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The Influence of System Quality, Information and Services of the Merdeka Mengajar Platform on User Satisfaction in Elementary School

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ABSTRACT

This research aims to determine the effect of system quality, information and services from the Merdeka Mengajar Platform on user satisfaction at SDN Tambakaji 04 and SDN Ngaliyan 01 Semarang. This research uses quantitative research methods with a population of 50 teachers. The questionnaire was prepared using a 1-5 Likert scale. Hypothesis test analysis results (t test): 1) the system quality obtained a sig value of $0.842 > 0.05$, which means that the quality of the independent teaching platform (PMM) system has no significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang, 2) the results of the information quality t test obtained $sig\ 000 < 0.05$, meaning that the information quality of the independent teaching platform (PMM) has a significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang, and 3) the results of the service quality t test obtained a value of $000 < 0,05$ means that service quality has a significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang.

Keywords:

system quality, information, service, independent teaching platform, user satisfaction

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A. Introduction

Technological advances that occur today are a form of innovation carried out by humans. The development of information technology involves almost all sectors in daily life, starting from agriculture, health, especially in the education sector. One of the advances in information technology in the field of education can be seen from the learning systems used by each educational institution. The learning system used in ancient times was different from the learning system used today.

The learning system used in ancient times was called the conventional learning system. The conventional learning system is learning using the lecture method, where the teacher explains the material, coupled with giving assignments and exercises. It can be seen that teachers are clearly more active than students during the learning process using conventional learning systems. According to Mansyur (1991:138-139), Andi's research (2021) states that the conventional method (lecture) is a form of interaction through information and oral narrative by a teacher towards students in his class. (Jafar, 2021)

Using traditional learning methods in the digital era is no longer effective, where these methods tend to make students feel bored. Very rapid technological advances require the world of education to follow and adapt. Educational institutions will be left behind if they still use these learning methods. The application of information technology causes a change in the conventional learning system to a face-to-face learning system in digital form. Apart from that, the education system in Indonesia can be said to be still less effective, where students are forced to become multitasking students. According to the Organization for Economic Co-operation and Development (OECD: 2015) the education system in Indonesia is the 4th largest education system in the world after India, China and the United States. A total of 53 million students attend 270,000 schools with 3.4 million teachers. (CENTER FOR EDUCATIONAL ASSESSMENT OF BALITBANG KEMENDIKBUD, 2019)

The Minister of Education, Culture, Research and Technology (Kemendikbudristek) often carries out reforms to restore learning. One of the updates that is always carried out is regarding the curriculum. Curriculum is a small part of educational civilization. Creating or developing a curriculum is not only an educational system, but within the curriculum there is an accumulation of interests from various related parties. The curriculum is formed in accordance with the developments and challenges faced by a country itself. The curriculum implemented in Indonesia to date has gone through a long process by changing the curriculum 11 times. Reforms should be made by considering convenience and not complicating the learning and teaching process to continue to improve learning activities.

Curriculum changes are very important for the effectiveness of the curriculum in certain conditions, reviewing the 2013 curriculum or curriculum, there are several shortcomings, such as the curriculum structure is less flexible and lesson hours are determined per week, the subject matter in the 2013 curriculum is too dense, the available material is less diverse, not yet using technology to support the teacher learning process. In this regard, to overcome these challenges, systematic changes are needed. One change that can be made is through the curriculum, because the curriculum is an important tool for creating inclusive learning. The Ministry of Education and Culture has simplified the curriculum in special conditions, called the emergency curriculum, to correct the learning lag during the pandemic. The real results of using the emergency curriculum from 31.5% of schools show that this curriculum can reduce learning loss.

Efforts to restore the learning crisis that has long occurred in Indonesia. The Ministry of Education and Culture issued a policy. By developing a curriculum to bring

about a new paradigm shift in education in Indonesia. In order to support these efforts, the independent curriculum is a concrete form of this policy. The independent curriculum is a curriculum with diverse intracurricular learning where the content will be more optimal so that students have enough time to deepen concepts and strengthen competencies. (Kemendikbudristek, 2022)

