International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Transforming Work Discipline In The Era Of Human Resource Digitalization Through The Implementation Of An Online Attendance Application For Employees At The Karawang Regional Disaster Management Agency

Carolin Melani[1], Uus Mohammad Darul Fadli[2], Ery Rosmawati[3]

[1,2,3]Management Study Program, Faculty of Economics and Business, Buana Perjuangan University, Karawang

E-mail : mn23.carolinmelani@mhs.ubpkarawang.ac.id, uus.fadli@ubpkarawang.ac.id, eryrosmawati@ubpkarawang.ac.id

Abstract

The rapid digital transformation in human resource management requires government agencies to adapt to attendance systems to improve work discipline. This study aims to analyze the implementation of an online attendance application and its role in transforming work discipline at the Regional Disaster Management Agency (BPBD) of Karawang Regency. Using a descriptive qualitative method, the population consisted of 111 employees with six informants selected through purposive sampling based on their involvement in using the online attendance application. Data were collected through observation, interviews, documentation, and literature review. Then, they were analyzed using data reduction, data presentation, conclusion drawing, and validation through triangulation and member checks. The results show that the application is easy to use, reliable, efficient, secure with location verification, and supported by responsive technical support, thus improving the accuracy, transparency, and accountability of attendance recording. The system effectively reduces tardiness, prevents attendance fraud, and encourages employees to consistently adhere to work schedules. In conclusion, the implementation of the online attendance application transforms work discipline from direct supervision to self-discipline strengthened by a digital system, creating more systematic, measurable, and accountable employee

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

behavior. This digitalization supports effective HR management and improved organizational performance.

Keywords : Attendance Application, Work Discipline, Digitalization, Work Performance, Human Resources

INTRODUCTION

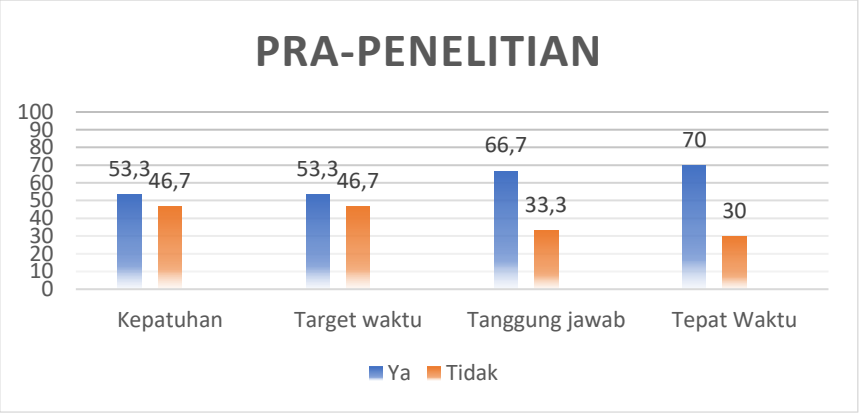
The rapid development of digital technology has also brought about significant changes in the world of work. Digitalization creates faster, more efficient, and data-driven work systems, requiring employees to adapt to existing technology.(Judijanto et al., 2025)In this era of globalization, the ability to operate digital applications has become a primary requirement for every individual in the workplace. The use of digital applications has been proven to increase work effectiveness and efficiency, as tasks can be completed in a shorter time with fewer obstacles.(Choirinisa, 2202).

Digitizing human resource management in Indonesia is a crucial strategy for addressing bureaucratic modernization and the dynamics of public demand. Digital technology serves as a driver for optimizing the planning, management, and development processes of civil servants.This digital transformation not only increases operational efficiency, but also encourages the creation of a more responsive, transparent and accountable governance system.(Adila & Mahendra Putri, 2024).In HR management, timely and accurate employee attendance is the basis for measuring productivity, evaluating performance, and calculating compensation. Therefore, a reliable attendance system is a crucial component in achieving effective HR management.(Estrada et al, 2025)

The Regional Disaster Management Agency (BPBD) of Karawang Regency as a public service agency requires employees with a high level of work discipline to ensure preparedness and timeliness in disaster management.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR



Source: Pre-research data, processed (2026)

The results of pre-research on 30 employees showed that employee work discipline was still not optimal, such as there were still 53.3% of employees who did not comply with work rules.delay mCompleting work within the target time was 53.3%, irresponsible in carrying out tasks was 66.7%, and lateness to work hours was 70%. This condition emphasizes the need to implement a more effective system to improve employee work discipline.

