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Evaluation of the Perception of the Effectiveness of Financial Information Systems with the DeLone and McLean Methods

Riski Arifiyanti[1]*, Muhammad Shobaruddin[2], Alfi Haris Wanto[3]

[1]Department of Public Administration, University of Brawijaya, Malang, Indonesia
[2]Department of Public Adminsitration, University of Brawijaya, Malang, Indonesia
[3]Department of Public Administration, University of Brawijaya, Malang, Indonesia

Abstract

This study aims to measure the effectiveness of Financial Information Systems at the State University of Malang in 2019. Respondents in this study are UM stakeholders, namely system operators, system technicians and information users. Data collection using a questionnaire. The analysis used is Partial Least Square Analysis which is operated through the Smart PLS program. The results showed that there was no influence between the Quality of the System on Use in the information user and technician groups, conversely in the system user group there was an influence. There is an influence between Service Quality on Use in the information and technical user groups, conversely in the system user group there is none. There is no effect of system quality, information quality, and service quality on user satisfaction. There is an influence between users on user satisfaction on the group of users of information and systems, conversely there is no influence on the group of technicians. There is an influence between users on net benefits. There is an influence between user satisfaction on net benefits in the information user group and the system, conversely in the engineering group there is no influence.

Keywords: SEM-PLS, Smart PLS, Financial Information Systems

INTRODUCTION

According to [1], universities as providers of academic services must provide the best service to stakeholders. Good service will produce stakeholder confidence so that it can provide satisfaction for its stakeholders. Clustering higher education by the Ministry of Research in Technology and Higher Education is one way to spur higher education to continue to improve quality, in 2018 UM was ranked 14th, but in 2019 UM ranked dropped to 19th. This downgrade could mean that the State University of Malang has not been serious in its efforts to maintain and improve the quality of its institutions. The Higher Education Ranking 2019 focuses on indicators or assessments based on an output-outcome base, that is by looking at input performance and output performance. The addition of this indicator is an effort so that universities can actively respond to the times, especially the 4.0 industrial revolution and the need for labor.

Malang State University (UM) as one of the higher education institutions engaged in education services, has an important role in realizing excellent service based on the principles of good governance. Improving service quality is an important goal in the development of MW institutions, both at the local, regional, national and international levels. This is in line with the Regulation of the Minister of Administrative and Bureaucratic Reform and the Republic of Indonesia (PAN RB) No. 11 of 2015 concerning the 2015-2019 Bureaucracy Reform Roadmap. As an integral part of the Ministry of Research, Technology and Higher Education, Malang State University is determined to realize the policy of developing tertiary institutions to meet local, regional, and global demands on an ongoing basis.

In the 2018 UM Performance Report, the mission of organizing governance that is strong, accountable, and transparent and strengthening partnerships in order to improve sustainable quality, in the work program, one of which is mentioned the program to improve integration of planning, information and promotion systems supported by the reliability of infrastructure, sources human power, and information technology. Information and communication technology that has been used at Malang State University to improve public implementation in the form of academic services, student services, staffing services, financial services, and general services. However, an analysis of the success of

Riski Arifiyanti
Email : riskiarifiyanti@gmail.com
Address : Department of Public Administration, University of Brawijaya, Malang, Indonesia

the system has not been done regularly, especially on financial information systems.

Financial reports presented by the government must meet four qualitative characteristics. These characteristics are relevant, reliable, comparable, and easy to understand. This is also in line with Government Regulation No.56 of 2005 concerning Regional Financial Information Systems which explains that the regional financial information presented must meet the principles of accuracy, relevance, and accountability. Thus, the need for information systems as well as an analysis of its success really needs to be considered with the intent and purpose of the system can really improve performance in the government sector. One of the determinants of the success of a system is when the system can be accepted by users, because the success and failure of system implementation is very dependent on the acceptance of system users.

Financial Information System of Malang State University was originally built to facilitate the preparation of financial reports that were developed since 2008. Since the use of the Financial Information System application, improvements have been made, both in terms of the application user and in terms of the application system itself. This Financial Information System runs online, realtime and integrated. Currently this application is used by all financial management staff both at the Head Office, Faculties, UPT and Institutions in the State University of Malang. Therefore, it is necessary to analyze the implementation of financial information systems and the benefits obtained by system users from the existence of the system will affect the level of system user satisfaction [2].

