

# The Influence of Work Motivation, Work Discipline, and Technology on Increasing Employee Performance at The Office of The Head of Aek Pamingke Plantation Village

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## Abstract

The purpose of this study was to determine and analyze the influence of work motivation, work discipline, technology, and performance improvement at the Village Head's Office. The research method used in this study is a quantitative research method. This research also includes quantitative research that is correlational. The population in this study were all employees at the Village Head's Office with a total of 44 people. The number of samples used in this study amounted to 44 people. Where the entire population is used as a research sample using the saturated sample method. The data used in this study is primary data, namely data obtained directly by researchers from measuring the length of the short intervals in the measuring instrument is the Likert scale. The data analysis technique used in this study is a quantitative data analysis technique using statistical methods. This study uses the calculation results of the IBM Statistical Package For The Social Science (SPSS) version 26 which aims to determine the level of significance and the relationship between the independent variables and the dependent variable.

*Keywords:* Work Motivation; Work Discipline; Technology; Performance Improvement.

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## 1. Introduction

Human resources are a separate challenge for management because the success of management and others depends on the quality of human resources. If individuals in the company can run effectively then the company continues to run effectively. In other words, a company is determined by the performance of its employees. The rapid development of science and technology requires companies to be able to adapt and survive in all situations. The continuity of a company is determined by the performance of its employees. The implementation of a job is considered to meet standard standards when referring to the results of the work that has been set, so as to achieve the results and work objectives that have been targeted and achieved to the fullest, including the performance of employees at the Office of the Head of the Aek Pamingke Plantation Village. Efforts to build human resource management results greatly influence the performance potential of individual employees, because performance is the result of work and work behavior that has been achieved in completing the tasks and responsibilities given within a certain period. Performance depends on a combination of ability, effort, and opportunities obtained. Motivation and performance are two constructive and correlative elements. Both require each other and cannot be separated from the other (Setiawan, 2015) efforts and opportunities. Motivation and performance are two constructive and correlative elements. Both require each other and cannot be separated from the other (Setiawan, 2015) efforts and opportunities. Motivation and performance are two constructive and correlative elements. Both require each other and cannot be separated from the other (Setiawan, 2015).

Technology plays a very important role in the development of human life. In today's era, technology is a very important tool to help a company, institution or government agency. Technological developments have influenced all aspects of life in the fields of economy, politics, art, culture, and education. Every innovation is created to provide many conveniences and various ways of carrying out human activities. Rural development has undergone significant changes since the digitization of Information and Communication Technology. The rapid development of Information and Communication Technology in an effort to streamline services to the community must be carried out at the village level. The existence of Information and Communication Technology besides being able to improve services is also beneficial

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in the process of processing data that can be used for development planning, supporting decision making and many other benefits. Today's rural development is experiencing significant changes in its concept and process. The concept of development is no longer limited to the agricultural sector and basic infrastructure but leads to the development of ICT. And information systems are a combination of information technology and people's activities. But if no one operates the most sophisticated information technology, then the result is that the information system does not run optimally. The combination of information technology and human managers is the key to successful implementation of information systems. Repetitive work can be replaced by a system to simplify work. The running role of information systems causes organizational performance to become more efficient and effective.

As professionals, the employees of the Aek Pamingke Plantation Village Head Office have different work motivations from one employee to another, this is caused by a person's lack of interest in achieving the desired direction. This is the same as the findings of Rozalia et al., (2015) that what drives performance improvement is motivation that can spur employees to work hard so they can achieve their goals, in this way it will improve employee performance so that it affects the achievement of company goals. This will later result in differences in the performance of employees at the Aek Pamingke Plantation Village Head Office in improving the quality of work at the Aek Pamingke Plantation Village Head Office. This is the same as the findings of Juniantara and Riana (2015) that the better and more motivation given to employees, the employee's performance satisfaction will increase. The need for competent employees in accordance with their inadequate position in the Aek Pamingke Plantation Village Head's Office has consequences for a irresponsible attitude towards work, loss of motivation for achievement, lack of enthusiasm at work and feelings of boredom which causes a decrease in the performance of the employees of the Plantation Village Head's Office Aek Pamingke. Improving individual and group performance is a concern in improving organizational performance. Several factors affect individual performance, namely company regulations, co-workers, supervision, motivational skills and training. Motivation as behavior aimed at the target. Motivation has no significant effect on employee performance (Juniantara & Riana, 2015).