Various previous studies have confirmed that the implementation of digital attendanceapplication-based has an influence on increasing employee work discipline(Hudri, 2024)However, other studies show that although online attendance has a positive effect on employee discipline, the level of contribution is relatively low because work discipline is also influenced by other factors outside the system.(Setiadi et al., 2024).Thus, further research is needed that examines the role of HR digitalization in more depth, not only as a tool for controlling attendance, but also as a means of transforming behavior and work discipline culture as a whole.

This study aims to determine, analyze, and explain how the online attendance application in the Regional Disaster Management Agency (BPBD) environment, the role of implementing online attendance applications in supporting the improvement of employee work discipline in BPBD and examine how the transformation of employee work discipline takes place in the era of human resource digitalization through the use of online attendance applications, so that the contribution of digital technology can be understood not only in the aspect of attendance administration, but also in shaping work discipline behavior and culture more comprehensively..

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

LITERATURE REVIEW

Work Discipline

According to Hasibuan et al. (2024), work discipline is about completing tasks consistently and responsibly and complying with established rules and regulations without violating them. Workplace discipline is defined by Siagian et al. (2025) as the ability to respect, appreciate, obey, and comply with all rules and regulations, both written and unwritten, and to not violate them. According to Ganyang et al. (2024), when employees are disciplined in the workplace, it means they are ready to follow the rules and regulations set by the company. These rules and regulations may be specific or more general, but they all have a relationship with the employee's ability to do their job, exercise their authority, and assume responsibility for the company's success.

In researchDarmawan & Prastiwi, (2022)Work discipline is measured through 4 main dimensions, namely (1) complying with all organizational regulations from (a) compliance with regulatory policies, (2) effective use of time as shown by (a) completing work, (3) responsibility in work tasks as reflected in employee responsibility, (4) level of absence as shown by (a) arriving on time according to the work schedule.

Online Attendance

Estrada et al (2025)states that the online attendance system is a digital-based technology used to record employee attendance automatically and in real-time via digital devices such as smartphones, computers, or biometric machines connected to the internet network.Purwanto et al (2024) states that online attendance is an attendance system that runs via a web platform or application, designed to make it easier for employees to take attendance from designated official locations and to make it easier for agencies to manage data.Mufran et al., (2024)states that online attendance is a digital technology-based attendance system that automates the attendance recording process via electronic devices, so that the data is more accurate and minimizes the potential for fraud such as leaving attendance on behalf of others.

In researchParidah et al., (2025)Online attendance is measured through 5 main dimensions, namely (1) user friendliness, which is reflected in (a) menu display, (2) reliability, which is shown through (a) accuracy, (3) efficiency, which is reflected in (a) short time, (4) security which is shown by (a) location verification, (5) quality of service which is reflected in (a) technical support.

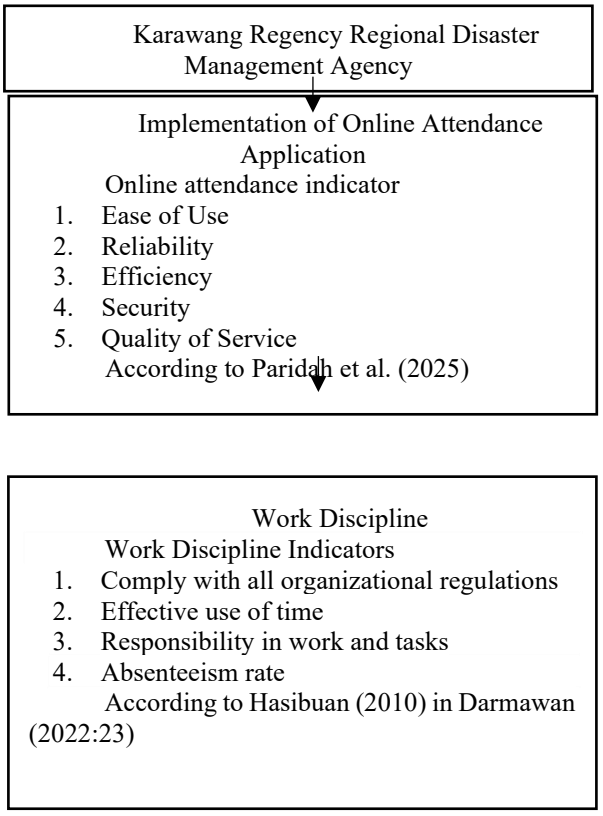
Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