Curriculum changes will of course have an impact on all elements of the education system. Based on the guidelines of Minister of Education and Culture No. 56 of 2022 concerning the implementation of the curriculum to improve the quality of education in Indonesia, the Ministry of Education and Culture provides options for implementing the curriculum according to the needs of each school. There are three options offered to schools, namely, the 2013 curriculum (in full), the emergency curriculum (simplified 2013 curriculum), or the independent curriculum. (Minister of Education, Culture, Research and Technology of the Republic of Indonesia, 2022)

The Ministry of Education and Culture has so far released 22 episode of the independent curriculum policy as a new breakthrough for the education system in Indonesia. One of these policies is a development product for teachers as teaching and learning activities and work are carried out online. The independent curriculum and the Independent Teaching Platform (PMM) have several features that will assist teachers in realizing the Pancasila student profile. PMM is a driving force for educators in creating Pancasila students who are characterized by learning, teaching and creating (Nur Insani: 2022). (Ketaren, Rahman, Meliala, Tarigan, & Simanjuntak, 2022) PMM provides several interesting features, namely, 1) development features for teachers including independent training, inspirational videos and proof of work. 2) features of teaching and learning activities include student assessments and teaching tools. This facility can be used independently by teachers and educational staff and can be accessed anywhere and anytime.

The policy was created to make it easier for educators and staff in the process of transferring knowledge to students. In fact, this policy was also made for students who take part in the independent campus teaching program (MBKM) in accordance with Minister of Education and Culture Regulation Number 3 of 2020 concerning National Higher Education Standards. This program is only intended for people who are studying at university. The aim of taking MBKM is to master all knowledge as preparation for entering the world of work. (Mutmainah, Yulia, Marnilin, & Mahfudi, 2022)

Basically, this independent curriculum is still new and regarding its implementation in various schools, SDN Tambakaji 04 and SDN Ngaliyan 01 have implemented the Independent Curriculum and the Merdeka Teaching Platform (PMM) well. Supported by a fairly stable internet network and digital-based learning instruments. However, a policy certainly has several challenges that can hamper the process of implementing an independent curriculum. The first obstacle is the readiness of resources, teachers are required to be literate in information technology and not technologically ignorant. Previous generation teachers needed to keep up with the times even though they were struggling or couldn't do it at all, so they continued to use conventional learning until they finished their duties. The second obstacle is whether the program is mature to be implemented. Because it must have very strong reasons and needs to be studied very deeply. Third, synergy between stakeholders and limited references for running the program. (et al, 2022)

According to one teacher's opinion regarding the independent curriculum and the Independent Teaching Platform (PMM), this policy is an obligation that must be followed in accordance with current developments. The obstacle experienced when using PMM is

that a teacher does not understand information technology, teachers are required to search for information independently about the independent curriculum and PMM regarding how to implement it in the school environment. Apart from that, in research conducted by Susilawati et al, (2021), other challenges faced by teachers when using PMM were limited facilities and infrastructure such as internet connections, internet quota and devices used, as well as difficulties logging into PMM due to the authentication process. This certainly indicates that the quality of the system is still not working well.

Researchers are interested in discussing further whether there is an influence on the quality of the Merdeka Mengajar Platform (PMM) system, information and services on user satisfaction, because the elementary school has used the independent curriculum and applies it regularly. Based on the background description above, the author is interested in conducting research.

B. Theoretical Framework

Information is data that is processed in such a way that it has a useful or meaningful meaning. But not all information that is processed becomes meaningful or useful information. There are 3 important things that must be considered in information, namely: Information is the result of data processing, Provides meaning or significance, Is useful or helpful in increasing certainty. (Deni Darmawan, 2016) In general, an information system is a system that provides information in decision making and in carrying out business activities. This system is a combination of humans, information technology and organized work methods. Etymologically, the word management comes from the ancient French word management, which means the art of organizing and implementing. Management can also be interpreted as an effort to plan, organize and manage resources to achieve goals effectively and efficiently. This is in accordance with what George R. Terry said, management is a typical process consisting of several actions; planning, organizing, mobilizing and supervising. (Adi Sulisty Nugroho, 2021)

The curriculum in Indonesia is often revised. The definition of curriculum according to Law Number 20 of 2003, curriculum is a set of plans and arrangements regarding objectives, content and teaching materials as well as methods used as guidelines for implementing learning activities to achieve national education goals. (Habe & Ahiruddin, 2017) S. Nasution (2006) emphasized that the curriculum is "something that is planned as a guide to achieving educational goals". From another point of view, the curriculum is a set of plans, arrangements and methods of teaching and learning activities (Oemar, 2005). It can be concluded that the curriculum is a set of plans and descriptions of the future which involves all components in an educational institution starting from the learning materials that students must master, the teaching methods used, evaluation of learning outcomes and the resources needed to support learning as a the ultimate goal of an educational institution.

