of information technology in the preparation of financial reports (Ariesta, 2013).

### 3.3. Hypothesis

Based on the theoretical foundation and various previous studies discussed in the previous section, the following is the hypothesis of the research proposed.

H1: There is a positive effect of treasurer competency on the quality of financial statement reports in the finance ministry.

H2: There is a positive effect on the application of accrual-based accounting systems to the quality of financial reports in the finance ministry.

H3: ICT Literacy strengthens the effect of treasurer competency on the quality of financial reports in the finance ministry.

H4: ICT Literacy strengthens the effect of accrual-based accounting systems on the quality of financial reports in the finance ministry.

### 3.4. Research Model

The research model is based on the results of previous studies (including, García Jara et al., 2011; Hassan, 2015; Hendriks, 2012; Indriani, 2015; Ndou, 2004; Nurillah & Muid, 2014). The first research model (without moderation) can be presented in the following equation:

$$LK = \alpha + \beta_1SDM + \beta_2SABA + \beta_3dDIPA + \beta_4SAP + \beta_5ACC + \beta_6TRS + \beta_7PT + e$$

where:

$LK$  = quality of ministry of finance's financial reports

$\alpha$  = constanta

$\beta_x$  = regression coefficient

SDM = treasurer competency variable

SABA = accrual based accounting system implementations variable

dDIPA = DIPA amounts variable

SAP = accounting standard variable

ACC = accountability variable

TRS = transparency variable

PT = ICT utilization variable

$e$  = standard of error

While the second model (using ICT literacy as a moderating variable) with the Moderated Regression Analysis (MRA) method can be presented in the following equation:

$$LK = \alpha + \beta_1SDM + \beta_2SABA + \beta_3SDM.TI + \beta_4SABA.TI + \beta_5dDIPA + \beta_6SAP + \beta_7ACC + \beta_8TRS + \beta_9PT + e$$

where:

$LK$  = quality of ministry of finance's financial reports

$\alpha$  = constanta

$\beta$  = regression coefficient

SDM = treasurer competency variable

SABA = accrual based accounting system implementations variable

TI = ICT literacy variable



dDIPA = DIPA amounts variable  
SAP = accounting standard variable  
ACC = accountability variable  
TRS = transparency variable  
PT = ICT utilization variable  
 $e$  = standard of error

## 4. Analysis Result, Interpretation, and Presentation

### 4.1. Data Testing

The data from the answers of the questionnaires submitted by the respondents are the main data in this study. The data is then processed using SPSS version 25 application. Data testing is done by conducting a series of classic assumption tests, before further analysis can be done.

From the table above, it can be seen that based on respondents with a total of 157 samples, the majority (90%) were male respondents. The level of variation for the respondent's work unit is quite even, only in the units of the Directorate General of Treasury with a maximum of 82, according to the proportion of the number of financial managers in the finance ministry who are also numerous. While the level of education is dominated by D-III and S-1 graduates, respectively 63% and 36%.

### 4.2. Validity and Reliability

The validity and reliability test from the results of the research can be seen from the number in the following table:

By looking at the value of Chronbach's Alpha, which is  $>.600$  for each variable, it can be stated that all variables have met reliability. While to test the validity with Pearson correlation from the results of the questionnaire, each question item from each variable is valid to explain the value of the variable.

### 4.3. Normality

To be able to find out whether all variables have a normal distribution or not in the predetermined regression model, it is done by a normality test by observing the P-Plot Regression diagram. From the test results for both models, it is obtained from the

TABLE 2: Respondents Characteristics.

Respondents Characteristics	F	%
<b>Working Unit</b>		
Inspektorat Jenderal	10	6.37%
Direktorat Jenderal Perbendaharaan	82	52.23%
Direktorat Jenderal Pengelolaan Pembiayaan dan Resiko	3	1.91%
Direktorat Jenderal Anggaran	8	5.10%
Direktorat Jenderal Kekayaan Negara	17	10.83%
Sekretariat Jenderal	2	1.27%
Direktorat Jenderal Pajak	20	12.74%
Direktorat Jenderal Bea dan Cukai	15	9.55%
<b>Sex</b>		
Men	142	90.45%
Women	15	9.55%
<b>Age</b>		
< 30 years	117	74.52%
30 - 40 years	40	24.84%
> 40 years	0	0.64%
<b>Last Formal College</b>		
D-I	1	0.64%
D-III	99	63.06%
S-1 / D-IV	56	35.67%
S-2	1	0.64%

Source: Results of the questionnaire data

TABLE 3: Data Reliability.