RESEARCH FRAMEWORK AND HYPOTHESIS

Work discipline encompasses employee compliance with work hours, accuracy in completing tasks, and attitudes and behaviors consistent with the organization's culture. Good work discipline demonstrates a high level of employee commitment and responsibility toward their duties.An online attendance system is a digital technology for automatically recording employee attendance in real time via internet-connected devices. This system offers ease of use, reliability, time efficiency, security, and quality of service..

In the context of local government organizations,Aderizal & Syamsir (2023) also explained that the use of an online attendance system aims to improve discipline in terms of employee attendance.



Proportion

The digitalization of human resources through the implementation of an online attendance application within the Regional Disaster Management Agency (BPBD) is seen as a strategic element for improving the accuracy, effectiveness, and transparency

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

of employee attendance management. This system serves not only administrative functions but also serves as a managerial instrument to strengthen work discipline, particularly regarding schedule adherence, attendance consistency, and performance monitoring. In the context of digital HR transformation, the use of online attendance applications contributes to changes in work behavior, strengthens the internalization of disciplinary values, and forms a work culture that is adaptive, responsible, and in tune with technological developments.

RESEARCH METHODS

This study uses a descriptive qualitative method. The population consisted of 111 employees within the Karawang Regency Regional Disaster Management Agency (BPBD), with informants determined through purposive sampling. The criteria for employees involved in the use of the online attendance application were 6 people, namely, 1 BPBD leader, 1 BPBD employee, and 1 BPBD employee.Head of General Affairs and Personnel Sub-Section, 2 peopleBPBD secretariat, 2 BPBD staff. Data collection techniques include observation, interviews, documentation, and literature review. Data analysis techniques include data reduction, data presentation, conclusion drawing, and data validity, strengthened by triangulation of sources, methods, and member checks.

RESEARCH RESULTS AND DISCUSSION

Company profile

The Karawang Regency Regional Disaster Management Agency (BPBD) was established based on Regional Regulation Number 11 of 2021 and Regent Regulation Number 79 of 2021, which regulate its status, organizational structure, duties, and functions. This institution is the implementing element of the regional government in the field of disaster management, led by an agency head who is ex-officio the Regional Secretary and reports to the Regent.

Informant Profile

This study involved six informants selected based on the criteria of employees who had used the online attendance application and were willing to participate. The complete informant profiles are presented in the following table.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Table 1. Informant Profile

Code	Position	Gender	Length of work	Education
Inf1	Head of BPBD	Man	6 months	S1
Inf2	Secretariat	Woman	18 Months	S1
Inf3	Secretariat	Man	2 years	S1
Inf4	Head of General Affairs	Woman	15 years	S1
Inf5	BPBD staff	Man	10 years	Vocational School
Inf6	BPBD staff	Man	4 years	Vocational School

Research result

ResultsThe research data were obtained through in-depth interviews with six informants and analyzed thematically. A summary of the research results is presented in the following table.