## **2. Literature Review**

### *2.1. Work Motivation*

According to Hasibuan in Rozalia et al., (2015) work motivation is the encouragement to direct subordinates to want to work productively to realize the goals that have been set. According to Yusmanita in Oktavia et al., (2022) high work motivation will create a conducive work environment and encourage the creation of attitudes and professional actions in completing work in accordance with their respective fields and responsibilities, thus employees will work more actively in carrying out their work. Conversely, with low work motivation, employees do not have enthusiasm for work, give up easily, and have difficulty completing their work.

### *2.2. Work Motivation Goals*

According to Hasibuan in Rahayu (2017) the goals of work motivation are:

- a) Increase employee morale and job satisfaction
- b) Improve employee discipline
- c) Streamlining employee recruitment
- d) Creating a good working atmosphere and relationship
- e) Increase employee loyalty, creativity, and participation
- f) Improving employee welfare
- g) Increasing employees' sense of responsibility towards their duties

### *2.3. Dimensions of Work Motivation*

According to Sutrisno Edy in Oktavia et al., (2022) the dimensions of work motivation are divided into two, namely:

- a) Internal Factors : desire to live, appreciation, recognition.
- b) External Factors : working environment conditions (sufficient light, clean, strategic), job security.

#### 2.4. Work Motivation Indicator

Mangkunegara in Rozalia et al., (2015) indicators of work motivation include:

- a) Existence needs include all forms of material and physiological desires.
- b) Such as salary rewards, remuneration and working conditions. Relational needs include a person's need to establish relationships with other people.
- c) Growth needs include needs that encourage a person to grow to achieve higher goals

#### 2.5. Work Discipline

According to Bataineh, (2020) work discipline is a tool used by managers to communicate with employees so that they are willing to increase one's awareness to comply with all rules and social norms that apply in a company. According to Hasibuan et al., (2022) work discipline is a person's awareness and willingness to comply with all company regulations and applicable social norms. According to Marlapa & Mulyana, (2020) work discipline is a tool used by managers to communicate with employees so that they are willing to change behavior and to increase awareness as well as one's willingness to comply with all social norms that apply in a company. According to (Zeuch, 2016) work discipline has 3 aspects, these three aspects are as follows:

- a) Mental attitude
- b) Good understanding of such systems of code of conduct, norms, criteria and standards

An attitude of behavior that naturally shows sincerity to internal factors, namely those that come from within the body itself due to the reaction to external workloads. obey everything carefully and orderly

From some of the expert opinions above regarding work discipline, it can be interpreted that work discipline is an attitude of respect, obedience to applicable regulations, both written and unwritten regulations. Discipline can be a role model for others. However, if in an organization you do not apply discipline, you must follow the existing rules so that you like it or not, like it or not, the employee will become disciplined.

#### 2.6. Purpose of Work Discipline

According to Muafi & Hawignyo (2022) the goals of work discipline are:

- a) The general objective of work discipline is for the continuity of the company in accordance with the motives of the company concerned, both today and tomorrow.
- b) The specific objectives of work discipline are:
  - a. So that workers comply with all applicable labor regulations and policies as well as company regulations and policies, both written and unwritten
  - b. Can carry out the work as well as possible and be able to provide maximum service to certain parties with an interest in the company in accordance with the field of work assigned to him
  - c. Can use and maintain the company's goods and services facilities and infrastructure as well as possible
  - d. Can act and behave in accordance with the norms that apply to the company
  - e. The workforce is able to obtain a high level of productivity in accordance with the company's expectations, both in the long term and in the short term

#### 2.7. Forms of work discipline

According to Mangkunegara & Octorend, (2015), there are two forms of work discipline, namely:

- a) Self imposed discipline (discipline that arises from himself). Self that arises from self job satisfaction, so job satisfaction also affects the work discipline of employees in the company, which means that if employee job satisfaction is high the higher the employee discipline. And preferably if the employee's job satisfaction is low then the employee's discipline is also low in the awareness of the employee himself, because of his duties and obligations. So the cycle that exists in employees follows the level of employee satisfaction.
- b) Command discipline (discipline based on orders). This discipline arises because of the rules or sanctions imposed within the organization. However, this discipline is discipline that is not intentional on the part of an employee,

but only coercion and only following existing regulations, so as not to be subject to a letter of reprimand from Human Resources.