[3] aimed at the successful implementation of the billing system at Sragen Regency Hospital. The results showed that the quality of information and the quality of the system proved to have a significant influence on user satisfaction as well as usage and other variables. In general, the success model of the DeLone and McLean information systems is a framework that can provide an evaluation of the billing system implementation in Sragen District Hospital.

[4] a journal entitled analysis of the success rate of the implementation of regional financial management information systems through the DeLone and McLean Models shows that information quality, system quality and service quality do not positively influence the use and satisfaction of users and net benefits. this is possible because SIMKEUDA has just been implemented. Whereas user satisfaction affects net benefits.

Based on the description above regarding the research that has been carried out by previous researchers, the differences in this study, where the variables used are system quality, information quality, service quality, usage, user satisfaction and net benefits.

MATERIAL AND METHOD

This research uses quantitative methods with the type of survey research. Researchers using variables proposed by [5] about the success analysis of the use of information systems, namely: system quality, information quality, service quality, use, user satisfaction, and net benefits.

Data Collection

This research instrument used a questionnaire and conducted interviews directly with parties related to the research conducted, SIKUM Users. Respondents in this study are operators, technicians and users of financial information systems. Users are spread across Faculties and Units at Malang State University. Data collection was carried out during September 2018-January 2019 at State University of Malang. The number of samples in this study were 122 respondents.

Testing the validity of using Pearson correlation, where the instrument is declared valid if the correlation value> 0.3. The technique used to measure the reliability of the instruments in this study is the Cronbach Alpha technique. The analysis technique used is Partial Least Square which is operated through the Smart PLS program. According to [6], SEM-PLS analysis is an analysis that combines factor analysis approaches, structural models, and path analysis.

RESULT AND DISCUSSION

Next will be presented the test of the validity and reliability of each indicator. Validity testing is done using Pearson correlation, the instrument is declared valid if the correlation value (r)> 0.3. While reliability testing is done by looking at the Cronbach alpha value where if the Cronbach alpha value> 0.6 then the instrument can be declared valid. Following is a table of results of testing the validity and reliability of each indicator.

Table 1. Validity an Reliability Test

Variable	Indicator	r	Alpha Cronbach
System quality (X1)	X1.1	0.877	0.876
	X1.2	0.892	
	X1.3	0.859	
	X1.4	0.796	
Information quality (X2)	X2.1	0.875	0.962
	X2.2	0.877	

	X2.3	0.923	
	X2.4	0.923	
	X2.5	0.920	
	X2.6	0.920	
	X2.7	0.890	
Service quality (X3)	X3.1	0.840	0.875
	X3.2	0.826	
	X3.3	0.790	
	X3.4	0.810	
	X3.5	0.824	
Use (Y1)	Y1.1	0.943	0.946
	Y1.2	0.921	
	Y1.3	0.961	
	Y1.4	0.893	
User satisfaction (Y2)	Y2.1	0.910	0.901
	Y2.2	0.941	
	Y2.3	0.888	
Net benefit (Y3)	Y3.1	0.892	0.958
	Y3.2	0.885	
	Y3.3	0.900	
	Y3.4	0.920	
	Y3.5	0.914	
	Y3.6	0.912	
	Y3.7	0.851	

Sources: Primary data is processed, 2020

Table 1 above shows the correlation values of all question items in the questionnaire for all indicators and items worth above 0.3. In addition, the reliability test results with Cronbach's alpha on the six research variables showed values above 0.6. Thus it can be concluded that the instrument meets the requirements of validity and reliability.

PLS Analysis Result

The results of testing the linearity assumptions of the nine relationships built in this study show that the linear model is significant (sig linear model <0.05), which indicates that the linearity assumption of relationships between variables in this study is fulfilled, considering that in SEM-PLS, the relationship used is in the linear form. Testing the goodness of fit model in PLS can be seen from the value of predictive-relevance (Q2). In the User Group Information the Q2 value is calculated based on the R2 value of each endogenous variable with the results of the Q2 calculation, showing a predictive-relevance value of 0.984 or 98.4% greater than 0.7. This means that variations in the Y2 variable are explained by the variables used of 98.4% and the remaining 1.6% explained by other variables outside the model. Thus, the model is said to be worthy of having relevant predictive value.

