

# The Impact of the Implementation of Student Tuition Payment Information Systems on the Quality of Financial Reports: A Case Study at Universitas Komputer Indonesia

Adeh Ratna Komala<sup>1</sup> and Mari Maryati<sup>2</sup>

Accounting Departement and Management Departement Universitas Komputer Indonesia

Email: [adeh@email.unikom.ac.id](mailto:adeh@email.unikom.ac.id), [mari.maryati@email.unikom.ac.id](mailto:mari.maryati@email.unikom.ac.id)

**Abstract.** The purpose of this research is to see the impact of implementing a student tuition payment system on the quality of financial reports at the Universitas Komputer Indonesia. This is done because students are customers whose loyalty must be maintained. Efforts are being made to provide satisfaction to students by providing transparent and accountable financial report information. The research method used is a survey method using a questionnaire via google form. Respondents were 28 study programs at Universitas Komputer Indonesia as users of the system. The data analysis was carried out through descriptive and verification analysis. Data processing using SEM PLS. The results showed the level of closeness (correlation coefficient) between the student tuition payment system and the quality of financial reports. From these results it can be said that the student tuition payment system is very helpful for the Universitas Komputer Indonesia in producing quality financial reports so that it can make it easier for users to make decisions. Universitas Komputer Indonesia continues to innovate in developing an integrated student tuition payment information system so that the resulting financial reports can provide useful information for the user. The student tuition payment information system has been proven to have improved the quality of information that is accurate, relevant, timely and complete. In addition, the student tuition payment information system created by the Universitas Komputer Indonesia has made it easier for system users to carry out their work so as to cut time more efficiently.

**Key words:** implementation, student tuition payment information system, quality of financial reports

## 1. Introduction

In implementing the information system, it is necessary to have the competence of human resources, this can be done through training and understanding in the application of the system. Accounting information systems, including the tuition payment system, are structures used by businesses to collect, store, manage, process, retrieve, and report financial data so that they become financial reports that can be used by users in making decisions [1]. It was further stated that the accounting information system is a subsystem that processes financial and non-financial transactions that directly affect the processing of financial transactions [2]. The financial information system is the automation of the company's financial operations [3]. Financial information systems are the automation and integration of financial management processes to improve the efficiency and equity of a company's operations by offering the potential to increase participation, transparency, and accountability [4]. Financial information system is an information system that provides information to decision makers regarding financial matters & provides information about the flow of money for users throughout the company [5]. Meanwhile, quality information is produced by a quality system as well. Quality information is information that has dimensions that are accurate, relevant, timely and complete. Accurate means that information must be free from misleading understanding and material errors, present every fact honestly and can be verified. Relevant means that information can be related to its intended use.

Timely means that information has the characteristics of being available when needed and presented up-to-date. Complete means that information includes everything that can affect decision making [6]. The information generated by the tuition payment system at the Universitas Komputer Indonesia is reports of students who have made payments, reports of students who have not made payments and reports of students who are still in suspension. The Universitas Komputer Indonesia as an educational institution is certainly very concerned with maintaining the loyalty of its students to provide the best service. Likewise with the transparency of financial reports for students. Some of the obstacles faced include students who have paid off, have not paid and are still in suspension and are not properly recorded. For this reason, researchers are interested in seeing the impact of the implementation of the tuition payment system on the quality of financial reports in the form of information on students who have paid tuition fees, information on students who have not paid and students who are still in suspension. Regarding the implementation of information systems, several researchers have conducted research. The results of the study state that there is an influence of accounting information systems on the company's financial performance [7].

