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The Effect of Computerization Systems on Employee Performance in Duren Sawit Office, East Jakarta

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Abstract

Technological developments have affected services to the community more quickly and accurately. The computerized system has been proven to assist the government in smoothing the operational work of its employees. This study aims to determine the significant effect of a computerized system on employee performance at the Duren Sawit office in East Jakarta, and to determine the responses of employees in the community service department who use a computerized system. The research method used in this research is a quantitative descriptive approach. Data obtained from the results of questionnaires given to respondents and interviews of 30 people with census sampling techniques, namely front office employees. The office of the village of Duren Sawit uses a computerized system to help smooth operational work of its employees in serving the community. From the results of processed questionnaires, observations, and interviews, it can be seen that there is a significant influence between the computerized system on the performance of public service employees which is very strong with a very strong correlation coefficient value, with a variable influence of 84.6%. As well as the response of employees who use a computerized system, proving that the system used is very helpful in completing their work so as to produce good performance.

Keywords: Computerization, Employee Performance.

1. Introduction

Recent technological developments have been very rapid and have greatly influenced activities in carrying out work activities in the office, especially in terms of processing data which is so much and complicated to do and the results are also less accurate. Current technological developments encourage government agencies to process data to make it more accurate, fast and precise so that work that takes a long time can be completed quickly due to system assistance.

The use of computers can also increase productivity and work effectiveness and time efficiency. With the effectiveness of employees' work, it can make the organization more resilient to achieve its goals and objectives. With the use of a computerized system, an organization will be increasingly able to play a role with a high level of effectiveness and be able to meet the data and information needs for functional units of government organizations, as well as in determining various government policies and development planning, both at the conceptual level and at the operational level requires a variety of data and information that is accurate, precise and fast for decision making in line with the increasingly advanced level of technological development.

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2. Literature Review

James O'brien (2006: 9) suggests that a system is a group of interconnected components, working together to achieve a common goal by receiving input and producing output in an orderly transformation. Besides, a system cannot be separated from the surrounding environment. Then the feedback (feedback) can come from the output but also from the system environment in question. The organization is seen as a system that will certainly have all of these elements. Gordon B. Davis (2012), states that systems can be abstract or physical. An abstract system is an ordered arrangement of interdependent ideas or conceptions. Whereas a physical system is a series of elements that work together to achieve a goal.

System Characteristics, System components (components), a system consists of a number of interacting components, meaning that if they work together to form one unit. These components can be in the form of a subsystem. System boundaries (boundary), system boundary is the scope of the system which is a limiting area between systems and other systems or systems with the external environment. This system limitation allows a system to be viewed as an inseparable unit. Environment outside the system (environment), any form that exists outside the scope or boundaries of the system which affects the operation of the system is called the external system environment. The environment outside this system can be beneficial and can also be detrimental to the system. Thus, the outside environment must be maintained and maintained. The adverse external environment must be controlled. If not, it will interfere with the continuity of the system. System interface (interface), media that connects the system with other subsystems is called the system liaison or interface. This liaison enables resources to flow from one subsystem to another. The form of output from one subsystem will be input to other subsystems through this link. Thus, there can be a system integration that forms one unit. System input (input), the energy put into the system is called system input, which can be maintenance (maintenance input) and signals (input signal). For example, in a computer unit. "Program" is the maintenance input used to operate the computer and "data" is the input signal to be processed into information. System Output (output), the resulting energy is processed and classified into useful output. This output is an input for other subsystems. For example, information systems. The resulting output is information. This information can be used as input for decision making or other things that become input for other subsystems. Processing System (process), a system can have a process that will convert input into output. For example, the accounting system. This system will process transaction data into reports required by management. System Goals (objective), a system has definite and deterministic goals and objectives. If a system does not have a target, then the operation of the system is useless. A system says it will be successful on the goals or objectives that have been planned.

