

The Influence of Project Management Applications, Productivity and Work Environment on Discipline, Motivation and Work Results

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Abstract. This research focuses on discipline, motivation and low work results. High and low discipline, motivation and work results can be caused by internal and external factors. There are 3 essential components in work, namely: internal conditions, external conditions, and work results. Internal factors that affect work results can be in the form of increased discipline and motivation through the application of Project Management and Productivity Applications, while external factors are in the form of the work environment. This study aims to determine 1) how the application of Project Management and Productivity Application affects work discipline and motivation, and 2) how the application of Project Management and Productivity Application affects work results. The subjects of this research are all employees, both permanent employees and interns at PT Multi Ark Indonesia. The test question method and also the survey method equipped with a questionnaire are the data collection tools used in this study. The unit of analysis amounted to 40 all employees. The findings in this study are 1) Project Management Application and Productivity have a positive and significant effect on discipline and motivation at work 2) Project Management Application and Productivity have a positive and significant effect on work output. Based on the t test, the effect of Project Management Applications, Productivity and Work Environment on discipline is 2.477, the effect of discipline on Motivation and Work Results is 2.871. The indirect effect of Project Management Applications, Productivity and Work Environment on Motivation and Work Results through discipline is 2,687.

1. Introduction

Project management is an important aspect for any organization as it helps to successfully complete the project within the specified timeframe, budget and scope. The use of project management applications, productivity, and work environment play an important role in influencing the discipline, motivation, and work results of individuals within an organization. The purpose of this study is to examine the impact of project management applications, productivity, and work environment on discipline, motivation, and work results. This research aims to provide insight into the relationships between these variables and how they affect the overall performance of individuals within an organization. It is relevant for organizations looking to improve the efficiency and effectiveness of their workforce and increase employee motivation and job performance.

Operational processes are largely determined by the quality of their own human resources [1]. To drive employee performance, organizations need people with unique skills and competencies aligned

with the organization's vision and mission. Great people ultimately produce great employees. Labor standards should therefore be used as benchmarks to compare what is done and what is expected [2].

Competence is the ability to do or perform a job or task based on skills and knowledge and supported by the working attitude required for the job. To know the expected level of performance for the category Good or Average, you need to determine your level of proficiency. Determinants of required competencies are certainly used as a basis for evaluating job performance. With this ability, talents are seen as people with identities that need to be developed. HR competence plays an important and essential role as it is human capital on the one hand, an active actor for organizational development and a determinant of an organization's ability to manage its resources. Developing talented people requires the involvement of academia. This means that the faculty's primary role in efforts to improve student achievement is critical.

Project management is an important aspect in every organization, as it helps in ensuring project success within the specified time, budget, and scope. The use of project management applications, productivity, and work environment play an important role in influencing the discipline, motivation, and work output of individuals in an organization. The use of technology and increasingly advanced project management applications helps in making work easier and speeding up the manufacturing process. Productivity and work environment also play an important role in influencing the motivation and work output of individuals. Therefore, it is imperative for organizations to know how much influence project management applications, productivity, and work environment have on discipline, motivation, and work outcomes. The results of research by Rifki, M., & Damayanti, E. (2022), work environment has also been shown to have a significant impact on employee performance. In some cases, the work environment is not critical to employee performance [3]. Sutaguna, I., N., T., Yusuf, M., Ardianto, R., Wartono, P., (2023), shows that work environment variables have a significant impact on employee performance. Work discipline variables do not significantly affect employee performance. At the same time, all variables used in this study have a significant impact on performance [4]. Bashir, F., A., Amir, A., Jawaad, M., & Hasan, T., (2020), found that working conditions positively contribute to employee efficiency and recommended that businesses could benefit from such measures. Job satisfaction is valuable and serves as a driving force, but only for highly motivated people, as these favorable working conditions can be maximized to increase productivity [5].

