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MEASUREMENT OF THE SUCCESS OF *STUDENT ACTIVITIES PERFORMANCE SYSTEM* (SAPS) WITH *DELONE* AND *MCLEAN* MODEL

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ABSTRACT

The purpose of this research is to measure the success of the Student Activities Performance System (SAPS) using the Delone and Mclean model at the Faculty of Medicine, Baiturrahmah University. This model has been implemented and utilized since 2017, but the measurement and the effectiveness of this model have not been measured yet. The research method used in this study was quantitative. The data gained were analyzed using the structural equation model (SEM). This study showed the relationship of the system quality, the information quality, the service quality, user satisfaction, users, and net benefits. The results of this study proved that there are seven accepted hypotheses and five rejected hypotheses for direct influence.

Keywords: Student Activities Performance System, Delone And Mclean Model

INTRODUCTION

The use of integrated information systems in higher education has been increasingly implemented since it provides benefits for managing student data easier. In addition, it also provides comfort and convenience for students to report on the organization activities they participate in. The integrated information systems make universities easier to collect, store and manage the student data in a more structured and easily accessible manner. The systems, in the end, benefit from the ease to process data analysis, to minimize errors and to duplicate information.

As the information systems are successfully implemented for managing student data, the critical understanding of decision makers and stakeholders will definitely make the systems run well. To measure the success of information, it is important for decision makers and stakeholders, to gain an understanding of the added value that the system has already provided to an institution as a whole (Yuliana, 2016). They need to know whether or not the system that has been applied has positive impacts and benefits on the progress of the institution itself. The Decision makers and stakeholders of Baiturrahmah University are also required to have such understanding.

Baiturrahmah University and the Faculty of Medicine have implemented a web-based information system called the Student Activities Performance System (SAPS) to store and to assess all student activities from various faculties, especially in the Student Affair and Alumni Affair sections. SAPS has been designed as an assessment system for non-academic activities, mostly to shape students' characters and soft skills such as students' organization activities, seminars, workshops, and competitions. The aim of this system is to create an assessment standard for student activities in implementing the Tri dharma of Higher Education, in encouraging students to be more active in extracurricular activities as well as in developing high interests, talents and higher critical thinking. The soft skills are believed by the directorate of Higher Education (Dikti) to play a major role at workplaces.

With the current information system implemented, the Faculty of Medicine, Baiturrahmah University expects to increase students' participation in non- academic activities. The students will not only focus on academic aspects, but also on organizations and extracurricular activities. Furthermore, SAPS is also expected to provide useful feedback for students in developing competencies and improving their personal qualities. By focusing on developing soft skills, the Faculty of Medicine has a keen concern to prepare students who have diverse knowledge to face the challenges of their workplaces. This concern is in line with the vision and mission of the Faculty of Medicine, Baiturrahmah University .

This system has been implemented to students of the academic year 2017/ 2018. It has been continuously implemented until now. In this system, every student inputs his activities into the SAPS application. With the application of *The Student Activities Performance System (SAPS),* the Faculty of Medicine no longer experiences

difficulties in managing achievement data and student activities (such as sports, arts, reasoning and organization). However, since this system was implemented in 2017, the measurements and effectiveness of the system have not been carried out. These two aspects, measurements and effectiveness, in an organization need to be evaluated to see whether or not the implementation is successful and brings some benefits to users (Sapty Rahayu et al., 2018).