Table 2. Research Results on the Implementation of Online Attendance Applications

Indicator	Interview Results	Analysis
Ease of Use	Inf1: conveys that the initial use of the attendance application requires adjustment, but is subsequently effective for recording attendance and monitoring tasks.	Interview results indicate that in the initial stages of using the attendance app, users faced various obstacles related to the adaptation process, limited technological understanding, technical device constraints, and the transition from the previous attendance system. However, with increasing experience and intensity of use, the attendance app was perceived as increasingly easy to use, able to increase the effectiveness and
	Inf2: that although an adaptation process was initially required, the attendance application was ultimately deemed easy to use and effective in recording attendance.	
	Inf3: Initial use of the attendance application requires adaptation, but over time users become accustomed to it.	
	Inf4: Declarethat the beginning is confusing, but the attendance application	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	speeds up attendance recording once you get used to it.	speed of attendance recording, and support the function of monitoring employee task implementation more optimally.
	Inf5:He said that the initial implementation of the attendance application experienced problems, but over time it became easier to use than the previous method.	
	Inf6:He said that when using the attendance application initially, he experienced technical problems, but users were finally able to use it well.	
	Inf1: conveying the appearance of the attendance application menu is considered simple and easy to understand, thus facilitating access to the main features.	Interview results indicate that the appearance and menu structure of the attendance application are generally considered simple, clear, and systematic, making it easy to understand and accessible to employees of various age groups. The application's informative design, complemented by supporting features such as a simple user flow, coordinate points, and system transparency, contribute to ease of use, improve access clarity, and support the efficiency of the employee attendance process.
	Inf2: provides a clear and systematic appearance of the attendance application, facilitating access to key features and increasing efficiency.	
	Inf3: Convey that the appearance and menu of the attendance application are simple, easy to understand, and accessible to all employees.	
	Inf4:conveying the appearance and menu of the attendance application is easy to understand and makes it easier to use.	
	Inf5: conveythat the appearance and flow of the attendance application is simple, easy to understand and use.	
	Inf6: conveythat the appearance and menu of the attendance application are easy to understand, with coordinate and	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	transparency features that make it easier for users.	
Reliability	Inf1: conveys that the attendance application records attendance accurately and in real time, so that the data is valid.	The results show that the attendance application has a high level of accuracy, with attendance recording performed in real time and accurately. This transparent recording system ensures the validity of attendance data, supports employee disciplinary assessments, and only detects errors when there are technical issues.
	Inf2:convey that the attendance application records attendance in real time and accurately, supporting employee discipline assessments.	
	Inf3: conveys thatThe accuracy of the attendance application is considered high because it records the absence time according to the time of implementation.	
	Inf4: conveys that the accuracy of the attendance application is good, with errors only when disruptions occur.	
	Inf5:submitting the attendance application is considered accurate because the attendance recording is immediately sent and confirmed via the user's email.	
	Inf6: conveys thathigh accuracy of attendance application with accurate time recording.	
	Inf1: convey thatAbsences result in reduced benefits and hinder the implementation of employee work.	Based on the interview results, it was shown that absence or inaccuracy in attendance resulted in automatic reductions in allowances and could affect the smooth completion of tasks, so the accuracy of attendance data was very important.
	Inf2: conveys thatInaccurate attendance affects benefits and the smooth running of work, so data accuracy is important.	
	Inf3: conveys thatThe reduction in benefits occurs automatically, but work is still completed after the absence.	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	Inf4: convey thatTime mismatches affect allowances and timely completion of tasks.	
	Inf5: conveys thatAbsences result in a warning and automatic deduction of benefits.	
	Inf6: conveys thatAllowance deductions are made automatically through the attendance application.	
Efficient	Inf1: convey thatThe online attendance application speeds up recording and enforces employee discipline.	Interview results indicate that the use of online attendance applications increases the speed and efficiency of the attendance recording process. These applications can be accessed directly from each employee's mobile phone, eliminating queues, simplifying data recapitulation, and supporting improved employee discipline in the digital age.
	Inf2: conveys thatThe attendance application is faster, more efficient, and makes data recap easier.	
	Inf3: said that attendance via the application is faster because it can be accessed directly on each person's cellphone.	
	Inf4:convey that the attendance application is fast, efficient, and supports employee discipline.	
	Inf5: conveys thatAttendance via digital applications is faster and more practical because it does not require queuing.	
	Inf6: conveys thatAttendance via the application is faster and more efficient because it can be accessed via mobile phone in the digital era.	
	Inf1: convey thatFast and automatic attendance improves employee discipline.	Based onInterview results indicate that online attendance