Computer Based Management Information System

In some companies using computers as a tool for employees to make it easier to complete their work affairs, computers can be entered into the field of Management Information Systems. There is also said that a computer-based Management Information System is a Management Information System that places computer data processing tools in an important position. Today, when people describe a modern Management Information System, what is meant is a computerized one so that the ideas of computerization in private and public organizations are actually concerned with the purpose of improving the information system itself. There are several reasons why computers are such an important tool in the Modern Management Information System. The first reason has to do with the computer's ability to process data.

Computerized Systems

Computerized systems are part of the work that is very important in processing and storing data to facilitate employee work. According to Tata Sutabri (2016: 103), a computerized system is an electronic system for fast and precise data manipulation and is designed and organized to automatically receive and store input data, process it and produce output under the supervision of a program instruction step stored in memory. According to Jogyanto (2009: 77) in his book the introduction of computers defines a computerized system is the use of computers as a tool in data processing activities that are carried out manually. The data is converted using a computer that has been programmed beforehand. This data processing starts with the recorder until the report is printed

Computerization

Language computer / computer comes from a foreign language to compute means count. Thus, the computer can be interpreted as a calculating tool or calculating machine. However, if the term computer is translated into Indonesian as a calculating machine, then our imagination will be different from its meaning and purpose, which means as if a computer is equated with a calculator. Computerization can also be interpreted as a computer. Computers use parts or components called hardware and software. The basic part of computer hardware consists of an input equipment unit, a central processing unit (CPU) which will control the sequence and steps of all operations, a storage unit such as magnetic tape, and a high-speed printing device that can print quickly. Converting the course of human thought and language into thought language and machine language requires experts in the field of software or ready-made software programs. This conversion is a process, requiring a program (programmer) who has been trained to know languages such as Pascal and other popular programming languages.

Employee Performance

Performance as the optimal target for work that needs to be completed within a certain scope and period of time. The performance of office district employees needs to be supported by various factors in order to increase the productivity of services to public services and the economy. Performance appraisal is needed to determine the level of success of each employee's performance. Performance appraisal is used to assess the success or failure of implementing activities or policies in accordance with the objectives set in order to realize the company's mission and vision. According to Benardin and Russel in Priansa (2017) state that performance is the result produced by certain job functions or activities at certain jobs during a certain period of time. The work result is the result of the ability, expertise, and desire achieved. According to Sinambela in Priansa (2017) states that: Performance is the ability of employees to perform certain skills. Performance is very necessary because with this performance it will be known how far the employee's ability to carry out the tasks assigned to him. For this reason, it is necessary to determine clear and measurable criteria, as well as jointly stipulated as a reference.

Performance Appraisal Objectives

Basically, performance appraisal has several objectives as stated by Werther and Davis in Priansa (2017), namely: Performance improvement, enabling leaders and employees to take actions related to improving their performance. Compensation adjustment, helping decision makers to determine who is entitled to receive an increase in compensation, and vice versa. Placement decision, determine promotions, transfers and demotions that apply to employees that can be obtained from the

results of job appraisals. Training Needs, evaluating the training needs of employees in order to improve their performance to be more optimal. Career planning and development (career planning and development), combining companies to determine the type of career and career potential that employees can achieve. The recruitment process (staffing process deficiencies), performance appraisals affect employee recruitment procedures used by the company. Informational inaccuracies and job-design errors, help explain errors that occur in HR management, especially in the field of job analysis information, job design, and HR management information systems that apply within the company. Equal employment opportunity (equal employment opportunity), it shows that the placement decision is not discriminatory, meaning that every employee has the same opportunity for a certain position according to the company's needs. External challenges (external challeges), employee performance is influenced by various external factors, such as family, health and work environment. Feedback, the results of the performance appraisal provide feedback for staffing or for the employees themselves.

