

THE EFFECT BETWEEN THE SUCCESS OF IMPLEMENTATION MONITORING SYSTEMS AND EVALUATION DEVELOPMENT (SMEP) THROUGH THE MODIFICATION APPROACH FOR DELONE & MCLEAN MODELS (EMPIRICAL STUDY IN THE GOVERNMENT OF MALANG REGENCY)

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ABSTRACT

This study aims to determine the factors that influence the successful implementation of the development monitoring and evaluation system (SMEP) in Malang Regency Government. Measurement of information system success is measured through a modified DeLone & McLean model approach. The population in this study were employees of the evaluation and reporting section of all agencies in the Malang Regency Government who used the development monitoring and evaluation system (SMEP). Data collection techniques using a questionnaire with a sample taken as many as 138 respondents. Data analysts use the Structural Equation Model (SEM) with the SmartPLS 2.0 application program. The results showed that system quality, information quality, perceived usefulness, top management support had a positive effect on user satisfaction and user satisfaction had a positive effect on net benefits.

Keywords: Success of System Implementation, SMEP, DeLone & McLean Model

INTRODUCTION

The digital world and the development of information systems have experienced rapid progress in the past few years. Wixom and Todd (2005) state that the success of information systems can be measured in two streams, one of which uses user satisfaction. In addition, information systems can be said to be successful in their implementation if they can provide net benefits to individuals and organizations (DeLone & McLean, 2003). Net benefits are an embodiment of individual and organizational impacts resulting from the use of information systems (DeLone and McLean, 2003).

The Government through Law No. 23 of 2014 concerning Regional Government states that the government has issued various guidelines and regulations which form the basis for regional governments both provincial and district / city to carry out monitoring and evaluation of development reporting activities in their regions. Government programs can be monitored and evaluated through a technology-based information system, the SMEP (Development Evaluation Monitoring System). SMEP is an internet-based "web-based" information system that is needed by local governments to facilitate and accelerate the process of reporting activities, the progress of work implementation and absorption of development activity budgets and can produce outputs of Physical and Financial Realization Reports. SMEP will facilitate executives in monitoring and evaluating all forms of development activities and accelerating the absorption of APBD budgets. However, in the implementation of SMEP since 2017 many obstacles and problems have occurred including the delay in the collection of Physical and Financial Realization Reports, synchronization of SMEP with SIMDA that is not optimal, slow digital networks and many more. This has an impact on the achievement of the target value of A that was carried out by the Government of Malang Regency in 2018 related to performance accountability (AKIP). Some programs that have been prepared based on the three development strategies of the Malang Regency Government are not going well, so that accountability of performance does not match the desired outcomes, whereas performance is also part of the net benefits which is an important indicator in the success of an information system.

This study aims to determine the factors that influence the successful implementation of the development monitoring and evaluation system (SMEP) in Malang Regency Government. Without prior research related to the factors that influence the successful implementation of SMEP, the government will find it difficult to make improvements properly. The right improvement to the implementation of SMEP is expected to be able to improve the performance, effectiveness and productivity of individuals and organizations, especially in Malang Regency Government. This research is a development of Information Systems Success Model that refers to Oktavia's research (2016). It also refers to the research on Information System Success Model by Wang & Liao (2008), Ainil (2012), Falgenti and Pahlavi (2013) and Rouibah (2009). Based on Susanty's research (2013) researchers took constructs of system quality, information quality, and user satisfaction. After that, the construct of service quality (Falgenti and Pahlavi, 2013), perceived usefulness construct (Ainil, 2012), top management support construct (Rouibah, 2009) and the net benefit construct (Oktavia, 2016).

The reason researchers use the Information System Success Model is because the Information System Success Model has contributed greatly to the development of information systems (Hussein et al., 2005). In addition, the Information Systems Success Model has advantages in order to predict and explain the success of information systems (Karaman and Bolen, 2015; Kulkami, Ravindran, and Freeze, 2006). DeLone & Mclean's information system success model (2003) is already good in measuring information system success compared to other information system success models such as the Seddon & Kiew (1996) model that only measures information system success from the level of usability and user satisfaction. To adjust to the characteristics and conditions of the most recent information system, further development of the success model of the information system DeLone & McLean (2003) is needed.

