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## The Effect of Competence, Work Discipline and Work Environment on Performance at PT Anagata Mulia Abadi Jakarta

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**Abstract:** The purpose of this study was to determine the effect of competence, work discipline and work environment on employee performance at PT. Anagata Mulia Abadi Jakarta. This research method is an associative research type and uses a questionnaire instrument. The total population and sample of this study were 128 respondents and used a saturated sampling technique. Analysis of the data in this study using simple multiple linear regression analysis. The results of this study indicate that there is a positive and significant effect of competence (X1) on performance (Y), namely,  $Y=24,952+0,444X1$ . There is a positive and significant effect of Work Discipline (X2) on Performance (Y), namely,  $Y=24,271+0,608X2$ . There is a positive and significant effect of the Work Environment (X3) on Performance (Y), namely,  $Y=26,185+0,556X3$ . There is a positive and significant effect of Competence (X1), Work Discipline (X2), and Work Environment (X3) on Performance (Y), this is evidenced by the results of the multiple regression equation is  $Y = 18.222 + 0.191(X1) + 0.286(X2) + 0.240(X3)$ .

**Keywords:** Competence; Work Discipline; Work environment; Performance

### INTRODUCTION

Currently the world, including Indonesia, is entering the 5G era. But what exactly is 5G and what is the history of the mobile network we enjoy so far? G in 5G is generation. 5G is the fifth generation of cellular networks, before this there were 4G, 3G, 2G and 1G. Each generation of network technology sets communication signal standards for mobile devices at that time according to guidelines set by the International Telecommunication Union (ITU). As more people gain access to mobile devices and the Internet of Things (IoT) continues to expand, it is estimated that as many as 24 billion devices will require mobile network support by 2024. That's where 5G comes in. South Korea was the first country to offer 5G in March 2019. The 5th generation was launched by KT, LG Uplus, and SK Telecom. Some experts claim 5G brings speeds of around 10 Gbps to phones. That's more than 600 times faster than 4G speeds on today's phones, and 10 times faster than fiber optic services at home.



With these speeds, you can download 4K movies in 25 seconds, or to stream several movies at the same time. But the advantages of 5G are not just super-fast speeds.

This network technology has lower latency and the ability to connect more devices at once. 4G has an average latency of around 50 milliseconds, while 5G's average latency is estimated to be around 10 milliseconds. Even 5G latency can drop to 1 millisecond. Meanwhile, the ability to connect with devices reaches 10 times more than 4G (1 million devices/km<sup>2</sup>), so its use is not only for fulfilling mobile broadband services for consumers, but also for Industry 4.0. For Example the application of smart factories, VR/AR, remote surgery and autonomous cars. 5G gives operators more options in spectrum usage than 4G. There are three spectrum options used, namely low-band, mid-band and high band. Low band 5G operates at frequencies below 1 GHz. This frequency band is used for cellular and TV networks, and can provide wide coverage, even in rural locations.

The network speed and latency is better than 4G, only the top speed is around 300Mbps. Move to the mid-band 5G spectrum, being in the spectrum between 1 GHz and 6 GHz. This provides a faster connection and lower latency than low-band spectrum. The mid-band spectrum is considered the most ideal for 5G because it can carry a lot of data across significant distances. Data rates are higher than low-band spectrum, with peak speeds of up to 1 Gbps. To achieve the highest speed of 5G, which is 10 Gbps, operators need millimeter wave or mmWave technology. It takes advantage of very high wireless spectrum above 6 GHz. Unfortunately, the mmWave spectrum is limited to short distances and will therefore only be used in congested environments that often serve large numbers of people. In order to experience maximum speed, users must be within about 100 meters of the BTS transmitting tower and not be obstructed by buildings or trees. Of course, for mobile users who want to take advantage of 5G, they need new devices that already support this network.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

PT Anagata Mulia Abadi Jakarta requires employees to have excellent competence in the ability to master data related to their field of work, analyze problems that occur in the industry and prioritize all work-related decisions by preparing them mentally and physically. Employees are also required to comply with applicable regulations in the industry.