Therefore, this study used the DeLone and McLean model to measure the factors that can provide success in information technology systems. There are 6 (six) components of this model, system quality, information *quality*, user satisfaction, Use, individual impact and organizational impact (Yuliana, 2016)

The use of the Delone and Mclean model to evaluate information technology systems has been conducted by some researchers. The findings of these previous studies support this study. Pusparini & Sani (2021) tested the quality academic information system of the STMIK Widuri using the Delone and Clean methods as a whole. The finding indicated that the academic information system applied at the STMIK Widuri has a good quality system with the score of 81.63%. Other researchers, conducting research & development, found the influence of each existing variable using the Delone and McLean method (Sapty Rahayu et al., 2018) , (DeLone WH and ER McLean, 2003) , (Yi-ShunWanga & Yi-WenLiao, 2008) , (Wang, 2008) , and (Surya Admaja, 2015)

LITERATURE REVIEW

The DeLone and McLean Information Systems Success Model

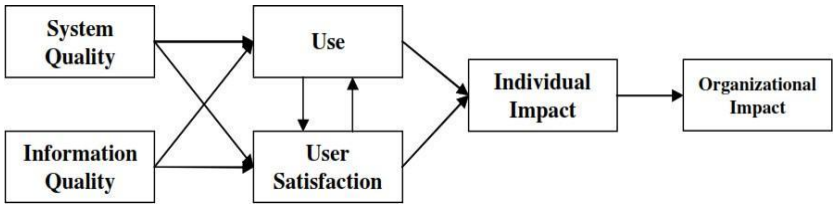
Delone and McLean information systems success model is a system performance measurement developed in 1992. This model explains that variables used for measurement systems are interrelated.

Based on the theories and previous research results that have been studied, DeLone and McLean then developed a parsimony model called the DeLone and McLean Information Systems Success Model (D&M IS Success Model) (DeLone and McLean, 1992) in (Yuliana, 2016) . According to Yuliana (2016), *The* DeLone and McLean model reflects the dependence of six measurements of information system success. The six elements or factors or components or measurements of this model are:

1. System Quality
2. Information Quality
3. Use or Usage Intentions
4. User Satisfaction
5. Individual Impact
6. Organizational Impact

The six elements or components for measuring system performance can be seen in the image below:

(Seddon, 1997) suggests further clarification for the concept of " *use* " because it is ambiguous.



Responding to this suggestion, DeLone and McLean realize that the definition of “use” to measure success is too simple. This definition does not pay attention to the nature of the use. Therefore, DeLone and McLean decided to add the variable " *Intention to Use"* in his information success model.

System Quality (System Quality)

According to (Pawirosumarto, 2016) System quality is a measurement of information system processes that focuses on the results of interactions between users and the system. System quality has attributes, such as ease of use, reliability, and response time. These attributes are determining factors whether or not the system quality implemented benefits the users. According to (Nelson et al., 2005), system quality can be measured through five dimensions, including system reliability, system flexibility, system integration, system accessibility, and system response time.

Information Quality (Information Quality)

According to (Wahyono, 2004) information produced by the system is an important component that is really needed by users. In order to accurately produce this information, three main categories to measure the quality of the information provided by the system are relevance, accuracy and appropriateness.

Service Quality (Service Quality)

Service quality is a component that takes into account expectations and system performance. According to (Syafarudin & Hertati, 2020) Service quality is the result of a comparison between

consumer expectations of real service performance. This theory highlights that the service quality contributes two things, namely expectations and the reality received. According to (DeLone WH and ER McLean, 2003), service quality is the excellence of service provided by the system to the users. The key indicators for consumers' evaluation on service quality are assurance, empathy, and responsiveness.

Based on the above theories, it can be concluded that the service quality is a comparison between user expectations and reality to achieve the goals of the system that has been created. Thus quality service can be provided if it meets these measurement indicators for users' satisfaction.

Use or Usage Intentions

According to (Mubarok et al., 2022), Use aims at finding out how often information users use the system. System usage measures frequency of use, time of use, number of accesses, usage patterns and dependencies. Meanwhile, according to (Safitri, 2020) Usage is the use of an output of an information system by the users. The concept of the use of a system can be seen from several perspectives, the real use and perceived use. Simply, the use measures users' frequency of visiting activities in transactions and decision making on the information provided by the system (Pusparini & Sani, 2021).

Based on the above theory, it can be concluded that the key indicators of the use of an information system to measure the use are the nature of use and the frequency use.