THEORITICAL REVIEW

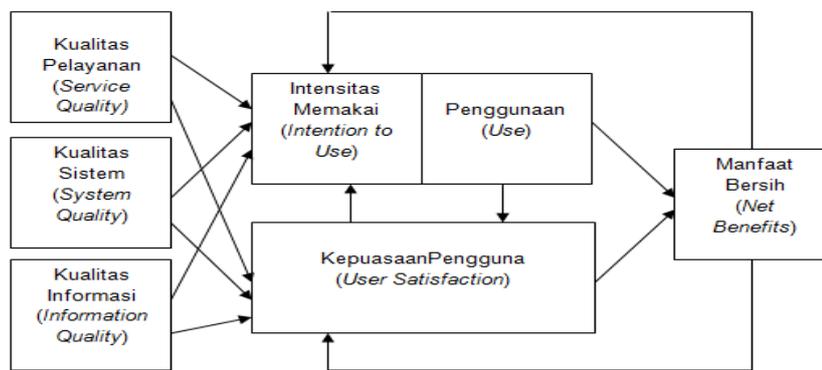
Technology Acceptance Theory

Technology acceptance theory is a model in information technology research by Davis (1989). This model is adopted from the Theory of Reasoned Action. The application of this model is more often used in information technology research because it is considered easy and simple to implement. This model explains the acceptance of an information technology through certain dimensions so that an information technology is easily accepted by the user (user). These dimensions come from 2 important factors, namely perceived ease and perceived usefulness.

The Success Model of the DeLone & McLean System

DeLone and McLean (1992) found that information system success can be explained by several characteristics. The first characteristic is the quality of information systems or called system quality (system quality). The second characteristic is the quality of the output of information systems or information quality. The third characteristic is consumption of output or its users (use). The fourth characteristic is the response or user satisfaction to the information system (user satisfaction). The fifth characteristic is the influence of information systems on user habits (individual impact). The sixth characteristic is its effect on organizational performance (organizational impact).

Figure 1. DeLone McLean Information System Success Model (2003)



In its development, the information system success model DeLone & McLean (1992) received many criticisms of the model. In 2003 the success model of the DeLone & McLean information system was updated and revised by DeLone & McLean with the research title "The Delone and McLean Information System Success: A Ten year Update". This new model adds a dimension of service quality in addition to the existing quality dimensions. While other dimensions remain as in the previous model of information system success, namely the quality of the system (system quality) and information quality (information quality). In addition, in the new success model, individual impact and organizational impact as a result of the influence of system quality, information quality and service quality are combined into one variable, namely net benefits.

Development Monitoring and Evaluation System (SMEP)

The Monitoring and Evaluation Reporting System (SMEP) is an internet-based "web-based" information system that is needed by the local government to facilitate and accelerate the process of reporting activities, progress of work implementation and absorption of development activity budgets. Through SMEP, it will be easier for executives to monitor and evaluate all forms of development activities and accelerate the absorption of APBD budgets. At the final output of this information system can produce a Physical and Financial Realization Report which aims to see the extent of the realization of activities through the budgeted budget funds and the extent to which the physical progress of development in each activity / sub-activity.

System Quality

The quality of the system can be explained as the overall performance of the information system (Bharaty and Chaudury, 2004). In addition, the quality of the system is also a combination of hardware and software. In this study the quality of the system is the quality of the Development Monitoring and Evaluation System (SMEP) which is used to support the management and activities of the regional government. The focus of system quality is explained by DeLone & McLean (1992) that the quality of the system depends on how well the hardware, software, policies and procedures of the information system are capable of providing information for users consisting of ease to use, ease of access and system reliability.

Information Quality

Information quality refers to the outputs of information systems concerning the value, benefits, relevance, and urgency of the information produced (DeLone & McLean, 1992). When measuring end-user satisfaction, information quality is often used as the main variable (Petter et al., 2008). In this study, the quality of information is output produced from the use of the Development Monitoring and Evaluation System (SMEP) in the Regional Government. O'Brient (2004: 15) explains the characteristics of information quality through time and content dimensions. The time dimensions include actual, timely, frequency of information. The dimensions of the content are clear, detailed, presented well, the facilities used and neatly arranged.

Service Quality

Service quality is the overall support offered by information technology staff and service providers to users to ensure the system can be applied both internally and externally (Petter et al., 2008). In this study, service quality is an excellent service provided by IT staff and vendors for all forms of handling Development Monitoring and Evaluation Systems (SMEP) in local governments. The forms of services provided can be in the form of assistance with repairing problematic or damaged systems, repairing system installations, product knowledge, and providing system usage training. According to Petter et al. (2008) there are four main components that can be used in measuring service quality, namely assurance, responsiveness, reliability, empathy.

Perceived Usefulness

The usefulness of perceived (perceived usefulness) explains the extent to which people believe that using a particular system will improve their performance (Davis, 1989). Trust is related to the level of usefulness of the use of information systems. If users believe that the information system used is useful they will use it, whereas if users feel unbelievable that the information system being used is not useful then they will not use it. Chin & Todd (1995) looked at the usefulness of several perspectives including being able to make work easier, be useful, be able to increase productivity, be able to increase effectiveness, and improve job performance. It not only makes work easier and more useful, but Seddon and Kiew (1994) that something will be useful if it is able to provide benefits in the future. The impact that will occur when the user has felt the benefits of the information system used is able to provide user satisfaction. The usefulness of perceived is the most important factor in providing user satisfaction (Ainil, 2012).

