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IMPACT OF INFORMATION TECHNOLOGY AND MANAGEMENT SYSTEMS ON EMPLOYEE PERFORMANCE AT PT DAYA ADICIPTA

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ABSTRACT

This study aims to explore how Information Technology (IT) and Management Information Systems (MIS) influence employee performance. The research involves 115 respondents who are employees of PT. Daya Adicipta Motora Honda Dealer Baros in Cimahi City, using a stratified random sampling technique, which divides the population into strata to select samples. Data was collected through questionnaires and analyzed using multiple regression analysis. The processing of the questionnaire data using IBM SPSS Statistics 22 software shows that the Information Technology variable is valid based on the validity test, and the reliability test results for this variable are also deemed acceptable.
Based on calculations using SPSS, the F-table value is 13.4. The SPSS output indicates the F-calculated value is 58.449, with a significance level of 0.000. Since the F-calculated value is greater than the F-table value and the significance level is less than 0.05, it can be concluded that Information Technology (X1) and Management Information Systems (X2) have a simultaneous and significant impact on Employee Performance (Y). This supports Hypothesis 3 (H3) of this study.

Keywords: Information Technology, Management Information Systems, Performance.

INTRODUCTION

Information technology has rapidly developed over the past few decades, encompassing various innovations that have significantly impacted how organizations operate. (Laudon & Laudon, 2004) In this context, Management Information Systems (MIS) serve as the primary tool supporting information management within organizations to improve decision-making quality and operational efficiency. Both IT and MIS are now recognized as essential components influencing organizational strategy and performance, particularly in facilitating communication, data management, and the automation of business processes. Several studies have shown that information technology has a significant impact on improving employee productivity. (XIYAO, 2024) For example, the use of software and cloud-based applications enables employees to work more efficiently, access data in real-time, and collaborate without geographical limitations. IT allows employees to perform their tasks more quickly and

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accurately, which in turn can enhance the overall performance of the organization.(M. Z. Islam, n.d.) The scope of Information Technology (IT) in modern companies is not limited to communication tools, but also includes systems that assist in human resource management, business planning, as well as integrated financial and marketing management. In this regard, the use of Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and other business applications has been proven to improve employee efficiency and task accuracy.(Tafti et al., 2022)

Management Information Systems (MIS) play a crucial role in providing the necessary information to make better and faster decisions within an organization. A good MIS helps reduce reliance on intuitive decisions and enables data-driven decision-making. MIS can also accelerate data processing, present more accurate and timely reports, and assist in strategic and operational planning. Several studies also highlight the direct relationship between IT, MIS, and employee performance. For instance, research by (Ahmed et al., 2020) showed that the proper use of IT and MIS could increase the speed and accuracy of task completion and improve employee job satisfaction.

Accessible technology and efficient information systems support employees in achieving their work goals, thereby improving overall work outcomes. One of the challenges in the implementation of Information Technology and Management Information Systems is the frequent employee turnover, as seen in PT. Daya Adicipta Motora. Research by (Jabado & Jallouli, 2024) indicated that employee rotation can affect the efficiency of IT and MIS usage within a company. Companies must ensure continuous training and support for IT and MIS systems so that new employees can quickly adapt to the existing systems and enhance their productivity. (Chornous & Gura, 2020) High employee turnover requires efficient IT management to reduce the time it takes for new employees to understand and utilize the systems. The automotive industry, represented by PT. Daya Adicipta Motora, has also leveraged Management Information Systems to increase business operational efficiency and strengthen market competitiveness. The use of IT and MIS in automotive dealerships is critical for managing customer data, vehicle inventory, and ensuring transparency in sales processes and after-sales services. (Kiradoo, 2020) In this context, IT helps streamline communication between sales, after-sales, and management departments, thus improving employee performance effectively. (Imran et al., 2022) Here are ten recent research papers related to the topics discussed in the article, such as the scope of Information Technology (IT) in modern organizations, the role of Management Information Systems (MIS), and their impact on employee performance, as well as challenges such as employee turnover and technology implementation in specific industries like automotive. (Chopra et al., 2022). The current state of research underscores the transformative role of Information Technology (IT) and Management Information Systems (MIS) in improving employee performance and driving organizational success. However, challenges such as employee turnover, system integration, and resistance to change must be carefully addressed to realize the full potential of these technologies. Organizations that successfully align their IT strategies with business goals, invest in continuous training, and foster a culture of innovation

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will be better positioned to gain competitive advantages and enhance employee performance. For PT. Daya Adicipta Motora, leveraging IT and MIS in a strategic manner will not only streamline operations but also enhance employee productivity, leading to sustained success in the competitive automotive market.