This study only reviews the conceptual and theoretical foundations as well as the empirical literature. Next, it is mentioned that the effectiveness of accounting information systems is influenced by the culture and competence of users [8]. The results of this study indicate that the financial information system has not yet been integrated so that it must be strengthened with appropriate, accountable and easily accessible mechanisms by the public. Accounting information systems through the quality of financial reports have a positive effect on the performance of the MSME trading business sector [9]. This study only describes the causal relationship between variables based on theory. The accounting information system is influenced by incentives, education level, experience and skills at PT Angkasa Pura Logistik [10]. In his research, it is stated that an accounting information system can be said to be effective if the system is able to produce information in a timely, accurate and reliable manner, but this has not been investigated. The results show that a quality accounting information system has an impact on security, accessibility, reliability of use, data integration, and the availability of correct and timely information that is able to support company performance [11]. This study emphasizes an increase in performance due to the implementation of an accounting information system. The results of the study state that the accounting information system has an effect on the quality of accounting information based on accounting standards [12]. This study examines the effect of accounting information system applications on accounting firm governance. The results of the study indicate that the effectiveness of financial reports occurs if there is an effective quality information system that is influenced by organizational culture [13]. This study emphasizes the need to support a good organizational culture to achieve the effectiveness of accounting information systems. Accounting information systems and internal control systems affect the quality of financial reports [14]. In addition to the accounting information system, the internal control system is the focus in influencing the quality of financial reports. The results of the study indicate that accounting information systems, teamwork, and internal control have a positive and significant effect on the timeliness of submitting financial reports [15]. The results of this study indicate many factors that affect the quality of financial statements. The SPP payment verification system at Atma Luhur produces payment verification information that can be used by the finance department. This system is very effective and efficient because it can be accessed anywhere and anytime so that it can improve the verification process [16]. The SPP payment information system triggers performance by speeding up the payment process and report generation at MTs Baiturahman Beringin Taluk. A college payment information system is said to be running well if the system is easy of use, that is, it is clear and understandable [17; 18], usefulness, which is being able to help users in doing their work [17; 19], adaptability, which emphasizes the ability to manage internal and external changes [17; 20], and integrated, namely an integrated information system on the basic parts of the system in achieving better functions in accordance with expectations [17; 21].

Based on the benefits and phenomena that have been described, the researcher sees the need for research that can provide empirical evidence about the implementation of a tuition payment information system that has an impact on the quality of financial reports. This research was conducted with the aim of knowing the effect of implementing a tuition payment information system on information on students who have made tuition payments, who have paid off and who still have a suspension. Student reports are recorded and read by users so that they can provide information that can be used in decision making.

## 2. Metode

The research method used is descriptive and verification methods (explanatory research). The unit of analysis in this study is the Head of the Study Program at the Universitas Komputer Indonesia as many as 28 (twenty eight). The Head of the Study Program is the respondent of this research because he is the user of the student tuition payment reports. The data source is primary data collected in the form of a statement (questionnaire) which is summarized in the google form. The data was processed using SEM PLS.

The type of research used to collect data is a survey. The methods used to collect data in this study are interviews, questionnaires, observation, and motivational techniques. This research has been tested for validity and reliability.

Based on descriptive analysis that the student tuition payment information system has an effect on the quality of reports of students who have paid tuition, and students who defer payments. The results of data processing show that the tuition payment information system affects the quality of financial reports related to students who have made tuition payments, who have paid off and are in the process of deferring.

## 3. Research Results and Discussion

The following is a profile of respondents including gender and length of work at the Universitas Komputer Indonesia.

**Table 1 Respondent Profile**

<b>Respondent Profile</b>	<b>F</b>	<b>%</b>
Gender		
Male	7	25%
<b>Pemale</b>	<b>21</b>	<b>75%</b>
length of work		
0 - 10 years	10	36%
<b>&gt; 10 years</b>	<b>18</b>	<b>64%</b>

In this section the researcher will describe the results of the study with the title of the effect of the tuition payment system (X) on financial statements (Y). The data that has been collected is coded (coding), processed using descriptive analysis to determine the respondents' responses to each of the variables studied, then continued with Structural Equation Modeling (SEM) analysis with 28 research respondents.

**Table 2 Description of Tuition Payment Information System Variables**

Tuition Payment Information System									
1	The tuition payment information system implemented at UNIKOM, Easy of use		Very easy	Easy	Quite easy	difficult	Very difficult	Total	Average
		F	10	14	3	1	0	28	4,17
		%	36%	50%	10%	4%	0%	100%	
2	The tuition payment information system implemented at UNIKOM, Usefulness		Very helpful	Helpful	Quite helpful	Less helpful	Not helpful	Total	Average
		F	11	13	3	1	0	28	4,21
		%	39%	46%	11%	4%	0%	100%	
3	The tuition payment information system implemented at UNIKOM, Adaptability		Always adapt	Adapt	Quite Adapt	Less Adapt	Not Adapt	Total	Average
		F	12	12	4	0	0	28	4,29
		%	43%	43%	14%	0%	0%	100%	
4	The tuition payment information system implemented at UNIKOM, Integration		Very integrated	Integrated	Quite integrated	Less integrated	Not integrated	Total	Average
		F	7	17	1	2	1	28	3,96
		%	25%	60%	4%	7%	4%	100%	
Average									4,15

Based on the table above, respondents answered that it was easy to use the 50% tuition payment information system. As many as 46% of respondents answered that the tuition payment information system helps the respondent's work. The tuition payment information system is said to always adapt to technology, which is 43% and 50% answered that the tuition payment information system is integrated at universities to study programs.