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	Inf2: conveys thatFast and automatic attendance increases employee discipline and responsibility towards work schedules.	applications play a significant role in improving employee discipline. The fast, automated, and accurate attendance process, along with time and location requirements, encourage employees to arrive on time, adhere to work schedules, and be responsible for their duties, thereby reducing the likelihood of tardiness.
	Inf3: conveys that the attendance application enforces discipline through attendance time limits.	
	Inf4: convey thatFast attendance encourages discipline because employees have no excuse for being late.	
	Inf5: conveys thatThe provisions and accuracy of time in the attendance application encourage employee discipline.	
	Inf6: conveys thatThe time and location requirements on the attendance application encourage employees to arrive on time.	
Security	Inf1: conveylocation verification ensures employees are at their assigned location.	Interview results indicate that location verification in the attendance app plays a crucial role in ensuring employee attendance at their assigned location. This feature improves attendance data accuracy, enforces discipline, prevents fraud and manipulation, and provides transparent, accountable proof of attendance. Furthermore, location verification is an app requirement that all employees must comply with.
	Inf2: conveys that vLocation verification improves attendance accuracy and employee discipline.	
	Inf3: conveys thatLocation verification is an application requirement that all employees must comply with.	
	Inf4: convey thatlocation verification prevents cheating and manipulation of attendance.	
	Inf5:convey that location verification ensures attendance on duty and prevents cheating.	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	Inf6: conveys thattransparent location verification and serves as proof of employee presence according to their work location.	
	Inf1: conveys that location verification improves discipline without creating excessive surveillance.	Interview results indicate that location verification in attendance apps plays a crucial role in enforcing employee discipline and accountability. This feature ensures attendance on duty, even when working outside the office, without creating excessive surveillance, thus encouraging compliance and punctuality.
	Inf2: conveys thatLocation verification improves employee discipline and accountability	
	Inf3: conveys thatLocation verification encourages employee discipline by ensuring attendance according to assignments.	
	Inf4: convey thatLocation verification enforces discipline without excessive supervision	
	Inf5: conveys thatLocation verification encourages employee discipline outside the office	
	Inf6: conveys thatAttendance according to location and time enforces employee discipline	
Quality of service	Inf1: convey thatResponsive technical support in handling application usage issues quickly and in a coordinated manner	Interview results indicate that the application's technical support is highly responsive and effective. The technical team is able to quickly address issues, provide appropriate solutions, and facilitate user problem-
	Inf2: conveys thatFast, responsive, and user-friendly technical support	
	Inf3: conveys thatResponsive technical support and promptly resolves issues with the application	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	Inf4: convey thatFast and effective technical support to handle application issues	solving, ensuring smooth application use.
	Inf5: conveys thatTechnical support responds quickly and effectively to application issues.	
	Inf6: conveys thatFast and effective technical support to solve application problems	

Interview analysis revealed that the online attendance application facilitates real-time attendance recording, improving efficiency, accuracy, and employee discipline through simple features and location verification. Responsive technical support ensures smooth use and prompt resolution of issues.