The independent curriculum is a curriculum concept introduced by the Indonesian Ministry of Education, Culture, Research and Technology (Kemendikbudristek) in 2020. Minister Nadiem Makariem stated that educational units, namely schools, teachers and students have the freedom to innovate, the freedom to learn independently and creative. An independent curriculum is a curriculum that gives schools and teachers the freedom to create a curriculum that is more relevant to the needs of students. Freedom to learn is the freedom to think, be creative, innovate and encourage teachers and students to produce something more meaningful (Mulyasa, 2021).

C. Research Methods

This research uses a quantitative research approach. According to Sugiyono, quantitative research is a research method that is based on the philosophy of positivism, research tools are used to study certain populations or samples, data analysis is quantitative statistics to test predetermined hypotheses. The results of quantitative research are presented in statistical form (numbers). This research was conducted from 27 March 2023 to 14 April 2023. The research location was carried out at SD Negeri Ngaliyan and Tambakaji 04.

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics that are applied by researchers to study and then draw conclusions. (Sugiyono, 2014) The population in this study was only 50 people consisting of 2 schools, 19 people were from SDN Tambakaji 04 and 31 people were from SDN Ngaliyan 01. This study used a saturated sampling technique or census due to the teacher population. SDN Ngaliyan 01 and SDN Tambakaji 04 are relatively small. Saturated sampling technique is a sample determination technique when all members of the population are used as samples.

There are two data sources in this research, namely primary sources and secondary data sources. Primary data is information collected by researchers directly from the data source. Primary data is also called original data or new, up-to-date data. To obtain primary data, researchers must collect it directly. (Sugiyono, 2016) Techniques that can be used to obtain primary data include observation, interviews, directed discussions and distributing questionnaires. Secondary data is data obtained by researchers from various existing sources such as data from the Central Bureau of Statistics (BPS), books, reports, journals and others.

In this research, researchers used questionnaire and observation data collection techniques. According to Surachman, he explained that a questionnaire is a written interview with several differences. (Surahmad, nd) Observation is an analytical technique that has specific data collection characteristics compared to other analytical techniques, namely interviews and questionnaires.

The data analysis techniques used in this research are:

1. Descriptive Statistics Techniques.

Descriptive analysis is an analysis of the results of respondents' responses regarding the influence of system, information and service quality. (Wenno, Esomar, & Sopacua, 2016) Independent teaching platforms on user satisfaction. In this section we will look at the tendencies of respondents' answers to each research variable. The tendency of respondents' answers can be seen from the descriptive statistics of each variable. The descriptive analysis is described into a range of scales as follows:

$$RS = \frac{m - n}{b}$$

Information :

RS : Scale Range

m : Number of highest scores on the scale

n : The lowest number of scores on the scale

b : Number of classes or categories created

2. Instrumental Test

There are several tests in this instrumental test, including: (Arikunto, 2022)

Validity test and Reliability Test

3. Classic assumption test

This classical assumption test will also carry out several classical assumption tests on the regression model that has been processed using the SPSS program, including: Normality test, Multicollinearity Test, Heteroskedasticity Test.

4. Multiple linear regression

Multiple regression analysis is used to determine the effect of the independent variable on the dependent variable on changes in each increase or decrease in the independent variable which will affect the dependent variable (Purwanto SK, 2004) ,

Formula:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + e$$

Where:

- a : constant
- b : regression coefficient
- Y : employee performance
- X1 : motivation
- X2 : work environment
- e : error

5. Hypothesis test

t-test (Partial)

To test whether each independent variable has a significant effect on the dependent variable partially with $\alpha = 0.05$ and also acceptance or rejection of the hypothesis, in the following way:

Formulate a hypothesis

Ho1: there is no significant influence between the quality of the Merdeka Mengajar Platform system on partial user satisfaction

Ha1: there is a significant influence between the quality of the Merdeka Mengajar Platform system on partial user satisfaction

Ho1: There is no significant influence between the quality of the Merdeka Mengajar Platform information on partial user satisfaction

Ha1: there is a significant influence between the quality of the Merdeka Mengajar Information system on partial user satisfaction

Ho1: there is no significant influence between the service quality of the Merdeka Mengajar Platform on partial user satisfaction.

