

# The Influence of Management Information Systems on

# **Teacher Performance at UPTD in Kampung Rakyat**

# **District, South Labuhanbatu Regency**

# Dewi Ratna Bulan Siregar<sup>1\*</sup>, Ilyas Prawiga<sup>1</sup>

<sup>1</sup>Labuhan Batu Islamic University, Indonesia

\*Corresponding author E-mail: dewaratnaregar@gmail.com

#### Article History: Received: June 22, 2024; Accepted: July 20, 2024

#### ABSTRACT

Management Information Systems are one of the determinants in developing institutions in addition to professional human resources. Computerized management information systems are systems that tend to tie decision making closely to data processing systems and administrative work functions carried out using computers. This research aims to see the influence of the Management Information System (X) on Teacher Performance (Y) at the UPTD of Kampung Rakyat District, South Labuhanbatu Regency. The population in this study were teachers at the UPTD, Kampung Rakyat District, RegencySouth Labuhanbatu. The sample for this research consisted of 40 teachers. The data collection techniques used were questionnaires and documentation. The data analysis techniques used are simple linear regression analysis, hypothesis testing (t test), and coefficient of determination to see how much the Management Information System contributes to Teacher Performance at the UPTD, Kampung Rakyat District, South Labuhanbatu Regency. Based on the research results, it shows that: (1.) Management information systems have a significant effect on teacher performance at UPTD, Kampung Rakyat District, RegencySouth Labuhanbatu with a calculated t value of 3.653 and a sig value. of 0.001. (2.) The influence of management information systems on teacher performance at UPTD, Kampung Rakyat District, South Labuhanbatu Regency is 94.5%, while the remaining 5.5% is influenced by other variables that are not in this research.

Keywords: Management Information Systems, Teacher Performance

#### **INTRODUCTION**

In the era of globalization, everyone agrees that information management is something that is really needed by every social government institution, including educational institutions. Therefore, education requires a tool to be able to make information a very useful tool in forming a much better education, one of which is the scientific discipline, namely the education management information system. Education at this time requires a foundation that must be built, namely realizing its position as a producer of educational services. Educational institutions must understand well the increasingly complex needs of society, especially following the very rapid development of educational technology. The most appropriate strategy to improve the quality of education is to provide educational services by facilitating learning practices using technological infrastructure and integrating computers. The purpose of implementing management information systems in educational institutions is to support management function activities; Planning, Organizing, Staffing, Directing, Evaluating, Coordinating,



and Budgeting. The development of management information systems in educational institutions is urgently needed, because in facing global competition educational institutions are required to provide information more quickly, accurately and conveniently which is part of service quality, so that it will become a competitive advantage.

Every school certainly wants the best results in achieving its goals, namely the school's vision and mission. So it is very important if it is supported by high productivity by teachers. Because productivity is the ability to produce more work than the usual standard. High productivity is not only supported by the abilities possessed by each individual. High productivity must be supported by a healthy, safe and comfortable work environment because that way teachers can work optimally. In connection with demands for teacher productivity that must increase, because conceptually teacher productivity is closely related to output (results) and input (input). If productivity increases, this is only possible due to an increase in skills and workforce. Therefore, work productivity is a comparison of a teacher's work which has increased from the previous one. So school leaders pay attention to the factors that influence teacher performance. Factors that influence teacher performance are internal and external factors. From an internal perspective, good performance is influenced by ability, drive and high motivation. From an external perspective, good performance can be influenced by the environment, friends and good leaders. If superiors pay more attention to internal and external factors, teachers will be more motivated and responsible in carrying out their duties.

In the world of education, educational activities cannot be separated from educational management information systems, because the two are interrelated and need each other. The relationship between these two aspects can be described as education being assessed as a driver of management information systems, while management information systems are a determinant of educational performance. In general, a management information system can be described as a system created to carry out data processing that can be used to support routine tasks, evaluation and decision making within the organization. According to George M. Scoot (2002: 100), "management information systems can increase teacher productivity and school quality. The use of information produced for management, but with appropriate information technology, it will be possible to create a management information system that is able to increase integration in the fields of information and operations.

The existence of a management information system within the national education department is not solely a need for leadership, but teachers and administrative staff also need information in this case to support their performance. Facts obtained in the field are that schools under the auspices of the UPTD, Kampung Rakyat District, South Labuhanbatu Regency have implemented a good management



information system, but teacher performance is not yet optimal. This can be seen from several cases in schools that teachers do not understand the development of digital technology, teachers do not update information from the school and teachers lack interest in operating management information systems. The cases mentioned above are not entirely the fault of one party or teacher, but there are many factors that cause them, including inadequate educational infrastructure, not all schools have computers or laptops that can be used by teachers, environmental conditions that are less supportive such as network problems, and The lack of teacher initiative in utilizing management information systems is due to the absence of training so that teachers do not understand and how to start a job.