Still according to Prawirosentono (2014), there are several things that can be used as performance appraisal indicators, including: Owned Knowledge, an employee's knowledge of the job is very important because it is part of his responsibility. Timeliness is an employee able to plan and schedule his work. This will greatly affect the timeliness of employees in completing the work that is the responsibility of an employee. Quality of work does an employee know the quality standards of work required by the company. Speed in Completing Work do employees know the quality standards of company productivity. This relates to the quality of work and the speed with which employees complete a job for which they are responsible. Technical Knowledge Around the Work do employees have technical knowledge about the work they are assigned to, because this is also related to the quality of work and the speed at which employees complete the work for which they are responsible. Self Confidence to what extent are employees dependent on other employees in completing their work, because this is related to a person's self-confidence in carrying out work. Ability to Adjust does the employee have an instinctive judgment (judgment) that is owned by an employee that affects their performance, because they have the ability to adjust and assess their duties in support of the company's vision and mission. Communication Between Employees, employee communication skills, both with colleagues and superiors. Teamwork, the ability of employees to work with other employees. This is very important in determining the performance of these employees.

3. Methods

In this study, the data used are primary data and secondary data, both qualitative and quantitative. Primary data is obtained through direct observation in the field and direct interviews with supporting employees, and the results of distributing questionnaires given to employees who are. The samples taken were 30 respondents, the statistical tests carried out included: Validity Test, Reliability Test, Linear Analysis, Correlation Coefficient Test, Determination Coefficient Test, Hypothesis t-test and F-test, Data processing using SPSS 19.

The variable operational grid used to determine the dimensions and indicators of computerized system variables is as follows:

Table 1. Variable Instrument Indicator X

Dimension	Indicators
Hardware	➢ □ Input Section ➢ □ Main processing and memory parts ➢ □ Output section ➢ □ Communication section

Software	➢ □ System software ➢ □ Application software
Brainware	➢ □ Cognitive intelligence ➢ □ Affective intelligence ➢ □ Psychomotor intelligence
Data base Management	➢ □ Data collection ➢ □ Maintain and maintain data integrity testing ➢ □ Data storage ➢ □ Maintenance of data ➢ □ Secure data ➢ □ Organizing data ➢ □ Search for data
1. Procedure	➢ □ Activities ➢ □ Functions
Telecommunication Network	➢ □ Computer (Host) ➢ □ Telecommunication Channels ➢ □ Telecommunication software

Table 2. Variable Instrument Indicator Y

Dimension	Indicators
Attendance	Presence
Honesty	Deed
Responsible	Responsible for work
Ability (Work Result)	Work meets work standards
	Work skills in accordance with the job
Loyalty	Willingness to contribute more
Obedience	Employee obedience
Cooperation	Help each other between employees
Leadership	Leadership ability
Initiative	Initiative at work

Population and Sample

According to Siregar (2017), the population comes from English, namely Population which means the number of residents. In the research method, the word population is very popularly used to describe a group of objects that are the target of research. The research population is the whole (universe) of the object of research which can be humans, animals, plants, air, value symptoms, events, life attitudes and so on.

Correlation Coefficient Test

According to Siregar (2017: 251) the correlation coefficient is a number that states the strength of the relationship between two or more variables or can also determine the direction of the two variables. Correlation value (r) = (-1 ≤ 0 ≤ 1). For the strength of the relationship, the value of the correlation coefficient is between -1 and 1, while the direction is expressed in the form of positive (+) and negative (-). For example: If r = -1 means perfect negative correlation, meaning that there is an opposite relationship between variable X and variable Y, if variable X increases, then variable Y decreases. If r = 1 means perfect positive correlation, meaning that there is a direct relationship between variable X and variable Y, if variable X increases, then variable Y increases.

Coefficient of Determination

According to Siregar (2017), the coefficient of determination (KD) is a number that states or is used to determine the contribution or contribution given by a variable or more X (free) to variable Y (dependent).

Regression Equations

According to Sugiyono (2017), regression analysis is used to predict how far the value of the dependent variable changes, if the value of the independent variable is manipulated / changed or increased and decreased.

4. Results and Discussion

Validity Test

The results of the validity test for the Computerization System variable (X) can be seen in the following table.

