# The Assessment of Management Effectiveness Program on Organizational Performance Satisfaction

Sukmo Hadi Nugroho<sup>1</sup>, Okol Sri Suharyo<sup>2</sup>, Adi Bandono<sup>3</sup> <sup>1</sup>Esa Unggul University, Jakarta Indonesia <sup>2,3</sup>Indonesia Naval Technology College, STTAL Surabaya Indonesia E-mail: sukmo.hadi@esaunggul.ac.id; okolsrisuharyo@sttal.ac.id; adibandono@sttal.ac.id

#### Abstract

Service is one of the functions of the organizational state or government apparatus. Professional and high-quality service is a responsibility that must be provided by the state government. The management effectiveness toward the satisfaction of organizational performances is a necessity. The purpose of this study is to get an assessment relationship about effective management programs to the satisfaction of organizational performance. The effectiveness emphasizes and shows the progress of the result achievement of the target that has been decided formerly by an organization. Performance satisfaction is a very important factor and it determines the success of a business or a company since society is the consumers of the organization's products. Management program effectiveness is one form of government services for increasing organizational performance. This management program's effectiveness is expected to be able to overcome the former system problems. Besides, performance satisfaction is the purpose of this management effectiveness program. This research is located in one of the state companies or government organizations. The Operational definition of variable in this research is as follows: Independent Variable  $(X_1)$ is Management Effectiveness, while the Dependent Variable (Y) is the Organizational Performance Satisfaction. This research is conducted using the explanatory type of research with a quantitative approach. Based on the research shows that the assessment of the regression equation can be formulated as  $Y = 13.629 + 0.499 X_1$ . It's mean that the management program's effectiveness gives an influence on performance satisfaction significantly.

Keywords: Management Effectiveness, Organization Performance, Satisfaction.

### I. INTRODUCTION

Service is one of the functions of the state or government apparatus. Based on the development of the academic context, the conception of public service at first is based on a sociology perspective which emphasizes that public service is an activity the governor is obligated to provide for the interest of those governed [8]. Public service as the governor's obligation actualization to fulfill the interest of the governed party is very urgent, because, this activity is necessary for the achievement and development of social independence [25].

Professional and high-quality service is the main responsibility that needs to be fulfilled by the government. It is based on the Constitution Number 25, 2009 about public service which states that public service is an activity or an activity chain of the service needs fulfillment based on the legislation applied for every citizen on properties, services, and/or administrative services which are provided by the public service administrator [16]. The public service administrator includes every state administrator institutions, corporations, an independent organization that is founded based on the constitution for public service, and other legal institutions that are founded merely for the public service activities [4].

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As a public administrator, the government is demanded to be able to increase the quality of its services. It is also supported by the rapid development of technology and information current that stimulates every company and public organization to produce products or service innovation which eventually can increase their service. As [1] stated that innovation could also be defined as a new product or service, a new technology or manufacturing process, a new structure or administrative system, or a new plan regarding the members of an organization [10]

Innovation in producing service products that can give satisfaction towards the consumers can be actualized with a program. A program is the entire steps or activities that depend on each other to reach the purposes that have been set. A good program is a program that can run effectively. Thus, the appraisal of the effectiveness of a program is very important to be conducted [6].

In general, effectiveness emphasizes and shows the progress of the result achievement of the target that has been decided formerly by an organization. One of the programs that need to be measured is the management effectiveness innovation program that is launched by the State Government Organization. Management effectiveness innovation program is a system or innovation from the State Government Organization [26]. This management effectiveness innovation program system has been chosen by the State Government Organization because this program system gives a lot of benefits. Besides, the program system is applied to give satisfaction for the performance organization, because the organizational performance satisfaction eventually determines the success of the program that is made [11].

Based on the explanation above, the researchers are interested in investigating "The assessment of management program effectiveness on organizational performance satisfaction". The purpose of this study is to get an assessment relationship about effective management programs to the satisfaction of organizational performance. By knowing this assessment, a correlation value will be obtained which will determine the next policy to be taken.