Variable	Cronbach's Alpha	N of Items
SDM	0.665	8
SABA	0.719	6
TI	0.697	7
LK	0.614	7

Source: Results of processing by the author.

Notes: SDM: treasurer competency, SABA: accrual based accounting system implementations, TI: ICT Literacy, LK: quality of financial reports.

diagram that the points have formed a diagonal line from the lower left to the upper right, and there is no point away from the diagonal line. Based on these results, it can be concluded that the research data is normal in both existing models.

#### 4.4. Multicollinearity

This test is used to determine the existence of a linear relationship between each independent variable in the regression model. The results of the multicollinearity test are found in the following table.

TABLE 4: Multicollinearity results.

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SDM	.498	2.009
	SABA	.403	2.482

Dependent Variable: LK

Source: Results of processing by the author.

Notes: SDM: treasurer competency, SABA: accrual based accounting system implementations, LK: quality of financial reports.

From the results of the above test, it can be seen that the tolerance value is close to 1, and the VIF value is still below 10, so the conclusions can be drawn is that the data does not occur multicollinearity.

#### 4.5. Testing the Hypothesis

Hypothesis testing is done by doing a regression analysis of the model that has been determined through three tests, which are: testing the coefficient of determination (R square), partially testing (t test), and simultaneously testing (R test).

##### 4.5.1. Regression Analysis

Based on the table above, the regression equation can be arranged as follows:

$$LK = 0,502 + 0,305 \text{ SDM} + 0,011 \text{ SABA} + d\text{DIPA} + 0,24 \text{ SAP} + 0,245 \text{ ACC} + 0,038 \text{ TRS} + 0,082 \text{ PT} + e$$

The above equation can be interpreted that in the condition of other variables which are fixed, then if there is an addition of 1 unit of treasurer (SDM) competency level, then the Quality Level of the Financial Report will increase by 0.305 units. Likewise, if there is an addition of 1 unit level of implementation of the accrual-based accounting system, then the quality of financial statements will increase by 0.011 units.

TABLE 5: Regression result (without moderation model).

Model		B	Std. Error	t	Sig
1	(Constant)	.502	.252	1.989	.048
	SDM	.305	.067	4.526	.000
	SABA	.011	.065	.167	.868
	SAP	.240	.089	2.702	.008
	Accountability	.245	.094	2.602	.010
	Transparency	.038	.097	.394	.694
	ICT Utilization	.082	.097	.843	.401
R	.807				
R <sup>2</sup>	.652   Adjusted R <sup>2</sup> .638				
F	46.759   Sig .000				

Source: Results of processing by the author.

Notes: Dependent Variable: quality of financial reports. Controlling Variable: SAP, Accountability, Transparency and ICT utilization.

Next, for the results of the regression test model with moderating variables (MRA) shown in the following table:

TABLE 6: Regression result (with moderation model).

Model		B	Std. Error	T	Sig
2	(Constant)	1.868	.370	5.047	.000
	SDM	-.075	.098	-.769	.443
	SAP	.075	.084	.897	.371
	Accountability	.212	.088	2.404	.017
	Transparency	.044	.089	.495	.621
	ICT Utilization	-.015	.092	-.162	.872
	SDM*ICT Literacy	.082	.017	4.781	.000
R	.835				
R <sup>2</sup>	.698   Adjusted R <sup>2</sup> .686				
F	57.681   Sig .000				

Source: Results of processing by the author.

Notes: Dependent Variable: quality of financial reports. Controlling Variable: SAP, Accountability, Transparency and ICT utilization.

Based on the table above, the regression equation can be arranged as follows:

$$LK = 1,868 - 0,075 \text{ SDM} + 0,082 \text{ SDM.TI} + d\text{DIPA} + 0,075 \text{ SAP} + 0,212 \text{ ACC} + 0,044 \text{ TRS} - 0,015 \text{ PT} + e$$

#### 4.5.2. Coefficient of Determination

Based on the two models specified above, the next test is to see the coefficient of determination  $R^2$ . The higher value means that the higher the level of ability of the independent variables to explain variations in changes in the dependent variable in the model.  $R^2$  test results for the first model (without moderation) seen in table 5 above, which shows the adjusted  $R^2$  value of 0.638. This means that 63.8% of the variable quality of government financial statements can be explained by the independent variables studied. While in the model the second regression (MRA), the adjusted  $R^2$  value is 0.686 or higher than the value of determination in the first model, indicating that in general, ICT literacy variables moderate the independent variables in the study in influencing the quality of financial statements.

