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The Effectiveness of Using Fingerprint in the Environmental Office of Soppeng Regency

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ABSTRACT

The use of fingerprint is an electronic-based attendance tool used to see the level of employee discipline. This study aims to determine the effectiveness of finger printing use in the Soppeng Regency Environmental Office. To achieve this goal, researchers use data collection techniques through observation, questionnaires, interviews, and documentation. This research is quantitative descriptive research. The population in this study was all employees of the Soppeng Regency Environmental Office which amounted to 62 people and sampling was carried out based on the Krejcie table as many as 55 people. Data is presented through a frequency table and processed using score calculations. The data analysis technique uses a percentage formula. The results of this study show that the effectiveness of finger printing in the Soppeng Regency Environmental Office is carried out very well or very effectively. These results are seen from the aspects of: 1) achieving targets, namely achieving employee attendance and productivity with a percentage result of 92.25%, 2) employee adaptability to finger printing with a percentage result of 95.81%, (3) employee job satisfaction with a percentage result of 91.85%, (4) employee responsibility to complete work on time with a percentage result of 92%.

Keywords: Effectiveness; fingerprint; discipline

INTRODUCTION

Technological developments in the era of increasingly sophisticated globalization make it easier for people to access information. One of the important developments in information technology is the increasing need for data processing tools that have a function to produce information needed by everyone, even institutions or organizations. The development of increasingly sophisticated technology, so that it provides benefits for all circles, especially very large benefits for government agencies (Jamaluddin et al., 2021; Nasrullah et al., 2021; Niswaty et al., 2021). Government agency is an organization that is a collection of people specially selected to carry out state duties as a form of service to the people. The purpose of government agencies can be achieved if the employees in it have a high disciplinary nature, by having to obey all existing regulations (Arhas, Riskawati, et al., 2021; Jamaluddin et al., 2022; Wahid et al., 2024).

Employees who have a high level of discipline are employees who always come and leave work on time, doing all work properly and correctly according to the predetermined time. To find out employee discipline, an attendance system is needed that can record employee attendance lists. The attendance system or attendance list is a form of supervision of the level of discipline of employees or employees that has been carried out in several

agencies since a long time ago. Previously, some agencies applied manual attendance to record employee attendance lists, with signatures on arrival and signatures on return, not all at once, not engineering and also not just full because it was signed at the same time. To anticipate and minimize the occurrence of employee flicker violations / fraud, the use of the fingerprint system began to replace manual absences. This policy refers to enforcement Government Regulation Number 53 of 2010 Concerning Civil Servant Discipline.

Since the issuance of the regulation, almost all government agencies and educational institutions have changed to using fingerprint. Because finger printing is a machine with the help of software to fill in the presence data of communities, groups and agencies that use it, as well as a rare government strategy in increasing supervision of Civil Servants (PNS). The application of finger printing is not to curb the freedom of civil servants and the creativity and innovation of civil servants, but to determine the level of performance and discipline of employees in carrying out their duties and functions.

The use of the attendance system in government or private institutions is actually not directly related to efforts to improve employee discipline and performance (Halomoan, 2020; Kale et al., 2019; Wilandari & Dinantara, 2020). The main purpose of implementing the system is to facilitate system control and automation. But basically, discipline should indeed be embedded in an employee regardless of any absentee system applied in the agency where they work. In enforcing discipline, agencies also need to apply supervision to employees in order to carry out their work as well as possible. Supervision is needed to direct employees to carry out work appropriately and in accordance with agency rules. The implementation of an activity without supervision can cause work discipline to decrease and will directly affect other activities, so that it can hamper the goals of an organization.

At the Soppeng Regency Environmental Office that before finger printing, employees still used manual attendance. Supervisors or other employees who see attendance do not know the level of discipline of other employees, in manual abscession there is no information when the employee comes and goes home, employees can leave on another day or leave absences to other employees making it difficult for superiors to give sanctions. Therefore, the Soppeng Regency Environmental Office has used finger printing for the first time in August 2020, therefore it can be said that finger printing is still only applied in the office. Environmental Agency employees do finger printing 3 times a day, namely in the morning after apples, in the afternoon after rest and in the afternoon before going home. The application of finger printing can indirectly make it easier for superiors to see the level of attendance discipline of each employee.

METHOD

The type of research used in this study is descriptive research with a quantitative research approach. Descriptive research is directed to determine the value of independent variables (both one variable and more) without making comparisons or linking one variable to another. Quantitative research is research that is structured and quantifies data to be generalized.

