Analysis of Employee Performance Quality Through The Use Of Online Attendance Attendance (Application) At Dinas Ketahanan Pangan Dan Pertanian Pesisir Barat

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Abstract— The use of online attendance is the useof technology to support effectiveness in recording attendance within agencies. Many problems arise regarding absenteeism in agencies, namely the inevitable manipulation. Therefore, researchers want to examine the quality of employee performance in the west coast food security and agriculture service using online attendance. This study aims to find out how effective the use of online attendance is on the quality of performance. The number of samples taken was 100 respondents with purposive sampling. Data analysis in this study used the Structural Equation Model (SEM). From the results of data processing, the R square result of 0.939 is obtained, which means that variable X has a significant effect on variable Y through the intervening variable Z.

Keywords—quality performance, finger print, discipline performance.

I. INTRODUCTION

In the new normal era like today with the rapid development of technology and the expansion of global information infrastructure has changed the pattern and way business activities are carried out in all secktors including government. The development of information-based technology has become a paradigm in today's society, this is very important to do in the midst of current technological developments.

In Indonesia, E-electronik has been introduced since 2001 through a presidential instruction on the development and empowerment of telematics (telecommunications, media and informatics) which states that government officials must state that government officials must use telematics technology to support Good Government and increase the pace of democratization Furthermore, the issuance of Presidential Instruction No.3 of 2003 concerning National Policies and Strategies for egovernment Development which is a clear proof of the Indonesian government to improve the quality of public services through e-government. E-government or electronic government is the use of information technology by the government to provide information and services for its citizens.

With the existence of an electronic system in government activities, of course, it is used to improve the efficiency of government work which has been considered less than optimal. The creation of this system is expected to cut time and costs so that all activities the government is carried out optimally and has a good quality of work as well.

In an agency / company, human resources are the main asset in every running of an activity. Employees as human resources are a great potential to achieve the success of agency goals. The potential of each human resource must be maximized, because humans are the drivers and determinants of the course of activities in the agency. Therefore, an agency should give positive direction to its human resources in order to achieve the goals set by the agency.

Agencies need employees who have high *job performance* to achieve success. Employee performance is an action taken by employees in carrying out the work that has been given by the agency. Performance can also be interpreted as an illustration of the level of achievement of the implementation of an activity / program / policy in realizing the goals, objectives, mission and vision of the organization contained in the planning of an agency.

One of the agencies that has implemented a computerized system is the west coast district agriculture department. The information systems that have been used in these agencies are document filing systems, financial systems, asset management systems and employee attendance. Data collection of employee attendance at the west coast district agricultural office is done manually with signatures on the absentee book. Attendance recapitulation is also done manually, namely by recording and counting the number of employees present, sick or without information. The recapitulation process requires high accuracy to avoid errors in the calculation of attendance numbers. In addition, the disadvantages of manual attendance can occur fraud that may be carried out between employees such as absenteeism.

To overcome the problems that have been described, an employee attendance information system is needed at the west coast Agriculture office.

For this reason, the west coast agricultural department provided a *finger print* tool. Finger print is an advanced attendance equipment used to record employee fingerprints when they come and go home, besides this equipment works online and can be monitored from a computer that terhubung with such equipment over the network. This finger print also makes it easier for administrators to recap the attendance of employees. Finger print is considered more practical and efficient when compared to the previous conventional attendance system.

Recording employee attendance is one of the important factors in human resource management. The weakness of the conventional system is the opening of opportunities for manipulation, recording errors, and the loss of an employee's attendance record. In addition, the possibility of *buddy punching* where other co-workers record work time that is not themselves is very large. This makes recording employee attendance times inaccurate. Based on the explanation above, the author is interested in researching the quality analysis of employee performance through the use of online attendance (*fingerprint)* in the west coast agricultural service.