#### 4.5.3. F Test

In examining the effect of all the independent variables examined in the model together on the dependent variable, simultaneous tests were used. The results of this test are determined based on the results of the regression output in the form of a significance value F, using the SPSS application with a significance level of 0.05 ( $\alpha = 5\%$ ). For the first model, based on the results in table 5, the statistical F probability value is 0,000 and is far below the standard level of 0.05. This shows that with a 95% confidence level, there is enough evidence to treat  $H_0$  in the first model simultaneous test. Or in other words, statistically proven that the overall research variables consisting of treasurer quality and the application of accrual-based accounting systems (as well as control variables), together influence the quality of government financial reports.

While for the second model (MRA), as shown in table 6, the probability value F statistic is also worth 0,000 below the standard level of 0.05. So that this model is also significant and can be used to predict the quality of financial statements through treasurer competency assessment, the application of accrual-based accounting systems, and ICT literacy (as well as control variables).

#### 4.5.4. t Test

Then a partial test is conducted to find out how far the influence of each independent variable on the variation on the dependent variable in the study (Ghozali, 2006). The t test in this study was conducted for both models, the first model was conducted to

test hypothesis 1 and hypothesis 2. The results of the t test for both hypotheses can be seen in table 5, where the Sig value for treasurer competency variable is  $0,000 < 0.05$  which means significant. Therefore, it can be concluded that the treasurer competency variable partially influences the quality of financial statements. Whereas for hypothesis number 2, the Sig value for the variable applying the accrual-based accounting system is  $0.868 > 0.05$ , which means insignificant. Therefore, it can be concluded that the variable implementation of accrual-based accounting systems does not have a significant effect on the quality of financial statements. This variable is then not tested further on the second model because it does not have a significant effect on the first model.

While for the t test of hypotheses number 3 and 4, it is done by comparing the regression results on the model before and after the existence of the moderating variable. The comparison results are available in the following table:

TABLE 7: Comparison of Moderated Partial Regression Results.

Variabel	Beta	Sig
<b>Variabel SDM</b>		
SDM	-0.415	0.011
SDM x TI	1.346	0.004
<b>Variabel SABA</b>		
SABA	0.56	0.334
SABA x TI	-0.385	0.668

Source: Results of processing by the author.

Notes: SDM: treasurer competency, SABA: accrual based accounting system implementations, TI: ICT Literacy.

Based on the result above, it can be seen that the Beta value for the SDMxTI interaction variable is positive and significant ( $0.004 < 0.05$ ), meaning that ICT literacy strengthens the treasury and significant competency variables (Hypothesis number 4). While the Beta value for the SABAxTI interaction variable shows a negative value and is not significant ( $0.668 > 0.05$ ), meaning that ICT literacy moderation weakens the variable accrual-based accounting system implementation but is not significant (Hypothesis number 5 is not proven).

## 5. Conclusin and Recommendations

The results of this study informs the fact that treasurer competency and the application of accrual-based accounting systems have a significant and positive effect on the quality of financial reports in the ministry of finance. This shows that by increasing the treasurer

competency which is currently being carried out by the government through Treasurer Certification, it will be able to have a positive influence on the quality of government financial statements. In addition, the overall completion of the accrual-based accounting system (SPAN and SAKTI) can also have the same effect.

In addition, this study also shows that in this industrial era 4.0, the level of understanding and literacy of information technology can moderate the influence of the determinants of the quality of financial statements. Specifically, the level of ICT literacy will significantly increase the influence of treasurer competency variables on the quality of government financial reports. This conclusion is in accordance with the results of Chene's research (2009), which concludes that the level of understanding of ICT will affect the competence of users of a system. This study also found that ICT literacy did not significantly moderate the effect of applying accrual-based accounting systems to the quality of financial statements. The existence of an accrual-based accounting system that has been implemented and is running well, makes it easier for users to use it, so ICT literacy does not have a significant effect.

This research is expected to have implications for the government in particular, especially in an effort to increase the competence of treasurers in this industrial era 4.0. Future research is expected to learn more about ICT literacy in the management of state's finances and the impact of industry 4.0.