Top Management Support

Romney and Steinbart (2009: 64) explain that top management support is how top management defines the information and processing needed, sets goals and objectives of the system, reviews the system and allocates funds. Thong et al. (1996) explain that top management support is an important key factor in being able to implement information systems effectively. The same opinion is also explained by Young & Jordan (2008) that top management support is the most important determinant of success in an information systems project. In this study, top management support is the support given by top management to the Development Monitoring and Evaluation System (SMEP). The involvement of top management in providing support for the implementation of information systems is expected to be able to provide convenience to the users of the system with the aim of providing satisfaction to the system users.

User Satisfaction

User satisfaction can be interpreted as the final feeling of feeling happy or unhappy generated by interactions that occur with information systems (Seddon and Kiew, 1996). The feeling of pleasure is obtained by the users if the information system used is in accordance with the needs expected by the system user. However, if the information system cannot meet the needs of the system user and does not meet the expectations of the system user, it can mean that the system has failed to be implemented. User satisfaction in this study is a sense of satisfaction experienced by system users after using the Development Monitoring and Evaluation System (SMEP). Various forms of user satisfaction can be generated from the features provided such as the quality of the system and the quality of information generated by the information system. Doll and Torkzadeh (1988) explain that the satisfaction of end users of information systems is a form of overall evaluation of users of information systems based on user experience in using information system.

Net Benefits

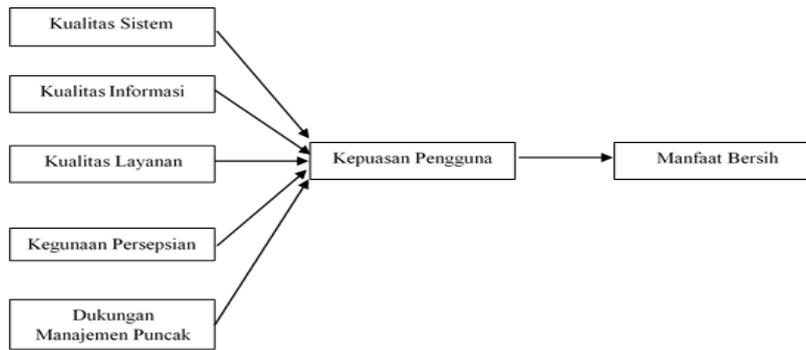
Net benefits are the impact that is felt directly by individuals and organizations on the use of information systems (DeLone & McLean, 2003). Individual and organizational impacts obtained from the use of information systems include individual and organizational effectiveness, individual and organizational productivity, and individual and organizational performance (DeLone & McLean, 2003; Oktavia, 2016). These impacts are impacts that are felt directly by the user of the system. In this study net benefits represent benefits received by individuals and organizations using the Development Monitoring and Evaluation System (SMEP). The existence of net benefits can facilitate management in measuring how successful the implementation of information systems that are applied. In addition, management can also compare with the initial planning that has been set.

METHODOLOGY

Research Framework

This research measures the success of information systems through the modified DeLone & McLean (2003) model. In the modification of the DeLone & McLean (2003) model carried out in the Oktavia study (2016) there are still some constructs that must be reviewed, including not including the quality constructs. Whereas Baroudi and Orlikowski (1988) and Nursudi (2013) also explained that Information Technology staff was one of the factors that influenced the satisfaction of system users. In addition, the construct of use (use) should not be used in measuring information systems that are mandatory. Susanty (2013) and Livari (2005) that the quality of information and the quality of the system does not affect the use (use). Furthermore, Ozkan et al. (2008) founded that in almost every information system effectiveness study, organizational characteristics are one of the most important aspects of assessing information system effectiveness. To complement the success factor of the information system that represents the organization and environment, a construct of top management support was added (Rouibah et al., 2009). This underlies researchers using system quality, information quality, service quality of user involvement, and user satisfaction as endogenous variables, and net benefits as endogenous variables.

Figure 2. Research Framework



Definition of Variable Operations:

a. System Quality

System quality is the overall performance of the Development Monitoring and Evaluation System (SMEP) including features and user interfaces.

b. Information Quality

Information quality is the quality of outputs produced from the Development Monitoring and Evaluation System (SMEP).

c. Service quality

Service quality is the quality of service obtained from the Information Technology Staff and Information Technology Vendors in ensuring the Development Monitoring and Evaluation System (SMEP) can be used properly.

d. Perceived Usefulness

Perceived uses are perceptions related to the uses obtained by the user when operating the Development Monitoring and Evaluation System (SMEP) and whether or not the system is important to be used

e. Top Management Support

Top management support is the support given by top management to the implementation of the Development Monitoring & Evaluation System (SMEP).

f. User Satisfaction

User satisfaction is a subjective attitude that arises from users of the Development Monitoring and Evaluation System (SMEP) after using the system.

g. Net benefits

Net benefits are the impacts and benefits felt by individuals and organizations after using the Development Monitoring and Evaluation System (SMEP).