User Satisfaction (User Satisfaction)

User satisfaction is the users' trust in the system. After using the system, the users will think about the effects of the information system and decide whether or not the system meets what they need. Kotlet in (Machmud, 2018) defines user satisfaction as the degree of the users' ease and quality to which they believe in the use of the system. This degree of satisfaction is the result of a comparison between the users' expectations of a product and the real results obtained from the product. Iivari (2005) believes that higher quality information systems will increase users' satisfaction.

According to (DeLone WH and ER McLean, 2003), user satisfaction is a response and actions done by users after using the information system. The measuring variables to see users' satisfaction are efficiency, effectiveness and overall satisfaction. (Sapty Rahayu et al., 2018) .

Net Benefits

The net benefits of the system exhibit more effects of the system used by the user or organization. According to Jogiyanto in (Syahfitri et al., 2022) *Net benefit* is the positive impacts of the implementation of an information system on the quality of productivity of individuals or associations resulting in the increase of productivity and time efficiency in searching for information. Net benefit tells us whether an information system is truly beneficial overall for aspects including time savings and cost reduction. If the users experience a number of positive impacts, then the system is beneficial.

In addition, (Pitt, Leyland F, 1995) states a significant additional benefit means the enhancement of decision making, productivity, sale increase, cost reduction, profits, market efficiency, consumer's welfare, job creation, and economic development. DeLone and McLean (1992) group two dimensions, individual impact and organization impact, into Delone and McLean information systems success model. The dimension is called Net benefits in 2003.

RESEARCH METHODS

The method used in this research was quantitative methods. Researchers created questions according to standard questionnaire questions in the Delon and Mclean model. The approach used was a survey method which took samples from the population using questionnaires as a data collection instrument. In this study, the population was granted as the first step in determining the research sample. The population was 479 students of the Faculty of Medicine in academic year 2017, 2018 and 2019. The samples were taken based on the Slovin technique. Referring to the above statistical calculation, the number of samples in this study was 83 students. To get the data, the questionnaires were written in statement form and used Likert scale units of measurement. Evaluation of the assessment model or outer model was to measure the reliability and validity of the indicators forming the latent construct referring to Latan and Gozali, 2017 in (Syahfitri et al., 2022). The outer model criteria for this research can be seen in the table below:

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Table 1: Outer Model Criteria

Criteria	Parameter	Rule Of Tumb
Reliability Indicator	Loading Factor	> 0.70 (Confirmatory Research) 0.60 – 0.70 (Explonary Research)
Internally Consistent Reliability	Composite Reliability	> 0.70 (Confirmatory Research) 0.60 – 0.70 (Explonary Research)
Convergent Validity	Outer Loading Value	Outer Loading > 0.70
Discriminant Validity	Cross Loading Value	Cross Loading > 0.70

Inner Model

Inner Model Evaluation of the structural model or inner model was to predict the relationship between latent variables and observed variance to determine the significance of the p-value.

According to (Abdillah and Hartono, 2015) the Inner Model or structural model determines the causal relationship between latent variables which was built based on the substance of the theory. Inner Model is a structural model to predict causal relationships between latent variables. Through the bootstrapping process, T-statistic test parameters are obtained to predict the causal relationship (Abdillah and Hartono, 2015). According to Latan and Ghozali in (Syahfitri et al., 2022):

Table 2: Inner model criteria

Criteria	Rule Of Tumb
R-Square	The $R^{2\ value}$ is 0.25 low, 0.50 moderate and 0.75 strong

RESULTS AND DISCUSSION

The data analysis method used in this research was path analysis using *the partial least squares* (PLS) model. This model is usually called PLSSEM because it uses structural equation modeling (SEM) for the model equation. According to (Muhson, 2022) SEM is a multivariate statistical analysis method developed from regression and path analysis.