PT Anagata Mulia Abadi Jakarta often conducts training for employees every year, however when implementing their work they still often experience employees whose abilities have not mastered the information related to their work, have not mastered the details of work assignments according to the instructions of superiors, have not mastered the method of completing work match the deadline so that performance is not optimal, not all employees have a strong mentality when experiencing problems at work, because many employees are mentally not strong and their performance is shrinking.

The level of employee learning affects the occurrence of competence and work knowledge at PT. Anagata Mulia Abadi Jakarta. The following table provides information on the number and level of learning in the industry.

Table 1. Number of Employees and Education Level

Uraian	2020	2021
Senior High School	30	34
Diploma	30	24
Bachelor Degree	50	58
Master	10	12
Total	120	128

Source: HRD PT. Anagata Mulia Abadi Jakarta 2021

From the results of the information in the table above, the number and level of employee learning are still low, there are still many employees who do not want to increase their education to the next level. The knowledge of employees in a certain field is not matched with the level of education. For example, employees who graduate from high school have



not been able to understand the knowledge of employees who have a bachelor's degree so that their career advancement cannot increase because of limited knowledge. Many employees are supposed to be in their fields but in Reality they are not placed in their fields so that it disturbs the performance of employees in the industry.

From the results of the research conducted by the author, the following are the gaps that exist when the industry is promoting an efficient performance program, but even in this industry, work discipline shows an unfavorable trend. This can be seen from Information Arrival of employees of PT. Anagata Mulia Abadi Jakarta from January to December 2021 as follows:

Table 2. Percentage Level of Employee Attendance (January -December 2021)

Month	Number of Employees	Employee attendance Data
January	128	98%
February	128	96%
March	128	97%
April	128	96%
May	128	95%
June	128	97%
July	128	90%
August	128	89%
September	128	94%
October	128	94%
November	128	93%
December	128	92%

Source: HRD PT. Anagata Mulia Abadi Jakarta, 2021

Based on the information in table 2 above, it shows that the percentage of employee arrivals in January 2021 to December 2021 in total is in a bad condition, where from the total number of employees who arrive late, have permission, without permission, or return early, it shows a trend that increases, this indicates that there are still many employees who lack work discipline. A good or conducive work area will be able to increase the motivation and passion of its employees at work. The condition of the work area zone must also be conducive, the following is an observation table related to the work area in the work area.

Table 3. Conditions of the Work Environment

Lighting in the work environment	Uneven workspace lighting makes the atmosphere in the office dim
Noise at work	The sound of the engine is loud enough that it interferes with concentration and communication
Safety at work	Security in the work area is still not maximized, because the number of Security is still not adequate
Relationship with co-workers	There are often misunderstandings between co-workers that are triggered by several things, such as job competition, unfair work, or to seek the attention of superiors.

Source: Pre-research results of researchers in 2021

## Performance

According to Hasibuan (2016: 160) performance is a result of work achieved by a person in carrying out his duties on business skills and opportunities. Performance indicators that can be used in performance appraisal according to Sutrisno (2016:152), namely:

1. Work result  
The level of quantity and quality that has been produced and the extent to which supervision is carried out.
2. Job knowledge  
The level of knowledge related to work tasks that will directly affect the quantity and quality of work results
3. Initiative  
The level of initiative while carrying out work tasks, especially in terms of handling problems that arise
4. Mental agility  
The level of ability and speed in receiving instructions and adapting to the way of work and the existing work situation
5. Attitude  
The level of morale and positive attitude in carrying out work duties
6. Discipline of Time and Attendance  
Punctuality rate and attendance rate

### Competence

According to Sedarmayanti (2015: 126), "Competence is a fundamental characteristic possessed by a person that has a direct influence on, or can predict excellent performance". Meanwhile, Sutrisno (2016:204) explains several aspects contained in the concept of competence as follows:

1. Knowledge, namely awareness in the cognitive field, for example, an employee knows how to identify learning.
2. Understanding, namely the depth of cognitive depth, and effectiveness possessed by individuals, for example an employee in carrying out learning must have a good understanding of the characteristics and working conditions.
3. Ability (skill) is something that an individual has to carry out the tasks or work assigned to him, for example the ability of employees to choose work methods that are considered more effective and efficient.
4. Value is a standard of behavior that has been believed and psychologically has been integrated in a person, for example the standard of behavior of employees in carrying out their duties (honesty, openness).
5. Interest is a person's tendency to do an action, for example a work activity.