Table 1.
Summary of Constructions and Indicators Used in Research

No	Construct	Indicators	Code
1	System Quality (KS)	1. <i>Ease of use</i>	KS1
		2. <i>Easy of learning</i>	KS2
		3. <i>Reliability</i>	KS3
		4. <i>Security</i>	KS5
2	Information Quality (KI)	1. <i>Completeness</i>	KI1
		2. <i>Relevance</i>	KI2
		3. <i>The Real Information</i>	KI3
		4. <i>Up to date for Information</i>	KI4
		5. <i>Ease of understanding</i>	KI5
3	Service Quality (KL)	1. <i>Emphaty</i>	KL1
		2. <i>Responsiveness</i>	KL2
		3. <i>Assurance</i>	KL3
		4. <i>Reliability</i>	KL4

4	Perceived Usefulness (KPR)	1.	The information system is considered important by the user	KPR1
		2.	Information systems are able to simplify the user's work	KPR2
		3.	Information systems according to the user's job needs	KPR3
5	Top Management Support (DMP)	1.	Active Participation	DMP1
		2.	System funding	DMP2
		3.	Concern for the system	DMP3
		4.	Encouragement in the relevant division	DMP4
6	User Satisfaction (KP)	1.	Satisfaction with the use of the system	KP1
		2.	The effectiveness of information systems to meet user needs	KP2
		3.	Efficiency of information systems in completing user tasks	KP3
		4.	Nice experience using the system	
		5.	Pride using the system	KP4 KP5
7	Net Benefits (MB)	1.	Individual Performance	MB1
		2.	Individual Effectiveness	MB2
		3.	Individual Productivity	MB3
		4.	Organizational Performance	MB4
		5.	Increased Organizational Effectiveness	MB5
		6.	Increased Organizational Productivity	MB6

Source: Data processed

Research Hypothesis

H1: The quality of the system has a positive effect on user satisfaction

H2: Information quality has a positive effect on user satisfaction

H3: Service quality has a positive effect on user satisfaction

H4: The use of perceived positive effect on user satisfaction

H5: Top management support has a positive effect on user satisfaction

H6: User satisfaction has a positive effect on net benefits

Population and Sample

The population in this study were all staff of the evaluation & reporting (EVAPOR) who used the development monitoring and evaluation system in the Malang Regency Government area. Through data from the Regional Personnel Agency and the Malang Regency Organizational Section that the Malang Regency Government has an SKPD consisting of 91 SKPD. The population in this study was 194 people. The sampling method used in this study is probability sampling. The technique used is a simple random sampling technique to obtain random samples. Determination of the number of samples can be determined using the Slovin formula. From the entire SKPD in Malang Regency Government it can be seen that the total population of the study is 194 people, so that the total sample of this study is 131 people

Types and Data Collection Methods

The type of data used in this study is primary data obtained directly from the original source, the respondent. Data collection was carried out by giving questionnaires to respondents, namely the evaluation & reporting staff who use the development monitoring and evaluation system of each SKPD in Malang Regency Government. The questionnaire distributed contained structured questions relating to the variables studied.

Analysis Method

Data analysis method used in this study uses Partial Least Square (PLS). The application used is SmartPLS2. The reason researchers use PLS is that this statistical method can be used to test the predictive effect of relationships between latent variables that are in one model. In addition, in testing through PLS, data does not have to be normally distributed and can be used to test research models that use a weak theoretical basis (Hartono and Abdilah, 2009: 21-22). The use of PLS can also be done on a small number of samples (Hartono and Abdilah, 2009: 21). So PLS-SEM is considered more suitable to be used as a statistical analysis tool in this study. Then the model evaluation is done through PLS which is divided into evaluation of the outer model and inner model.

Outer model evaluation is used to measure the validity and reliability. Validity testing is directed towards testing the construct validity to find out how well the results obtained from the use of a measurement in defining the construct. Validity testing is done through convergent validity test and discriminant validity test. Convergent validity is related to measurements of a construct that should be highly correlated. The score is considered satisfactory if the factor loading value is more than 0.7, the average variances extracted (AVE) is more than 0.5 and the communality is more than 0.5. Discriminant validity associated with different construct gauges should not be correlated. The score is considered satisfactory if the root value of AVE is greater than

the correlation value of latent variables and the value of cross loading is more than 0.7 (Hartono and Abdillah, 2009; 60-61). Reliability testing is done to measure the accuracy, consistency and accuracy of the measuring instrument in making measurements. It can be said to pass the reliability test if the composite reliability value is above 0.7. However, composite reliability scores above 0.6 are still acceptable.