Ha1: there is a significant influence between the service quality of the Merdeka Mengajar Platform on partial user satisfaction

Hypothesis limitations

Ho: accepted if sig. $> \alpha = 0.05$

Ho: rejected if sig. $\leq \alpha = 0.05$

6. Coefficient of determination

The coefficient of determination (R²) essentially measures how far the model's ability is to explain variations in the dependent (independent) variable. The coefficient of determination values are zero and one. A small R² value means that the ability of

the independent (free) variable and explaining variations in the dependent variable is very limited. A value close to one means the independent variable provides almost everything needed to predict the dependent variable. In this reality, Adjusted R2 can have a negative value, even though what is desired must be a positive value. If the empirical test shows that the adjusted R2 value is considered to be zero. Mathematically, if the value of $R^2 = 1$, then adjusted $R^2 = R^2 = 1$. Meanwhile, if the value of $R^2 = 0$ then adjusted $R^2 = (1 - k) / (n - k)$. If $k > 1$, then adjusted R2 is negative.

D. Results and Discussion Result

The following are the results of multiple linear regression regressed using the SPSS version 21 program:

Coefficients

Table 1. Dependent Variable: User Satisfaction (Y)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,615	1,567		1,669	.102
System Quality (X1)	.013	,065	.023	,201	,842
1 Information Quality (X2)	,415	,068	,619	6,141	,000
Service Quality (X3)	,251	,061	,365	4.105	,000

Based on the analysis above, it can be concluded as follows:

1. The constant value (a) from this research is 2.615 which has a positive value, which can be interpreted as having a unidirectional effect between the independent variables consisting of system quality (X1), Information (X2) and Service (X3) and the dependent variable, namely user satisfaction (Y). . This shows that if all variables and dependents have a value of 0 percent, it means that they have not changed. So the user satisfaction value is 2.615.
2. The regression coefficient value for system quality (X1) is 0.013. This value shows a positive influence, which can be interpreted as an influence between system quality variables and user satisfaction. This means that if the system quality variable increases by 1%, user satisfaction will decrease by 0.026, assuming that other variables remain constant.
3. The regression coefficient value for information quality (X2) is 0.415. This value shows a positive influence between the information quality variables and user satisfaction. This means that if the information quality variable increases by 1%, user satisfaction will decrease by 0.415, assuming that other variables remain constant.
4. The regression coefficient value for the service quality variable (X3) has a positive value of 0.251. This value shows that if service quality increases by 1%, then user

satisfaction will increase by 0.251 assuming other independent variables are considered constant.

Determination coefficient analysis

The coefficient of determination functions to determine the percentage of influence that variable X simultaneously has on variable Y. The results of the analysis of the coefficient of determination in this study using SPSS are as follows:

Model Summary

Table 2. Predictors: (Constant), Service Quality (X3), Information Quality (X2), System Quality (X1)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,913 _a	,834	,823	.93537

Based on table 2, the output of the determination test in this study produces an adjusted R square value of 0.823. So it can be explained that this figure shows the ability of the variable quality of the system, information and services of the independent teaching platform in explaining user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang, which is 8.23 while the rest is 91.77 (1-8.23). User satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang is explained by other variables.

t Test Analysis (Partial)

The basis for decision making for the t test according to Ghozali (2018) is:

1. If the sig value < 0.05, or tcount > ttable then there is an influence of variable X on Y.
2. If the sig value is > 0.05, or tcount < ttable then there is no influence of variable X on Y.

Model	Coefficients			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	2,615	1,567		1,669	.102
System Quality (X1)	.013	,065	.023	,201	,842
Information Quality (X2)	,415	,068	,619	6,141	,000
Service Quality (X3)	,251	,061	,365	4.105	,000

Table 3. Dependent Variable: User Satisfaction

Discussion

The influence of the quality of the Merdeka Mengajar (PMM) platform system on user

satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang

Based on the results of multiple linear regression analysis, the Tcount value was 0.201, while the Ttable value at the 5% significance level was 1.678. With Tcount being smaller than Ttable ($0.201 < 1.678$), this shows that the quality of the PMM system has no significant effect on user satisfaction. Some of the features contained in PMM are not used routinely by users, meaning that users only use them according to user needs. In addition, minimal knowledge about the system can cause users to ignore the quality of the PMM system and find it difficult to adapt to the new system. However, improvements to the quality of the PMM system must still be made so that user comfort in using PMM increases so that it can trigger user trust.