### 2.8. *Work Discipline Indicators*

Work discipline is a tool used by managers to communicate with employees so that they are willing to change behavior as well as efforts to increase one's awareness and willingness to comply with all company rules and social norms that apply. Basically there are many indicators that affect the level of employee discipline in an organization. There are several indicators of work discipline, as follows:

- a) Obey the rules of time seen from the hours of work, hours of going home and hours of rest on time in accordance with the rules that apply in the company
- b) Comply with company rules, basic rules on how to dress, and conduct yourself at work
- c) Compliance with the rules of conduct at work is demonstrated by ways of doing jobs in accordance with the position, duties and responsibilities as well as how to relate to other work units
- d) Comply with other regulations, rules about what is allowed and what is not allowed to be done by employees in the company

Work discipline can be measured by the following indicators:

- a) Punctuality comes to work
- b) Home time setting
- c) Compliance with applicable regulations
- d) Use of work uniforms that have been used
- e) Responsibility in doing the task
- f) Carry out work tasks to completion every day

### 2.9. *Technology*

Information and Communication Technology (ICT) as part of science and technology (IPTEK) in general is all technology related to the collection, collection (acquisition), processing, storage, dissemination and presentation of information. Information technology is also a technology that is used to process data including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely information that is relevant, accurate and timely used for personal, business, and government and is strategic information for decision making (Paudel, 2021). ICT itself is a large umbrella terminology that covers all the technical equipment to process and convey information. Meanwhile, experts explain the meaning of information and communication technology as follows:

- a. Eric Deeson, information and communication technology is a human need in taking and transferring, processing and processing information in a social context that benefits oneself and society as a whole
- b. Susanto, information and communication technology is a medium or tool that is used to transfer data either to obtain data or information or to provide information to other people and can be used as a means of communicating either one way or two ways.

Based on some of the opinions above, it can be concluded that the notion of Information and Communication technology is technology that processes or processes and produces information and disseminates or publishes it such as media communication. ICT itself must have characteristics that are able to support its use, including, namely; ICT is able to provide information, is easy to use, reliable, has a fast innovation cycle and minimal response time.

### 2.10. *E-Government*

E-Government is an effort to develop electronic-based governance. An arrangement of management systems and work processes within the government by optimizing the use of information and communication technology (Rahmisyari et al., 2022). E-government allows the public to be able to interact and receive services from local, regional and central government. The use of Information and Communication Technology (ICT) by the government gives rise to several advantages:

- a) Improving efficiency, the use of ICT can increase efficiency in sharing data or information within and between governments
- b) Improving services, the use of ICT can improve services to the community
- c) Help achieve a certain policy, the use of ICT can help socialize government policies to the public so that related parties can share ideas and information related to a particular policy
- d) Helping to contribute to economic policy, the use of ICT in e-government can reduce corruption, increase openness and trust in government
- e) Increasing contribution to reform, the use of ICT has changed or reformed various areas, such as: improving transparency and facilitating information sharing
- f) Increasing trust between the government and its people, the use of ICT can improve good governance through increasing transparency, reducing corruption so that it can increase public trust in government administrators

### 2.11. Village Information System

Village Information System is a process and application/media based on computers and the internet, managing Village Information, supporting the functions and duties of the village government, which includes population administration, planning, reporting, asset management, budget management, public services, top-down Information transmission or conversely, cross-sectoral communication, Village Government and Community communication, and so on.[1] Based on the above understanding, the type of application needed by a village may require more than one application, for example the Population Validation Application for data management and population services such as (KTP, KK, Birth Certificate and Certificate), SISKEUDES to manage village finances/budget, application village profile, social media (Facebook, Twitter, WhatsApp, email, Google Drive, Blogg) and so on.

### 2.12. Performance Improvement

According to (Hasibuan et al., 2022) performance is a work result achieved by a person in carrying out the tasks assigned to him which are based on skills, experience and sincerity as well as time.

