

Implementation of android-based online attendance to improve teacher work discipline

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Abstract

In the current digital era, technological advancements have significantly influenced various sectors, including education. The integration of technology in educational administration, particularly through the use of mobile applications, has opened new avenues for improving work discipline and performance. The purpose of this study is to explain how the application of android-based online attendance and describe how discipline and teacher performance. The theoretical study used in this study is a theory of work discipline put forward by Gorga that discipline is the attitude or behavior of an employee which is manifested in the form of a willingness with full awareness and sincerity to obey and carry out duties and responsibilities as an effort to contribute as much as possible to achieve the goals of the institution. This research uses a qualitative approach using a phenomenological case study research model. The result of this study is to explain the use of android-based online presence. Every weekday, all teachers and employees at SD Muhammadiyah Sukorejo fill out the attendance list using the attendance application installed on *their respective cellphones*. Through the application, attendance time and location coordinates where teachers and employees conduct attendance are recorded automatically accurately. Through the use of *online* attendance, teacher discipline is better than before. In the last six months, the data on delays has decreased significantly from 22.2% to 6.6%. *Online attendance* using android smartphones has a great impact on improving the discipline and performance of teachers and employees although it still needs improvement. This article makes a new contribution to the understanding of the application of Android-based online attendance technology in improving work discipline and performance in basic education environments.

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INTRODUCTION

The era of globalization is globalizing or globalizing processes Demand anyone to get closer to technology (Widiyono, 2019). The development of increasingly sophisticated technology, leads to obtaining practical and smart solutions (Danuri, M. 2019). Various concepts about technology are a unified system related to digital transformation (Mahmudah & Son, 2021). The influence of the development of Information Technology has now reached all fields of education, the need for accurate, precise and fast information in presenting very complete data is one of the important goals (Litvinenko, 2020). For this *Smartphones* play an active role in all fields and will facilitate human work (Helianny, I. 2019). Information is very important for everyone, with information there will also be reciprocity in good progress in all fields (Santos et al., 2021). From the existence of a progress there will be a change, and changes will occur if information is made and with information will be developed again a new discovery (Mulyani, Y. 2020). Currently, the world is experiencing a revolution in the application of computer technology called digitalization (Urbach et al., 2019).

Technology utilization Smartphones which then very rapid development can be used to improve the quality of performance (Wahyono, H. 2019). Advantages of Smartphones With the Android operating system allows users to install many applications that can support their daily work (Amine et al., 2019). This is what causes users Smartphones in Indonesia reaches around 55 million users which puts Indonesia as the third most users after China and India in Asia Pacific coverage (Andeobu et al., 2021).

One of the classic problems in the world of education is about teacher discipline (Rivai, 2021). As the phenomenon in SD Muhammadiyah Sukorejo, Sukorejo District, Kendal Regency, based on interviews with the principal, data on teacher attendance delays were obtained which was quite significant, namely 22.2%. Not a few teachers are not punctual in terms of attendance, especially the problem of teacher discipline entering the classroom during learning activities in class (Mulenga, 2019). Undisciplined behavior from educators causes learning and teaching activities to be disrupted and ultimately has an impact on low student learning outcomes. Teacher discipline can be influenced by many things, both internal and external factors (Sobandi & Nurlatifah, 2019). Internal factors come from within the teacher himself which are related to his awareness and constancy in discipline (Rasheed et al., 2019). While external factors come from outside the teacher such as: the environment where teachers live who are not disciplined and people who like to violate discipline, to an environment that does not cultivate obedience to existing rules and norms at all (Angraini, 2019).

The use of an increasingly advanced information technology system can overcome the unwanted things above with the existence of a digitalized attendance system that can provide performance achievement at the school (Faramita et al., 2022). Android is the operating system for *Smartphones* (Wu et al., 2019). Android provides *platform* Open for developers to create their own applications that have been used by various mobile devices (Saputra et al., 2021). One of the most rapid devices is *Mobile* Where the development of technology is increasingly rapid and fast, especially information and communication technology. Currently, information technology has been widely used for data processing because it has many advantages including speed, accuracy and efficiency compared to manual systems (Fadhilillah, et al, 2021). The development of technology that is currently experiencing very rapid progress is mobile technology, especially for *Smartphones* Android (Banafaa et al., 2023).