# II. MATERIAL AND METHODS

#### II.1. Management Effectiveness Program

In general, management effectiveness emphasizes and shows the progress of the result achievement of the target that has been decided formerly by an organization. According [3] stated that effectiveness is defined as the degree to which a social system achieves its goals. Effectiveness must be distinguished from efficiency. Efficiency is mainly concerned with goal attainment [26]

Management effectiveness shows the achievement degree. Effectiveness is frequently or always associated with the definition of efficiency, whereas, there is a difference between them. Effectiveness emphasizes on the result that is achieved, while efficiency tends to see the way how to achieve the result by comparing the input and the output. [18]

According to [5], Management effectiveness is the use of resources, facilities, and infrastructures in a certain amount that is intentionally set beforehand to produce some amount of properties or services of the activities. Management Effectiveness shows the success from the point of view whether the goals that have been set are achieved or not. The closer the activities result in the goals, the higher the effectiveness is.

Management Effectiveness Program is related to the implementation of all main tasks, goals achievement, punctuality, and active participation from all members. Management Program Effectiveness is the relation between the goals and the results that have been set, and it also shows the compatibility degree between the goals that have been set and the results that are achieved [24].

Thus, from that definition, it can be concluded that the Management Program's effectiveness is an act to reach a goal or target that has been set formerly. If a program can

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give a result that is compatible with the goal that has been set, it means that the program is an effective one. To measure effectiveness, it needs an indicator which is used later as a measurement reference. As stated by [25] it includes as follows:

- a. Program Comprehension
- b. Precise Target
- c. Punctuality
- d. Goals Achievement
- e. Real Change

# II.2. Organizational Performance Satisfaction

Organizational performance satisfaction is an important factor and it determines the success of a business firm because performance satisfaction is one of the organization's products. It is supported by the statement of [7] that said that without customers, the service firm has no reason to exist [9]. Therefore, a business firm has to be able to fulfill society's needs from time to time based on the development so that they can give satisfaction to the society and eventually there will be more society that uses those products.

The measurement of organizational performance satisfaction is an important element in the process of public service where the final purpose that is going to be reached is providing a better, more efficient, and more effective service based on society's needs [12]. A service can be considered as satisfaction when the service can fulfill the needs and the expectations of the service users. The organizational performance satisfaction can also be the reference for the success of a program implementation that is applied to a public service institution [24].

There are 9 indicators based on PERMENPAN-RB (Regulation of the Minister of State Apparatus Utilization-Bureaucracy Reformation) Number 16 the year 2014 [15] about organizational performance Satisfaction Survey on the Implementation of Public Service that can be used to measure whether the society is satisfied with the service or not. Those indicators are:

- a. Requirements
- b. Procedures
- c. Service Timing
- d. Fee/Fare
- e. Service Product Specification
- f. Implementer Competency
- g. Implementer Behavior
- h. Service Declaration
- i. The complaint, Suggestion, and Input Handling

### II.3. Hypothesis

 $H_0$  = Management Effectiveness does not give influence on the Performance Satisfaction significantly.

 $H_1$  = Management Effectiveness gives influence on the Performance Satisfaction significantly.

#### II.4. Research Methods

This research uses the explanatory type of research with the quantitative approach. According [19] stated, "...explanatory is used to explain the causal relationships among the variables through a hypothesis test..." Furthermore, the objective of explanatory research is to explain the causal relation and the test on the hypothesis. This research is located in one of the state companies or government organizations. The Variable of Operational Definition in this research is as follows: Independent Variable  $(X_1)$  is Management Effectiveness, while the Dependent Variable (Y) is the Organizational Performance Satisfaction. The operational definition in this research is as follows:

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# Tabel 1. Variables and Indicators Research

(Source: Researchers Processing Result, 2020)

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The measurement scale in this research uses the Likert scale. Likert scale is used to manage behavior, opinion, and perception of a person or a group of people about a social phenomenon [20]. In this research, the researchers give some alternative answers with the interval 1-4 (Very disagree (1), Disagree (2), Agree (3), and Very Agree (4))

This research population is entirely an employee or worker in the government organization. Research sampling uses a non-probability sampling technique [13]. It is a sampling technique that does not give the same chance or opportunity to every element or population member, and it is done in the way of incidental sampling which means the sampling is based on a chance. Any person who accidentally meets the researcher can be used as a sample if they are considered suitable as a data source [21].

The data collection technique in this research is questioner and observation. The research instruments are the questionnaires, before the validity and the reliability is tested.

In the validity test, the research result is valid when there is a similarity between the collected data with the real data that occurs in the researched objects [23]. Whether an instrument item is considered as valid or not can be seen by comparing the correlation index of the management program with the significance level 5%.