According to Payaman Simanjuntak in Alimudin et al., (2019) performance is the level of achievement of results on the implementation of certain tasks. According to Wirawan in Lubis (2015) performance is the output produced by the functions or indicators of a job or profession within a certain time. According to Rivai and Sagala in Lubis (2015) performance is the real behavior displayed by each person as work performance produced by employees according to their role in the company.

According to Sedarmayanti in Lubis (2015) states that 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 illegally not violating the law and in accordance with morals and ethics. According to Mashun in Lubis (2015) performance is about the level of achievement of the implementation of activities or programs/policies in realizing the goals, objectives, mission and vision contained in the strategic planning of an organization.

### 2.13. Performance Indicator

According to Mathis and Jackson in Rozalia and Ruhana (2015) establish the main standards in measuring employee performance, namely:

- a) *Quantity of output*(output quantity)  
Standard output (output) is more widely used to assess the performance of employees in the production or technical.
- b) *Quality of output*(output quality)  
If that is used in measuring the employee's work performance.
- c) *Timelines of output*(output time)  
Timeliness used in producing an item is often used as a measure or assessment of work performance.
- d) *Presences at work*(attendance level)  
If the employee's attendance is below the set working day standard, the employee will not be able to make an optimal contribution to the organization.
- e) *Efficiency of work completed*(efficiency of completed work)

Carry out every activity of an organization with the aim of being able to obtain the desired results with the minimum possible effort in accordance with existing standards.

f) *Effectiveness of work completed*(effectiveness of completed work)

A job is said to be effective if it is completed on time according to plan

2.14. *Previous Research*

Badrianto et al., (2022) in his research entitled *The Influence of Leadership Style, Work Environment and Workload on Employee Performance*, which aims to influence leadership style, work environment and workload on employee performance. The results of this study are that the current partial leadership style will affect performance where the object of employees has a positive influence on the performance of employees of PT. Nutrifood Indonesia fillpack section. It can be seen that leadership style has a positive effect on employee performance by 33.1% on employee performance, this shows that the effect is low. This low influence is supported because the current leadership style is considered less than optimal to support work, this is supported by the employees' answers through the questionnaire statement that there are still employees who are not cared for by their leaders. Partially existing work environment at this time will affect performance where the object of the employees of PT. Nutrifood Indonesia's fillpack section shows a 30.9% effect on employee performance. this shows that the effect is low. This low influence is supported because the current work environment is considered incomplete to support employees while working. This is supported by the employees' answers through statements distributed via questionnaires that the indicators of the work environment are not sufficient to support work. Partially sufficient workload will affect performance where the object of employees at PT. Nutrifood Indonesia in the fillpack section shows a 29.4% effect on employee performance, this shows that the effect is low. This low effect is supported because a good workload should be in accordance with the abilities of employees, this is supported by the answers of employees through statements distributed through questionnaires that employees do a lot of work every day because the targets set are not the same as the number of employees working that day. Leadership style, work environment and workload simultaneously (together) have a positive effect on the performance of employees of PT. Nutrifood Indonesia fillpack section. This is supported by the results of the analysis test where the value of Sig. 0.000 <0.05 and Fcount value 23.473 > Ftable 2.70 and R Square value of 0.428 or 42,

Indar Rachmawati et al., (2020) in his research entitled *The Influence of Organizational Culture, Work Ability and Discipline on Employee Performance at the North Labuhanbatu District Agriculture Service*, which aims to determine the effect of organizational culture, work ability and discipline on employee performance at the North Labuhanbatu District Agriculture Service. The results of this study are the results of partial testing that there is an influence of organizational culture on employee performance, and discipline has a significant effect on employee performance. Based on the results of simultaneous testing there is a significant influence between organizational culture variables, work ability and discipline on employee performance at the North Labuhanbatu District Agriculture Service.

Marlapa & Mulyana, (2020)) in his research entitled *The Influence of Work Discipline and Motivation on Performance and Their Impact on Job Satisfaction (Survey of Employees of the Sungai Raya District Office, Kubu Raya Regency)*, which aims to determine the effect of work discipline and motivation on performance and its impact on employee job satisfaction at the Sungai Raya District Office, Kubu Raya Regency. Based on the test results, there is an influence of work discipline and motivation on employee performance. And there is a significant influence between employee performance variables on satisfaction. And there is a significant influence of work discipline, motivation, and performance variables on job satisfaction.