METHODS

This study uses descriptive and associative methods. The descriptive method aims to describe the values of variables in detail without comparing them. The associative method is used to analyze the relationships between two or more variables to explain, predict, or control specific phenomena. The unit of analysis in this study is the individual employees at the Honda Dealer PT. Daya Adicipta Motora, Baros, Cimahi City. This unit is used to describe the characteristics of employees who are the subjects of the study. The population in this study consists of all employees at the Honda Dealer PT. Daya Adicipta Motora Baros, totaling 163 employees (data from 2022). The researcher uses Stratified Random Sampling to select the sample, where the population is divided into strata based on job divisions, and then a random sample is chosen from each stratum. Based on calculations using the Yamane formula, the total sample size is 115 employees . Primary data is used as the source of information in this study. The data collection technique employed is the questionnaire, which is a set of pre-designed questions answered by the respondents to gather information based on their opinions. This method allows the researcher to obtain data directly from the employees, who are the subjects of the study, in order to analyze the impact of information technology and management information systems on employee performance.

RESULTS AND DISCUSSION

Associative Analysis to determine the effect of Information Technology (X1) on Performance (Y) at the Honda Baros Cimahi dealership can be seen from the regression coefficient (beta) squared in the Standardized Coefficients column, which is 0.511 and shows a positive value. Hypothesis testing through partial testing (t-test) also provides insight into the effect. The effect of Information Technology (X1) on Performance (Y) at the Honda Baros Cimahi dealership is 26.11%, calculated as $(\beta)^2 = (0.511 \times 0.511) \times 100\% = 26.11\%$. Thus, it can be concluded that if the Information Technology (X1) variable changes (increases) by one unit, the Performance (Y) variable will change by 26.11%.

In addition to the regression coefficient, the effect of Information Technology (X1) on Performance (Y) at Honda Baros Cimahi can also be seen from the partial test analysis (t-test). According to (Priadana & Sunarsi, 2021), to determine the Degree of Freedom or df = n – k or n - p, where k or p represents the number of independent variables, which in this case is two (Information Technology (X1) and Management Information Systems (X2)), and the significance level is 0.05 (5%) because it is a one-tailed test (right side), based on the research hypothesis in Chapter I. According to(Priadana & Sunarsi, 2021), the independent variable has a partial effect if H0 is rejected and Ha is accepted when t-calculated > t-table and the significance level is < 0.05. Therefore, the t-table value is 1.997, while the t-calculated value obtained from the SPSS output

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(version 22) is 5.290. The significance level for the Information Technology (X1) variable is 0.000. Therefore, it can be concluded that t-calculated is greater than t-table (5.290 > 1.997) and the significance level is less than 0.05 (0.000 < 0.05). Based on these results, it can be concluded that the Information Technology (X1) variable has a partial and significant effect on Performance (Y). This is in accordance with Research Hypothesis 1 (H1). Thus, the results of this study are consistent with previous research conducted by(A. Islam & Naseem, 2023) , which found that the Information Technology variable has a positive effect on Performance.