As for research on this matter, many have been carried out, such as, utilizes finger print technology for attendance information systems with the aim of avoiding absentee fraud and reducing paper use [5]. Unlike the case with built an employee attendance information system in Batu Ceper District by inputting employee IDs and selecting attendance information such as attendance, illness, permit and no information. The purpose of the application is to improve the accuracy of the data and information of the employee concerned, but the weakness is that employees can leave attendance with other employees [2]. In addition, there are also researchers who take advantage of the use of employee attendance dashboards which are shown visually in the form of interactive graphs to control, measure and monitor the performance of all employees [12].

From several previous studies on attendance information systems based on *finger prints, dashboards,* and employee cards. This study utilized a fingerprint time attendence machine tool located near the office lobby of the west coast food security and agriculture service. Fingerprints have proven to be quite accurate, secure, easy and convenient when compared to other human identity recognition systems such as face shape, voice color and eye retina. Human fingerprints are so unique that no one has fingerprints identical to anyone else, even between twins. Uniquely, everyone's ten fingers are different. Realizing this fact, the use of fingerprints for employee attendance can be a better solution to absenteeism because with fingerprints there are no more employees who leave absences and commit fraud.

II. THEORITICAL FRAMEWORK

1. *Employee performance*

According to performance or performance is a description of the level of achievement of the implementation of a program of activities or policies in realizing the goals, objectives, vision, and mission of an organization or institution that is poured into a plan.

According to Performance is the result of work and work behavior that has been achieved in completing tasks and responsibilities assigned in a certain period.

According to employee performance is the result of the work of employees both in terms of quality and quantity in performing and completing tasks charged to the employee by their superiors or leaders based on their role in the company.

According to performance indicators to measure employee performance are (1) quality of performance, (2) quantity (3) timing (4) effectiveness.

From the above understanding, it can be concluded that performance is a condition that must be known and confirmed to certain parties to be able to find out the achievement of the results of an agency or institution that is connected with the vision and mission of the institution and know what happens from the policies that have been implemented by the agency or institution.

2. *Finger print attendance system*

Finger Print attendance system is a form of Management Information System that uses computer technology to record human fingerprints. According to Management Information System is the effective and efficient use of information resources to improve organizational performance. According to Management Information System is an integrated human/machine system to present information to support operation, management and decision-making functions within an organization.

According to Management Information System is a computer-based blend of human resources and resources that results in a collection of data storage, communication, and use for the purpose of efficient management operations and business planning. Meanwhile, according to states that *software* that supports attendance purposes, which includes income, the Internet of Things in its application can also identify, find, track, monitor objects and trigger related events automatically and in real time, the development and application of computers, the internet and other information and communication technologies have a great impact on the economic management community, production operations, social management and even personal life [24] Indicators used for finger print according to:

1. Practical
2. Just
3. High securities

3. *Work Discipline*

According to Discipline is the awareness and willingness of a person to obey all applicable company regulations and social norms.

According to Discipline is a state that causes or gives encouragement to employees to do and carry out all activities in accordance with established norms or rules.

According to Work discipline is the ability of a person's work to regularly, persevere constantly and work in accordance with applicable rules and not to violate established rules.

Thus, it can be concluded that work discipline is a tool used by managers to communicate with employees so that they are willing to change a behavior and as an effort to increase one's awareness and willingness to obey all company regulations and applicable social norms.

Indicators of work discipline according to are:
1. Presence
2. Observance of work regulations
3. Observance of working standards

III. METHODOLOGY

Types of Research

The research methods used by the authors in this study are Associative and Quantitative. Associative research is a study that aims to find out the relationship between two or more variables. In this study, the author wanted to know the effect of the finger print attendance system on employee performance through work discipline.

Meanwhile, according to quantitative approaches are not carried out in depth, generally investigating surfaces only, thus requiring a relatively shorter time compared to qualitative research. Quantitative research is expressed in numbers and analyzed by statistical techniques

Data Collection Methods

Primary data collection is a systematic and standard procedure for obtaining the necessary data in research.
1. Interview
   Interviewing is a data collection technique when researchers directly dialogue with respondents to extract information from respondents.
2. Questionnaire Technique (Quesioner)
   Quesioner is a method of collecting data by making a list of questions in the form of a questionnaire that is shown to employees in the object of research, namely employees of the West Coast District Food and Agriculture Security Service, using a *likert* scale in the form of a checklist of each question has 5 options.