The current era of globalization is no longer used because it is not time efficient in the implementation process (Nurli et al., 2022; Khofifah et al., 2023). For this reason, there is a need for unconventional attendance to overcome these problems. In this case to encourage an agency to provide more accurate attendance information. School managers need to replace the conventional attendance system with a attendance system *Online* Based on Android, because it is considered more effective and cheaper price. By replacing the android-based attendance system, it is hoped that

increasing employee attendance discipline can be more effective and motivate employees to work better at the agency (Sunaryono et al., 2021).

While using the attendance manual (only in the form of an attendance list book), the principal could not know the level of discipline of teachers and employees. In manual attendance, it can be manipulated arrival and return hours or leave absences to other employees. With this online attendance system, school managers can monitor who are teachers or employees who are often absent and who are never absent. If teachers or employees are not absent many times, there are sanctions or reprimands. So with this reprimand, it can create discipline for all educators and education staff. So that this Online attendance system *is* a manifestation of improving the use of manual attendance which is considered ineffective and inefficient in its application.

RESEARCH METHODS

This research uses qualitative methodology. One of the steps taken is to make observations. Observations are made without and with the participation of researchers. Observing while participating can result in more, more in-depth and more detailed data. In order to be a participant and observer, researchers should participate in various events and activities, but there are times when researchers can only be observers without acting as participants.

This research was conducted at SD Muhammadiyah Sukorejo, Sukorejo District, Kendal Regency. The respondents of this study were the Principal, Waka Personnel, Waka Kurikulum, and Operator of SD Muhammadiyah Sukorejo. They were chosen to be respondents because they are the trusted sources of information. The process of data triangulation is to compare data obtained from one source with another. The steps taken in order to obtain completeness of data and information in accordance with the focus of research carried out several data collection techniques used, namely: observation methods; interview methods and documentation studies. Data processing and analysis is done through the process of simplifying data into a form that is easier to read and interpret. Then the analytical technique used in this study is a descriptive analysis technique carried out through three lines of activity, namely data reduction; presentation of data; perification and making conclusions.

RESULTS AND DISCUSSION

The use of android-based online attendance at SD Muhammadiyah Sukorejo technically is every working day all teachers and employees fill out the attendance list using the attendance application installed on *their respective cellphones*. The data filled in during attendance are the teacher's name, coordinate points (filled automatically), time (auto-filled), real-time face photos, uniform wearing descriptions, and several morning activities (welcoming student attendance and morning prayer activities). The attendance application is very easy and very accurate in recording attendance time as conveyed by the principal.

Alhamdulillah the online attendance application that we have implemented since the beginning of the 2022/2023 academic year is very effective in improving the discipline of attendance, time and coordinates recorded in the application are very accurate because it is very difficult to

Since the beginning of the 2022-2023 school year, all teachers have been present at school before 07.00 WIB and leave after 14.00 WIB. The limit for late teacher attendance is 06.45 WIB making all teachers try to attend before 06.45 WIB because one minute late will be recorded as late attendance in the online attendance recording. Use of attendance *Online* can improve teacher discipline, this is in line with research conducted by Maulidatul Khasanah at SD Islam Muhammad Hatta Malang which states that the application of electronic attendance can improve teacher and employee discipline even though there are still several violations encountered, one of which is employees who arrive late to school (Susamta & Mahmudah, 2021)

Work discipline is the attitude or behavior of an employee which is manifested in the form of a willingness with full awareness and sincerity to comply and carry out duties and responsibilities as an effort to contribute as much as possible to achieve the goals of the institution (Dewi, N.K.N.K. 2022). The use of *online* attendance where the data is very accurate can encourage teachers and employees to leave on time. Apart from the accuracy of the data recorded in the application, the timeliness of work departure is also influenced by the reward given to teachers and employees who attend on time. Time attendance records by school management are associated with the provision of attendance *rewards*. Awarding based on data records in the application minimizes the view that the award is based on *likes and dislikes* as stated by the vice principal of personnel as follows:

We provide rewards or attendance allowances for teachers and employees who are never late in one month, the data we use is the result of recording from online applications installed with each teacher's mobile phone and the data recaps enter the school email for management purposes. Awarding based on valid data makes all legowo.