Table 3. Validity Test Y

Variable	Indicators	R value	R table	Result
Computerization Systems (X)	X1	0.550	0.3061	Valid
	X2	0.741		Valid
	X3	0,618		Valid
	X4	0,652		Valid
	X5	0,706		Valid
	X6	0,655		Valid
	X7	0,624		Valid
	X8	0,688		Valid
	X9	0,827		Valid
	X10	0,611		Valid

table r test 2 (two) directions with N = 30 / df = 28 with an error rate of 5% obtained 0.3610. Because the result of r count is greater than r table for an error level of 5%, it can be concluded that the indicators on the computerized system variables are valid and can be continued for this study. The results of the validity test of the Employee Performance Variable (Y) can be seen in the following table.

Table 4. Validity Test Y

Variable	Indicators	R value	R table	Result
Employee Performance (Y)	X1	0,759	0.3061	Valid
	X2	0,785		Valid
	X3	0,690		Valid
	X4	0,797		Valid
	X5	0,774		Valid
	X6	0,626		Valid
	X7	0,458		Valid
	X8	0,687		Valid
	X9	0,784		Valid
	X10	0,605		Valid

Based on the table r test 2 (two) directions with N = 30 / df = 28 with an error rate of 5% obtained 0.3610. Because the result of r count is greater than r table for an error rate of 5%, it can be concluded that the indicators on the work effectiveness variable are valid and can be used for this study.

Reliability Test

The instrument reliability test in this study used a confidence level of 95% or a level of significance (α) = 0.05. The instrument reliability test used Alpha Croncbach criteria. Based on the results of the reliability test above, it is known that the Cronbach's Alpha value is 0.904. This lift is greater than the minimum value of Cronbach's Alpha 0.6.

Therefore, it can be concluded that the research instrument used to measure the variables of the computerized system can be said to be reliable or reliable and the research can be continued. Based on the results of the reliability test above, it is known that the Cronbach's Alpha value is 0.916. The lift is greater than the minimum Cronbach's Alpha value of 0.6. Based on the above provisions, the Employee Performance variable in this study shows very reliable results. therefore, it can be concluded that the research instrument used to measure the work effectiveness variable can be said to be reliable or reliable and can be continued for research.

Determination Coefficient Test

To determine the influence of a computerized system on employee performance at the Duren Sawit East Jakarta urban village office, the coefficient of determination test was used. The results obtained from processing through SPSS 26.0 are as follows.

Table 5. Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,846[a]	,716	,705	2,508

Based on the results of processing through SPSS 26.0, it can be seen that the value of R Square is 0.716 or 71.6%, which means that the computerized system of employee performance at the Duren Sawit office, East Jakarta is 71.6% and the rest is influenced by other factors.

Test of Regression Equations

Tests to determine the effect of discipline (X1) and work motivation (X2), partially on the variable performance of employees of PT. Samsung Electronics Indonesia used the T test. From the analysis using the error rate (α) 10% and degrees of freedom (df) = n-k-1.

Table 6. Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	6,120	4,362		1,403	,172
	X	,842	,100	,846	8,394	,000
a. Dependent Variable: Y						

Based on the table above, it can be seen that the significant value is 0.000 <0.05, the decision is that H0 is rejected, H1 is accepted, then the conclusion is that the regression equation is significant so that the regression equation is

Y = 6.120 + 0.842X

This means that if X = 0 or without a computerized system, the employee's performance will be 6.120, if X increases by 1 point or every increase in the computerized system by 1, it will increase the employee's work effectiveness by 0.842 and vice versa. This shows a positive relationship between computerized systems and employee performance.

5. Conclusion

From the results of the study, the authors draw some conclusions, namely, from the calculation of the correlation coefficient, the result is 0.846 which indicates that there is a strong relationship between computerized systems and employee performance at the Duren Sawit office in East Jakarta. Based on the calculation of the coefficient of determination, the result is 0.716 which shows the influence of the computerized system on employee performance by 71.6% and the remaining 28.4% is influenced by other factors. Based on the calculation of simple linear regression analysis, the equation Y = 6.120 + 0.842X is obtained which shows that without a computerized system, the employee's performance is 6.120. And if X increases by 1 point or every increase in computerized system by 1, it will increase employee performance by 0.842 and vice versa. And have a positive relationship.

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