The Q2 calculation technician group shows a predictive-relevance value of 0.9997 or 99.97% greater than 0.7. This means that the variation of the Y2 variable is explained by the variables used by 99.97% and the rest by 0.03% explained by other variables outside the model. Thus, the model is said to be worthy of having relevant predictive value.

In the System Users Group the results of the Q2 calculation, showing a predictive-relevance value of 0.999 or 99.9% greater than 0.7. This means that the variation of the Y2 variable is explained by the variables used by 99.97% and the remaining 0.01% is explained by other variables outside the model. Thus, the model is said to be worthy of having relevant predictive value.

Structural Model

In the first part of the SEM-PLS analysis is the interpretation of the measurement model. The measurement model presents measurement variables (as unobservable variables) of each measuring indicator (as observable variables). Measurement models are carried out on each research variable. This measurement model is equivalent to Confirmatory Factor Analysis (CFA). The measurement coefficient model or called loading factor states the amount / contribution of the indicator as a measure of the variable. The indicator with the highest loading factor indicates that the indicator is the strongest measure of the measured variable.

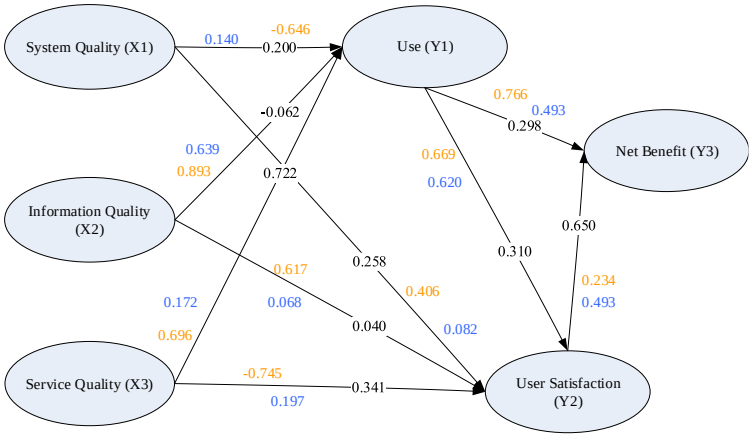
Table 2. CFA of Information Users group (1), Technicians (2) and system Users (3)

Variable	Indicator	1	2	3
System quality (X1)	X1.1	0.819	**0.937**	0.891
	X1.2	0.853	**0.957**	0.884
	X1.3	0.845	**0.906**	0.857
	X1.4	0.669	0.794	**0.913**
Information quality (X2)	X2.1	0.825	**0.968**	0.865
	X2.2	0.811	**0.942**	0.865
	X2.3	0.903	**0.967**	0.913
	X2.4	0.892	**0.974**	0.916
	X2.5	0.921	**0.964**	0.945
	X2.6	0.913	**0.965**	0.902
	X2.7	0.881	0.906	**0.911**
Service quality (X3)	X3.1	0.769	**0.913**	0.847
	X3.2	0.741	0.827	**0.913**
	X3.3	0.743	0.802	**0.844**
	X3.4	0.764	**0.900**	0.779
	X3.5	0.813	**0.881**	0.874
Use (Y1)	Y1.1	0.909	**0.966**	0.953
	Y1.2	0.877	0.925	**0.953**
	Y1.3	0.947	**0.979**	0.964
	Y1.4	0.865	0.871	**0.928**
User satisfaction (Y2)	Y2.1	0.848	0.920	**0.940**
	Y2.2	0.893	**0.966**	0.960
	Y2.3	0.829	**0.954**	0.922
Net benefit (Y3)	Y3.1	0.769	**0.913**	0.847
	Y3.2	0.741	0.827	**0.913**
	Y3.3	0.743	0.802	0.844
	Y3.4	0.764	**0.900**	0.779
	Y3.5	0.813	**0.881**	0.874

Sources: Primary data is processed, 2020

In SEM there are two influences namely direct effect, and indirect effect. There is a significant influence between one variable on another variable, if the P-value <0.05. The complete analysis results are presented in Table 5 and Figure 1 for direct effects and Table 6 for indirect effects.