2.15. *Variable Operational Grid*

**Table 1.** Operational Variables

<b>Variable</b>	<b>Sub Variable</b>	<b>Indicator</b>
Work Motivation (X1)	Physiological	Adequacy of clothing, food and boards
	Sense of security	Physical and physiological safety
	Social	Acknowledgment of existence and appreciation
	prestige	Status symbol
	Self-actualization	Opportunity to develop yourself

Variable	Sub Variable	Indicator
Work Discipline (X2)	Presence	Number of work attendance, compliance with regulations
	Obedience	Attendance, adhere to working hours
	Punctuality	Timeliness of work flexibility
Technology (X3)	Perceived ease of use	Easy to learn
		Easy to use
	Perception of expediency	Ease of interaction
		Effectiveness
		Respond to information needs
Performance Improvement (Y)	Quality of work	Accuracy and tidiness of work
	Working quantity	Number of work plans that can be completed
	Ability to work alone	Accuracy in the preparation of work plans
	Work knowledge and skills	Level of knowledge in managing the workforce
	Responsibility	Responsibility for work results

### 3. Methods

The research method used in this study is a quantitative research method. This research also includes quantitative research that is correlational. The population in this study were all employees at the Aek Pamingke Village Head Office with a total of 44 people. The number of samples used in this study amounted to 40 people. Where the entire population is used as a research sample using the saturated sample method. The data used in this study is primary data, namely data obtained directly by researchers from measuring the length of the short intervals in the measuring instrument is the Likert scale. The data analysis technique used in this study is a quantitative data analysis technique using statistical methods.

### 4. Result and Discussions

#### 4.1. Validity Test

Based on the validity test on rTable, the value of the sample (N) = 44 was 0.2973. Referring to the results of the validity test, it was found that all of the instruments, starting from the variables of work motivation, work discipline, technology (X1, X2, X3), all produced values (r count > than r table of 0.2973). In addition, from all instruments starting from the performance improvement variable (Y) (r count > than r table of 0.2973). So it can be concluded that all instruments in this study can be said to be valid.

**Table 2.** Work Motivation Validity Test (X1)

		Correlations					work motivation
		MK1	MK2	MK3	MK4	MK5	
MK1	Pearson Correlation	1	.257	.329*	.389**	.144	.604**
	Sig. (2-tailed)		.092	.029	.009	.352	.000
	N	44	44	44	44	44	44
MK2	Pearson Correlation	.257	1	.816**	.649**	.357*	.819**
	Sig. (2-tailed)	.092		.000	.000	.017	.000
	N	44	44	44	44	44	44

MK3	Pearson Correlation	.329*	.816**	1	.690**	.380*	.854**
	Sig. (2-tailed)	.029	.000		.000	.011	.000
	N	44	44	44	44	44	44
MK4	Pearson Correlation	.389**	.649**	.690**	1	.584**	.877**
	Sig. (2-tailed)	.009	.000	.000		.000	.000
	N	44	44	44	44	44	44
MK5	Pearson Correlation	.144	.357*	.380*	.584**	1	.603**
	Sig. (2-tailed)	.352	.017	.011	.000		.000
	N	44	44	44	44	44	44
work motivation	Pearson Correlation	.604**	.819**	.854**	.877**	.603**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	44	44	44	44	44	44

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 3.** Work Discipline Validity Test (X2)

**Correlations**

		DK1	DK2	DK3	DK4	DK5	dicipline_work
DK1	Pearson Correlation	1	.416**	.246	.302*	.377*	.554**
	Sig. (2-tailed)		.005	.107	.046	.012	.000
	N	44	44	44	44	44	44
DK2	Pearson Correlation	.416**	1	.661**	.673**	.493**	.796**
	Sig. (2-tailed)	.005		.000	.000	.001	.000
	N	44	44	44	44	44	44
DK3	Pearson Correlation	.246	.661**	1	.831**	.714**	.867**
	Sig. (2-tailed)	.107	.000		.000	.000	.000
	N	44	44	44	44	44	44
DK4	Pearson Correlation	.302*	.673**	.831**	1	.820**	.920**
	Sig. (2-tailed)	.046	.000	.000		.000	.000
	N	44	44	44	44	44	44
DK5	Pearson Correlation	.377*	.493**	.714**	.820**	1	.868**
	Sig. (2-tailed)	.012	.001	.000	.000		.000
	N	44	44	44	44	44	44
dicipline_work	Pearson Correlation	.554**	.796**	.867**	.920**	.868**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	44	44	44	44	44	44