The results of research from Jahid, I., A., Adnyana, I., M., (2021), show that the variables motivation, job satisfaction, and job satisfaction performance have a significant positive impact on employee performance through organizational engagement [6]. Research results from Govindaras, B., Wern, T., S., Kaur, S., Haslin, I., A., and Ramasamy, R., K., (2023), according to their findings, sustainable environmental development requires a greater focus on the knowledge area of project resource management, which interacts with planning and execution processes. Resource management planning, team development, and team leadership are three processes that fall into this category and are very important. The second most important area of expertise is project communication management, followed by project schedule management [7]. This study aims to assess the influence of project management applications, productivity, and work environment on discipline, motivation, and work results. The research aims to provide insight into the relationship between these variables and how they affect the overall performance of individuals in an organization. This research is relevant to organizations that aim to improve the efficiency and effectiveness of their project management processes and increase the motivation and work output of their employees.

The purpose of this research is also to measure the influence and impact of project management applications, productivity, and work environment on work discipline; to measure and quantify what impact. How effective and influential are project management applications, productivity, and work environment on work outcomes. Based on the results of the above studies, my research difference is that the variables project management application, productivity, and work environment combine to have a significant impact on the domain variables, and the domain variables have a significant impact on motivation and work performance. Given that, project management applications, productivity, and work environments change with discipline and have a significant impact on work results when measured.

Discipline comes from the English discipline which comes from the word disciple which means student, follower, adherent. Discipline can mean rules to be followed, fields of study, and teachings. Discipline means a person who enforces rules. From this description, it can be interpreted that work discipline is generally accepted norms, ethics and habits as well as procedures for behaving in an atmosphere and in relation to the company. which applies in an atmosphere and in relation to the company. Disciplinary action is action taken against (anyone, indiscriminately) violators of the rules. Discipline is defined by Harling, V.N.V (2020: 2)[8] as compliance to obey and implement established regulations. Work discipline is basically always expected to characterize every human resource in the organization, because with discipline the organization will run well and can achieve its goals well. Employee motivation is generally known as the conscious or unconscious tendency of an individual to act, usually with a specific goal in mind. Motivational energy usually helps you get things done faster and easier. Motivation can be viewed as an important stimulus factor that influences human behavior. People have different behaviors and attitudes, and amidst this diversity, organizations need to formulate practices that can satisfy groups of people as well as individuals [9].

The study assumes that project management applications, productivity, and work environment have a significant impact on employee discipline, motivation, and work results. Therefore, the hypothesis of this study is that the better the project management application used, the better the productivity and work environment, and the better the employee's discipline, motivation and work results. The purpose of this study is to explore and understand how project management applications, productivity, and work environment affect employee discipline, motivation, and work results. This study also aims to provide a deeper and more in-depth perspective on the phenomenon under study and provide recommendations for companies and management to improve employee performance, especially in the work environment of PT Multi Ark Indonesia.

2. Method

The method used in this study is sampling of the entire population, or census method. This study uses quantitative research by collecting and analyzing data that can be measured numerically or quantitatively. This is because in this approach the resulting data analysis is more systematic and structured using statistical techniques. This allows you to test your hypotheses and draw stronger conclusions based on your data. The analytical unit for this study is the staff of PT Multi Ark Indonesia. The data collection method uses a questionnaire. A survey technique is a data collection technique that gives respondents a series of questions or written answers. Since this company is under the full control of the researcher, the researcher also has special access rights for sampling. Very good data accuracy. The scaling method in this study uses the Likert scale. The population of this survey was all employees of PT Multi Ark Indonesia, with a total of 40 employees. The sample used in this study is called a population study because it was designed to sample the entire population of 40 employees.