Variable	r count	r table	Explanation
X1.1.1	0.549	0.2512	Valid
X1.1.2	0.426	0.2512	Valid
X1.1.3	0.524	0.2512	Valid
X1.2.1	0.687	0.2512	Valid
X1.2.2	0.524	0.2512	Valid
X1.2.3	<mark>0</mark> .679	0.2512	Valid
X1.3.1	0.425	0.2512	Valid
X1.3.2	<mark>0</mark> .478	0.2512	Valid
Y1.1	0.518	0.2512	Valid
Y1.2	0.460	0.2512	Valid
Y1.3	0.457	0.2512	Valid
Y1.4	0.549	0.2512	Valid
Y1.5	0.262	0.2512	Valid
Y1.6	0.333	0.2512	Valid
Y1.7	0.544	0.2512	Valid
Y1.8	0.348	0.2512	Valid
Y1.9	0.593	0.2512	Valid
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Tabel 2. Validity Test

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(Source: Researchers Processing Result, 2020)

Table 2 is the validity test where the data of Corrected Item Total Correlation and "r" table are obtained from the process of SPSS 21. A statement is considered valid if r count > r table, otherwise, if r table < r count, it is considered that the item used is not valid [14].

In the reliability test, a research result is reliable when there is data similarity at different times. One of the ways to seek reliability for all items can be done by using the Alpha Cronbach coefficient [17].

Tabel 3. Reliability Value				
Alpha	N of item	Explanation		
0.778	14	Reliable		
(Source: Researchers Processing Result 2020)				

Based on the reliability in Table 3, it can be concluded that the research instrument that is questionnaires are considered reliable. It can be seen from the alpha number that is

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International Journal of Advanced Science and Technology Vol. 29, No.4, (2020), pp. 4730 – 4741

> 0.6. In the data analysis technique, the researchers use Classic Assumption including First, normality test, which is used to test the residual variable probability, has a normal distribution in the regression model because Test F and Test t assumes that the residual grade follows the normal distribution, consequently, if it is violated, the statistical test becomes invalid for small amount samples [22]. Second, the heteroscedasticity test is intended to test the occurrence of residual variance dissimilarity from one observation to another observation in the regression model. If the points spread randomly and are spread well above or below number 0 (zero) on the Y axis, it means heteroscedasticity on the regression model does not occur, so it is proper to predict the attached variable based on the free variable input. Third, the Autocorrelation test is aimed to test the correlation between the disturber errors in period t with the disturber errors in period t in the linear regression model [2]. The second is the simple regression analysis and the third is hypothesis testing.

# III. RESULT AND DISCUSSION

### **III.1.** Respondents Overview

The respondents in this research are the employee of the state government organization. The number of the respondents is 100 people by using an incidental sampling technique. The respondents are classified based on age, gender, job level, education, marital status, and the number of children. In terms of age, most participants (45%) included in the productive age category (25-40 years). In terms of sex, most participants were women (46%). Most of them have academic positions of expert assistants (45%). In terms of education, most participants have bachelor's and master's education (84%). In marital status, most participants were married (71%), and in terms of the number of children, most participants had two children (66%). More detailed information can be seen in Table 1.

Table 1. Description of Respondent Characteristics (N=100)

Respondent	Profile	Percentage
Characteristics		U
Age	25 - 30 years	20%
	31 to 40 years	25%
	41 to 50 years	25%
	51 to 58 years	26%
	above 58 years	4%
Gender	Male	54%
	Female	46%
Job level	Low Management	60%
	Middle Management	30%
	Top Management	10%
Education	Bachelors	50%
	Post Graduate	34%
	Doctoral	16%
Husband's or Wife's	Working	70%
Work		
	Not working	30%
Marital Status	Married	71%
	Single parent	21%
	Single	8%
Number of Children	Less than 2 children	66%
	More than 3 children	34%
(Source: Res <mark>e</mark> a	rchers Processing Result, 2	020)

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### **III.2.** Classic Assumption

# a. Normality Test

The normality test is meant to know whether the researched residual distributes normally or not. The method used for the normality is the Kolmogorov-Smirnov test.



Figure 1. Histogram Dependent Variable (Source: Researchers Processing Result, 2020)

Based on the normality curve on the Histogram above, it can be concluded that the program's effectiveness has a normal distribution. It is shown by the curve shape that is similar to a bell.

