The Influence of Decision Support Systems (DSS) on Employee Performance at PT. Pratama Indomitra Konsultan

Faris Nur Abdurrahman[1], Deni Mahdiana[2]

[1,2] Universitas Budi Luhur

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Correspondence Email:
2331600136@student.budiluhur.ac.id
deni.mahdiana@budiluhur.ac.id

ABSTRACT

This study examines the effect of the Decision Support System (DSS) on employee performance at PT Pratama Indomitra Konsultan. This study uses a quantitative causal design with data collected from 88 employees through interviews, document recording, and questionnaires. The data was analyzed using simple linear regression and SPSS 23.0 for Windows. The results of the study show that there is a positive and significant relationship between DSS and employee performance.

ABSTRAK

Penelitian ini bertujuan untuk menguji pengaruh Sistem Pendukung Keputusan (SPK) terhadap kinerja karyawan di PT Pratama Indomitra Konsultan. Penelitian ini menggunakan desain kausal kuantitatif dengan data yang dikumpulkan dari 88 karyawan melalui wawancara, pencatatan dokumen, dan kuesioner. Data dianalisis dengan menggunakan regresi linier sederhana dan SPSS 23.0 for Windows. Hasil penelitian menunjukkan bahwa terdapat hubungan yang positif dan signifikan antara DSS dan kinerja karyawan.

INTRODUCTION

Human resources (HR) plays a critical role in any organization. The effectiveness of an organization depends on the competence and flexibility of its internal HR. Individual success and performance are determined by their level of competence. Hasibuan (2019) emphasizes that employees are an organization's primary asset, and they are actively involved in planning and executing organizational activities. In short, HR is a critical factor in organizational success. Optimal company performance is achieved when all employees demonstrate their best performance. This is driven by the company's appreciation for employee sacrifices through fair and performance-based compensation. This close relationship between compensation and employee performance is also emphasized by Moeheriono (2012:247). Every employee is expected to perform their best in carrying out their duties. This is not only beneficial for employees but also becomes the primary goal of the organization or institution where the employee works. Pratama Indomitra Consultant is a tax consultant company that serves individuals and companies in managing their tax obligations correctly. Led by highly qualified consultants who uphold high business ethics, Pratama Indomitra Consultant is committed to providing comprehensive and reliable tax solutions for its clients. Pratama Indomitra Consultant is located at Jalan TB Simatupang 57, PP Plaza building Lt3, East Jakarta.

Table 1. Employee Task Efficiency at Pratama Indomitra Konsultan

Unit	Year	Performance Standard (%)	Achievement (%)	Category
Admin	2021	85	90	**Achieved**
	2022	85	93	**Achieved**
	2023	85	76	**Not Achieved**
	2021	85	78	**Not Achieved**

Unit	Year	Performance Standard (%)	Achievement (%)	Category
Junior Tax Consultant	2022	85	89	**Achieved**
	2023	85	71	**Not Achieved**

This research utilizes data from the past three years, with a focus on 2021 and 2022, when the company's targets were not met. This data was collected based on information and processes from employees at Pratama Indomitra Konsultan. Performance improvement is necessary due to the gap between expected targets and the reality on the ground. It is hoped that with performance improvement, organizational goals can be achieved and the survival of Wibowo Company can be maintained (Wibowo, 2012:27). Employee performance that does not meet the company's assessment is suspected by the Decision Support System. This is due to the researcher's observation of a field phenomenon where, based on data processing of clients using tax consulting services, junior tax consultants have not been able to further explore targets that use tax consultants. This has already been found in the data available at Pratama Indomitra Konsultan. This system is computer-based and its function is to assist, not replace, human decision-making in the face of complex problems. DSS uses data and models to provide analysis and choices to decision-makers (Ratna, 2023). This research is motivated by findings at PT Pratama Indomitra Konsultan, where several employees have shown performance that has not met targets, a mismatch between the Decision Support System (DSS) and work needs, and low work discipline. Therefore, this study aims to examine the influence of Decision Support System (DSS) on employee performance at PT Pratama Indomitra Konsultan.