Device testing was conducted at PT Multi Ark Indonesia. Validity tests use correlation product moments and reliability tests use Spearman Brown processed with IBM SPSS Statistics 23 for Windows. In addition, classical acceptance tests include multicollinearity and heteroscedasticity tests. Hypothesis testing in this study uses multiple regression analysis with coefficients of determination and hypothesis testing t and f. Discussion and Future Research Directions Various studies have been conducted on employee motivation and job satisfaction, very few factors and variables were used for boosting employee motivation at work. To perform well, employees need encouragement and support from a positive work environment [10]. And are postulated to be the most important predictors of motivation. Motivation, therefore, has the ability to significantly improve employee performance. Furthermore, while a person's success and performance in an area of work is defined by their skill and professionalism in that area, motivation is diminished when success is achieved without attendance, attention, or awareness [11]. Moreover, according to justice theory, motivation is a function of justice in social exchange. Employees are more likely to participate in their organizations when they understand the organizational truth [12]. As a result, motivated employees are an asset that helps a company maintain

and grow its bottom line. In addition, job satisfaction is related to the work environment. Job satisfaction is primarily a psychological feature. It depends on the employee, and there are individual differences. Basically, it refers to the emotional outcomes that enable employees to succeed at work [13]. Moreover, effective motivation at all levels of the organization is essential to keep employees satisfied and engaged [14]. Employee satisfaction therefore has a significant positive impact on employee performance. In addition, work-related stress has a significant impact on job satisfaction. Using work-related stress as motivation boosts creativity and breaks boredom and monotony. The negative impact of stress causes hostility and reduced job satisfaction [15]. Moreover, offering rewards is simply a tool for measuring an individual's workplace motivation, rather than the primary reason employees want to stay with the company [11]. Therefore, in order to have productive employees, it is necessary to emphasize the satisfaction of each employee for the benefit of the company.

3. Results and Discussion

Validity test or efficacy tests are measures that indicate the effectiveness and efficacy level of a means. An instrument is effective if it can measure what it intends to measure. Findings are valid when there are similarities between the collected data and what actually happened to the object under investigation. From Table 1 above, sig. To conclude that r question items are less than 0.05 ($\alpha = 0.05$) and r counts $>$ r tables, implying that each variable item is valid and can be used to measure the study variable I can.

4.1 Result

The results of the method used using the linear regression model are as follows:

Table 1. Simple Linear Regression Calculation Results of Variable X on Y

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	6.911	1.558		4.436
	Project Management Applications, Productivity And Work Environment (X)	.330	.133	.373	2.477
					.018

a. Dependent Variable: Discipline (Y)

Based on the table above, the variables project management application, productivity, and work environment have a t -value (X) = 2.477 with a significance level of 0.018. Each calculated t value is greater than t table = 1.558 and each significance value is less than 0.005. Thus, project management applications, productivity, and work environment variables can be seen to significantly affect learning success. The t -test magnitudes show positive values for these variables. This means that the greater the impact of project management applications, productivity, and work environment, the greater the discipline of employees.

From the output, the regression equation model is obtained as follows:

$$Y = a + bX$$

$$Y = 6.911 + 0.373X$$

The equation is:

$$Y = 6.911 + 0.373X$$

where:

Y is the dependent variable

X is the independent variable

a = 6.911 is the Y-intercept or the value of Y when X is equal to 0

b = 0.373 is the slope or the rate of change of Y with respect to X.

Table 2. Simple Linear Regression Calculation Results Variable Y on Z

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	4.345	2.311		1.880
	Discipline (Y)	.614	.214	.422	2.871
					.068
					.007

a. Dependent Variable: Motivation And Work Results (Z)

Based on the table above, the variables discipline have a t-value (Y) = 2.871 with a significance level of 0.007. Each calculated t value is greater than t table = 2.311 and each significance value is less than 0.005. Thus, discipline variables can be seen to significantly affect learning success. The t-test magnitudes show positive values for these variables. This means that the greater the impact of discipline, the greater the motivation and work results of employees. From the output, the regression equation model is obtained as follows:

$$Z = a + bY$$

$$Z = 4.345 + 0.422Y$$

The equation is:

$$Z = 4.345 + 0.422Y$$

where:

Z is the dependent variable

Y is the independent variable

a = 4.345 is the Z-intercept or the value of Z when Y is equal to 0

b = 0.422 is the slope or the rate of change of Z with respect to Y.