Loading Factor Value

Table 3: *Loading Factor Values*

Indicator	Loading Factor Value	Information
X1. 1	0.752	Valid
X1. 2	0.859	Valid
X1. 3	0.889	Valid
X1. 4	0.919	Valid
X1. 5	0.908	Valid
X1. 6	0.786	Valid
X2. 1	0.832	Valid
X2. 2	0.777	Valid
X2. 3	0.874	Valid
X2. 4	0.793	Valid
X2. 5	0.783	Valid
X3. 1	0887	Valid
X3. 2	0.853	Valid
X3. 3	0.923	Valid
Y1.1	0.911	Valid
Y1.2	0.722	Valid
Y1.3	0.838	Valid

Y2.1	0.891	Valid
Y2.2	0.838	Valid
Y2.3	0.903	Valid
Y2.4	0.908	Valid
Z1	0.764	Valid
Z2	0.867	Valid
Z3	0.754	Valid
Z4	0.840	Valid
Z5	0.799	Valid

The loading factor values table above indicates that each indicator value has a value > 0.5. This means that it meets the requirements for convergent validity and all questions for each indicator are declared adequate or good.

Pathway Coefficient Analysis

Table 4: Hypothesis Testing

	Construct	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
H1	User Satisfaction (Y2) -> Net Benefits (Z)	-0.035	-0.083	0.140	0.252	**0.401**
H2	Information Quality (X2) -> User Satisfaction (Y 2)	0.228	0.252	0.083	2,728	**0.004**
H3	Information Quality (X2) -> Net Benefit (Z)	-0.008	0.007	0.117	0.069	**0.473**
H4	Information Quality (X2) -> Use (Y1)	0.184	0.216	0.132	1,391	**0.084**
H5	Service Quality (X3) -> User Satisfaction (Y 2)	0.075	0.045	0.155	0.484	**0.315**
H6	Quality of Service (X3) -> Net Benefit (Z)	0.295	0.253	0.126	2,346	**0.011**
H7	Quality of Service (X3) -> Use (Y1)	0.338	0.294	0.165	2,044	**0.022**
H8	System Quality (X1) -> User Satisfaction (Y 2)	0.437	0.455	0.142	3,075	**0.001**
H9	System Quality (X1) -> Net Benefit (Z)	0.482	0.564	0.206	2,338	**0.011**
H10	System Quality (X1) -> Use (Y1)	0.347	0.360	0.151	2,300	**0.012**
H11	Use (Y1) -> User Satisfaction (Y 2)	0.238	0.222	0.109	2,180	**0.016**
H12	Use (Y1) -> Net Benefits (Z)	0.104	0.110	0.112	0.930	**0.177**

The results of data analysis from Smart PLS calculations and based on the data in table 4 indicate that if P-Values is < 0.05, and T statistics ≥ 1.96, the research hypothesis is accepted. If not, the hypothesis is rejected.

The research results reveal that four hypotheses, H1, H3, H4, H5, and H12, were rejected. The first hypothesis (H1) was rejected since there was no significant positive impact of user satisfaction on net benefits for students at the Faculty of Medicine. The students experienced that the quality of the system did not meet their needs resulting in an unsatisfactory experience or feeling. This result is in line with research results found by Panjaitan et al., (Panjaitan et al., 2019). The third hypothesis (H3) was also rejected that there is no significant positive impact of information quality on net benefits. The students were still confused about entering the data in SAPS. This research result is in accordance with the research results found by Panjaitan et al (Panjaitan et al., 2019). The fourth hypothesis (H4) is rejected because there is no significant positive impact of information quality on use. It is

very interesting to note that although socialization on how to enter the data was carried out, they were still confused in entry. This research result is in line with the research results found by Achmadi & Siregar (Achmadi & Siregar, 2021). The fifth hypothesis (H5) was rejected due to no significant positive impact of service quality on user satisfaction. This is because when students encounter obstacles in using SAPS, they tend to ask their classmates. The result of this research is supported by the research result found by Khairrunnisa & Yunanto (Khairrunnisa & Yunanto, 2017). The twelfth hypothesis (H12) was rejected because the students used SAPS only for graduation as it is one the requirements for graduation. The results of this research are also supported by previous research conducted by Wara et al (Wara et al., 2021) and Wahyuni (Wahyuni, 2011) who have proved that the frequent use of SAPS does not increase the level of satisfaction of the user. In other words, it cannot be said that the more the students use SAPS, the more satisfied users they will be.