LITERATURE REVIEW

Employee Performance

Employee performance is the result of work, both in terms of quality and quantity, achieved in carrying out their duties and responsibilities. Improving employee performance is the main goal of the organization or institution where they work. Mangkunegara (2005:6) defines performance as the results of work achieved with full responsibility, while Bagia (2015:147) defines it as a record of results obtained from a job or activity in a certain period. Employee performance is like a machine that is run by three main elements: motivation, ability, and opportunity. The three are like interlocking gears, leading individuals to optimal work results. Motivation becomes the main driving force, ability becomes the provision, and opportunity becomes the space to show the best performance. As Mangkunegara (2016:67) says, performance is the result of a process that is measured in a certain period. Edison (2016:190) also agrees that performance is the overall process of individual work which is the benchmark for its success. Organizations have different ways of measuring performance, depending on the approach and purpose of the assessment. Amins (2012: 42) emphasizes three dimensions: individual work results, behavior, and characteristics.

According to Afandi (2018:89), employee performance can be assessed through several indicators. First, the amount of work results which shows how much work is completed, which can be measured in numbers or other units. Second, the quality of work results which reflects how well and according to the work standards that are produced. Third, efficiency in work which measures the employee's ability to complete tasks with as few resources and time as possible. Next, work discipline which assesses the employee's compliance with the applicable regulations and work schedules. Initiative is also an important indicator, namely the ability of employees to act independently and proactively in solving problems, taking on new responsibilities, and proposing improvements. Accuracy, which shows the extent to which work

is done carefully and with minimal errors, is also a factor in assessment. In addition, leadership, which includes the ability of employees to influence and motivate others to achieve common goals, honesty, which reflects integrity and truthfulness in carrying out duties, and creativity, which assesses the ability of employees to come up with new ideas, solve problems innovatively, and adapt to change, are also important indicators. By assessing these indicators, companies can get a complete picture of employee performance and know which areas need to be improved.

Decision Support System (DSS)

Decision Support System (DSS) is a computer-based information system that helps management in dealing with various problems, both complex and non-complex, by using data and models. According to Little (2013), Decision Support System (DSS) produces various decision alternatives to help management in solving problems. While according to Sparague in Ratna (2023), Decision Support System (DSS) is a computer system that supports, not replaces, the decision-making process. A Decision Support System (DSS) is a versatile tool with several characteristics that enable it to assist leaders in making more optimal and consistent decisions within a short timeframe. It is designed to help in various situations by integrating manual judgment with computerized data processing. A DSS can be utilized by all levels of management and is customized to meet their specific information and support needs. It can be employed by individuals or groups to facilitate the decision-making process, supporting both independent and sequential decision-making. A DSS is flexible, catering to decisions that are made once or repeatedly, and it encompasses all stages of decision-making, from information gathering to solution implementation. It is adaptable to various decision-making processes and styles. One of the key strengths of a DSS is its ability to adapt to change, allowing users to modify and expand the system as needed. Furthermore, a DSS features an easy-to-use interface that instills comfort and confidence in its users. Based on the given explanation, researchers have summarized the characteristics of a Decision Support System (DSS) as follows: A DSS is a tool that supports the decision-making process, capable of solving both complex and non-complex problems. It combines models and analysis techniques with available data and information search functions to provide comprehensive support. Designed with user-friendliness in mind, a DSS comes with interactive instructions, eliminating the need for in-depth computer expertise. It is flexible and can adapt to changes in the environment and user needs. Importantly, a DSS allows for the integration of the decision maker's intuition and personal judgment into the decision-making process.