In this study, to measure variables, a Likert scale questionnaire was used which will be filled in by renspondents according to variable indicators. The population in this study was all employees of the Soppeng Regency Environmental Office totaling 62 people and sampling was carried out based on the Krejcie table as many as 55 people.

The data collection of this study used several techniques including observation techniques, questionnaire techniques, interview techniques and documentation techniques. The data analysis technique used in this study is using a percentage formula. Data is presented through a frequency table and processed using score calculations To calculate the percentage of questionnaire result data, a formula based on opinions from Niswaty & Arhas (2019) as follows:

$$P = \frac{F}{N} x\ 100\%$$

Information:
P = Percentage
F = Respondent's Answer Frequency
N = Number of Respondents

The research data was analyzed using percentage analysis by presenting each question to determine the Effectiveness of Using Fingerprint in the Soppeng Regency Environmental Office, with the formula proposed by Suprianto et al. (2018) yaitu:

$$\% = \frac{n}{N} x\ 100$$

Information:
% = Percentage
n = Value obtained
N = Number of all values

RESULT AND DISCUSSION

The results of the data analysis presented in this study are data obtained from the percentage results that have been given to 55 respondents who became research samples that aimed to find out the picture of the Effectiveness of Using Fingerprint in the Soppeng Regency Environmental Office and the interview results presented were data obtained from 3 informants who were sampled, described as follows:

Target Achievement

The purpose of achieving targets here is interpreted as the extent to which targets can be determined by the organization can be realized properly. The achievement of the target in this case the attendance target, since the use of finger print of the supervisor attendance target is very effective. The results of data processing on target achievement indicators are as follows:

Tabel 1. Jawaban responden untuk indikator pencapaian target

Number	Frequency				Value x Frequency						Sum
	5	4	3	2	5	4	3	3	5	4	3
1	50	5	0	0	0	250	20	0	0	0	270
2	31	11	13	0	0	155	44	39	0	0	238
3	47	4	4	0	0	235	16	12	0	0	263
4	39	11	5	0	0	195	44	15	0	0	254
5	44	2	8	0	1	220	8	24	0	1	253
6	49	2	3	0	1	245	8	9	0	1	263
7	33	12	6	0	4	165	48	18	0	4	235
Sum											1776

Source: Processing research data

Based on table 1, it can be seen that the Effectiveness of Fingerprint Use in the Soppeng Regency Environmental Office based on target achievement indicators, the formula is used:

$$\% = \frac{n}{N} \times 100$$

$$\% = \frac{1776}{7\ \times\ 5\ \times 55} \times 100$$

$$\% = \frac{1776}{1925} \times 100$$

$$= 92{,}25\%$$

Based on the results of data analysis in table 1 shows that the target achievement indicator is in the very effective category with results obtained of 92.25%. Judging from the results of observations regarding the achievement of targets at the Soppeng Regency Environmental Office with the results of questionnaires that have been distributed to respondents show that employees have achieved targets in terms of attendance or time discipline since the use of fingerprint attendance. Since the use of fingerprints, the level of employee discipline has been achieved, such as employees coming to the office on time because every morning morning an apple is held, as well as before leaving the office, employees follow the afternoon apple, it is done every day, and employees are also on time to complete work.

The achievement of targets in this case is the presence and productivity of work. This can be seen from the extent to which the implementation of organizational goals in achieving targets in accordance with previously set goals. Based on the results of data analysis obtained in the field, it can be seen that the achievement of targets at the Soppeng Regency Environmental Office is in the category of very effective, in terms of employees coming to the office on time, taking a break from work on time, leaving the office on time, completing work on time, working in accordance with the predetermined working time, the attendance recapitulation process is carried out every day, The supervisor gives sanctions to employees if they violate time discipline. Based on several categories mentioned earlier, it can be said that the achievement of targets in the Soppeng District Environmental Office has been achieved and effective since the implementation of finger printing, even motivating employees to be disciplined at work. The existence of good discipline in office is one of the keys to the success of government. In line with research Darwis et al. (2021) that the achievement of targets is the achievement of attendance, employee work productivity, ease and comfort in the attendance process and accurate attendance reports.