On the other hand, the research results reveal that seven (7) hypotheses, H2, H6, H7, H8, H9, H10, and H12, were accepted. While the second hypothesis (H2) is accepted since there is a significant positive impact of information quality on net benefits. This finding is supported by research from Achmadi & Siregar (Achmadi & Siregar, 2021) who have proved that the quality of information produced by information systems can vary from one system to another. The sixth hypothesis (H6) is accepted due to a significant positive impact of services on net benefits. The results of this research are supported by previous research conducted by Panjaitan et al (Panjaitan et al., 2019). Furthermore, service quality influences users, in line with (Khairrunnisa & Yunanto, 2017). The seventh hypothesis was accepted since there was a significant positive impact of the service quality on the use. This research result is in line with results found by Yi-ShunWanga & Yi-WenLiao, Wang, and Pawirosumarto. (Yi-ShunWanga & Yi-WenLiao, 2008), (Wang, 2008), dan (Pawirosumarto, 2016). The eighth hypothesis (H8) is accepted due to a significant positive impact of system quality on user satisfaction, in which the result is in line with research findings of Iivari, Sapty Rahayu, and Sapty Rahayu (Iivari, 2005), (Sapty Rahayu et al., 2018), (Sapty Rahayu., 2020) . The ninth hypothesis (H9) was accepted since there was a significant positive impact of system quality on net benefits, which is in accordance with research results found Krisdiantoro et al. and Oktavia (Krisdiantoro et al., 2019) and (Oktavia, 2016) . The tenth hypothesis (H10), and the eleventh (H11) are accepted, and the result is supported by research findings of Khayun & Ractham (Khayun & Ractham, 2011).

The Influence of System Quality on Usage

The research results show that the quality of the SAPS (Student Activities Performance System) system meets student needs and provides a fairly good level of security and reliability, this can be proven from the results of the respondents' achievement targets for the quality of the SAPS system, respondents stated that the quality of the SAPS system was "Quite Good", However, there are still several aspects that need to be improved, such as features that users still don't understand, and a system display that sometimes confuses users. The system improvements that the students hope will have an impact on user comfort in using the system. With good system quality, students feel comfortable using SAPS. A safe and reliable system also gives users a sense of trust in SAPS. Users, in this case students, will tend to continue to use the SAPS system to report activities outside of lectures at the Faculty of Medicine, Baiturrahmah University. This research provides support for the positive influence between SAPS system quality and use, by showing that use of the system can meet user needs and build trust in its use.

The Influence of Information Quality on Usage

Based on the results of the research questionnaire distributed to all research samples, it is suspected that the quality of information has an influence on usage and is rejected. Even though the quality of the information displayed in the SAPS (Student Activities Performance System) is quite good, this is proven by the results of the respondent's target achievement (TCR) regarding the quality of the information being in the "Pretty Good" category, but there are still shortcomings in the system. Medical Faculty students do not fully understand this system, and the information presented is still incomplete. The importance of relevant information is to provide users with a proper understanding of the context and purpose of the system. Even though this system has been socialized to each class of students, there are still some students who are still confused about filling out this system. In the future, socialization will be carried out more intensively so that students can understand the information in the system.

The Influence of Service Quality on Usage

Based on the results of the research questionnaire distributed to all research samples, it is suspected that service quality has an influence on acceptable use. Thus it can be explained that the better the quality of service provided by SAPS and the Faculty of Medicine to students will increase

the level of use of the system. The quality of service provided by SAPS to users, based on responses from respondents, is quite good. Service quality can be measured by the extent to which SAPS provides accurate information, easy access, and is responsive to student needs and problems. SAPS is able to provide guarantees, provide good response time and have empathy for users. These three system service assessment indicators need to be maintained by the Faculty of Medicine through the SAPS system, so that students feel safe when using the SAPS system.