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

**Table 4.** Technology Validity Test (X3)

**Correlations**

		T1	T2	T3	T4	T5	technology
T1	Pearson Correlation	1	.644**	.321*	.417**	.462**	.759**
	Sig. (2-tailed)		.000	.034	.005	.002	.000
	N	44	44	44	44	44	44
T2	Pearson Correlation	.644**	1	.702**	.681**	.326*	.852**
	Sig. (2-tailed)	.000		.000	.000	.031	.000
	N	44	44	44	44	44	44
T3	Pearson Correlation	.321*	.702**	1	.828**	.343*	.783**
	Sig. (2-tailed)	.034	.000		.000	.023	.000
	N	44	44	44	44	44	44
T4	Pearson Correlation	.417**	.681**	.828**	1	.645**	.876**
	Sig. (2-tailed)						
	N	44	44	44	44	44	44

	Sig. (2-tailed)	.005	.000	.000		.000	.000
	N	44	44	44	44	44	44
T5	Pearson Correlation	.462**	.326*	.343*	.645**	1	.690**
	Sig. (2-tailed)	.002	.031	.023	.000		.000
	N	44	44	44	44	44	44
technology	Pearson Correlation	.759**	.852**	.783**	.876**	.690**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	44	44	44	44	44	44

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 5.** Performance Improvement Validity Test (Y)

		Correlations					
		PK1	PK2	PK3	PK4	PK5	improvement_performance
PK1	Pearson Correlation	1	.829**	.813**	.669**	.727**	.877**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	44	44	44	44	44	44
PK2	Pearson Correlation	.829**	1	.947**	.837**	.785**	.959**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	44	44	44	44	44	44
PK3	Pearson Correlation	.813**	.947**	1	.879**	.818**	.970**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	44	44	44	44	44	44
PK4	Pearson Correlation	.669**	.837**	.879**	1	.790**	.907**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	44	44	44	44	44	44
PK5	Pearson Correlation	.727**	.785**	.818**	.790**	1	.890**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	44	44	44	44	44	44
improvement_performance	Pearson Correlation	.877**	.959**	.970**	.907**	.890**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	44	44	44	44	44	44

\*\* . Correlation is significant at the 0.01 level (2-tailed).

4.2. Reliability Test

**Table 6.** Reliability Test of Variable X

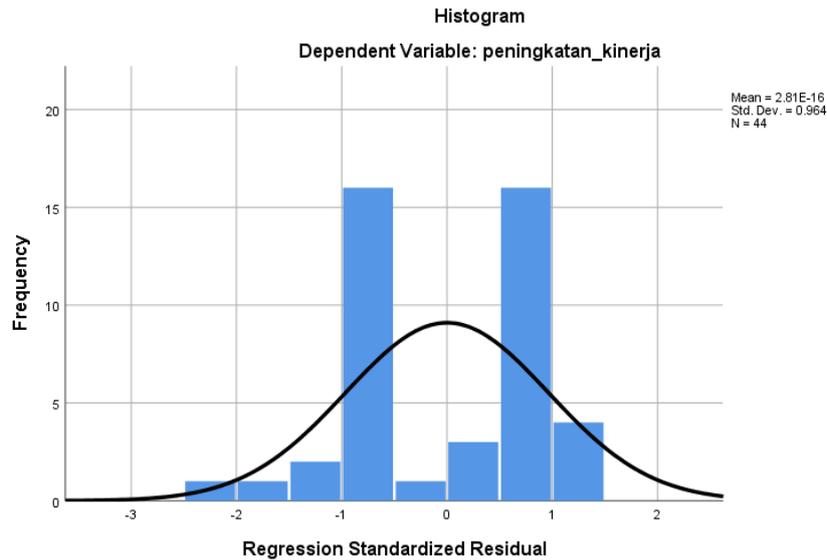
Reliability Statistics	
Cronbach's Alpha	N of Items
.849	15

**Table 7.** Reliability Test of Variable Y

Reliability Statistics	
Cronbach's Alpha	N of Items
.955	5

From the results of the reliability test, it was found that all values from the results of the X and Y variables all produced an alpha cornbrach value of  $> 0.60$ . So it can be concluded that all the instruments in this study were reliable.