Figure 1. Structural Model SEM: Direct Effect



Relation	Information User Group		Technician Group		System User Group	
	Coef	p	Coef	p	Coef	p
X1→Y1	0.200^{ns}	0.361	-0.646^{ns}	0.201	0.140^{ns}	0.450
X2→Y1	-0.062^{ns}	0.797	0.893^{ns}	0.093	0.639*	0.012
X3→Y1	0.722*	0.000	0.696*	0.006	0.172^{ns}	0.370
X1→Y2	0.258^{ns}	0.105	0.406^{ns}	0.724	0.082^{ns}	0.649
X2→Y2	0.040^{ns}	0.837	0.617^{ns}	0.637	0.068^{ns}	0.731
X3→Y2	0.341^{ns}	0.061	-0.745^{ns}	0.220	0.197^{ns}	0.152
Y1→Y2	0.310*	0.030	0.669^{ns}	0.197	0.620*	0.000
Y1→Y3	0.298*	0.029	0.766*	0.000	0.493*	0.000
Y2→Y3	0.650*	0.000	0.234^{ns}	0.148	0.493*	0.000

Table 3. Structural Model SEM: Direct Effect

Sources: Primary data is processed, 2020
Note: *Significant, ^{ns} Non Significant

Table 4. Structural Model SEM: Indirect Effect (Mediation Effect)

Model	Indirect Effect	Coefficient Direct Effect	Coef Indirect Effect	Ket.	
Information User Group	X1 → Y1 → Y3	X1 → Y1 = 0.200^{ns}	Y1 → Y3 = 0.298*	0.060	Non Sig.
	X2 → Y1 → Y3	X2 → Y1 = -0.062^{ns}	Y1 → Y3 = 0.298*	-0.018	Non Sig.
	X3 → Y1 → Y3	X3 → Y1 = 0.722*	Y1 → Y3 = 0.298*	0.215	Sig.

	X1 → Y2 → Y3	X1 → Y2 = 0.258^{ns}	Y2 → Y3 = 0.650*	0.168	Non Sig.
	X2 → Y2 → Y3	X2 → Y2 = 0.040^{ns}	Y2 → Y3 = 0.650*	0.026	Non Sig.
	X3 → Y2 → Y3	X3 → Y2 = 0.341^{ns}	Y2 → Y3 = 0.650*	0.222	Non Sig.
Technician Group	X1 → Y1 → Y3	X1 → Y1 = -0.646^{ns}	Y1 → Y3 = 0.766*	-0.495	Non Sig.
	X2 → Y1 → Y3	X2 → Y1 = 0.893^{ns}	Y1 → Y3 = 0.766*	0.684	Non Sig.
	X3 → Y1 → Y3	X3 → Y1 = 0.696*	Y1 → Y3 = 0.766*	0.533	Sig.
	X1 → Y2 → Y3	X1 → Y2 = 0.406^{ns}	Y2 → Y3 = 0.234^{ns}	0.095	Non Sig.
	X2 → Y2 → Y3	X2 → Y2 = 0.617^{ns}	Y2 → Y3 = 0.234^{ns}	0.144	Non Sig.
	X3 → Y2 → Y3	X3 → Y2 = -0.745^{ns}	Y2 → Y3 = 0.234^{ns}	0.174	Non Sig.
System User Group	X1 → Y1 → Y3	X1 → Y1 = 0.140^{ns}	Y1 → Y3 = 0.493*	0.069	Non Sig.
	X2 → Y1 → Y3	X2 → Y1 = 0.639*	Y1 → Y3 = 0.493*	0.315	Sig.
	X3 → Y1 → Y3	X3 → Y1 = 0.172^{ns}	Y1 → Y3 = 0.493*	0.085	Non Sig.
	X1 → Y2 → Y3	X1 → Y2 = 0.082^{ns}	Y2 → Y3 = 0.493*	0.040	Non Sig.
	X2 → Y2 → Y3	X2 → Y2 = 0.068^{ns}	Y2 → Y3 = 0.493*	0.034	Non Sig.
	X3 → Y2 → Y3	X3 → Y2 = 0.197^{ns}	Y2 → Y3 = 0.493*	0.097	Non Sig.