### Discipline

According to Setiyawan and Waridin (2012: 189) work discipline is a form of obedience to the rules, both written and unwritten that have been set. According to Hasibuan (2012: 194), indicators that affect a person's level of discipline in an organization include:

1. Goals and abilities are (jobs) assigned to employees which must be in accordance with the employees concerned
2. The exemplary leader is a leader who is used as an example and role model by his subordinates.
3. Remuneration is the provision of remuneration paid by employees based on the work that has been completed.
4. Justice, namely not distinguishing one employee from another because the agency does justice to all employees.
5. Sanctions should be educational in nature and become a motivational tool to maintain discipline in the company.
6. Assertiveness is the leadership reprimand and punishes every employee, every employee can realize good discipline in the company. Human relations are harmonious relationships between fellow employees, contributing to creating good discipline in a company.

### Work Environment

The work environment in a company needs to be considered, this is because the work environment has a direct influence on employees. Sedarmayanti (2014:21) states that broadly speaking, the types of work environments are as follows:



1. Physical work environment, namely all physical conditions around the workplace that can affect employees either directly or indirectly. The physical work environment can be divided into two categories, namely:
  - a. An environment that is directly related to employees. Such as: work centers, chairs, tables etc.
  - b. The intermediary environment or the general environment can also be called the work environment that affects the human condition, for example: temperature, humidity, air circulation, lighting, noise, unpleasant odors.
2. Non-Physical Work Environment  
 Namely all circumstances that occur related to work relationships, both relationships with superiors and relationships with fellow co-workers, or relationships with subordinates

## METHODS

This research was designed in a descriptive manner with a quantitative approach. The population used as the object of this research is all employees who work at PT Anagata Mulia Abadi Jakarta totaling 128 employees. In this research, the sampling method used is non-probability sampling with the method taken is saturated sampling (census). Until the sample to be used in this research as many as 128 people.

Testing of research instruments and research data was carried out using statistical tests including Data Quality Test, Classical Assumption Test, Simple Linear Regression, Multiple Linear Regression, Coefficient of Determination Test, and Hypothesis Testing.

## RESULT AND DISCUSSION

### Validity test

Table 4. Validity Test

Variabel	Pernyataan	R hitung	R tabel	Keputusan
Competence	P1	0,412	0,173	Valid
	P2	0,714	0,173	Valid
	P3	0,649	0,173	Valid
	P4	0,606	0,173	valid
	P5	0,620	0,173	Valid
	P6	0,638	0,173	Valid
	P7	0,799	0,173	Valid
	P8	0,755	0,173	Valid
	P9	0,745	0,173	Valid
	P10	0,669	0,173	Valid
	P11	0,713	0,173	Valid
	P12	0,313	0,173	Valid
Work Discipline	P1	0,558	0,173	Valid
	P2	0,570	0,173	Valid
	P3	0,609	0,173	Valid

	P4	0,484	0,173	Valid
	P5	0,477	0,173	Valid
	P6	0,534	0,173	Valid
	P7	0,761	0,173	Valid
	P8	0,766	0,173	Valid
	P9	0,738	0,173	Valid
	P10	0,654	0,173	Valid
Work Environment	P1	0,583	0,173	Valid
	P2	0,490	0,173	Valid
	P3	0,681	0,173	Valid
	P4	0,655	0,173	Valid
	P5	0,729	0,173	Valid
	P6	0,693	0,173	Valid
	P7	0,832	0,173	Valid
	P8	0,838	0,173	Valid
	P9	0,825	0,173	Valid
	P10	0,614	0,173	Valid
Performance	P1	0,423	0,173	Valid
	P2	0,502	0,173	Valid
	P3	0,441	0,173	Valid
	P4	0,455	0,173	Valid
	P5	0,662	0,173	Valid
	P6	0,645	0,173	Valid
	P7	0,779	0,173	Valid
	P8	0,785	0,173	Valid

P9	0,613	0,173	Valid
P10	0,746	0,173	Valid
P11	0,304	0,173	Valid
P12	0,310	0,173	Valid

Source: Primary data processed with SPSS 25 (2021)

Based on the results of the validity test, it can be seen that the totality of the rcount value is greater than rtable 0.173, thus it can be concluded that all statement items in the variables of competence, work discipline, work environment and performance are valid. So that no statement items are deleted and all statement items can be used in the totality of the test model.