According to Fakhri Husein and Wibowo in AR Farizki (2016) a system is a set of interconnected components that function to collect, process, store and distribute information to support decision making and supervision in an organization. Meanwhile, Al-Bahra Bin Ladja Mudin (2012) believes that a system is a collection of components or elements or subsystems. In general, a system is a collection of elements that interact to achieve a certain goal. In other words, the system can also support data management, by forming a flow of information that is used for decision making. Types of systems generally consist of open systems and closed systems (Open-Loop and Closed-Loop Systems). An open system is a system that does not have goals, mechanical control, and feedback. Meanwhile, a closed system is a system that has targets, mechanical control and feedback (Raymond McLeod, Jr., 2001:233).

Information comes from the old French word, information which is taken from the Latin informationem which means outline, concept, idea. Information is a noun from informare which means activities in knowledge and communication. According to the term, information is a collection of data/facts that are organized or processed in a certain way so that they have meaning for the recipient (Yakub in D Hasenda, 2017). Information is the result of data processing so that it becomes an important form for the recipient and is useful as a basis for decision making whose consequences can be felt directly at that time or indirectly in the future. To obtain information, it is necessary to have data to be processed and a processing unit (Setiawan, 2016). According to AR Farizky (2016) management is a process that emphasizes involvement and interrelated activities to achieve predetermined targets. In general, management is said to be managing. So management is an activity carried out to complete a job or activity together or involving other people to achieve the same goal by utilizing existing resources.

Sutiyadi (2017) states that a management information system is an integrated human/machine system for presenting information to support management operations and decision-making functions in an organization. According to AN Pratama (2016) performance is the results achieved by a person



according to the standards applicable to the job in question. Increasing individual performance will most likely also increase company performance because the two have a close relationship. Research conducted by Naidah (2010) entitled The Influence of Management Information Systems (SIM) on Employee Performance at PT. Metro Batavia Air Makassar District. The results of this research show that the management information system variable (X) has a positive effect on employee performance (Y).

### **RESEARCH METHODS**

This research uses a quantitative research type and design. According to Sugiyono (2016:80) "Population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. In this study, the research population was all teachers registered at Dapodik Elementary Schools in the UPTD, Kampung Rakyat District, South Labuhanbatu Regency, totaling 40 elementary schools under the auspices of the UPTD, Kampung Rakyat District, South Labuhanbatu Regency. The population in this study was 40 schools, and the samples to be taken were 4 schools, the samples were taken randomly. The schools chosen by researchers are as follows:

Table 1. Names of Research Sample Schools

No	School name	Total number of teachers	
1	UPTD. SDN 32 Tanjung Mulia	8 people	
2	UPTD. SDN 08 Perlabian	9 people	
3	UPTD. SDN 03 Tanjung Medan	11 teachers	
4	UPTD. SDN 11 Pekan Tolan	12 teachers	
	Amount	40 people	

Source: Processed by researchers, 2024

#### **RESULTS AND DISCUSSION**

#### **Analysis of Regression Test Results**

A simple linear regression analysis method is used to build an equation that connects management information system variables and teacher performance variables so that the predicted and predicted values can be seen from the results.

		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta		
Model					t	Sig.
1	(Constant)	14,709	5,498		2,675	,013
	Х	,915	,257	,573	3,563	,001

Table 2. Regression Analysis Results



Source: Data processed by researchers, 2024

From the table above, the following linear regression equation can be obtained: Y = 14.709 + 14.709

#### 0.915.

### Analysis of Hypothesis Test Results

Hypothesis testing in this research uses the SPSS program. The aim of hypothesis testing is to prove the research hypothesis regarding the influence of management information systems on teacher performance. The results of data processing show the following.

		Unstandardize		Standardize		
		d		d		
		Coefficients		Coefficient		
Model				S	Q	Sig.
		В	Std. Error	Beta		
1	(Constant	14,709	5,498		2,675	,013
	)					
	Х	,915	,257	,573	3,563	,001

Table 3. Regression Analysis Results

Source: Data processed by researchers, 2024

The test was carried out by looking at the significance value of t calculated with t table. If the calculated t value > t table and the sig value. count < 0.05, then it can be stated that the independent variable has a significant influence on the dependent variable. Conversely, if the calculated t value < t table and the sig value. count > 0.05, then it can be stated that the independent variable does not have a significant influence on the dependent variable.