Overall, the average score for the variable tuition payment information system is 4.15. This value is in the interval 3.41 – 4.20 which indicates that the respondents answered that the tuition payment information system at the Universitas Komputer Indonesia is good.

**Table 3. Overview of Financial Report Quality Variables**

Financial Report Quality									
1	Reports regarding the payment of student tuition at UNIKOM that you have received, accurate		Very suitable	suitable	Quite suitable	Less suitable	Not suitable	Total	Average
		F	14	9	5	0	0	28	4,32
		%	50%	32%	18%	0%	0%	100%	
2	Reports regarding the payment of student tuition at UNIKOM that you have received, relevant		Very suitable	Suitable	Quite suitable	Less suitable	Not suitable	Total	Average
		F	10	12	6	0	0	28	4,14
		%	36%	43%	21%	0%	0%	100%	
3	Reports regarding the payment of student tuition at UNIKOM that you have received, timelines		Always on time	On time	Quite on time	Less on time	Not on time	Total	Average
		F	12	12	4	0	0	28	4,29
		%	43%	43%	14%	0%	0%	100%	
4	Reports regarding the payment of student tuition at UNIKOM that you have received, complete		Very complete	Complete	Quite complete	Less complete	Not complete	Total	Average
		F	7	17	1	2	1	28	3,89
		%	25%	60%	4%	7%	4%	100%	
Average									4,16



Based on the table above, respondents answered that the financial statements of student tuition payments at the Universitas Komputer Indonesia were in accordance with the actual 50%. As many as 43% of respondents answered that the financial statements of tuition payments were in accordance with what the respondents needed. The tuition payment report is said to be always on time, which is 43% and 60% answered that the tuition payment financial report is complete. Overall, the average score for the financial statement variable for tuition payments is 4.16. This value is in the interval 3.41 – 4.20 which indicates that the respondents answered that the report on tuition payments at the Universitas Komputer Indonesia was good.

### Structural Equation Modeling (SEM) Analysis

Structural Equation Modeling (SEM) analysis in this study was used to determine the effect of the tuition payment information system on the financial statements of tuition payments, using the SmartPLS software. There are two main stages in SEM analysis with SmartPLS, namely the analysis of the outer model and the analysis of the inner model which will be described as follows.

### Testing the Measurement Model (Outer Model)

The measurement model defines how each indicator block relates to its latent variable, there are tests on this outer model such as convergent validity, discriminant validity, composite reliability, and Cronbach's alpha.

#### Convergent Validity

This analysis was conducted to examine valid indicators in detail regarding individual item validity. According to Ghozali (2011: 210) the loading factor value will be fulfilled if the value of each indicator is  $> 0.5$ . All of the indicators in the tuition payment information system (X) and the tuition payment financial report (Y) have a loading factor value of  $> 0.5$ . It can be concluded that each indicator is valid and can be used.

**Table 4. Convergent Validity**

Latent Variable	Indicator	Loading Factor	Description
X. Tuition Payment Information System	Easy to use	0,916	Valid
	Usefulness	0,924	Valid
	Adaptability	0,890	Valid
	Integration	0,941	Valid
Y Tuition Payment Financial Report	Accurate	0,897	Valid
	Relevant	0,868	Valid
	Timelines	0,924	Valid
	Complete	0,920	Valid

#### Discriminant validity

Discriminant validity occurs when two different instruments that measure two predicted uncorrelated constructs produce scores that are not correlated. The method used is the Fornell-Larcker Criterion where the AVE value of the extracted mean variance must be higher than the correlation involving the latent variable.

**Table 5. Discriminant Validity**

	Tuition Payment Information System (X)	Tuition Payment Financial Report (Y)
Tuition Payment Information System (X)	0,918	
Tuition Payment Financial Report (Y)	0,819	0,903

It can be seen that the value from the Fornell-Larckel Criterion table shows that the value of X to X is greater than the value of X to Y

### Composite Reliability

Composite reliability testing was conducted to determine the reliability of each construct. The recommended composite reliability value is  $> 0.7$ . Based on the calculation results presented in the table below, it can be concluded that all variables are reliable from each construct

**Table 6. Composite Reliability**

Variable	Composite Reliability	Description
Tuition Payment Information System	0,955	Reliable
Tuition Payment Financial Report	0,946	Reliable

Reliability testing can be strengthened by looking at the Cronbach Alpha value and the expected value is  $> 0.6$  for all constructs. Based on the calculation results presented in the table below, it can be concluded that all variables are reliable from each construct

**Table 7. Cronbach Alpha**

Variable	Cronbach Alpha	Description
Tuition Payment Information System	0,938	Reliable
Tuition Payment Financial Report	0,924	Reliable