The Influence of System Quality on User Satisfaction

The findings in this research state that it is suspected that system quality has an influence on user satisfaction. It can be explained that the better the quality of an information system, the higher the satisfaction of users of that information system. And it shows that the better the quality of the SAPS system itself will have an impact on increasing student satisfaction at the Faculty of Medicine, Baiturrahmah University. Other results also prove that the target achievement of respondents gave an assessment of system quality and user satisfaction with SAPS as "Quite Good". However, improvements must be made to the system quality assessment indicators, namely the guarantee and ease of using the SAPS system itself. Current students are still confused about using the system. If system quality increases by 1% then user satisfaction will increase by 43.7%. So improvements to the system are needed periodically by paying attention to user needs and user satisfaction.

The Influence of Information Quality on User Satisfaction

In this research hypothesis, it is assumed that there is a significant influence of information quality on user satisfaction (the hypothesis is accepted), this shows that the better the quality of information a system provides, the higher the level of user satisfaction in using the system. Based on respondents' responses to the quality of information provided by the SAPS system at the Faculty of Medicine, Baiturrahmah University, it was considered quite good. However, it is necessary to make improvements to the system which is useful for increasing user satisfaction with the system owned by this institution.

The Influence of Service Quality on User Satisfaction

Based on research conducted on respondents who explained that this research was to look at the influence of service quality on user satisfaction, it was rejected, this shows that it is suspected that service quality does not have a significant influence on user satisfaction. The results of the respondents' achievement targets regarding service quality and user satisfaction with SAPS are "Quite Good", however there are problems with this system, namely the absence of an online help feature, making it difficult for students to consult on problems encountered in using the SAPS system. Medical Faculty students tend to only ask their classmates if they experience difficulties in entering data, which should be done through online services or face to face between operators and users so that all problems will be resolved well, effectively and efficiently. This is what causes students to feel dissatisfied with the services provided by the system.

The Effect of System Quality on Net Benefits

Based on the research conducted, a hypothesis was obtained for this research, namely that it is thought that there is a significant influence of system quality on net benefits, if the system quality is good it will have an impact or effect on the institution or its users. Based on the respondent's target achievement (TCR) for system quality and net benefits, with the assessment category "Good enough", it can be concluded that the Medical Faculty SAPS is quite good. If SAPS has good system quality, it will have an impact on the Medical Faculty and its users, so that it can help in making decisions. By using an information system, the productivity of the University Medical Faculty in recording student activities outside of lectures. Additionally, users can also broaden their horizons through easier access to relevant information. Apart from that, the use of information systems also has an impact on time efficiency in searching for the information needed, so that time can be used more efficiently.

The Effect of Information Quality on Net Benefits

Based on the research hypothesis, it can be explained that it is thought that there is no influence of the quality of information on net benefits (the hypothesis is rejected), and this is also supported by the results of responses from respondents who gave an assessment of the quality of information held by SAPS, quite good. The reason this hypothesis was rejected was because respondents still had difficulty understanding the information held by the SAPS system, so that students often made mistakes when entering activity data. And other causes that need to be investigated further by future researchers. The results of this research are supported by previous research (Panjaitan et al., 2019a) which states that there is no significant influence on net benefits. Furthermore, the development of variables in this research is also supported by research from

(DeLone WH and ER McLean, 2003).

The Effect of Service Quality on Net Benefits

Based on the research hypothesis carried out, it can be explained that service quality has a significant influence on net benefits. The results of responses from respondents show that according to them the quality of service is quite good. This is proven by the SAPS role of the Faculty of Medicine which has an impact on the Faculty of Medicine, data collection on student activities, and student achievements are more structured. This helps in the institutional accreditation process. However, research results may vary depending on the context and variables studied. Therefore, it is necessary to carry out regular evaluations of service quality to ensure that service quality continues to meet user expectations and needs. The results of this research are supported by previous research conducted by (Panjaitan et al., 2019b) which stated that service quality does not have a significant influence on net benefits.