In this research, the results obtained can be seen in table IX that the calculated t value is 3.653 while the t table value is 2.021 (n=40). For the sig value, calculated at 0.001 while the sig value, test of 0.05. From these results it can be concluded that the Management Information System variable has a significant influence on the Teacher Performance variable, this means that the research hypothesis can be accepted.

### Analysis of Coefficient of Determination Test Results

Table 4. Model Summary

	D	D		Std. Error of the
Mode	K	K	Adjusted R	Estimate
1		Square	Square	
1	,573	,328	,302	2.64509
	а			

Source: Data processed by researchers, 2024



The coefficient of determination obtained from the R square value is 0.328 using the formula KD =. Based on the calculations, a value of 94.5% was obtained, which shows that the influence of the independent variable (Management Information System) on the dependent variable (Teacher Performance) was 94.5%, while the remaining 5.5% was explained by other variables outside the variables examined in this research. $\sqrt{1 - R^2}$ 

## Discussion

Based on the data the analysis results show that the management information system on teacher performance has a significant positive influence on the sig value. 0.01 is smaller than the  $\alpha$  value, namely 0.05. And the contribution of Management Information Systems to Teacher Performance is 94.5%, which means there is still a 5.5% possibility of other variables that can influence teacher performance.

The role of management information systems shows that optimal use of management information systems will improve teacher performance. All work using the system can be completed quickly, effectively and efficiently compared to manual ones. Apart from that, it can also save time so that teachers can immediately do other work. However, at the UPTD, Kampung Rakyat District, RegencySouth Labuhanbatu still needs to improve training in the use of management information systems because this is a weakness of computer-based management information systems that is felt by some teachers, the lack of technological knowledge makes some teachers feel they cannot work optimally, so that some teachers feel that computer-based management information systems hinder their performance. The above is in line with research conducted by Irfan (2018) which shows the results that management information systems have an influence on employee performance at PT Astra Motor Honda Alauddin Makassar Branch.

#### CONCLUSION

Based on the results of the research and discussion explained previously, the author can draw the conclusion that in this research entitled The Influence of Management Information Systems on Teacher Performance at UPTD, Kampung Rakyat District, South Labuhanbatu Regency, as follows:

- 1. In this research, the results obtained were that the calculated t value was 3.653 while the t table value was 2.021 (n=40). For the sig value, calculated at 0.001 while the sig value, test is 0.05 so that the Management Information System has a significant influence on the Teacher Performance variable, this means that the research hypothesis can be accepted.
- 2. The management information system on teacher performance has a significant positive influence with the sig value. 0.01 is smaller than the  $\alpha$  value, namely 0.05. And the contribution of



Management Information Systems to Teacher Performance is 94.5%, which means there is still a 5.5% possibility of other variables that can influence teacher performance.

### REFERENCES

Wibowo. (2013). Work management. Jakarta: Rajawali Press.

- Irfan. (2018). The Influence of Management Information Systems on Employee Performance at PT Astra Motor Honda Alauddin Makassar Branch. Department of Management, Faculty of Economics and Business, Muhammadiyah University of Makassar.
- Ambler, Scott W. (2002). Know The User before Implementing A System. Computing Canada. ABI/INFORM Global.
- Farizky, AR (2016). East Java Transportation and Llaj Department Employee Payroll Information System (Doctoral dissertation, STIE PERBANAS SURABAYA).
- Al-Bahra Bin Ladjamudin. (2012). Information Systems Analysis and Design. Science House. Yogyakarta: Andi
- Raymond McLeod, Jr. (2001). Information Systems 7th Edition Volume 2. Prenhallindo. Jakarta
- Hasenda, Dianvia. 2017. Management Information System Based on Short Message Services (SMS) Gateway at SMP Al Islam Krian Sidoarjo. Surabaya: Thesis UIN Sunan Ampel Surabaya.
- Adi Setiadi (2017). "The Influence of Price, Product Design, and Brand Image on Purchasing Decisions on Lenovo Smartphone Products (Study of Lenovo Smartphone Users at the Faculty of Economics and Social Sciences, UIN Sultan Syarif Kasim Riau
- Naidah, N. (2010). The influence of management information systems (sim) on employee performance at PT. metro batavia water makassar district. Journal of Balanced Economics, 6(2), 73-83.
- Sugiyono. (2016). Quantitative, Qualitative and R&D Research Methods, 24th Printing. Bandung: Alphabeta.