RESEARCH METHOD

This research employs a quantitative approach, where data is collected and analyzed numerically. The research design used is a causal design, which aims to test the causal relationship between the variables under investigation. Data is collected from a sample using research instruments and analyzed quantitatively to test the hypotheses that have been set. The main purpose of this design is to understand the relationship between the independent variable (which influences) and the dependent variable (which is influenced). The stages of this research include problem formulation, theoretical review, hypothesis formulation, data collection, data processing, and conclusion drawing, in accordance with the guidelines from Sugiyono (2018). This research involves one independent variable, namely Decision Support System (DSS), and one dependent variable, namely employee performance. The research subjects are employees of PT Infomedia Nusantara, while the research objects include DSS and employee performance. The research population consists of all employees of PT Pratama Indo Media Konsultan who meet certain quality and characteristics set by the researcher, with a total of 88 people. Data was collected using three methods: interviews, document recording, and questionnaires. Data

analysis was carried out using the simple multiple regression analysis method with the help of the SPSS 23.0 for Windows program.

RESULTS AND DISCUSSION

Normality Test

Based on the normality test results in this study, it is known that the significance value of 1.090 > 0.05, therefore it can be concluded that the residual values are normally distributed.

Multicollinearity Test

Based on the multicollinearity test results, there are no signs of multicollinearity in the simple regression model of this study. This is evidenced by the tolerance value of the employee performance variable which is greater than 0.1, namely 1.0, and the VIF value of the employee performance variable which is smaller than 10, namely 1.00. Both of these conditions indicate no strong correlation between the operational cost variable and the other variables in the regression model.

Heteroscedasticity Test

Dependent Variable: VAR00006
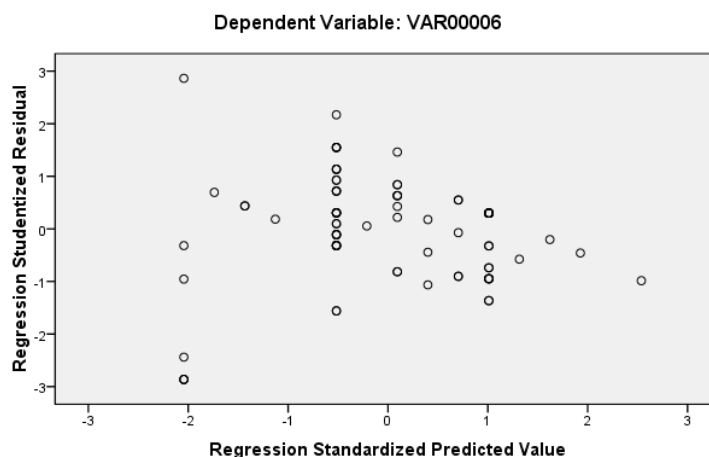
The results of the heteroscedasticity test show that the data points are randomly scattered above and below the zero line on the Y axis. This indicates that there is no heteroscedasticity in the simple regression model. In other words, the heteroscedasticity assumption is met, so the regression model can be continued to the next testing stage.

Hypothesis Testing: Partial Influence of Decision Support System (X) on Employee Performance (Y)

The results of the simple linear regression test obtained the results of the magnitude of the partial relationship from the decision support system. The magnitude of the partial relationship between decision support system (X) and employee performance (Y) is 7.573 with a p-value of 0.000 < alpha 0.05, stating that Ho is rejected, which means there is a positive partial influence relationship from decision support system (X) to employee performance (Y). This finding implies that the decision support system (X) will have an impact on decreasing employee performance (Y) with an influence relationship of 63.3% and the rest from external influences of 36.7%.

DISCUSSION

The research findings show a positive and significant relationship between the decision support system (DSS) (X) and employee performance (Y). Good DSS planning has a significant impact on improving employee performance. The better the implementation of DSS, the better the employee performance. These findings imply the need for employee management that focuses on improving performance. Employee performance can be improved by implementing effective DSS. In addition, good DSS implementation can increase employee motivation and productivity.

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