## References

- [1] Abdullah, S., Sari, D., & Yusniyar. (2016). Pengaruh Penerapan Sistem Akuntansi Pemerintahan Dan Pengendalian Intern Terhadap Good Governance Dan Dampaknya Pada Kualitas Laporan Keuangan (Studi Pada Skpa Pemerintah Aceh). *Jurnal Magister Akuntansi Pascasarjana Universitas Syiah Kuala*, 5(2), 100–115.
- [2] Afandi, J. (2017). Pemanfaatan Teknologi Informasi dalam Penyusunan LKPP. Retrieved September 30, 2018, from <https://www.kemenkeu.go.id/publikasi/artikel-dan-opini/pemanfaatan-teknologi-informasi-dalam-penyusunan-lkpp/>
- [3] Ariesta, F. (2013). Pengaruh Kualitas Sumber Daya Manusia. *Pemanfaatan Teknologi Informasi, dan Pengendalian Intern terhadap Nilai Informasi Pelaporan Keuangan Pemerintah Daerah*.
- [4] Chene, M. (2009). *The Implementation of Integrated Financial Information Management Systems (IFMIS)*.
- [5] García Jara, E., Cuadrado Ebrero, A., & Eslava Zapata, R. (2011). Effect of international financial reporting standards on financial information quality. *Journal of Financial*

- Reporting and Accounting*, 9(2), 176–196. <https://doi.org/10.1108/19852511111173121>
- [6] Ghozali, I. (2006). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Peneliti Universitas Diponegoro.
- [7] GULTOM, H. E. M. (2016). *PENGARUH KOMPETENSI DAN BEBAN KERJA OPERATOR SISTEM AKUNTANSI INSTANSI (SAI) TERHADAP KUALITAS PENYAJIAN LAPORAN KEUANGAN PADA KANTOR WILAYAH KEMENTERIAN HUKUM DAN HAK ASASI MANUSIA PROVINSI LAMPUNG*. UNIVERSITAS LAMPUNG.
- [8] Handayaningsih, R. M. W. (2016). 31.000 Bendahara akan Bersertifikasi di Tahun 2019. *Majalah Treasury Mini, Kementerian Keuangan*.
- [9] Hassan, M. M. (2015). Transformation To More-Accrual-Based Accounting Practices in Indonesian Government. *Journal of International Business Research*, 14(1), 147–173. <https://doi.org/10.1016/j.asoc.2014.01.003>
- [10] Hendriks, C. J. (2012). Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa. *SA Journal of Information Management*, 14(1), 1–9. <https://doi.org/10.4102/sajim.v14i1.529>
- [11] Indriani, M. (2015). Effect of Literacy in Influencing PLIK Success in Bambanglipuro. *Buletin Pos Dan Telekomunikasi*, 13(1), 37. <https://doi.org/10.17933/bpostel.2015.130103>
- [12] Mahmudi. (2016). *Analisis Laporan Keuangan Pemerintah Daerah*. Yogyakarta: Erlangga
- [13] Mardiasmo. (2004). *Akuntansi Sektor Publik* (Edisi Kedu). Yogyakarta: Andi.
- [14] Murwaningsari, E., Basaria, M. G., & Rachmawati, S. (2009). Faktor - faktor yang mempengaruhi kinerja kualitas, kinerja keuangan dan kepuasan pelanggan. *Jurnal Aplikasi Manajemen*, 7(3), 606–613.
- [15] Musee, K. J. (2014). Factors Affecting Effective Implementation of Intergrated. *Journal of Business Administration and Management Sciences Research*, 2(3), 54–62.
- [16] Ndou, V. D. (2004). E - Government for Developing Countries: Opportunities and Challenges. *The Electronic Journal of Information Systems in Developing Countries*, 18(1), 1–24. <https://doi.org/10.1002/j.1681-4835.2004.tb00117.x>
- [17] Nugroho, Y. P., Basuki, & Fanani, Z. (2017). Sistem Perbendaharaan Dan Anggaran Negara (SPAN) Dalam Proses Pencairan Dana Apbn Pada Kantor Pelayanan Perbendaharaan Negara. *Jurnal Media Riset Akuntansi, Auditing & Informasi*, 17(1), 67–80.
- [18] Nurillah, A. S., & Muid, D. (2014). Pengaruh Kompetensi Sumber Daya Manusia, Penerapan Sistem Akuntansi Keuangan Daerah (SKPD), Pemanfaatan Teknologi



Informasi, dan Sistem Pengendalian Intern Terhadap Kualitas Laporan Keuangan Pemerintah Daerah (Studi Empiris Pada SKPD Kabupaten Kuantan Sin. *Diponegoro Journal of Accounting*, 3(2), 1–13. <https://doi.org/2337-3806>

- [19] Romney, M. B., & Steinbart, P. J. (2016). *Sistem Informasi Akuntansi*. Jakarta: Salemba Empat.
- [20] Sadjarto, A. (2000). Akuntabilitas dan pengukuran kinerja pemerintahan. *Jurnal Akuntansi Dan Keuangan*, 2(2), pp.138-150. <https://doi.org/10.9744/jak.2.2.pp.138-150>