Teacher discipline that is realized by being willing to attend before 07.00 WIB has a very positive impact on learning effectiveness because children's morning *ngaji* learning activities can be carried out properly. By attending early, teachers have more time to prepare for learning as mandated by Permendikbud Number 81A of 2013 concerning the implementation of the 2013 curriculum, especially the general learning guidelines stipulate that lesson plans must be prepared by teachers before teachers enter class. Because with planning, teachers have determined all the needs and methods that must be applied when carrying out learning, including being able to manage time efficiently.

The purpose of using Android-based online attendance as an attendance machine is to increase the productivity of teachers and employees starting from the creation of time discipline (Trimurtini et al., 2023). Apart from being an effort to improve performance, the use of *online* attendance is to facilitate the attendance process and facilitate the personnel department in making reports in the form of recapitulation of attendance lists every month and provide complete reports to the personnel department, principals and foundations for the basis of performance appraisal. Broadly speaking, the application of *the online* attendance system for teachers and employees is designed in order to improve the discipline and performance of teachers and employees which will be a supporting factor for the progress and improvement of the quality of education.

This android-based online *attendance policy* based on data from informants is very effective in improving work discipline because it can present *real time* and accurate data related to teacher attendance time at school. In addition to data on attendance and return, through this application all teacher activities in a day are also recorded because teachers are also obliged to write down daily activities while at school in a daily journal format that integrates with the online attendance application. The use of this application still has to be *upgraded* according to technological developments and school management needs. The progress of the decline in the number of late teachers during June-December 2022 can be seen from the following graph.

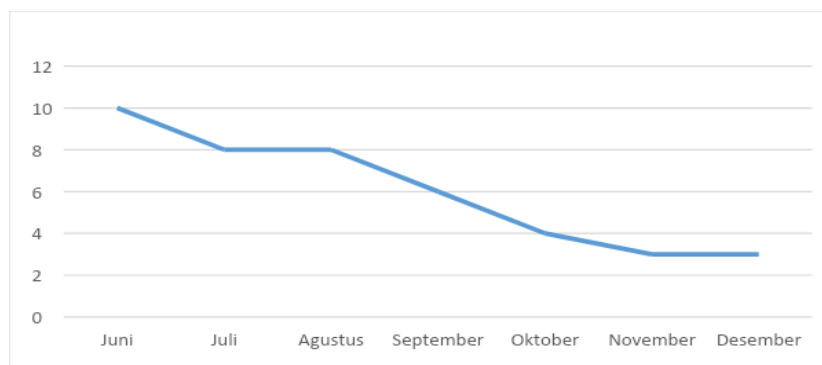


Figure 1. Decrease in Teacher Delay

The graph above shows that the use of attendance *Online* Very influential on improving work discipline. This is in accordance with Mahmud Saifudin's research on Purple Express Laundry Jakarta Employees which showed the results that the use of absences *Online* has a positive and significant effect on improving employee work discipline (Saifudin, 2018).

CONCLUSION

Android-based *online* attendance is a list of attendance and return of teachers and employees containing arrival and return hours using an android smartphone which is a mobile device on the operating system for cellular phones. In addition to containing the time of attendance and return, in the application there is also data on the daily activities of each personnel. The use of online attendance applications is part of adjusting to technological advances to facilitate teacher attendance, as well as facilitate data access using the internet network that allows data to be accessed anywhere and anytime. The implementation of android-based online attendance at SD Muhammadiyah Sukorejo, Sukorejo District, Kendal Regency can change the work patterns of teachers and employees. Most teachers become more time disciplined in carrying out their obligations. A small number of teachers and employees are still late not because they do not want to be disciplined but because of incidental obstacles.

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