The inner model is a structural model to predict the causality relationship between latent variables. The measurement of significance to support the hypothesis is known from the T-statistics comparison which is higher than the T-table which means the hypothesis is supported. (Hartono and Abdillah, 2009: 87). For a confidence level of 95% with an alpha of 5%, the T-table value is > 1.96 for the two tailed hypothesis and > 1.64 for the one tailed hypothesis. In this research, the hypothesis is one tailed hypothesis. Inner models in PLS can also be measured based on R2. The value of R2 can be used to measure variations in changes in exogenous variables towards endogenous variables. If the value of R2 is high then the model can be stated as a good predictive model. In addition, the inner model in PLS can also be measured based on Q2. If the Q2 value is greater than 0, then the model shows predictive relevance.

RESULTS

Characteristics of Respondents

A total of 138 questionnaires will be analyzed for data to describe respondents' characteristics based on gender, age, recent education, and work experience and length of use of SMEP. Respondents in this study were spread in 91 SKPDs that were spread in the Malang Regency Government area.

Table 2. Characteristics of Respondents

Categories	Sub-Categories	Frequency	Percentage (%)
Gender	Man	60	43.48%
	Women	78	56.52%
Age	20-30 years	54	39.13%
	31-40 years	54	39.13%
	41-50 years	23	16.67%
	>50 years	7	5.07%
Education	Senior High Scholl	19	13.77%
	Vocational Graduate	19	13.77%
	Undergraduate	87	63.04%
	Master Graduate	13	9.42%
	Post Graduate	0	0.00%
Work Experience	< 1 years	7	5.07%
	1-5 years	50	36.23%
	5-10 years	45	32.61%
	11-20 years	29	21.01%
	> 20 years	7	5.07%
Duration of Use (SMEP)	1-3 month	7	5.07%
	4-12 month	22	15.94%
	> 1 years	109	78.99%

Source: Data processed

Model Evaluation

Evaluate the Outer Model

In the evaluation of the outer model is done by testing the validity and reliability. Validity testing is divided into convergent validity testing and discriminant validity.

Convergent Validity

Convergent validity testing is done by looking at scores on the outer loading value, average variance extracted (AVE) and communality. All indicators are said to meet the requirements for convergent validity testing if the outer loading value > 0.7, average variance extracted (AVE) > 0.5, and communality > 0.5.

Table 3. Outer Loading Value

Research construct	Indicator of Research	Outer Loading Score
System Quality	KS1	0.8192
	KS2	0.8601
	KS4	0.8845
	KS5	0.7359
	Information Quality	KI1
Information Quality	KI2	0.8626
	KI3	0.8349
	KI4	0.8166
	KI5	0.7795
	Service Quality	KL1
KL2		0.8611
KL3		0.8918
KL4		0.8615
Perceived Usefulness		KPR1
	KPR2	0.9073
	KPR3	0.8927
Top Management Support	DMP1	0.8201
	DMP2	0.7168
	DMP3	0.7759
	DMP4	0.8101
User Satisfaction	KP1	0.8602
	KP2	0.8715
	KP3	0.9048
	KP4	0.8616
Net Benefits	MB1	0.9185
	MB2	0.9221
	MB3	0.8961
	MB4	0.8015
	MB5	0.8662
	MB6	0.9307

Source: Data processed

Table 4. AVE and Commuality Value

Construct	AVE Score	Commuality Score
System Quality	0.6112	0,6112
Information Quality	0.6887	0,6887
Service Quality	0.7589	0,7589
Perceived Usefulness	0.7651	0,7651
Top Management Support	0.8157	0,8157
User Satisfaction	0.6837	0,6837
Net Benefits	0.7926	0,7926

Source: Data processed

Based on Table 3 and Table 4 it can be explained that the average variance extracted score (AVE), communality in each construct is more than 0.5 and the outer loading score in each indicator is more than 0.7. These results can be interpreted that the research instrument has passed the convergent validity test.

Discriminant Validity

Discriminant validity testing is done by looking at scores on the AVE root value, latent variable correlation and cross loading. All indicators are said to meet the requirements for convergent validity testing if the root value of AVE > correlation of latent variables and cross loading > 0.7.