 Table 5. One-Sample Kolmogorov-Smirnov Test

Kolmogorov	-Smirnov Test	Unstandardized Residual
Ν		43
	Mean	.0000000
Normal Parameters <sup>a,b</sup>	Std. Deviation	2.26136607
	Absolute	.150
Most Extreme Differences	Positive	.084
	Negative	150
Kolmogorov-Sr	nirnov Z	.983
Asymp. Sig. (2-	tailed)	.289

(Source: Researchers Processing Result, 2020)

Based on Table 5, it can be seen that the significance grade is 0,289 higher than 0.05, so it can be concluded that the data distribute normally.

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#### b. Autocorrelation Test

Autocorrelation test aims to see whether, in the linear regression model, there is a correlation between one-period t with the previous period t-1 (previous). If there is a correlation, it means that there is an autocorrelation problem. This autocorrelation test uses the runs test.

Table 6	. Runs Test
Runs Test	Unstandardized Residual
<b>Esa</b> U	nddu
Test Value	.39306
Cases < Test Value	19
Cases >= Test Value	24
Total Cases	43
Number of Runs	25
Z	.717
Asymp. Sig. (2-tailed)	.473

(Source: Researchers Processing Result, 2020)

The runs test result shows that the Sig grade > 0.05 which means zero hypotheses are failed/rejected. Therefore, the data used is random enough so there will be no autocorrelation problem.

#### c. Heteroscedasticity Test

It is conducted to know whether, in a regression model, residual variance dissimilarity occurs from one observation to another observation.





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International Journal of Advanced Science and Technology Vol. 29, No.4, (2020), pp. 4730 - 4741

Based on Figure 2. Scatterplots Graphic, it can be seen that the points are spread randomly and well above or below the number 0 on the Y-axis. It can be concluded that heteroscedasticity on the model does not occur; hence, the regression model is properly used to predict society satisfaction based on the variable input of the program effectiveness.

#### d. **Simple Regression Analysis**

Simple Regression Analysis is used to count the influence between the free variable that is Effectiveness  $(X_1)$  on the attached variable that is society satisfaction (Y). This count is conducted by using SPSS for Windows 21.00. Next, it is obtained a regression model as below:

Table 7. Output Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.460 <sup>a</sup>	.212	.192	2.28878

(Source: Researchers Processing Result, 2020)

Based on the output above, it can be seen that the correlation/relation grade (R) is 0.460 and the coefficient determination (R2) is 0.212 which means that the influence of the free variable on the attached variable is 2.12%.

Table 8. Mean Square, F, and Sig.						
Model	Sum of Squares		Mean Square	F	Sig.	
Regression	57.687	1	57.687	11.012	.002 <sup>b</sup>	
1 Residual	214.779	41	5.239			
Total	272.465	42				

(Source: Researchers Processing Result, 2020)

Based on the output result, it is known that the influence of the free variable  $(X_1)$  on the attached variable (Y) is seen that F count = 11.012 with the significance/probability level is 0.002 < 0.05, so that the regression can be used to predict the variable of effectiveness.

Table 9. Coefficients <sup>a</sup>						
Model	Unstan	dardiz	Stan	t	Sig.	
	ed		dard			
	Coefficients		Coe			
			ffici			
			ents			
	B Std.		Beta			
		Error				
(Constant	13.62	2.672		5.102	.000	
1)	9					
$X_1$	.499	.150	.460	3.318	.002	

(Source: Researchers Processing Result, 2020)

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Based on the coefficient Table, the Constanta (a) is 13.629, while the trust grade is (b) 0.499. So, the regression equation can be formulated as Y = a+bx or  $Y = 13.629+0.499X_1$ . It's mean the assessment can be formulated :

#### Organizational Performance Satisfaction = 13.629+0.499 Management Effectiveness Program

Based on the output above, it can be explained as follows: society satisfaction will increase as much as 0.499 if the prepaid electricity program is effective. Based on the interpretation above, it can be concluded that the effectiveness of the prepaid electricity program has a positive influence on society satisfaction. From the simple linear regression test above, it can be concluded that if a program is effective, it will give satisfaction toward society. As has been explained in the previous chapter that the effectiveness/success can be seen from society as the product consumers. When society is satisfied, the program will be considered successful/effective.