### Inner Model

The inner model is a test on the structural model which is carried out to test the relationship between latent constructs. There are several tests such as R-Square, Goodness of Fit and hypothesis testing

### R-Square

The SEM-PLS application represents the amount of variance from the construct described by the model, the higher the R-Square value, the better the prediction model and the proposed research model. In addition, changes in the R-Square value can be used to explain the effect of the endogenous latent variable whether it has a substantive effect. The criteria for the R-Square are presented in the table below:

Table 8. R Square

R-Square ( $R^2$ )	Criteria
0,67	Strong
0,33	Moderate
0,1	Weak

Based on the calculation results, the R-Square (R<sup>2</sup>) value of 0.671 can be concluded that the tuition payment information system (X) has a strong influence on financial statements (Y) and the effect is 67.1% while the remaining 32.9% financial statements ( Y ) is influenced by other variables not discussed in this study.

### Goodness Of Fit (Gof)

Goodness of Fit (GOF) is used to evaluate measurement models and structural models and provides simple measurements for the overall prediction of the model. The criteria for GoF values are 0.10 (GoF Small), 0.25 (GoF Medium), and 0.36 (GoF Large) How to find GOF using the following formula:

$$GOF = \sqrt{AVE \times R^2}$$

$$GOF = \sqrt{0,829 \times 0,335}$$

$$GOF = 0,527$$

The GOF value in this study is 0.527, which means it is included in the large category. It can be concluded that from the GoF results in this study, it means that the fit of the model with the object under study can be said to be strong or fit

Table 9. Goodness of Fit (GOF)

	Ave	R <sup>2</sup>
Tuition Payment Financial Report	0,815	0,671
Average	0,829	0,335

### Hypothesis testing

The hypothesis in this study is as follows

H<sub>0</sub> = 0: There is no influence of the tuition payment information system on the financial statements at the Universitas Komputer Indonesia

H<sub>1</sub> ≠ 0 : There is an influence of the tuition payment information system on the financial statements at the Universitas Komputer Indonesia

The criteria for making a hypothesis decision are seen from the comparison between the value of t<sub>statistics</sub> and the value of t<sub>table</sub>, if the value of t<sub>statistics</sub> > t<sub>table</sub>, it can be concluded that H<sub>0</sub> is rejected and H<sub>1</sub> is accepted and vice versa if the value of t<sub>statistics</sub> is < t<sub>table</sub>, it can be concluded that H<sub>0</sub> is accepted and H<sub>1</sub> is rejected. To find the value of t<sub>table</sub> using a significance level of 5% and the number of samples used was 28 respondents, the t<sub>table</sub> value was 1.706.

In finding the value of t<sub>statistics</sub> using the SMARTPLS 3.2.7 application with the bootstrapping method and the value obtained is 12,030. Based on the criteria that have been determined, the value of t<sub>statistics</sub> > t<sub>table</sub> can be concluded that H<sub>0</sub> is rejected and H<sub>1</sub> is accepted, there is an influence of the tuition payment information system on financial reports at the Universitas Komputer Indonesia. To see in more detail, the results of the SMARTPLS 3.2.7 calculation are presented in the image below.



### Conclusion

The implementation of the tuition payment information system at the Universitas Komputer Indonesia is going well. This can be seen from the results of the study where the respondents, the head of the study program, said that the tuition payment system at the Universitas Komputer Indonesia had been going well. Likewise, the financial reports for tuition payments also provide good information needed by the Heads of Study Programs. Verificatively, it is also stated that the tuition payment information system affects the quality of the financial reports for tuition payments at the Universitas Komputer Indonesia. This shows that the tuition payment information system has an impact on the quality of financial reports.

### Acknowledgement

The author thanks Prof. Dr. Ir. Eddy Soegoto who has given the author the opportunity to complete this research.

### References

- [1] Amy Fontinelle. 2019. Introduction to Accounting Information Systems (AIS). <https://www.investopedia.com/articles/professionaleducation/11/accounting-information-systems.asp>
- [2] James Hall A. 2008. Accounting Information System. South Western. ISBN: 9780324560893. 6th ed.
- [3] Nicky LaMarco. 2019. What Are the Benefits of a Financial Management Information System?. <https://smallbusiness.chron.com/benefits-financial-management-information-system-71943.html>
- [4] Financial Management Information Systems (FMIS). <https://www.worldbank.org/en/topic/governance/brief/financial-management-information-systems-fmis>
- [5] Financial Information System <https://mutiarakharisma.wordpress.com/sistem-informasi-keuangan-financial-information-system/>
- [6] McLeod, J. R. & G.P. Schell. 2007. Management Information System. Prentice Hall