Adaptability

The change in the attendance system at the Soppeng Regency Environmental Office from manual to electronic using finger printing is a new thing for employees, therefore employees must be able to adapt to changes in the attendance system. The results of data processing on adaptability indicators are as follows:

Table 2. Adaptability

Number	Frequency					Value x Frequency					Sum
	5	4	3	2	1	5	4	3	2	1	
1.	43	6	6	0	0	215	24	18	0	0	257
2.	49	2	4	0	0	245	8	12	0	0	265
3.	46	9	0	0	0	230	36	0	0	0	266
4.	48	5	2	0	0	240	20	6	0	0	266
Sum											1054

Source: Processing research data

Based on table 2, it can be seen that the Effectiveness of Using Fingerprint in the Environmental Office of Soppeng Regency based on adaptability indicators, the formula is used:

$$\% = \frac{n}{N} \times 100$$

$$\% = \frac{1054}{4 \times 5 \times 55} \times 100$$

$$\% = \frac{1054}{1100} \times 100$$
$$= 95{,}81\%$$

Based on the results of data analysis in table 2 shows that the indicator of adaptability is in the very effective category with results obtained of 95.81%. Judging from the observations regarding adaptability in the Soppeng Regency Environmental Office, relevant to the results of the questionnaire that has been distributed to respondents, it shows that employees of the Environmental Office are able to adapt to existing changes, namely the change of manual attendance to electronic presence, seen from employees being able to use electronic attendance, even employees are very enthusiastic when using finger print attendance and even remind each other to Perform finger prints.

Adaptability is the process of adjusting to existing changes. Adaptability in this case is the ability of employees to adapt to changes in the use of manual attendance to electronic or fingerprint. The success of an organization is seen from the extent to which the organization can adapt to changes that occur both from within the organization and outside the organization (Eka, 2020; Lail & Isma, 2021; Syam et al., 2018). The self-adjustment in question is that employees are expected to be familiar with these changes and can even use or operate fingerprint attendance. Based on the results of data analysis obtained in the field, it can be seen that the adaptability of employees at the Soppeng Regency Environmental Office is in the category of very effective. Judging from the aspect of employees being able to adjust to changes in attendance from manual to electronic, employees are accustomed to always being disciplined, employees easily understand the use of fingerprint attendance, employees are able to use finger print attendance. In accordance with the results of data analysis obtained in the field in terms of several aspects previously mentioned, it can be said that employees at the Environmental Agency are able and able to adapt to these changes.

Job Satisfaction

Employee job satisfaction is the comfort felt by employees at work and the appreciation obtained from superiors. Job satisfaction is something that must be felt by employees. The results of data processing on job satisfaction indicators are as follows:

Table 3. Job Satisfaction

Number	Frequency					Value x Frequency					Sum
	5	4	3	2	5	4	3	3	5	4	
1.	44	6	5	0	0	220	24	15	0	0	259
2.	53	2	0	0	0	265	8	0	0	0	273
3.	52	1	2	0	0	260	4	6	0	0	270
4.	48	4	3	0	0	240	16	9	0	0	265
5.	25	6	7	9	8	125	24	21	18	8	196
Sum											1263

Source: Processing research data

Based on table 3, it can be seen that the effectiveness of using finger printing in the Soppeng Regency Environmental Office based on job satisfaction indicators, the formula is used:

$$\% = \frac{n}{N} \times 100$$

$$\% = \frac{1263}{5 \times 5 \times 55} \times 100$$

$$\% = \frac{1263}{1375} \times 100$$

$= 91{,}85\%$

Based on the results of data analysis in table 3 shows that job satisfaction indicators are in the very effective category with results obtained of 91.85%. Judging from the results of observations regarding work loss at the Soppeng Regency Environmental Office, relevant to the results of the questionnaire that has been distributed to respondents, it shows that Environmental Agency employees have felt satisfaction at work, as evidenced by the results of answers from the questionnaire, many choose to be enthusiastic at work, feel comfortable in using fingerprint attendance. Employees immediately work after doing finger printing, but a small number of employees still do not work immediately.

Job satisfaction is a condition that must be felt for every employee because this can improve organizational performance. The work of employees must be in accordance with the rewards obtained from superiors, employees who work more than the workload and who have achievements or achievements should be given rewards as appreciation to superiors. The enthusiasm and comfort that employees have in doing work certainly greatly impacts the quality of the work produced. Giving rewards or awards can motivate employees to further improve the quality of their work. Based on the results of data analysis obtained in the field, it can be seen that the work of employees of the Soppeng Regency Environmental Office is in the very effective category. Judging from the aspect of employees working directly after doing fingerprint attendance, employees are engaged in carrying out work, employees have high motivation to work on time, employees feel comfortable using finger print attendance, employees get rewards or rewards from superiors for discipline, both in terms of attendance and at work. In accordance with the results of data analysis in the field and some aspects mentioned earlier, it can be said that employee job satisfaction has been fulfilled. The use of fingerprint abscession is certainly expected to increase employee job satisfaction, meaning that time discipline in terms of attendance will be directly proportional to the quality of work produced, so that it can get its own appreciation from superiors both in the form of benefits and verbal appreciation (Akinduyite et al., 2013; Cay et al., 2021).