Sources: Primary data is processed, 2020
Note : *Significant, ^{ns} Non Significant

The results of testing the direct influence structural models are presented in Table 2 and Figure 1 as follows:

The influence of System Quality (X1) on Usage (Y1) obtained a structural coefficient in the Information User Group of 0.200, and P-value of 0.361, the Technician Group of -0,646 and P-value of 0.201, and the System User Group of 0.140 and P-value of 0.450. Because the P-value is equally> 0.05, it indicates that there is no significant effect between System Quality (X1) on Usage (Y1). That is, high and low Quality System (X1), will not result in high or low Usage (Y1). The negative results above can be explained because the use of this information system is mandatory, meaning that the UM Financial Information System must be used for all financial managers. Therefore the use of information systems cannot be used as a measure to assess the real use of an information system. Hypothesis test results that also show no influence between the quality of information and use can be seen in the research of [7] and [8]. As in [9] it is known that the results of the analysis of the use of SIKMA were rejected. This proves that the quality of the system is vital but does not become something important when used.

The influence of Information Quality (X2) on Usage (Y1) obtained structural coefficient in the Information User Group of -0.062, and P-value of 0.797 and the Technician Group of 0.893, and P-value of 0.093. Because the P-value is equally> 0.05, it indicates that there is no significant effect between Information Quality (X2) on Usage (Y1). That is, high and low Quality Information (X2), will not result in high or low Usage (Y1). Unlike the case with the System User Group, it is obtained a structural coefficient of 0.639 and a P-value of 0.012. Because the P-value <0.05, and the coefficient marked positive indicates that there is a significant and positive influence between Information Quality (X2) on Use (Y1). That is, the higher the Quality of Information (X2), the higher the Usage (Y1) will be. In the Information Users and Technicians group there were negative test results on the effect of Information Quality on Use, this could be due to the two groups not directly using this financial information system. The Information User Group only benefits from information that has been processed by the system. Whereas the Technician group certainly

does not directly relate to the substance of the financial information system (SIKUM). This is in line with research by [7] and [8] which states that the quality of information has no significant effect on usage. Unattractive information presentation, inaccurate information relevance and presentation language are lack of SIKUM. It differs in the System Users group where they use direct financial information systems (SIKUM). The test results obtained are significant positive where the higher the Quality of Information will result in the higher use. With good quality information will support the work of system users, so they will use the system more often, this is supported by the results of the measurement of the Usage variable, the results show that the Intention to Use (Y1.3) indicator is the indicator with the highest loading factor. Information quality is often used as a criterion to assess the performance function of an information system. One reason is that many organizations have begun computerized programs in an effort to produce better information for decision making. The quality of information needs to always be improved because data can be easily updated, manipulated, and processed in a timely manner to provide relevant information for decision making. Better information can lead to general improvements in the work environment in terms of improving staff morale and making work more attractive. In other words, if the quality of information increases, it is more likely to bring the desired organizational impact [10].

The effect of Service Quality (X3) on Usage (Y1) obtained structural coefficients in the Information User Group at 0.722, and the P-value 0.000 and the Technician Group at 0.696, and P-value 0.006. Because the P-value is both <0.05, and the coefficient is positive indicating that there is a significant and positive influence between Service Quality (X3) on Usage (Y1). That is, the higher the Quality of Service (X3), the higher the Usage (Y1) will be. Unlike the case with the System User Group, the structural coefficient obtained is 0.172, and the P-value is 0.370. Because the P-value> 0.05, indicates that there is no significant effect between Service Quality (X3) on Usage (Y1). That is, high and low Quality of Service (X3), will not result in high or low Usage (Y1). The results of this study are supported by research by [7] and [8] who say that service quality has no significant effect on usage. In a study [11] the results of the influence of service quality on this use were analyzed more deeply, that in government institutions service quality was generally not superior. Nevertheless these government employees still have to use the information system even with low service quality during the use of the system.