This study used a data collection method in the form of a questionnaire or questionnaire. A questionnaire is a technique or method of collecting data indirectly. The instrument or data collection tool is also called a questionnaire containing a number of questions or statements that must be answered or responded to by respondents. Data collection is carried out by providing questions or statements to respondents. The measurement scale used in this questionnaire uses an interval scale.

Population and Sample

The population in this study were Employees of the West Coast Food and Agricultural Security Service. Hair et, al revealed that a study using regression analysis methods and SEM, must have a minimum number of samples five times the number of questions on the questionnaire. So the total questionnaire in this study was 10 times the number of questions where the number of indicators was 10, resulting in as many as 100 respondents.

$$10 \text{ (indicator)} \times 10 = 100$$

Data Analysis Methods

Data analysis in this study used the Partial Least Suare (PLS) approach. PLS is a component- or variant-based Structural Equation Modeling (SEM) equation model. SEM and PLS are alternative techniques in SEM analysis where the data used do not have to be normally multivariate.

Hypothesis testing
1. There is an influence of the *Finger print (X)* attendance system on the performance of employees (Y) in the West Coast District Agriculture Office
2. There is an influence of work discipline (Z) on the performance of employees (Y) in the West Coast District Agriculture Office
3. There is an influence of the *Finger print (X)* Attendance System on the performance of employees (Y) mediated by work discipline (Z) in the West Coast District Agriculture Office

IV. RESULT AND DISCUISSION

The following are measurements of independent variables and dependent variables that will be measured in this study as follows.

	Employee performance	STS	TS	N	S	SS
1	The skills I have are in accordance with the job I do					
2	The amount of work given by me can be completed according to the target					
3	I am present at the office according to the specified working hours					
4	I always try to do work on my own abilities					
	Finger print	STS	TS	N	S	SS
5	Doing attendance becomes more practical					
6	During the verification process fingers have high accuracy					
7	Fingerprint systems have					

		STS	TS	N	S	SS
	the least risk of manipulation					
Labor discipline		**STS**	**TS**	**N**	**S**	**SS**
8	I came early to work to work					
9	I have never violated office rules					
10	I am responsible for the duties and work ordered					

RESULT

The research data was processed using the Smart PLS 3.0 application, the analysis activity was carried out by aligning the stages in the method in the analysis using the Smart PLS 3.0 application. and after obtaining the results of data processing, it will be obtained evidentiary data from the hypothesis that has been described in the previous chapter. The results are presented in the SEM (*Stuctural Equation Modeling)* analysis following are the analysis results obtained:

In order to meet the *convergent Validity* that is a requirement, which is higher than 0.5, the following chart results are obtained
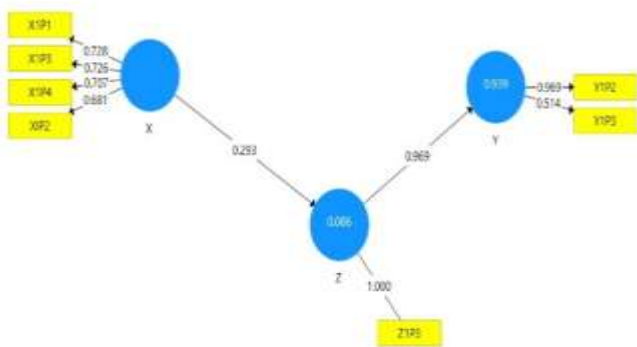

Figure 1. results are obtained

The chart above is the result of data processing after eliminating some invalid questions.