System quality is defined as a desirable characteristic of an information system to produce information. Good system quality is if the information system produced is in accordance with user needs and is useful for information users. The PMM system provides new hope as an alternative solution to some of the educational problems in Indonesia, with functions that can be adapted to needs, either as an addition, complement or replacement for the classroom learning activities that have been implemented so far.

This is in line with research conducted by Sania Kharisma (2020) which states that system quality does not affect user satisfaction but in the field of Internet Banking service users. Apart from that, Naufal et al (2017) also stated in their research that system quality has no effect on user satisfaction in the field of the PDAM Tirta Raharja Dashboard system.

The Influence of the Information Quality of the Merdeka Mengajar Platform (PMM) on User Satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang

The results of the analysis using multiple linear regression analysis show a Tcount value of 6.141 while the Ttable value at the 5% significance level is 1.678. With Tcount greater than Ttable ($6.14 > 1.678$), this shows that H_0 is accepted, meaning that the quality of PMM information has a partially significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang. Based on this explanation, it indicates that users of the Merdeka Teaching (PMM) platform prioritize information systems that can produce information that is accurate, timely and relevant to user needs.

Information quality measures the output of an information system. Is the information produced in accordance with the user's expectations and desires? The higher the quality of the information produced, the higher the user satisfaction. Based on the description of research data, the quality of information on the accuracy indicator with "questions about the PMM information system is appropriate to teaching and learning activities" and timeliness with the question "The PMM information system provides the latest information in a timely manner" has the highest score out of 9 questions with an average of 4.24 with the strongly agree scale category. This shows that the output from the PMM information system is in accordance with the needs of teachers to assist the teaching and learning process.

The results of this research are in line with research conducted by Habibie (2018) which stated that the quality of information influences user satisfaction in the E-Learning system. The results of this research are supported by research conducted by DeLon and McLean (2003) who examined how information quality influences user satisfaction, stating that information quality has a significant influence on user satisfaction.

The Influence of Merdeka Mengajar Platform (PMM) Service Quality on User Satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang

The results of the analysis using multiple linear regression analysis show a Tcount value of 4.105 while the Ttable value at the 5% significance level is 1.678. With Tcount greater than Ttable ($4.105 > 1.678$), this shows that H_0 is accepted, meaning that the quality of PMM services has a significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang. The service quality of the Merdeka Mengajar Platform has speed in responding to problems even though it is not optimal, it has guaranteed data security where respondents feel safe when using PMM and the care of the PMM provider can influence the increase in user satisfaction.

The quality of service provided by a good PMM system service provider will certainly influence system user satisfaction. The better the quality of the service provided, the higher the level of user satisfaction. Therefore, it is necessary to measure how good the quality of service provided by PMM is. The measurement tools used in this research are speed of response, assurance and empathy.

The results of this research are in line with research conducted by Setiawan (2021) which states that service quality has a positive effect on user satisfaction, but in the field of E-Learning. Diki Muliawan (2018) also stated that service quality has a positive effect on user satisfaction, but in the field of the Could Accounting system.

E. Conclusion

Based on the results of data analysis and discussion regarding "The influence of system quality, information and services of the independent teaching platform on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang" the author concludes that the quality of the independent teaching platform system has no effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang Semarang. The quality of information on the independent teaching platform has a positive and significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang Semarang. And the quality of the independent teaching platform service has a positive and significant effect on user satisfaction at SDN Ngaliyan 01 and SDN Tambakaji 04 Semarang Semarang.

This research has been carried out and carried out in accordance with scientific research procedures, but it still has research limitations, namely that it was carried out in two schools with a relatively small total population, so it will be different if applied to a larger population . Future research is expected to have more time and opportunities to conduct research so that it can collect data using a mix of methods, namely quantitative and qualitative. Apart from that, research can be carried out in several schools or 1 sub-district or district so that the scope of the research is wider, not limited to just 1 or 2 schools.

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