Table 5. AVE Root Value and Correlation of Latent Variables

Construct	AVE Value	AVE	DMP	KI	KL	KP	KPR	KS	MB
DMP	0.611	0.782	1	0	0	0	0	0	0
KI	0.689	0.830	0.637	1	0	0	0	0	0
KL	0.759	0.871	0.533	0.568	1	0	0	0	0
KP	0.765	0.875	0.608	0.660	0.714	1	0	0	0
KPR	0.816	0.903	0.641	0.619	0.657	0.756	1	0	0
KS	0.684	0.827	0.534	0.501	0.663	0.670	0.620	1	0
MB	0.793	0.890	0.472	0.476	0.544	0.597	0.604	0.426	1

Source: Data processed

Table 6. Cross Loading Value

Construct for Research	DMP	KI	KL	KP	KPR	KS	MB
DMP1	0.8201	0.5369	0.4645	0.4976	0.4708	0.473	0.2907
DMP2	0.7168	0.4195	0.4405	0.3907	0.3807	0.4882	0.2688
DMP3	0.7759	0.5002	0.3419	0.4895	0.5051	0.3031	0.4261
DMP4	0.8101	0.525	0.4297	0.5115	0.6253	0.4238	0.4704
KI1	0.4001	0.8534	0.4877	0.5776	0.5019	0.4126	0.3509
KI2	0.6087	0.8626	0.5051	0.6225	0.5809	0.4983	0.4682
KI3	0.5849	0.8349	0.4844	0.5435	0.5882	0.451	0.4213
KI4	0.4386	0.8166	0.4056	0.4704	0.4527	0.3419	0.4203
KI5	0.6074	0.7795	0.4616	0.5047	0.425	0.3541	0.3087

KL1	0.4716	0.4629	0.8698	0.6102	0.5881	0.562	0.4737
KL2	0.4581	0.4911	0.8611	0.5902	0.5451	0.5839	0.4536
KL3	0.4771	0.5087	0.8918	0.6517	0.5944	0.5906	0.562
KL4	0.4511	0.5135	0.8615	0.6331	0.5599	0.5732	0.4039
KP1	0.4483	0.5521	0.6126	0.8602	0.6027	0.5659	0.4265
KP2	0.5552	0.5656	0.6549	0.8715	0.7183	0.5459	0.5725
KP3	0.5723	0.6216	0.6713	0.9048	0.7097	0.606	0.5474
KP4	0.542	0.5671	0.5539	0.8616	0.6038	0.6265	0.5306
KPR1	0.5706	0.5541	0.5791	0.6434	0.9095	0.5402	0.604
KPR2	0.5505	0.5259	0.5706	0.683	0.9073	0.5298	0.5261
KPR3	0.6127	0.5934	0.6269	0.7176	0.8927	0.6055	0.5118
KS1	0.5061	0.4593	0.5074	0.513	0.5045	0.8192	0.3113
KS2	0.4134	0.475	0.6293	0.5742	0.4813	0.8601	0.3672
KS4	0.4978	0.465	0.5821	0.6231	0.559	0.8845	0.3625
KS5	0.342	0.2393	0.4612	0.4924	0.5065	0.7359	0.3704
MB1	0.4745	0.447	0.5301	0.5912	0.6041	0.4363	0.9185
MB2	0.4631	0.4439	0.52	0.5883	0.5923	0.4071	0.9221
MB3	0.5103	0.5789	0.6322	0.658	0.6352	0.4982	0.8961
MB4	0.2628	0.3027	0.3231	0.3161	0.3636	0.1786	0.8015
MB5	0.343	0.2853	0.3218	0.3921	0.4228	0.249	0.8662
MB6	0.3647	0.3751	0.4482	0.4991	0.4952	0.371	0.9307

Source: Data processed

Based on Table 5 and Table 6 it can be explained that the AVE root score in each construct is greater than the construct correlation between latent variables and the cross loading score in each indicator is more than 0.7. These results can be interpreted that the research instrument has passed the convergent validity test.

Reliability

Reliability testing is done by looking at scores on Cronbach's alpha and composite reliability. All indicators are said to meet the requirements of convergent validity testing if the root value of cronbach's alpha > 0.7 and composite reliability > 0.7.

Table 7. Cronbach's Alpha and Composite Reliability Value

Construct	Composite Reliability	Cronbachs Alpha
DMP	0.8625	0.7878
KI	0.917	0.887
KL	0.9264	0.8941
KP	0.9287	0.8977
KPR	0.93	0.8872
KS	0.8959	0.8442
MB	0.9581	0.9483

Source: Data processed

Based on Table 7, it can be explained that the composite reliability and Cronbach's alpha scores are more than 0.7. These results can be interpreted that the research instrument has passed the reliability test.

Inner Model Evaluation

Evaluation of the inner model is done by looking at the R-Squared (R2) and the value of the path coefficient / t-values at each path to test the significance of the constructs in the structural model. The results of the R-Squared (R2) value can be seen in Table 8.