Responsibility

Responsibility is the ability of employees to complete all assigned work on time and not in and out of the office during working hours except office matters. As employees who work, every employee should have a high sense of responsibility and obey every office rule, one of which is not going in and out of the office during working hours except for work matters.

Table 4: Responsibilities

Number	Frequency				Value x Frequency						Sum
	5	4	3	2	5	4	3	3	5	4	
1.	37	9	4	1	4	185	36	12	1	4	238
2.	54	1	0	0	0	270	4	0	0	0	274
3.	27	3	20	1	4	135	12	60	2	4	213
4.	53	2	0	0	0	265	8	0	0	0	273
5.	53	1	1	0	0	265	1	1	0	0	267
Sum											1265

Source: Processing research data

Based on table 4, it can be seen that the Effectiveness of Using Fingerprint in the Environmental Office of Soppeng Regency based on responsibility indicators, the formula is used:

$$\% = \frac{n}{N} \times 100$$

$$\% = \frac{1265}{5 \times 5 \times 55} \times 100$$

$$\% = \frac{1265}{1375} \times 100$$
$$= 92\%$$

Based on the results of data analysis in table 4 shows that the responsibility indicator is in the very effective category with results obtained of 92%. Judging from the observations regarding responsibilities at the Soppeng Regency Environmental Office, relevant to the results of the questionnaire that has been distributed to respondents, it shows that employees of the Environmental Office are already responsible for their work results and no longer go in and out of the office during working hours except office matters. Employees are also accustomed before leaving the office to first ask permission from superiors before leaving the office, while those who are still in and out of the office only during external service or work matters.

Responsibility is the ability of employees to complete all previously assigned work on time and not in and out of the office during working hours except for work matters. Responsibility is a form of employee dedication to their obligations (Arhas, Suprianto, et al., 2021). Responsibility should be embedded in every employee; it is also the obligation of employees to always be responsible for their work. If employees have a high sense of responsibility for their work, this can be seen from employees who always start their work on time, complete their work on time and are able to account for the results of their work. Based on the results of data analysis obtained in the field, it can be seen that the responsibility of employees of the Soppeng Regency Living Environment Office is in the very effective category. Judging from the aspect of employees having an increase in completing the mandate, employees ask permission from superiors when they want to leave the office, employees do not go in and out of the office during working hours except work matters, employees are responsible for their work, employees always obey the office rules that have been set. In accordance with the results of data analysis and various aspects above mentioned earlier, it can be said that employees of the Soppeng Regency Environmental Office already have a sense of responsibility for their work, this is in line with the implementation of finger print abscession where employees are controlled by electronic attendance which requires always being on time in terms of attendance so as to trigger employees to always be in the office to work on time and even complete their work in a timely manner and not in and out of the office during working hours, except for work matters.

Tabel 5. Analis data secara umum

Number	Indicator	n	N	%	Category
1	Target Achievement	1776	1925	92,2597	Highly effective
2	Adaptability	1054	1100	95,8181	Highly effective
3	Job Satisfaction	1263	1375	91,8545	Highly effective
4	Responsibility	1270	1375	92	Highly effective
	Sum	5358	5775	92,7792	Highly effective

Source: Results of general data analysis

Based on the graph, it shows for each indicator used in measuring the effectiveness of finger printing use at the Soppeng Regency Environmental Office, where the target achievement indicator is in the **"very effective"** category with a percentage rate of 92.25 percent, the adaptability indicator is in the **"very effective" category** with a percentage rate of 95.81 percent, the job satisfaction indicator is in the category **"Very effective"** with a percentage rate of 91.85 percent and the responsibility indicator is in the category of **"Very effective"** with a percentage of 92.36 percent.

$$\% = \frac{n}{N} x100\%$$

$$\% = \frac{5358}{5775} x100\%$$
$$= 92,77\%$$

The results of the data analysis showed that the effectiveness of using finger printing in the Soppeng Kabupten Environmental Office was achieved at 92.86 percent. So the effectiveness of using finger printing in the Soppeng Regency Environmental Office is in the category **of "very effective".**

CONCLUSION

Based on the results of the analysis and discussion described about the effectiveness of using fingerprints in the Environmental Office, Soppeng Regency is in the **"Very Effective" category.** This can prove that at the Soppeng Regency Environmental Office office, the use of fingerprints at the Soppeng Regency Environmental Office has met the achievement of targets, adaptability, job satisfaction, employee responsibility

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