This study analyzed the effect of Management Information Systems (X2) on Performance (Y) at the Honda Baros Cimahi dealership using associative analysis. The regression coefficient (beta) squared in the Standardized Coefficients column was 0.381, indicating a positive effect. The effect of Management Information Systems on Performance was found to be 14.52%, calculated as $(\beta)^2 = (0.381 \times 0.381) \times 100\% = 14.52\%$. This means that if the Management Information Systems (X2) variable increases by one unit, the Performance (Y) variable will increase by 14.52%. Additionally, the t-test analysis was performed to assess the significance of this relationship. With a significance level of 0.05, the t-calculated value was 3.950, which is greater than the t-table value of 1.997, and the significance level was 0.000 (less than 0.05). This indicates that Management Information Systems (X2) has a partial and significant effect on Performance (Y). These findings are consistent with the research hypothesis (H2) and align with previous studies, including the work by(Iringe-Koko, 2023), which also found a positive effect of Management Information Systems on Performance.

To examine the impact of Information Technology and Management Information Systems on Performance at the Honda Dealer Baros Cimahi, it can be assessed through the coefficient of determination analysis (R Square) and hypothesis testing, specifically the simultaneous test (F test). Below is the table of the coefficient of determination (R Square):

Table 1. Koefisien Determinasi (R Square)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.808[a]	.653	.642	4.58615	.957

a. Predictors: (Constant), TI, SIM

b. Dependent Variable: Employee Performance

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Based on Table above, it can be concluded that the influence of Information Technology and Management Information Systems on performance at the Honda Dealer Baros Cimahi is 65.3%. This is derived from the R Square value of 0.653, which when multiplied by 100% equals 65.3%. Therefore, it can be concluded that Information Technology and Management Information Systems account for 65.3% of the performance at the Honda Dealer Baros Cimahi. If the variables of Information Technology (X1) and Management Information Systems (X2) change (increase) by one unit, the Performance (Y) variable will change by 65.3%.

In addition to examining the influence of Information Technology and Management Information Systems on performance at the Honda Dealer Baros Cimahi through the coefficient of determination, this study also conducts a statistical test, namely the F-test. It is said that Information Technology and Management Information Systems have a simultaneous and significant effect if the calculated F value (F calculated) is greater than the F table value (F calculated > F table), and the significance level is below 0.05 (significance level < 0.05) (Priadana & Sunarsi, 2021). Below are the SPSS output results to assess the simultaneous influence:

Table 2 Analysis of Variance (ANOVA)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2458.684	2	1229.342	58.449	.000[b]
	Residual	1304.031	62	21.033		
	Total	3762.715	64			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), TI, SIM

CONCLUSION

This study aimed to examine the effects of Information Technology (X1) and Management Information Systems (X2) on Performance (Y) at the Honda Baros Cimahi dealership. The results support all three research hypotheses, which are as follows:

The findings support Hypothesis 1, The regression coefficient for Information Technology (X1) was 0.511, resulting in a positive effect on Performance (Y), with a calculated effect of 26.11%. This means that a one-unit increase in Information Technology leads to a 26.11% improvement in Performance.

- The t-test results (t-calculated = 5.290 > t-table = 1.997) and the significance level of 0.000 (which is less than 0.05) confirm that Information Technology (X1) has a statistically significant and partial effect on Performance (Y). These results are consistent with previous studies, including the research by A. Islam & Naseem (2023), which also found a positive impact of Information Technology on Performance.

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Hypothesis 2 (H2): The regression coefficient for Management Information Systems (X2) was 0.381, leading to an effect of 14.52% on Performance. This means that a one-unit increase in Management Information Systems results in a 14.52% increase in Performance.

- The t-test results (t-calculated = 3.950 > t-table = 1.997) and the significance level of 0.000 (less than 0.05) confirm that Management Information Systems (X2) also has a significant and partial effect on Performance (Y). These results align with prior research by Iringe-Koko (2023), which found a positive relationship between Management Information Systems and Performance.

Hypothesis 3 (H3): The coefficient of determination (R Square) value for the combined effect of Information Technology and Management Information Systems on Performance was 0.653, indicating that these two variables together account for 65.3% of the variation in Performance. This is a strong indication that both variables collectively have a significant impact on Performance at the Honda Baros Cimahi dealership. The F-test confirmed this simultaneous effect. The F-calculated value of 58.449 was greater than the F-table value, and the significance level was 0.000 (less than 0.05), indicating that both Information Technology (X1) and Management Information Systems (X2) have a significant and combined effect on Performance (Y).

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