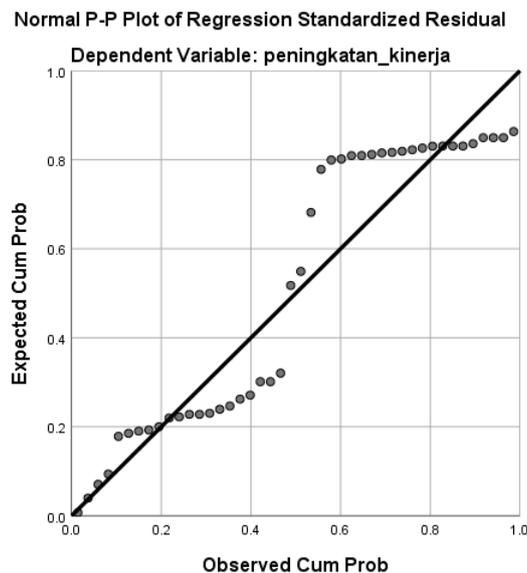
### 4.3. Normality Test



Source: 2023 Research Results (data processed)

**Figure 1.** Histogram

The normality test can be done in two ways, namely by looking at the Histogram graphic display and the PP Plot graph, the histogram graphic display is shown in Figure 1, where this graph gives a normal distribution pattern because it spreads evenly to the left and right.



Source: 2023 Research Results (data processed)

**Figure 2.** P-Plot Graph

In Figure 2 the P-P Plot, it can be seen that the dots spread around the diagonal line and their spread follows the direction of the diagonal line. From this graph it can be concluded that the regression line model meets the assumption of

normality. To further strengthen the results of the normality test with the PP Plot graph, a Kolmogorov-Smirnov analysis is carried out with the condition that Asmp. Sig (2-tailed) > 0.05 then it does not experience normal distribution disturbance, whereas if the value of Asmp. Sig.(2-tailed) <0.05, it means that the normal distribution is disturbed.

4.4. *Multicollinearity Test*

This test is used to test whether the model in the regression found a correlation between the independent variables. The multicollinearity test results obtained using SPSS version 26 are shown in table 4.2 below.

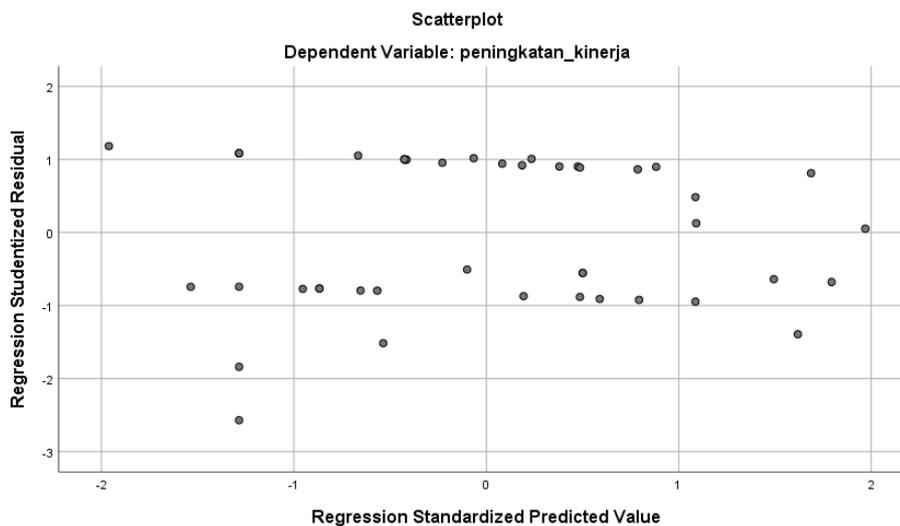
**Table 8.** Multicollinearity Test

		Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	std. Error	Betas			tolerance	VIF
1	(Constant)	23.137	5,263		4,396	.000		
	work	.078	.201	.065	2,387	.701	.887	1.127
	motivation							
	dicipline_work	.001	.187	.001	2005	.996	.844	1,185
	technology	-.107	.212	-.086	2,505	.617	.859	1,164

a. Dependent Variable: performance\_increase

From table 8, it shows that the three independent variables namely Work Motivation Variable, Work Discipline Variable, Technology Variable have respective VIF values of 1.127, 1.185, 1.164 whose overall level exceeds 10, resulting in multicollinearity in the independent research variables.