From the chart above, the intervening variable *Z* has a very high influence on the variable *Y* with a value of 0.969 while the variable *X* has a smaller influence with a value of 0.293. The results of the *composit reability* test were obtained from variable *X* (Finger print) 0.803 variable Y (Employee performance) 0.734 and variable Z (work discipline) 1.000. The original samples obtained in this study are as follows:

Variable	Sampel asli	t-statistik	p.value
X>Z	0.239	3.598	0,000
Z>Y	0,969	68.141	0,000

From the table above, the result is that variable X affects Z with a value of 3,598 > 1,960, then H0 is rejected and H1 is rejected which means that *finger print* affects employee performance and is strengthened by intervening variables, namely work discipline.

R-Square

Inner models (inner relations, structural models, and substantive theory) describe the relationship between latent variables based on substantive theory. The structural model is evaluated using R-square for dependent constructs. The R^2 value can be used to assess the influence of certain endogenous variables and exogenous variables whether they have substantive influences [18]..

From the results of data processing, you can get the R-squeare results as in the table below:

variabel	R^2
	0,939

From the table above, the result of R^2 of 0.939 means that employee performance of 93.9% is influenced by the use of finger print while the remaining 6.1% is influenced by other variables.

So it can be said that the R square of the results of this study is moderate.

IV. CONCLUSION

Based on the results that have been described, in the previous chapter, in the study, the following conclusions were obtained.
1. The use of fingerprints has a significant effect on employee performance
2. The use of fingerprints affects employee discipline and work discipline greatly affects employee performance

REFERENCES

[1] Afriyeni, A., & Fernos, J. (2018). Analisis Faktor-Faktor Penentu Kinerja Profitabilitas Bank Perkreditan Rakyat (Bpr) Konvensional Di Sumatera Barat. *Jurnal Benefita*, *3*(3), 325-335.

[2] Ahyaruddin, M., & Amrillah, M. F. (2018). Faktor penentu kinerja pemerintah daerah. *Jurnal Akuntansi Multiparadigma*, *9*(3), 471-486.

[3] Alhothaily, M., Alradaey, M., Oqbah, M., & El-Kustaban, A. (2015). Fingerprint attendance system for educational institutes. *Journal of Science and Technology*, *20*(1).

[4] Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. *Psychological bulletin*, *52*(5), 396.

[5] Darmawan, A., Yuliawati, D., Marcella, O., & Firmandala, R. (2016). Sistem Absensi dan Pelaporan Berbasis Fingerprint dan SMS Gateway. *Explore: Jurnal Sistem Informasi Dan Telematika (Telekomunikasi, Multimedia Dan Informatika)*, *7*(2).

[6] Diamantidis, A. D., & Chatzoglou, P. (2018). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management*.

[7] Sabita, H., Fitria, F. and Herwanto, R., 2021. Analisa Dan Prediksi Iklan Lowongan Kerja Palsu Dengan Metode Natural Language Programing Dan Machine Learning. *Jurnal Informatika*, *21*(1), pp.14-22.

[8] Ferdika, R., & Nasution, R. D. (2020). Perubahan Orientasi Motivasi Pegawai Pada Penerapan E-Absensi Di Kabupaten Ponorogo Changes In Orientation Of Employee Motivation In The Application Of E-Absensi In Ponorogo District. *Jurnal Penelitian Komunikasi dan Opini Publik Vol*, 24(1), 71-84.

[9] Gioh, A. (2021). Pelayanan Publik E-Government Di Dinas Komunikasi Informatika Kabupaten Minahasa. *Jurnal Politico*, 10(1).

[10] Ardiansyah, R., 2019, November. Penggunaan Metode Balance Scorecard Untuk Mengukur Kinerja Pekerjaan Pada PT. Bangun Cipta Karya Pamungkas (PT. BCKP). In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, pp. 78-87).

[11] Inuwa, M. (2016). Job satisfaction and employee performance: An empirical approach. *The Millennium University Journal*, 1(1), 90-103.

[12] Muhammad, N. A., Samopa, F., & Wibowo, R. P. (2013). Pembuatan Aplikasi Presensi Perkuliahan Berbasis Fingerprint (Studi Kasus: Jurusan Sistem Informasi Institut Teknologi Sepuluh Nopember Surabaya). *Jurnal Teknik ITS*, 2(3), A465-A469.