Table 8. R-Square Value (R2)

Construct	R-Square
KP	0.703
MB	0.456

Source: Data processed

Based on Table 8 shows that the value of R-Square (R2) of user satisfaction is 0.703. This can be interpreted that system quality, information quality, service quality, perceived usefulness, and top management support can explain changes in user satisfaction by 70.3%, while the remaining 29.7% is explained by other variables that do not exist in this research model . Furthermore, the R-Square (R2) value of net benefits is 0.456. This can be interpreted that peak user satisfaction can explain changes in user satisfaction by 45.6% while the remaining 54.4% is explained by other variables that are not present in this research model.

Picture 2. Inner Model Evaluation

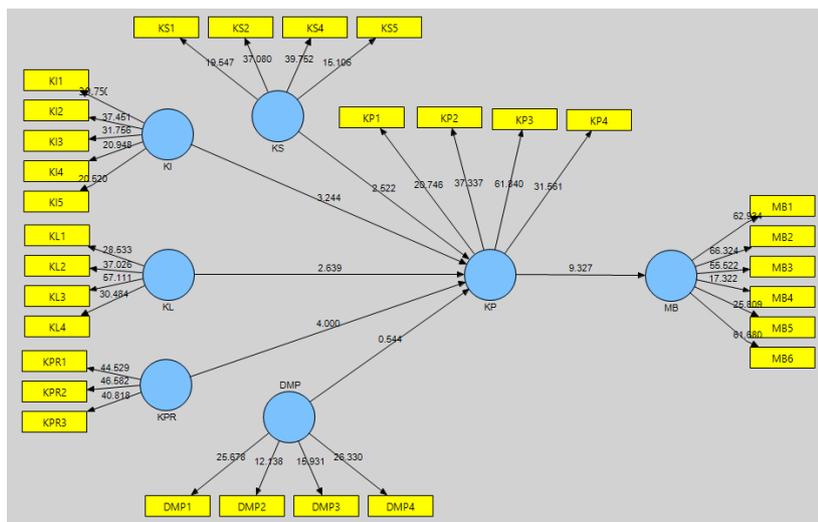


Table 9. Hypothesis Testing Results

Hypothesis	Construct	Path Coefficient	T-Statistic	Results
H1	KS→KP	0.1807	2.5218	Accepted
H2	KI→KP	0.1993	3.2437	Accepted
H3	KL→KP	0.2364	2.6392	Accepted
H4	KPR→KP	0.3391	4.0003	Accepted
H5	DMP→K P	0.0413	0.5444	Rejected
H6	KP→MB	0.597	9.3265	Accepted

Source: Data processed

DISCUSSION

The Effect of System Quality on User Satisfaction

The test results show that hypothesis 1 is accepted. This means that the Development Monitoring and Evaluation System with good quality will give satisfaction to the users of the system. Sense of satisfaction from the system users is due to the ease of users when operating SMEP for daily work, ease in learning SMEP because it is user friendly, SMEP is able to work without many errors and the safety of the system is always well maintained. The results of this study support the success model of information systems DeLone & McLean (2003) that one of the factors of the success of an information system is the quality of the system. The results of this study are consistent with research conducted by Mc Gill et al. (2003), Roldan & Leal (2003), Livari (2005), Purwaningsih (2010) and Susanty (2013) which state that system quality has a positive effect on user satisfaction. In this study, SMEP users in Malang Regency Government believe that good quality of SMEP is able to provide good performance at the individual and organizational level because of a sense of satisfaction and comfort when using the system.

The Effect of Information Quality on User Satisfaction

The test results show that hypothesis 2 is accepted. This means that the Development Monitoring and Evaluation System with good quality information output will give satisfaction to the users of the system. This user satisfaction arises from complete information from the SMEP output, relevant information according to user needs, information that does not contain many errors, information that is always up to date and easy to understand. The results of this study support the success model of information systems DeLone & McLean (2003) that one of the factors of the success of an information system is the quality of information. The results of this study are also consistent with research conducted by Utama (2017), Wang & Liao (2008) and Indriasari (2008), which state that information quality has a positive effect on user satisfaction. In this study, it shows that the quality of information is an important factor in the successful implementation of an information system. SMEP users in Malang Regency Government believe that good quality information will give users satisfaction because it makes it easier for the evaluation and reporting staff to compile reports relating to program realization, finance and development.