The influence of System Quality (X1) on User Satisfaction (Y2) obtained structural coefficients in the Information User Group of 0.258, and P-value of 0.105, the Technician Group of 0.406 and P-value of 0.724, and the System User Group of 0.082 and P-value of 0.649. Because the P-value is equally> 0.05, it indicates that there is no significant effect between System Quality (X1) on User Satisfaction (Y2). That is, high and low Quality System (X1), will not result in high or low User Satisfaction (Y2). In the study of [8], [12] and [13] stated that the influence of system quality with user satisfaction is significant, this illustrates that the quality of the system meets the expectations of its users. Contrary to the results of this study, where the variable use is mandatory, it means that the financial information system must be used by financial managers in accordance with the mandate / task of their superiors, so that user satisfaction cannot be a tangible measurement tool.

The influence of Information Quality (X2) on User Satisfaction (Y2) obtained structural coefficient on the Information User Group of 0.040, and P-value 0.837, the Technician Group at 0.617 and P-value 0.637, and the System User Group at 0.068 and P-value 0.731. Because the P-value is equally> 0.05, it indicates that there is no significant effect between Information Quality (X2) on User Satisfaction (Y2). That is, high and low Quality Information (X2), will not result in high or low User Satisfaction (Y2). The quality of information systems is the level of how much computer technology is felt to be relatively easy to understand and use [14]. According to [15] the quality of information systems is a characteristic of inherent information about the system itself. If the quality of the information system is good according to the user's perception, then they will tend to feel satisfied in using the system. The higher the quality of the information system used, the higher the level of satisfaction of the end user of the information system [16]. Users of the information system certainly hope that by using the system they will get the information they need. If the information generated is not quality, it will negatively affect user satisfaction. The use of financial information systems in UM is a mandate for all financial managers, so the measured behavior is mandatory behavior. Obligatory behavior is behavior that is not of its

own volition but because it is indeed a demand or obligation of work.

The influence of Service Quality (X3) on User Satisfaction (Y2) obtained structural coefficient on the Information User Group of 0.341, and P-value of 0.061, the Technician Group of 0.745 and P-value of 0.220, and the System User Group of 0.197 and P-value of 0.152. Because the P-value is equally> 0.05, it indicates that there is no significant effect between Service Quality (X3) on User Satisfaction (Y2). That is, high and low Quality of Service (X3), will not result in high or low User Satisfaction (Y2). Service quality is the user's perception of the services provided by the information system provider. [17] define service quality as a comparison between customer expectations and their perceptions about the quality of services provided. [18] states that as is the case with system quality and information quality, service quality has an influence on user satisfaction. When the user of an information system feels that the quality of the service provided by the information system provider is good, then he will tend to feel satisfied using the system. Vice versa, he will feel dissatisfied when the quality of services provided by information system service providers is not good. Behavior cannot occur if the condition of environmental objects is not supportive. According to [19] facilitating conditions include objective factors outside the environment that make it easier for users to do work, including support for the provision of computer equipment. In the context of information system utilization, facilitating conditions can be one of the factors that influence individual satisfaction in utilizing information systems. Someone's perception will be easier to accept or use the information system if there are other factors that encourage it (such as guidance or training) that will help them in operating the information system so that it can feel the benefits of the system. If the conditions provided in facilitating the use of information systems are not good, the user will feel dissatisfied.

The Effect of Usage (Y1) on User Satisfaction (Y2), obtained a structural coefficient in the Information User Group of 0.310, and a P-value of 0.030 and a System User Group of 0.620, and a P-value of 0,000. Because the P-value is both <0.05, and the coefficient is positive indicating that there is a significant and positive influence between Usage (Y1) on User Satisfaction (Y2). That is, the higher the Usage (Y1), the higher the User Satisfaction (Y2) will result. Unlike the case with the Technician Group, it is obtained a structural coefficient of 0.669 and a P-value of 0.197. Because the P-value> 0.05, indicates that there is no significant effect between Usage (Y1) on User Satisfaction (Y2). That is, the high and low Usage (Y1), will not lead to high or low User Satisfaction (Y2). The results of this study are supported by research [9] which states that the relationship between usage and user satisfaction is very close. In a usage process must be before user satisfaction and increased user satisfaction will also increase the intensity of use. User satisfaction is increased when users use information systems with high credibility, the information generated and good service has an indirect effect on increasing usage.