### Reliability Test

Table 5. Reliability Test Results

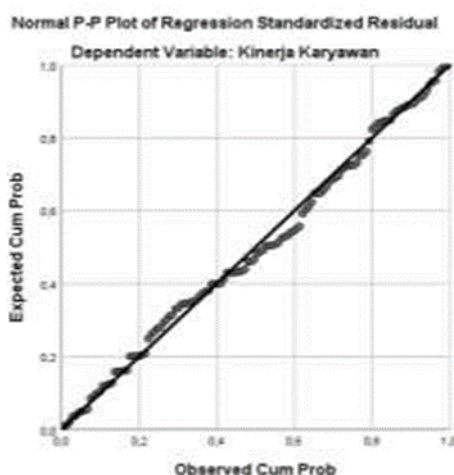
Variabel	Cronbach Alpha	Keputusan
Kompetensi (X1)	0,818	Reliabel
Disiplin Kerja (X2)	0,815	Reliabel
Lingkungan Kerja (X3)	0,885	Reliabel
Kinerja (X4)	0,780	Reliabel

Source: SPSS 25 Data Processing Results (2021)

Based on Table 5 above, it can be seen that each competency variable, work discipline, work environment, and performance, has a Cronbach Alpha value > 0.60, thus the reliability test results on all variables are very reliable. So that all questions can be trusted and can be used for further research.

### Classic assumption test

#### Normality test



Source: Data processed by SPSS version 25 (2021)

Figure 1. Normality Test of P-P Plot Data

Looking at the normal probability plot graph above, it can be concluded that the normal probability plot graph shows the points spread around the diagonal line and the distribution follows the direction of the diagonal line, so it can be concluded that the data used in this study is normally distributed.

## Multicollinearity Test

Table 6. Multicollinearity Test

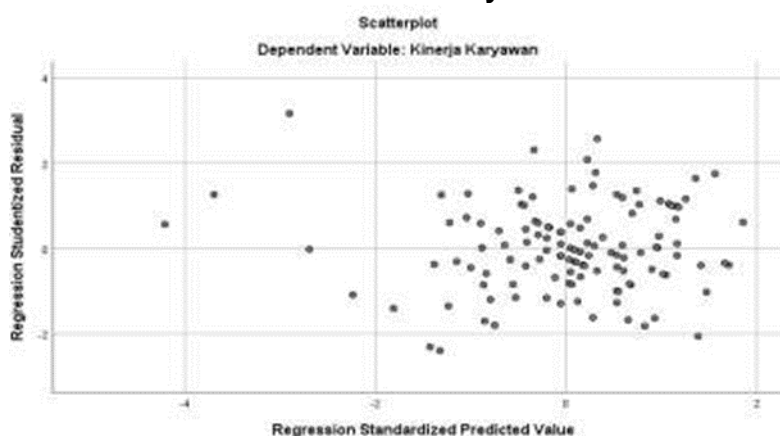
Model	Collinearity Statistics	
	Tolerance	VIF
Competence	0,616	1,623
Work Discipline	0,453	2,206
Work Environment	0,436	2,291

a. Dependent Variable : Performance

Source: SPSS 25 Data Processing Results (2021)

Based on Table 6, it can be seen that the tolerance value for the variables of competence, work discipline and work environment is  $0.616, 1.453, 0.436 > 0.1$ , and VIF values are  $1.623, 2.206, 2.291 < 10$  so it can be concluded that the variables of competence, work discipline, and work environment are declared to have no symptoms of multicollinearity.

## Heteroscedasticity Test



Source: SPSS 25 Data Processing Results (2021)  
Figure 2. Heteroscedasticity Testing With Graphs

From the graph, it can be seen that the points spread randomly, do not form a clear specific pattern, and are spread both above and below the number 0 (zero) on the Y axis, so there is no heteroscedasticity.

### Influence of competence on t test performance (Partial)

Based on Table 7, it can be known if the value of  $t_{count} 7,317 > t_{table} 1,657$  with a significant  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted explaining if there is a positive and significant influence of competence on performance.