Effect of Use on Net Benefits

Based on the research, it is explained that the hypothesis for this research is to see the effect of use on net benefits (the hypothesis is rejected). The results of responses from respondents show that the usage variable is in the good category, this shows that students at the Faculty of Medicine, Baiturrahmah University use the SAPS system regularly. However, students feel they are not satisfied with the system because the system they use does not provide greater benefits to users, this is due to the user's perception that the benefits of the system are only to fulfill the requirements in the academic process. So students assume that the activities they participate in and report to SAPS do not have a direct impact. However, on the contrary, for the Faculty of Medicine, the SAPS system has a very large role or influence in meeting institutional accreditation needs.

The Effect of User Satisfaction on Net Benefits

The findings in this study indicate that there is allegedly no relationship between user satisfaction and net benefits (hypothesis rejected). Therefore, student satisfaction with the SAPS system does not have a significant impact, although students may feel dissatisfied with the system used. However, students are still required to use the system. Based on the results of the respondent's target achievement (TCR) regarding user satisfaction (Fairly Good) and Users (Good). This is proven by the Chancellor's regulation that every student at the Faculty of Medicine must take part in activities outside of lectures for a minimum of 50 SAPS assessment credits, and this is a requirement for registering for the judiciary and graduating with a medical degree. This makes students active by participating in various activities outside of lectures. Students who have the highest GPA and SAPS scores will receive rewards from Baiturrahmah University. However, the lack of user satisfaction in using the system is caused by the system's inability to meet student needs. The unsatisfactory experience provided by the system to students is a factor that causes user satisfaction to not have a significant influence on the benefits obtained. Users will feel comfortable with the system if the system is able to provide adequate solutions and meet their expectations and needs.

Effect of Use on User Satisfaction

The hypothesis in this research states that it is thought that there is an influence of use on user satisfaction (acceptance). Based on the results of the respondent's target achievement (TCR), assessment categories for the usage variables (Good) and user satisfaction (Quite Good) can be obtained. The results of this research state that students who use the SAPS system only fulfill the requirements for registration, this is proven by the frequency of using the system, they are motivated only to fulfill the requirements of the medical undergraduate judiciary and Baiturrahmah University graduation, so that user satisfaction is achieved because students report each activity according to with applicable regulations and fulfill the requirements for graduation and graduation.

Satisfaction Mediates the Relationship between Information Quality and Net Benefits

SAPS does not yet have quality information that can provide net benefits to users so that it influences user satisfaction. If the SAPS system is able to provide good quality information to students, students will no longer feel confused in entering every off-campus activity into the system. Development and improvement of the system will be carried out continuously by the Faculty of Medicine, Baiturrahmah University in order to achieve student satisfaction in using the system. Data that is well integrated and has good quality information will provide convenience for users and medical faculties as owners of the system.

User Satisfaction Mediates the Relationship between System Quality and Net Benefits

Baiturrahmah University Faculty of Medicine students believe that the system does not meet their needs. System quality is an important variable in the development of the Delone and McLean method to see the net benefits to users and organizations. Therefore, continuous attention to system quality is very important for the progress of the organization or institution.

User Satisfaction Mediates the Relationship between Service Quality and Net Benefits

Service quality does not have an indirect effect on net benefits through user satisfaction. SAPS has not been able to provide good quality service to users so that user satisfaction is not met properly. Various factors cause SAPS service quality to be unable to provide user satisfaction, namely: students feel that the services provided are inadequate, students feel they do not get the expected net benefits. Apart from that, other problems are incompatibility between system features and functions and user needs, this mismatch can prevent users from achieving the desired net benefits, and other problems.