Table 3. Research Results on Work Discipline Transformation

Indicator	Interview Results	Analysis
Comply with all organizational regulations	Inf1:convey that comply with policies in a disciplined manner and be a professional role model.	Based on the interview results,Interview results indicate that employees maintain consistency in adhering to work policies and rules through discipline, self-practice, personal reminders, regular scheduling, and good communication. These efforts not only support daily performance but also uphold professional responsibility and build consistency in work behavior.
	Inf2: conveys thatcomply with policies with discipline and maintain communication to support performance.	
	Inf3: conveys thatconsistently comply with policies as an employee responsibility	
	Inf4: convey thatcreate a regular schedule and remind yourself to be disciplined in complying with company policies.	
	Inf5: conveys thatget used to complying with policies to create consistency in work.	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Indicator	Interview Results	Analysis
	Inf6: conveys thatmaintain consistency by reminding yourself to comply with policies and work as best as possible.	
	Inf1: convey thatSanctions are given in stages according to the level of violation.	Based on the resultsInterviews showed that sanctions were applied in stages and adjusted according to the severity of the violation, ranging from verbal warnings and written warnings to warning letters or termination of employment. Sanctions were applied fairly to prevent recurrence and enforce employee discipline.
	Inf2: conveys thatSanctions vary according to the level of violation, ranging from verbal warnings to termination of employment.	
	Inf3: conveys thatSanctions are given in stages, starting from warnings to repeated warning letters according to the violation.	
	Inf4: convey thatSanctions are adjusted to the type of violation, ranging from verbal warnings to termination of employment.	
	Inf5: conveys that ssanctions are given in stages from warnings to letters of warning	
	Inf6: conveys thatsanctions in the form of warning letters are applied fairly to prevent repeated violations	
Effective use of time	Inf1: convey thatmanage time and work priorities in a structured manner to complete tasks effectively according to targets.	Based on the resultsInterviews showed that employees manage their time and work priorities in a structured manner by focusing on important and urgent tasks, monitoring progress, and prioritizing work based on deadlines. This strategy is implemented to complete tasks on time, avoid work backlogs, and ensure effective task execution, including when working outside the office.
	Inf2: conveys thatset priorities and monitor progress to complete tasks on time	
	Inf3: conveys thatorganize tasks by deadline and avoid procrastination to prevent work from piling up.	
	Inf4: convey thatset work priorities by focusing on important and urgent tasks	
	Inf5: conveys thatset work priorities to complete tasks on time and prevent work from piling up.	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Indicator	Interview Results	Analysis
	Inf6: conveys thatprioritize tasks based on deadlines and complete outgoing tasks promptly.	
	Inf1: convey thatPunctuality reflects discipline and is an indicator of employee performance.	Interview results indicate that punctuality reflects employee discipline, which plays a crucial role in performance assessments. Discipline through punctuality not only supports the achievement of work targets but also reflects responsibility and adherence to regulations, thereby enhancing professionalism and overall performance quality.
	Inf2: conveys that punctuality reflects discipline and supports the achievement of work targets.	
	Inf3: conveys thatpunctuality reflects discipline and good performance	
	Inf4: convey that kPunctuality reflects discipline and responsibility, thus impacting performance appraisals.	
	Inf5: conveys that kPunctuality reflects discipline and affects performance.	
	Inf6: convey that kPunctuality and adherence to rules improve performance appraisals.	
Responsibility in work and tasks	Inf1: convey thatWork responsibility is an employee's commitment to carrying out tasks in a disciplined and integrity manner.	Based on the interview results, work responsibility is understood as the commitment and obligation of employees to carry out their duties in a disciplined manner, comply with procedures, and complete work optimally as a form of accountability for carrying out their duties.
	Inf2: conveys that tWork responsibility is an employee's commitment to carrying out their duties in a disciplined manner and adhering to procedures.	
	Inf3: conveys thatWork responsibility is understood as an employee's commitment to completing tasks optimally.	
	Inf4: convey thatWork responsibility is an employee's obligation to carry out tasks optimally.	

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Indicator	Interview Results	Analysis
	Inf5: convey that responsibilityWork is the employee's responsibility for carrying out his duties	
	Inf6: conveys thatWork responsibility is understood as an employee's commitment to carrying out tasks optimally	
Absenteeism rate	Inf1: convey thatpunctuality is supported by effective planning and time management	Based on interviews, employee punctuality is influenced by effective time planning and management, early work preparation, and the habit of arriving early. Furthermore, proactive measures such as providing alternative transportation, arranging adequate rest periods, and communicating with the team when obstacles arise contribute to maintaining punctuality.
	Inf2: conveys thatPunctuality is supported by thorough work planning and preparation.	
	Inf3: convey that kPunctuality is maintained through advance preparation and early arrival	
	Inf4: convey that kPunctuality is supported by early preparation, alternative transportation, and early departure.	
	Inf5: conveys that kpunctuality is supported by work preparation from the start	
	Inf6: conveys thatPunctuality is maintained through early preparation, adequate rest, and communication with the team when obstacles arise.	