The Effect of Use (Y1) on Net Benefits (Y3) obtained structural coefficients in the Information User Group of 0.298, and P-value of 0.029, the Technician Group of 0.766 and P-value of 0,000, and the System User Group of 0.493 and P-value of 0,000 . Because the P-value is equally <0.05, and the coefficient is positive indicating that there is a significant and positive effect between Use (Y1) on Net Benefits (Y3). That is, the higher the Usage (Y1), the higher the Net Benefits (Y3) will result. The results of this study are supported by [13] study which shows that there is a significant positive direct effect of the use of the system on the net benefits of SAIBA. The results of this study illustrate the successful use of the system will be beneficial in improving the performance of individuals and organizations.

The Effect of User Satisfaction (Y2) on Net Benefits (Y3), obtained a structural coefficient in the Information User Group of 0.650, and a P-value of 0.000 and a System User Group of 0.493, and a P-value of 0,000. Because the P-value is equally <0.05, and the coefficient is positive indicating that there is a significant and positive influence between User Satisfaction (Y2) on Net Benefits (Y3). That is, the higher the User Satisfaction (Y2), the higher the Net Benefits (Y3) will be. Unlike the case with the Technician Group, it is obtained a structural coefficient of 0.234 and a P-value of 0.148. Because the P-value> 0.05, indicates that there is no significant effect between User Satisfaction (Y2) on Net Benefits (Y3). That is, the level of User Satisfaction (Y2), will not result in high or low Net Benefits (Y3). The results of this study are supported by research [13] which states the direct effect of user satisfaction on net benefits is significant. This user satisfaction affects the increase in productivity, smooth work, ease of completion of work and more efficient. The results of this study add

empirical evidence that the net benefits derived from the use of the system such as accelerating the completion of work, improve performance, increase productivity. Makes work more efficient and easier.

In this study also obtained a mediating effect or indirect effect on several structural models. The following are structural models that have a mediating effect:

In the System Users group, the indirect effect coefficient is 0.315. the direct effect of Information Quality (X2) on Use (Y1) is significant, and the direct effect between Use (Y1) on Net Benefits (Y3) is also significant, it can be concluded that there is a significant indirect effect between Information Quality (X2) towards Net Benefits (Y3) through Use (Y1). Thus the higher the Quality of Information through Use will affect the high Net Benefits.

In the Information Users and Technicians group, the direct effect of Service Quality (X1) on Use (Y1) is significant, and the direct effect between Use (Y1) on Net Benefits (Y3) is also significant. Then it can be concluded that the Usage variable is a mediating variable between Service Quality against Net Benefits, where the higher the Service Quality will affect the higher the Net Benefits through Use.

Research Limitations

This research is not able to describe events in one period because it is an explanatory research and in a short period of time. This research only focuses on one state university which will certainly be different from other state and private universities, so the results cannot be generalized to all tertiary institutions. In this study using a questionnaire instrument that was distributed to research respondents, due to the busyness and limited time of the majority of respondents when filling out the questionnaire, so the answers perceived by respondents may cause certain biases in the study.

Research Implications

Theoretical Implications

It is expected that with a computer-based Information System (CBIS) can produce quality information, so that organizational goals can be achieved effectively and efficiently, with maximum results in an optimal process. Five main things that are the benefits of information systems in organizational management control, namely: saving time, saving costs, increasing effectiveness, developing technology and developing personnel.

Practical Implications

The results of this research will be able to make practical contributions to the leaders in one of the work programs of the State University of Malang, namely to increase integration of planning, information and promotion systems supported by the reliability of infrastructure, human resources and information technology.

CONCLUSION

Based on the results of the study it can be concluded that the quality of the system does not significantly influence the use of the system, the quality of information has a positive effect on the use found in the system user group, the quality of service does not significantly influence the use. System quality, information quality and service quality do not significantly influence user satisfaction. Use has a positive effect on satisfaction of use found in the system user and information user groups. The use of a positive and significant effect on net benefits, user satisfaction has a significant and positive effect on the net benefits obtained in the group of information users and system users.

The results of this study can be used as a management reference in determining information technology policy strategies related to improving performance in organizations. To find out the level of effectiveness of user satisfaction and use variables, other research needs to be done that can accommodate the nature of the use of the financial system at UM.

Development of human resources system users, information users and system technicians need to be done regularly. Organizational development strategies that involve the development of information technology need to be based on similar studies and aspects that affect information systems, both internal and external aspects.

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