Usage Mediates the Relationship between Information Quality and User Satisfaction

Information quality does not have a direct influence on user satisfaction, so there is an indirect effect of information quality on user satisfaction through the usage variable as an intervening variable. The important role of information quality in a system that has been built, can provide added value for user satisfaction, the information provided is easy to understand and relevant to users so that it helps increase user satisfaction. The Baiturrahmah University Faculty of Medicine must make improvements to the SAPS system, so that SAPS provides complete, easy to understand and relevant information according to the students' needs. Currently, SAPS still has not had a significant impact on user satisfaction, this is due to several factors, one of which is, the frequency of users using the system for SAPS final year students is only a requirement for registering for medical undergraduate graduation and university graduation.

Usage Mediates the Relationship between Service Quality and User Satisfaction

Service quality does not have a direct influence on user satisfaction, so there is an indirect effect of information quality on user satisfaction through the usage variable as an intervening variable. In assessing service quality indicators, SAPS has provided good quality, namely providing guarantees that users are safe in using the system, but there are still shortcomings and are of great concern to the Faculty of Medicine, Baiturrahmah University, namely that there are no assistance features in the system, so students experience difficulties. in solving problems encountered quickly and accurately in entering data on their activities.

Usage Mediates the Relationship between System Quality and User Satisfaction

Usage is able to mediate system quality on user satisfaction. These results indicate that usage experience acts as an intervening/mediating variable in the relationship between System Quality and User Satisfaction. System quality is also related to user trust in the system. If the system is reliable, safe, and user privacy is maintained, users will feel trust and confidence in using the system.

User Satisfaction and Usage Mediate the Relationship of System Quality to Net Benefits

System quality has an influence on net benefits through user satisfaction and use as an intervening variable is rejected. This means that there is no direct or indirect influence of system quality on net benefits, because user satisfaction and usage variables do not succeed in mediating this influence.

User Satisfaction and Usage Mediate the Relationship between Information Quality and Net Benefits.

Based on the results of the research analysis carried out, it was found that the quality of information contained in the SAPS system has no influence on net benefits and does not have a significant influence on user satisfaction. However, if the quality of SAPS information can be updated according to the wishes of students who act as users of the system, it will increase student satisfaction thereby providing good benefits for the institution and students of the Faculty of Medicine, Baiturrahmah University.

User Satisfaction and Usage Mediate the Relationship between Service Quality and Net Benefits.

User satisfaction and usage are able to mediate the relationship between service quality and rejected net benefits. This means that there is no direct or indirect influence of service quality on net benefits, because user satisfaction and usage variables do not succeed in mediating this influence.

User Satisfaction Mediates the Relationship between Usage and Net Benefits

User satisfaction mediates the relationship between use and rejected net benefits. This means that there is no direct or indirect influence from use on net benefits, because the user satisfaction variable does not succeed in mediating this influence.

Usage Mediates the Relationship of System Quality to Net Benefits

The use of mediating the relationship of system quality to net benefits is rejected. This means that there is no direct or indirect influence of system quality on net benefits, because the usage variable does not succeed in mediating this influence.

Usage Mediates the Relationship between Information Quality and Net Benefits

The use of mediating the relationship between information quality and net benefits is rejected. This means that there is no direct or indirect influence of information quality on net benefits, because the usage variable does not succeed in mediating this influence.

Usage Mediates the Relationship between Service Quality and Net Benefits

Usage mediates the relationship between service quality and net benefits. This means that there is no direct or indirect influence of service quality on net benefits, because the usage variable does not succeed in mediating this influence.

CONCLUSIONS

This study formulated 12 hypotheses based on the Delone and Clean approach to measure the success of SAPS at the Faculty of Medicine, Bairurrahnah University. By statistical calculation using SMART PLS, the findings of this study have proved that five (5) hypotheses are rejected, and seven (7) hypotheses are accepted. From these findings, it is summarized that utilizing the implemented SAPS for students of medicine is good enough. What is crucial to be done is to evaluate the system quality, information quality, service quality by paying attention to user needs and user satisfaction. Currently, SAPS is mandatory due to the students' understanding that SAPS is only one of the requirements for graduation.

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