Interview results indicate that employee discipline and compliance are reflected in systematic time management, consistent work behavior, and effective communication. Fair enforcement of sanctions reinforces compliance, while punctuality and accountability support target achievement and improve overall accountability and performance.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

DISCUSSION

Implementation of Online Attendance Applications in the Regional Disaster Management Agency (BPBD) Environment

The study results show that the implementation of the online attendance application within the Regional Disaster Management Agency (BPBD) initially required an adjustment process, but over time, it was successfully utilized by all employees. The application was deemed easy to access, had a simple interface, and was able to record attendance accurately and in real time. This digital attendance system expedited the attendance recording process, integrated with administrative consequences, and supported by location verification, which increased accountability without requiring excessive supervision. With responsive technical support, the implementation of online attendance played an effective role in supporting the digitalization of human resource management and improving work discipline at the BPBD.

The results of the discussion support the theoryMufran et al., (2024)states that online attendance is a digital technology-based attendance system that automates the process of recording attendance via electronic devices, so that the data is more accurate and minimizes the potential for fraud such as leaving attendance on behalf of others.. This discussion is in line with the research results fromRifaldi et al., (2025)The results of the study show that the online attendance system plays a significant role in improving work discipline, especially in terms of transparent, accurate, and real-time attendance recording, which supports effective employee attendance control.

Implementation of Online Attendance Application Supports Employee Work Discipline at BPBD

The implementation of an online attendance application within the Regional Disaster Management Agency (BPBD) has been proven to improve employee discipline. The speed and ease of the attendance process, coupled with clear timetables and automatic recording, encourage employees to adhere to established work schedules. This system reduces the likelihood of tardiness and fosters employee awareness of the importance of punctuality as part of their work responsibilities. Thus, online attendance serves as an effective disciplinary control mechanism and positively contributes to BPBD employee performance.

This discussion supports the view of Pradayana & Brahma (2020) who stated that one of the factors in assessing employee discipline can be seen from the employee attendance list.This discussion is in line with the resultsstudyMaulidatul Husna, nd

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

(2025)which shows that technological developments through online attendance systems provide a positive contribution to government agencies in improving employee work discipline and minimizing fraud in attendance records.

Transforming Employee Work Discipline in the Era of Human Resource Digitalization Through the Implementation of Online Attendance Applications at the Regional Disaster Management Agency (BPBD).

The implementation of an online attendance application has driven a transformation in employee work discipline at the Regional Disaster Management Agency (BPBD) toward a more systematic, technology-based approach. Work discipline is no longer built solely through direct supervision, but rather through individual awareness, reinforced by a digital system that automatically records attendance, punctuality, and consequences.Online attendance applications serve as an objective control tool because they are integrated with performance assessments, benefit deductions, and the implementation of gradual sanctions. This encourages changes in employee work behavior, leading to more disciplined time management, responsibility in completing tasks, and consistent adherence to organizational policies. Thus, digital attendance becomes a crucial tool in establishing a more measurable, transparent, and accountable work discipline in human resource management.

This discussion supports the viewPuspitasari et al., (2025)states that the application of information technology in the form of an online attendance system functions as an attendance control tool as well as a component in organizational management that demands responsibility and openness.These findings are also supported by researchGerungan et al., (2024)This demonstrates that the implementation of a digital attendance system is effective in improving employee work discipline. Employees become more aware of their work responsibilities, more disciplined in adhering to attendance regulations, and experience increased work productivity after the digital attendance system is implemented.

CONCLUSION

Based on the research results, it can be concluded that the implementation of the online attendance application at the Karawang Regency Regional Disaster Management Agency (BPBD) has been proven to contribute to improving employee work discipline through a more accurate, transparent, and integrated attendance recording system. Although the initial implementation phase required an adjustment process, particularly

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

related to changes in work habits and the use of technology, this system has gradually been able to encourage compliance with work hour regulations, punctuality, and consistent employee attendance. In addition to improving the efficiency of employee administration, online attendance also functions as a more objective and measurable instrument for controlling work discipline, thus supporting the transformation of digital-based human resource management.