#### e. Hypothesis Test

If t count < t table, so  $H_0$  is accepted and  $H_1$  is rejected If t count > t table, so  $H_0$  is rejected and  $H_1$  is accepted If grade Sig > real level (0.05), so  $H_0$  is accepted and  $H_1$  is rejected. If grade Sig < real level (0.05), so  $H_0$  is rejected and  $H_1$  is accepted.

Table 10. The of t-Test

	Model	t table	t count	Sig.
1	Constanta	1.68	5.102	.000
	X1	5	3.318	.002

(Source: Researchers Processing Result, 2020)

Based on the result above, it shows that the grade of t count (effectiveness) is 3.328 higher than the t table 1.685 with a significance level is 0.002 smaller than the real level (0.05). Based on those two comparisons,  $H_0$  is rejected and  $H_1$  is accepted, which means "the effectiveness of prepaid electricity program influences significantly on the society satisfaction (Y)".

As has been explained in the theory chapter that when an organization or a corporation can reach the goals that have been set formerly, it will increase the service quality. A highquality service will give satisfaction toward the society as the service receiver. Therefore, in this case, the prepaid electricity program has been effective. It can be seen from the tests that have been conducted that this program's effectiveness can give satisfaction toward society.

# CONCLUSION

This research is conducted to know the variable that influences organizational performance satisfaction. The independent variable that is used in this research is the Management Effectiveness (X<sub>1</sub>), while the attached variable is the Organizational performance satisfaction (Y) Dependent Variable. Based on the count of simple linear regression analysis, it can be known that: the influence of the free variable on the attached variable is conducted with a T-test. The result of the simple linear regression analysis shows that the t count is 3.318, while the t table is 1.686, so H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. Thus, it can be concluded that the test on the hypothesis states that "The management program effectiveness influences significantly on the organizational performance

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satisfaction". The Assessment of the regression equation between  $X_1$  and Y can be formulated as  $Y = 13.629 + 0.499X_1$ 

# ACKNOWLEDGMENT

The authors greatly acknowledge the support from Esa Unggul University Jakarta and Indonesia Naval Technology College STTAL Surabaya Indonesia for providing the necessary resources to carry out this research work. The authors are also grateful to the anonymous reviewers and journal editorial board for their many insightful comments, which have significantly improved this article.