### Simple Regression

Based on the calculation results in Table 7, it can be obtained a simple linear regression equation  $Y = 27,319 + 0,444X_1$

Where  $X_1 = \text{Competence}$

$Y = \text{Performance}$

If the value of  $X_1 = 0$  will be obtained  $Y = 27.319$

This means that the value (a) or a constant of 27,319, this value proves that when competence ( $X_1$ ) is zero or does not increase, then performance (Y) is always worth 27.319. The regression coefficient value (b) of 0.444 (positive) is showing a unidirectional effect, which means that each increase in competence by one unit will increase performance by 0.444 units.



### Coefficient of Determination Test

These results indicate a contribution (impact) of 29.8% resulting from the competence variable on performance while 70.2% is the cause of other factors.

### The Influence of Work Discipline on Performance

#### t-test

Based on Table 9, it can be known if the tcount value is  $8,461 > t_{table} 1,657$  with a significant  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted explaining if there is a positive and significant influence on work discipline on performance. Simple Linear Regression

Based on the results of the calculations in Table 6, it can be obtained a simple linear regression equation

$$Y = 24.271 + 0.608X_2$$

Where  $X_2$  = Work Discipline

Y = Performance

If the value of  $X_2 = 0$  will be obtained  $Y = 24.271$

This means that the value (a) or a constant of 24,271 this value proves that when work discipline ( $X_2$ ) is zero or does not increase, then performance (Y) is always worth 24,271. The regression coefficient value (b) of 0.608 (positive) is showing a unidirectional effect, which means that each increase in work discipline by one unit will increase performance by 0.608 units.

### Coefficient of Determination Test

These results indicate a contribution (impact) of 36.2% resulting from the work discipline variable on performance, while 64.8% is the cause of other factors.

### The Influence of Work Environment on Performance

#### t-test

Based on Table 11, it can be known if the tcount value is  $8.425 > t_{table} 1.657$  with a significant  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted explaining if there is a positive and significant influence on the work environment on performance.

Simple Linear Regression Based on the results of the calculations in Table 11, it can be obtained a simple linear regression equation  $Y = 26,185 + 0,556X_3$

Where  $X_3$  = Work Environment Y = Performance

If the value of  $X_3 = 0$  will be obtained  $Y = 26.185$

This means that the value (a) or a constant of 26.185 this value proves that when the work environment ( $X_3$ ) is zero or does not increase, the performance (Y) is always worth 26,185. The regression coefficient value (b) of 0.556 (positive) is showing a unidirectional effect, which means that each increase in the work environment by one unit will increase performance by 0.556 units.

### Coefficient of Determination Test

These results indicate a contribution (impact) of 36% resulting from the work environment variable on performance, while 64% is the cause of other factors.

### The Influence of Competence, Work Discipline and Work Environment on Performance

#### F test count

In table 13 the numbers on the probability are smaller and lower than 0.01 or (0.000 < 0.01), which means the acceptance of  $H_a$  and the rejection of  $H_0$  explains if there is a positive and significant effect of competence, work discipline and work environment on performance.

### Multiple Linear Regression

Based on the results of these calculations, it can be obtained multiple linear regression equations as follows:

$$Y = 18.222 + 0.191X_1 + 0.286x_2 + 0.240x_3$$

1. The constant value of 18.222 indicates that the three independent variables have not increased at all, which does not mean that the employee's performance is still 18.222.
2. The regression value of  $0.191X_1$  shows a unidirectional effect, meaning that the more competence increases, the more employee performance increases 0.191.

3. The regression value 0.286X2 shows a unidirectional effect, meaning that the more work discipline increases, the more employee performance increases 0.286.
4. The regression value 0.240X3 shows a unidirectional effect,
5. meaning that the more the work environment increases, the more employee performance increases 0.240.

### Coefficient of Determination Test

These results indicate a contribution (impact) of 45.5% resulting from the variables of competence, work discipline, and work environment on performance, while 54.5% is the cause of other factors.