Table 3. Simple Linear Regression Calculation Results Variable X on Z

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	4.960	2.240		2.215
	Project Management Applications, Productivity And Work Environment (X)	.514	.191	.400	2.687
					.033
					.011

a. Dependent Variable: Motivation And Work Results (Z)

Based on the table above, the variables project management application, productivity, and work environment have a t-value (X) = 2.687 with a significance level of 0.011. Each calculated t value is greater than t table = 2.240 and each significance value is less than 0.005. Thus, project management applications, productivity, and work environment variables can be seen to significantly affect learning success. The t-test magnitudes show positive values for these variables. This means that the greater the impact of project management applications, productivity, and work environment, the greater the motivation and work results of employees.

From the output, the regression equation model is obtained as follows:

$$Z = a + bX$$

$$Z = 4.960 + 0.400X$$

The equation is:

$$Z = 4.960 + 0.400X$$

where:

Z is the dependent variable

X is the independent variable

a = 4.960 is the Z-intercept or the value of Z when X is equal to 0

b = 0.400 is the slope or the rate of change of Z with respect to X.

4.2 Discussion

- Based on the t test the variables project management application, productivity, and work environment have a t-value (X) = 2.477 with a significance level of 0.018. Each calculated t value is greater than t table = 1.558 and each significance value is less than 0.005. Thus, project management applications, productivity, and work environment variables can be seen to

significantly affect learning success. The t-test magnitudes show positive values for these variables. This means that the greater the impact of project management applications, productivity, and work environment, the greater the discipline of employees.

- Based on the t test the variables discipline have a t-value (Y) = 2.871 with a significance level of 0.007. Each calculated t value is greater than t table = 2.311 and each significance value is less than 0.005. Thus, discipline variables can be seen to significantly affect learning success. The t-test magnitudes show positive values for these variables. This means that the greater the impact of discipline, the greater the motivation and work results of employees.
- Based on the t test the variables project management application, productivity, and work environment have a t-value (X) = 2.687 with a significance level of 0.011. Each calculated t value is greater than t table = 2.240 and each significance value is less than 0.005. Thus, project management applications, productivity, and work environment variables can be seen to significantly affect learning success. The t-test magnitudes show positive values for these variables. This means that the greater the impact of project management applications, productivity, and work environment, the greater the motivation and work results of employees.

The discussion is supported by the results of 5 previous studies by:

- Rifki, M., & Damayanti, E. (2022), work environment has also been shown to have a significant impact on employee performance. In some cases, the work environment is not critical to employee performance [3].
- Sutaguna, I., N., T., Yusuf, M., Ardianto, R., Wartono, P., (2023), shows that work environment variables have a significant impact on employee performance. Work discipline variables do not significantly affect employee performance. At the same time, all variables used in this study have a significant impact on performance [4].
- Bashir, F., A., Amir, A., Jawaad, M., & Hasan, T., (2020), found that working conditions positively contribute to employee efficiency and recommended that businesses could benefit from such measures. Job satisfaction is valuable and serves as a driving force, but only for highly motivated people, as these favorable working conditions can be maximized to increase productivity [5].
- The results of research from Jahid, I., A., Adnyana, I., M., (2021), show that the variables motivation, job satisfaction, and job satisfaction performance have a significant positive impact on employee performance through organizational engagement [6].
- Research results from Govindaras, B., Wern, T., S., Kaur, S., Haslin, I., A., and Ramasamy, R., K., (2023), according to their findings, sustainable environmental development requires a greater focus on the knowledge area of project resource management, which interacts with planning and execution processes. Resource management planning, team development, and team leadership are three processes that fall into this category and are very important. The second most important area of expertise is project communication management, followed by project schedule management [7].

4. Conclusion

Work environment variables have a dominant effect on employee performance, including creating a comfortable workplace for employees. It is hoped that it will be possible. Given that the independent variables in this study are very important in influencing employee performance, the results of this study may be helpful for further development of this study considering other variables. I hope it can be used as variables included in this study.

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