The Effect of Service Quality on User Satisfaction

The test results show that hypothesis 3 is accepted. This means that a good quality of service to the Development Monitoring and Evaluation System will give satisfaction to the users of the system. This form of satisfaction comes from a sincere interest by vendors and IT staff to solve problems, speed and responsiveness, assurance of the operational certainty of the system running smoothly and the ability of vendors / IT staff to perform system services properly without any errors. The results of this study support the success model of information systems DeLone & McLean (2003) that one of the factors of the success of an information system is service quality. The results of this study are consistent with research conducted by Wang & Liao (2008), Utami & Samopa (2013) and Almutairi & Subramanian (2005) which state that service quality has a positive effect on user satisfaction. In this study, service quality is an important factor that must be considered in implementing SMEP. SMEP users feel that internal and external IT teams that are able to support the operation of the system to perform daily tasks will provide a sense of satisfaction and comfort.

The Effect of Perceived Usefulness on User Satisfaction

The test results show that hypothesis 4 is accepted. This means that the user's perception of the Development Monitoring and Evaluation System which has many uses or benefits will give satisfaction to the system users. SMEP is considered useful because it is able to facilitate the work of system users, according to the job needs of the system users and its existence is important for system users. The results of this study support the Technology Acceptance Model Theory proposed by Davis (1989). The results of this study are also consistent with research conducted by Seddon and Kiew (1994) and Ainin (2012) which states that the usefulness of perceived positive effect on user satisfaction. System users who feel that SMEP is not important to use, do not meet the work needs of system users and do not make work lighter, so system users are not satisfied using the system even though its use is mandatory to use.

The Effects of Top Management Support on User Satisfaction

The test results show that hypothesis 5 is rejected. This means that the support given by top management for the implementation of the Development Monitoring and Evaluation System cannot provide satisfaction to the users of the system. The results of this study do not support research conducted by Rouibah et al. (2009) and Komara (2006) which stated that top management support had a positive effect on user satisfaction. Top management support that has no effect on user satisfaction is due to the direct management support felt by users to the implementation of SMEP currently at the middle management level. Direct support for the use of SMEP in the form of active participation, encouragement to the relevant divisions and care for the system rests with the Head of Division, Head of Subdivision and Head of Sie. At the top management level, the Regent and the Head of the SKPD are those who plan the existence of the Development Monitoring and Evaluation System. In this research, system users are not aware of the real efforts made by top management towards the implementation of the Development Monitoring and Evaluation System. This is what causes user satisfaction is not influenced by the support provided by top management.

The Effect of User Satisfaction on Net Benefits

The test results show that hypothesis 6 is accepted. This means that users who are satisfied with the Development Monitoring and Evaluation System can have a positive impact on individuals and organizations. The positive impact that can be obtained from satisfied users of the Development Monitoring and Evaluation System is an increase in employee performance, employee work effectiveness and employee work productivity. The results of this study support the DeLone & McLean (2003) information system success model that user satisfaction is a significant predictor of net benefits at both the individual and organizational levels. The results of this study are consistent with research conducted by Livari (2005), Wang & Liao (2008) and Oktavia (2016) that user satisfaction has a significant influence on individual and organizational impacts. In this study, system users

believe that the Development Monitoring and Evaluation System that provides comfort and satisfaction to users will be able to have an impact on improving the performance, effectiveness and productivity of employees and the organization as a whole.

CONCLUSION

Development Monitoring and Evaluation System (SMEP) is an information system in Malang Regency web-based "web-based" to facilitate and accelerate the process of reporting activities, monitoring the progress of work implementation and absorption of development activities budget. Through testing the hypothesis with the Partial Least Square method of the respondents' answers and using the modified DeLone & Mclean model, factors are found that can influence the successful implementation of the Development Monitoring and Evaluation System (SMEP).

The quality of the system, the quality of information, the quality of service and the usefulness of perception are the determining factors for the successful implementation of SMEP. The good quality of SMEP can affect user satisfaction by increasing ease of use, making user friendly appearance, reducing system error rates and increasing system security. The good quality of SMEP information can affect user satisfaction by providing complete, relevant, accurate, up to date information as well as a clear and easy to understand format. The good quality of SMEP services can affect user satisfaction by increasing the empathy of internal & external IT staff, increasing speed and responsiveness of good IT staff can affect user satisfaction, guaranteeing the smooth running of the system to users, and increasing the ability of internal and external IT staff. A good perception of the usefulness of SMEP can affect user satisfaction by developing systems in accordance with the user's job needs and is able to facilitate the user's work so that users feel that SMEP is important to use. Furthermore, users who feel satisfied and comfortable using SMEP can influence net benefits by increasing the performance, effectiveness and productivity of individuals and organizations.

Top management support is not a determining factor for the successful implementation of SMEP. The presence or absence of support provided by top management does not affect system user satisfaction. This is because direct support for the use of SMEP in the form of active participation, encouragement to the relevant divisions and concern for the system lies with the Head of Division, Head of Subdivision and Head of Sie. System users feel that the support given to the implementation of SMEP is done at the middle management level.

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