[13] Liandi, O. and Fitria, F., 2019. Evaluasi Tata Kelola Framework COBIT 5 pada Dinas Kependudukan dan Pencatatan Sipil. *POSITIF: Jurnal Sistem dan Teknologi Informasi*, 5(2), pp.111-115.

[14] Mulyani, Y. (2020). Penerapan Absensi Online Berbasis Android Pada Peningkatan Kedisiplinan dan Kinerja Guru Pegawai Negeri Sipil Pada Bidang PAI. *Jurnal Educatio FKIP UNMA*, 6(1), 205-208.

[15] Mohamed, B. K., & Raghu, C. V. (2012, December). Fingerprint attendance system for classroom needs. In *2012 Annual IEEE India Conference (INDICON)* (pp. 433-438). IEEE.

[16] Hendrawan, E., Irianto, S.Y. and Fitria, F., 2021. MEASUREMENT OF ELECTRONIC LEARNING PERFORMANCE USING THE TECHNOLOGY ACCEPTANCE MODEL (TAM) METHOD AT THE VOCATIONAL SCHOOL OF PATRIA GADINGREJO. *Jurnal TAM (Technology Acceptance Model)*, 12(1), pp.48-58.

[17] Mangkunegara, A. P., & Octorend, T. R. (2015). Effect of work discipline, work motivation and job satisfaction on employee organizational commitment in the company (Case study in PT. Dada Indonesia). *Marketing*, 293, 31-6.

[18] Ngantung, K. A., Najoan, M. E., Sugiarso, B. A., & Paturusi, S. D. (2014). Desain dan Implementasi Sistem Absensi Fingerprint di Jaringan Kampus dan Terintegrasi Dengan Sistem Informasi Terpadu UNSRAT. *Jurnal Teknik Elektro dan Komputer*, 3(1), 81-86

[19] Octaviani, L. (2019). Analisis Penerapan Absensi Sidik Jari (Fingerprint) pada Aparatur Sipil Negara di Kantor Kecamatan Samarinda Ilir Kota Samarinda (cetakan ke tujuh). *Samarinda, Kalimantan Timur*.

[20] Rhomadhona, H. (2018). Penerapan Teknologi QR Code Berbasis Web untuk Absensi Pegawai pada BKPSDM Kabupaten Tanah Laut. *Jurnal Humaniora Teknologi*, 4(1).

[21] Satrya, A., Muryati, M., & Ningsih, Y. I. (2021). Analisis Tingkat Kehadiran Pegawai dengan Aplikasi Sikepo di Dinas Tanaman Pangan dan Hortikultura Kabupaten Batang Hari. *JURNAL MAHASISWA*, 1(1), 9-21.

[22] Samsuddin, H. (2018). *Kinerja Karyawan* (Edisi Pert). Sidoarjo: IndomediaPustaka

[23] Prihatinta, T., & Wiwoho, R. D. (2017). Hubungan Tingkat Kehadiran Melalui Penerapan Absensi Finger Print Terhadap Disiplin Kerja Karyawan Kontrak di Politeknik Negeri Medan. *Epicheirisi*, 1(1), 8–12.

[24] Zhou, Q., & Zhang, J. Internet of things and geography review and prospect. Proceedings - 2011 International Conference on Multimedia and Signal Processing, 2011:47–51. http://doi.org/10.1109/CMSP.2011.10 1: CMSP 2011

[25] Fitria, Y.A., 2019. Visualization of data on earthquake prone areas from the analysis of earthquake data vibrations. *Test Engineering and Management*, 81(11-12).

Sumber lainnya :
[25] Inpres Nomor 6 Tahun 2001 Tentang Telematika, Yang menyatakan bahwa Pemerintah Harus Menggunakan Teknologi

[26] Inpres Presiden Nomor 3 Tahun 2003 Tentang Kebijakan Strategi Nasional Pembangunan Egovernment.