- [7] Amos Gan yam, Ivungu Ayoor. 2019. Effect of Accounting Information System on Financial Performance of Firms: A Review of Literature IOSR Journal of Business and Management 21(5):39-49 DOI:10.9790/487X-2105073949
- [8] Nurhayati Nunung Nurhayati, Nining Koesdiningsih. 2018. The Effectiveness of Financial Accounting Information System with Approach of Organizational Culture and User Competency in Baznas North of West Java. DOI: 10.18502/kss.v3i10.3438. <https://knepublishing.com/index.php/Kne-Social/article/view/3438/7271>.
- [9] Ida Ayu Nyoman Sutriani Animah Lalu Takdir Jumaidi . 2019. The Effect Of Accounting Information Systems On The Performance Of Msmes With The Quality Of Financial Statements As Mediation Variables (Study On Trade Business Sector Msmes In West Lombok Regency). International Journal of Business, Economics and Law, Vol. 19, Issue 5 (August) ISSN 2289-1552.
- [10] Ni Putu Lisa Ernawatiningsih, Putu Kepramareni. 2019. *Effectiveness of Accounting Information Systems and the Affecting Factors* International Journal of Applied Business and International Management, Vol 4, No 2
- [11] D. Rosa and A P Purfini. 2019. Analysis Effect Quality of Accounting Information Systems to Support Company Performance. IOP Conference Series: Materials Science and Engineering. <https://iopscience.iop.org/article/10.1088/1757-899X/662/3/032015>
- [12] Kayed Ab Allah Al-Attar. 2021. [The effect of accounting information system on corporate governance. Contents lists available at GrowingScience Accounting homepage: www.GrowingScience.com/ac/ac.html](https://www.growing-science.com/ac/ac.html). DOI:10.5267/j.ac.2020.10.008.
- [13] Adeh Ratna Komala. 2017. Cause And Effect Of Accounting Information System: A Study In National Zakat Management Orgnaizatioan. Journal Of Adminstrative And Business Studies. JABS. 3 (2) 69-76 [https://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract\\_Id=3744835](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3744835)
- [14] Ciko Arfismanda, Maulan Irwadi, M. Rum Hendarmin. 2021. The Effect of Accounting Information System and Internal Control System on the Quality of Financial Reports at PT Semen Baturaja (Persero) Tbk. <https://journal.jis institute.org/index.php/ijcse/article/view/343> DOI: <https://doi.org/10.47747/ijcse.v2i3.343>. Vol. 2 No. 3 (2021)
- [15] Mardi, Mardi. Perdana Petrolis Nusa, Suparno. Suparno, Munandar Imam Aris. 2020. Effect of Accounting Information Systems, Teamwork, and Internal Control on Financial Reporting Timeliness. The Journal of Asian Finance, Economics and Business. Volume 7 Issue 12 /Pages.809-818/2020/2288-4637(pISSN)/2288-4645(eISSN).
- [16] Bambang Adiwino, Yohanes Setiawan Japriadi, Lukas Tommy Information System Of Tuition And Thesis Payment Verification With Adaptive Layout Design. Journal Of Computing And Information Technology, P-Issn: 19782136, E-Issn: 2527-676x. Vol 17 No 2 (2020)
- [17] Adeh Ratna Komala. 2020. Zakat Optimilization With Financial Technology <https://icobest.unikom.ac.id/submission/proceeding/download/93>
- [18] Ndubisi, Nelson Oly dan Guriting, Petrus. 2006. *Management Research News: marketplace Behavior of Malaysian Costumers: (Borneo Online Banking: Evaluating Customer Perception & Behavioral Intention)*. Emerald Customers Support, e-mail [support@emeraldinsigh.com](mailto:support@emeraldinsigh.com), web [www-emeraldinsigh.com/customercharter](http://www-emeraldinsigh.com/customercharter)

- [19] Moller, Charles dan Chardhry, Sohail. 2011. *Re-conceptualizing: Enterprise Infromation System*. Denmark: International Federation for Information Processing (IFIP) Aalborg.
- [20] Tavana, Madjid. 2011. *Managing Adaptability, Intervention and People in Enterprice Information System*. Information Science Reference (an imprint of 161 Global) 701 E. Chocolate Avenue Hershey P/A 17033 USA.
- [21] Norman Thomas. 2007. *Integrated Security Systems Design: Concepts, Design and Implementation*. 3D Corporate Drive, Suite 400 Burlington, MA D1803, USA Elsevier Inc Jordan Hill, Oxpord OX2 8DP, UK