# REFERENCES

- Ahmadi, & Herdiawan, D. (2019). The application of CBA and SUG model for improving the quality of Indonesian navy human resources. International Journal of Recent Technology and Engineering, 8(3), 393–399. https://doi.org/10.35940/ijrte.C4190.098319
- [2] Ahmadi, Sumantri, S. H., Suharyo, O. S., & Kukuh Susilo, A. (2017). Selection anti-submarine sensor of the helicopter using the ELECTRE III method. International Journal of Applied Engineering Research, 12(9), 1974–1981.
- [3] Astika, I. M. J., Sukandari, B., Sutrisno, & Suharyo, O. S. (2020). Powder smoke composite building design as a weapon of the sea, air, and land defense sabotage. International Journal of Scientific and Technology Research, 9(1), 1728–1736.
- [4] Bandono, A. D. I., Suharyo, O. S., & Riono. (2019). Applied fuzzy and NASA tlx method to measure of the mental workload. Journal of Theoretical and Applied Information Technology, 97(2), 476–489.
- [5] Ghozali, Imam. (2013). Application of Multivariate Analysis with IBM SPSS 21 Program. 7th Edition. Semarang Diponegoro University. Publishing Agency.
- [6] Herdiawan, D., & Ahmadi. (2019). Development strategy of national food sovereignty to encounter radicalism threat. International Journal of Innovative Technology and Exploring Engineering, 8(11), 544–553. https://doi.org/10.35940/ijitee.K1570.0881119
- [7] Heru Kreshna Reza, Sukmo Hadi Nugroho. (2020). The Assessment of Work Performance, Education, and Self Motivation on Organizational Citizenship Behavior. International Journal of Advanced Science and Technology, 29(3), 8019 - 8030. Retrieved from http://sersc.org/journals/index.php/IJAST/article/view/8371
- [8] Matei, Lucica, and Matei, Ani. (2010). Behavior and Action: Citizen VS Public Services.National School of Political Studies and Public Administration (NSPSPA). Munchen.
- [9] Mote, Frederik. (2008). Public Satisfaction Analysis (PSA) on Public Service at Hospital Ngesrep Semarang. Diponegoro University.
- [10] Navimipour, Nima Jafarai & Zeynab Soltoni. (2016). The Impact of Cost, Technology Acceptance, and Employees' Satisfaction on the Effectiveness of the Electronic Customer Relationship Management Systems. Iran Islamic Azad University
- [11] Nugroho, S. H., Madhakomala, R., & Gunawan, K. (2019). The system dynamic model for policy evaluation of navy personnel on the state-duty aspect. International Journal of Scientific and Technology Research, 8(12), 228–236.
- [12] Nugroho, S. H., Madhakomala, R., & Gunawan, K. (2019). Analysis and scenario of navy performance allowance policy using system dynamic model. International Journal of Scientific and Technology Research, 8(12), 1140–1147.
- [13] Nugroho, S. H., Sukandari, B., Suharyo, O. S., & Bandono, A. (2020). The application of Nasa-Tlx methods to the analysis of Mtf navy personnel allocation. International Journal of Scientific and Technology Research, 9(3), 6172–6179.
- [14] Nugroho, S. H., Sukandari, B., Bandono, A., & Sri Suharyo, O. (2020). The applications of model bayesian networks for analysis and preventive actions on maritime security operations. International Journal of Scientific and Technology Research, 9(3), 3000–3006.
- [15] PERMENPAN Number 16. (2014). Public Satisfaction Survey on Government Implementation, Law Number 25 the Year 2009. Public Service.
- [16] Reza, H. K., & Nugroho, S. H. (2020). Relationship analysis of motivation and customer satisfaction on services quality aspect for online transportation. International Journal of Scientific and Technology Research, 9(4), 1101–1108.
- [17] Setiadji, A., Marsetio, & Ahmadi. (2019). The assessment of strategic planning and strategic change management to improve organizational performance. International Journal of Advanced Science and Technology, 29(5), 682–698.
- [18] Siagian, Sondang P. (2001). Management Information System. Bandung, Bumi Aksara.
- [19] Singarimbun, Masri, dan Sofian Effendi. (2012). Multiple Linear Analysis with SPSS. Yogyakarta, Graha Ilmu.

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- [20] Sugiyono. (2012). Quantitative and Qualitative Research Methods And R & D. Alfabeta Bandung.
- [21] Suharjo, B., Suharyo, O. S., & Bandono, A. (2019). Failure mode effect and criticality analysis (FMECA) for determination time interval replacement of critical components in warships radar. Journal of Theoretical and Applied Information Technology, 97(10), 2861–2870. https://doi.org/10.5281/zenodo.3256535
- [22] Suharjo, B. (2019). Using System Dynamics to Analyze the Leadership Style on Motivation and Soldier's Performance. In E3S Web of Conferences (Vol. 125). EDP Sciences. https://doi.org/10.1051/e3sconf/201912522002
- [23] Sumantri, S. H., Bastari, A., & Sri Suharyo, O. (2019). The assessment of naval base sustainability using a dynamic system thinking approach. International Journal of Scientific and Technology Research, 8(11), 388–394.
- [24] Susilo, A. K., Putra, I. N., Ahmadi, & Suharyo, O. S. (2020). Analysis of national maritime security strategy as an effect of regional development using SWOT, fuzzy multi-criteria decision making (FMCDM), and borda. International Journal of Operations and Quantitative Management, 25(3), 153– 174.
- [25] Sutrisno. (2007). Financial management. Yogyakarta. Ekonesia.
- [26] Tangkilisan, Hessel N S. (2005). Public Management. Jakarta. Gramedia Widiasarana Indonesia

#### **ABOUT THE AUTHORS**

#### Dr. Sukmo Hadi Nugroho

Senior Lecturer at Esa Unggul University Jakarta Indonesia. He leads the research activities in the Human Resources Development, Management Performance, Organization and Management Science and Technology.

#### Dr. Okol Sri Suharyo

Senior Lecturer at Indonesia Naval Technology College STTAL Surabaya Indonesia. He leads the research activities in the Operation Research, Decision Science, Development of Naval Science and Technology.

#### Dr. Adi Bandono

Senior Lecturer at Indonesia Naval Technology College STTAL Surabaya Indonesia. He leads the research activities in the Development of Resources Management of Naval Science and Technology.

