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# Effect of Management Information System Implementation And Employee Competency on Employee Performance PT. Sumekar

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## ABSTRACT

Employee productivity is one of the factors in improving services in an agency. This study aims to analyze the impact of implementing management information systems and employee qualifications on employee performance at PT. Sumekar. In this study, data analysis used multiple linear regression analysis to measure the effect of more than one independent variable (independent variable) on the dependent variable (dependent variable), which was processed with SPSS based on the conceptual framework and identified hypotheses. to confirm some research hypotheses. The test results using regression analysis (beta test) on the dependent (y) and independent (X1) and (X2) variables indicate that the implementation of management information systems (X1) has a much stronger influence on employee performance (Y) when compared to the ability employees (X2). This is supported by the value calculation data for the implementation of management information systems (X1) which is greater than the ability of employees (X2). However, the combination of the two is able to make a significant contribution to employee performance.

**Keywords:** Multiple Regression, Management Information System, Employee Performance Analysis.

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## 1. Introduction

One of the factors to make a good institution is to improve the performance of employees. Several things must be done by many institutions such as training, remuneration of employee benefits, utilization of technology and information and others. Utilization of technology and information is one of the many things that can be done to optimize employee work. This is then applied by PT. Sumekar by creating a management information system to maximize productivity and simplify the work of employees. To see the results of the implementation of management information systems, this study aims to analyze the effect of implementing management information systems and employee competencies on employee performance at PT. sumekar.

Analysis of the application of information systems on employee competencies and performance has been carried out by several researchers, such as research conducted by Parikesit at the Center for Development, Education and Training (Pusbindiklat) Agency for the Assessment and Application of Technology (BPPT). The method used in the analysis is the PIECES method [1].

Silalahi and Saragih conducting an analysis of the implementation of education and training at the Civil Education and Training Institute (LP2M) [2]. The results of the study indicate that a management information system

is needed to manage various activities at the Institute and a research conducted by applying the Servqual method to build an Education and Training Management information system to improve the quality of information services at the Meteorology Training Center [3].

## 2. Literature Review

The information system is a collection of interconnected sub-systems that form a component which includes input-process-output related to information processing (data that has been processed so that it is more useful for the user). Information systems can be called, a set of components forming a system that has a relationship between one component with other components that aim to produce information in a particular field. So in general an information system is a system consisting of a series of information subsystems for data processing to produce useful information in decision making

According to this research [4] the system has the following characteristics.

- Components
- Boundaries
- Environment (environments)
- Connector / interface (interface)

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- input (input)
- Processing
- Output (output)
- Goals (objectives) and goals (goals)
- Control
- Feedback

Management information system is a combination of people, hardware, software, communication network, and data resources that collect, transform, and disseminate information within an organization as shown in the following figure:



Figure 1. Information System Components

According to this research, Performance is the result of work that can be achieved by a person or group of people in an organization in accordance with their respective authorities and responsibilities, in an effort to achieve the goals of the organization concerned legally, not violating the law and in accordance with morals and ethics[5]. According to research conducted by Suryani [6], employee performance is often also called work performance. That is based on the real behavior displayed by each employee as a result of his work performance.

### 3. Research Methods

Based on the literature review that has been described previously, the conceptual framework chart of the research is as follows:

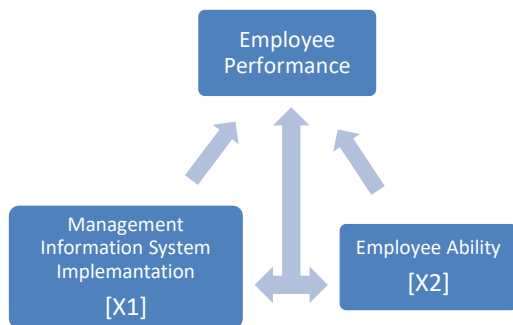


Figure 1. Research Conceptual Framework

This research is an explanative research where an observation is made that explains the relationship between the variables using hypothesis testing without giving treatment. The sample of this study used employees of PT.

Sumekar, totaling 30 people. The data used is primary data by conducting observations, interviews, and questionnaires. All questions are answered directly and a research guide to obtain answers from respondents

In this study, data analysis used multiple linear regression obtained by SPSS. Based on the conceptual framework and hypotheses that have been determined, then the process of testing the data is carried out which is then analyzed using multiple linear regression which is intended to prove some of the research hypotheses that have been determined.

### 4. Result and Discussion

The entire respondent's data is used as model input for the validity test process which will then be analyzed using multiple linear regression. The first step is to input all the data in the form of a table using the MS Excel application. Furthermore, the data was processed using SPSS version 25 software with multiple linear regression analysis techniques. The calculation results are seen in the following table:

Table 1. An example of a table.

Variable	Regression	STD Error
Management Information System Implementation	0,702	0,32521
Employee Ability	0,698	0,42562
Constanta	0,3521	5,4376533

Based on the results obtained in table 1, the implementation of the management information system has a coefficient value of 0.702 with the assumption that the value of other variables is constant, an increase of  $\pm 1$  point indicates an increase in employee performance of around 67%. Meanwhile, employee competence has a coefficient value of 0.698 with the assumption that the value of other variables is constant, an increase of  $\pm 1$  point indicates an increase in employee performance of around 64%.

This study also tested hypotheses which were divided into 4 parts, namely the application of management information systems had a significant effect on employee performance, employee competence had a significant effect on employee performance, the implementation of management information systems and employee competencies simultaneously had a significant effect on employee performance, and employee competence had a dominant influence. on employee performance.

The test results through a partial analysis of the dependent variable ( $y$ ) and independent ( $X1$ ) it was found that the implementation of the management information system ( $X1$ ) had a significant effect on employee performance ( $y$ ). The significance value = 0.0000, the regression value = 0.702, and the coefficient of determination  $R^2 = 0.573$ . It can be concluded that the independent variable ( $X1$ ) contributes to the dependent variable ( $y$ ) by 57.3% and 46.3% is contributed by other variables.

The test results through simple regression analysis (t test) on the dependent variable ( $y$ ) and independent ( $X2$ ) it was found that employee competence ( $X2$ ) has a significant effect on employee performance ( $y$ ). The significance value is  $t=0.0000$ , the regression value is  $=0.698$ , and the coefficient of determination is  $r^2=0.382$ . It can be concluded that the

independent variable (X2) contributes to the dependent variable (y) by 38.2% and 53.7% is contributed by other variables.

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## 5. Conclusion

From the results of the analysis, it is concluded that the implementation of management information systems has a significant influence on employee performance by 57.3% and 46.3% is contributed by other variables. Employee competence has a significant effect on employee performance by 38.2% and 53.7% is contributed by other variables, this result has similar with research that conducted by Bimo [7]. Simultaneous implementation of management information systems and employee competencies has a significant effect on employee performance. The results of the test through regression analysis (beta test) on the dependent (y) and independent (X1) and (X2) variables, it was found that the implementation of the management information system (X1) has a more dominant influence on employee performance (y) compared to employee competence (X2). This is supported by the arithmetic value data on the implementation of management information systems (X1) which is higher than the competence of X2 employees. However, the combination of the two is able to make a significant contribution to employee performance. Future research is expected to add several other types of variables to analyze employee performance at PT. Sumekar or continued with an effective and productive management information system implementation strategy.

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