4.5. *Heteroscedasticity Test*



Source: 2023 Research Results (data processed)

**Figure 3.** Heteroscedasticity Test

Based on Figure 4.3 above, the results of the SPSS output display clearly show that the dots spread below and above the number 0, and do not form a pattern, it can be concluded that the regression model does not contain elements of heteroscedasticity.

4.6. *Partial Test (t test)*

The t test was carried out with the aim of seeing how much influence each independent variable has on the dependent variable. Where the independent variable consists of Work Motivation, Work Discipline, Technology, while the dependent variable is Performance Improvement.

Basis for decision making:

- a) If the sig value <0.05 or tcount> ttable, then there is an influence between variable X on variable Y
- b) If the sig value > 0.05 or tcount <ttable, then there is no effect between variable X on variable Y

The ttable value is obtained by:

$$Df = (nk-1) = (44-4-1)$$

$$= 39$$

$$\alpha = 0.05$$

$$Ttable = 1.684$$

The results of the t test can be seen in Table 9.

**Table 9.** Partial Test (t)

		Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	std. Error	Betas			tolerance	VIF
1	(Constant)	23.137	5,263		4,396	.000		
	work motivation	.078	.201	.065	2,387	.701	.887	1.127
	dicipline_work	.001	.187	.001	2.205	.996	.844	1,185
	technology	-.107	.212	-.086	2,505	.617	.859	1,164

a. Dependent Variable: performance\_increase

4.7. *Simultaneous Test (Test F)*

From the results of the statistical tests that have been carried out below, an Fcount value of 2,116 is obtained, with a significant level of 0.000. Thus, the value of F count is 2.116> F table 1.684 with a significant level of 0.000 <0.05. This means that Work Motivation (X1), Work Discipline (X2), Technology (X3), simultaneously have a positive and significant effect on Performance Improvement (Y) at the Village Head Office of Aek Pamingke. Thus the research hypothesis can be accepted.

**Table 10.** Simultaneous Test

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	2,871	3	.957	2.116	.000b
	residual	329,311	40	8,233		
	Total	332,182	43			

a. Dependent Variable: performance\_increase

b. Predictors: (Constant), technology, work\_motivation, work\_discipline

4.8. *Determinant Coefficient (R<sup>2</sup>)*

Based on Table 11, the results of the determination coefficient test can be seen in the Ajdusted R Square coefficient value. With the magnitude of the Adjusted R Square coefficient of 0.609 or equal to 60.9%. Then the value of Performance Improvement is 60.9% which can be explained through the Work Motivation Variable, Work Discipline Variable, Technology Variable while 39.1% is influenced by other factors.

**Table 11.** Determinant Coefficient Results (R2)

<b>Summary model b</b>										
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	R Square Change	Change Statistics			Sig. FChange	Durbin-Watson
						FChange	df1	df2		
1	.093a	.609	.607	2.86928	.009	.116	3	40	.000	2.318

a. Predictors: (Constant), technology, work\_motivation, work\_discipline

b. Dependent Variable: performance\_increase

## 5. Conclusions

Based on the result, we conclude that:

- a) Partially, the work motivation variable (X1) has a positive and significant effect on the performance improvement variable with a tcount of 2,387 > Ftable of 1.684 with a significant value of 0.000 <0.05
- b) Partially that the Work Discipline Variable (X2) has a positive and significant effect on the Performance Improvement Variable with a tcount of 2,205 > Ftable of 1.684 with a significant value of 0.000 <0.05
- c) Partially that the Technology Variable (X3) has a positive and significant effect on the Performance Improvement Variable with a tcount of 2.505 > Ftable of 1.684 with a significant value of 0.000 <0.05
- d) The determinant coefficient test can be seen in the Ajusted R Square coefficient value. With the magnitude of the Adjusted R Square coefficient of 0.609 or equal to 60.9%. Then the value of Performance Improvement is 60.9% which can be explained through the Work Motivation Variable, Work Discipline Variable, Technology Variable while 39.1% is influenced by other factors.

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