### CONCLUSION

All independent variables in this research partially and simultaneously affect performance. This is evidenced by the results of the tests that have been tried in this research. It can be proven that competence, work discipline, and work environment are factors that influence employee performance at PT Anagata Mulia Abadi Jakarta. This research is in line with what has been done by Havidz Aima (2017), namely that there is a significant influence between competence and performance. Cristy Tulandi, S.I. Mandey, Mac Donald Walangitan (2015) who reported that there was a simultaneous influence between job characteristics and work environment on employee performance. And supported by research that was tried by the Professor. Doctor. Havidz Aima (2017) that there is a significant influence between competence and work motivation on the performance of PT Bank Bukopin employees.

Conclusions in this study, as follows:

1. Competence, work discipline, and work environment simultaneously affect employee performance at PT Anugrah Bersama Sejahtera Depok.
2. H1 (competence) partially positive and significant effect on performance. This is evidenced by  $t_{count} > t_{table}$  ( $7.317 > 1.657$ ) with a significance of  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted.
3. H2 (work discipline) partially positive and significant effect on performance. This is evidenced by  $t_{count} < t_{table}$  ( $8.461 < 1.657$ ) with a significance of  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted.
4. H3 (work environment) partially positive and significant effect on performance. This is evidenced by  $t_{count} < t_{table}$  ( $8.425 < 1.657$ ) with a significance of  $0.000 < 0.01$  then  $H_0$  is rejected and  $H_a$  is accepted.

### REFERENCE

- Andi Veny Anggreany M, 2017, The Influence of Competence, Motivation, and Physical Work Environment on Employee Performance. Case study at the Office of the Department of Energy and Mineral Resources of Donggala Regency, Thesis Department of Public Administration, Tadulako University.
- Christy Tulandi, 2015, The effect of job characteristic, welfare and work environment to employee performance, Case Study at PT. Federal International Finance Manado, Thesis Economics and Business, Sam Ratulangi University Manado.
- Edwin B. Flippo 2014, Personnel Management, Edition. VII. Volume II, Translation of Alponso S. Jakarta, Erlangga.
- Ghozali, Imam, 2021, Application of Multivariate Analysis with IBM SPSS 19 Program (Fifth Edition) Semarang Diponegoro University, Semarang.
- Hasibuan. S.P Malay. 2012. Human Resource Management, Revised Edition, Jakarta, Publisher PT. Earth Literature. Moekijat. 2016. Human Resource Planning. Bandung, Mandar Maju.
- Lesmana, R., Sunardi, N., & Tumanggor, M. (2020). Management Training in Improving Student and Teacher Motivation at SDN 84 Rejang Lebong. Journal of Humanist Community Service, 1(2).

- Lesmana, R. (2019). The Effect of Product Quality and Service Quality on Consumer Satisfaction Pt. Radekama Piranti Nusa. *Journal of Competitive Marketing*, 2(2), 115-129.
- Priyatno, Duwi, 2011, *Pocket Book of SPSS Data Statistical Analysis*, Mediakom, Yogyakarta.
- Sedarmayanti. 2014. *Human Resources and Work Productivity*. Jakarta, Mandar Maju.
- Prof. Dr. Havidz Aima, 2017, *Analyze the effect of competency and work motivation on employee performance remains Case Study at PT. Bank Bukopin, Tbk center*, Thesis Department of Business and Management, Mercubuana University.
- Setiyawan and Waridin, 2012, *The Influence of Employee Discipline and Organizational Culture on Performance in the Radiology Division of Doctor Kariadi Hospital Semarang*. *JRBI Vol.No.2*, Pages: 181-198.
- Sri Rahayuningsih, Nonik Maelani, 2018, *The influence of competence, compensation and motivation on the performance of PT. Pisma Garment Demak, Central Java*. Economics and Business Thesis, Stikubank University Semarang.
- Sugiyono. 2016. *Quantitative, Qualitative, and R&D Research Methodology*. Bandung, Alfabeta.
- Yoder, Dale. 2012. *Personnel Management and Industrial Relations*. New Delhi Prentice-
- Sunarto. Ading 2020. *Kompetensi, Disiplin Kerja Dan Lingkungan Kerja Terhadap Kinerja Pada PT Anugrah Bersama Sejahtera Depok*
- Sutrisno. Eddy. 2016. *Personnel Management and Human Resource Management*. Jakarta, Prenada Media Group.
- <https://inet.detik.com/telecommunication/d-5594213/apa-itu-5g-dan-sejarah-perkembangannya>