The implementation of the online attendance application at the Karawang Regency Regional Disaster Management Agency (BPBD) needs to be continuously optimized as part of efforts to digitize human resource management. This optimization focuses not only on technical aspects of use but also includes technical support, ongoing outreach, and feature development to ensure the system remains accessible and reliable. Furthermore, integrating online attendance with work hour policies, performance assessments, and sanction mechanisms is crucial to strengthening the system's function as a disciplinary control instrument. With integrated management, digital attendance is expected to foster a more systematic, measurable, and adaptive work discipline that meets the demands of technology-based organizational governance.

BIBLIOGRAPHY

Aderizal, S. A., & Syamsir. (2023). Pengaruh Penerapan Sistem Absensi Online (Abon) Berbasis Aplikasi Terhadap Disiplin Kerja Pegawai Pada Organisasi Perangkat Daerah (OPD) Kabupaten Dharmasraya. Jurnal Pendidikan Tambusai, 7(1), 24238.

Adila, N., & Mahendra Putri, L. D. (2024). Digitalisasi Tata Kelola SDM Aparatur di Indonesia. Jurnal ISO: Jurnal Ilmu Sosial, Politik Dan Humaniora, 4(2), 1–12. https://doi.org/10.53697/iso.v4i2.2125

Choirinisa, A. A. (2022). Pengaruh Penggunaan Aplikasi Digital Terhadap Efektivitas Kerja Pegawai. Transekonomika: Akuntansi, Bisnis Dan Keuangan, 2(5), 483–492. https://doi.org/10.55047/transekonomika.v2i5.239

Darmawan, K., & Prastiwi, N. L. P. E. Y. (2022). Pengaruh Disiplin Kerja Dan Etos Kerja Spiritual Terhadap Kinerja Pegawai Dinas Pekerjaan Umum Dan Tata Ruang Di Kabupaten Buleleng. Kontan: Jurnal Ekonomi, Manajemen Dan Bisnis, 1(3). https://doi.org/10.59818/kontan.v1i3.238

Erick Estrada, Nelly FM. Lucyani Dumatubun, R. M. N. B. (2025). Evaluasi Sistem Absensi Online Sebagai Alat Monitoring Kehadiran dan. 10–16.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Gerungan, G. F., Lengkong, V. P. K., & Trang, I. (2024). Analisis Absensi Digital Dalam Meningkatkan Disiplin Kerja Pegawai Di Sekretariat Dprd Kota Manado Analysis of Digital Attendance in Improving Employee Work Discipline At the Manado City Dprd Secretariat. Jurnal EMBA, 12(4), 568–575.

Halil, Nelly FM. Lucyani Dumatubun, R. M. N. B. (2025). Papsel economic journal. Sistem Absensi Berbasis Digital Dalam Meningkatkan Disiplin PegawaiPada Dinas Pendapatan Daerah Bagian Sekretariat Kabupaten Merauke, 25–30.

Hudri. (2024). Uji Reabilitas Instrumen Soal Menggunakan Rumus Alpha. Jurnal Ilmiah Bina Edukasi, 7, 100–108.

Judijanto, L., Anggoro, Y., Farawowan, F. F., Suroso, A., & Prihadi, D. J. (2025). Revolusi Digital Dalam Manajemen Sumber Daya Manusia : Mengoptimalkan Teknologi Untuk Pengembangan Karyawan Dan Produktivitas Organisasi. Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA), 9(3), 126–146. https://doi.org/10.31955/mea.v9i3.6189

Latifah, E. (2023). Peran Guru Pendidikan Agama Islam Dalam Pembinaan Karakter Siswa. 4(1), 40–48.

Maulidatul Husna, H. S. (n.d.). ISSN : 2723-0937 DOI. 10.35722/japb Https://jurnal.stiatabalong.ac.id/index.php/JAPB. 8, 619–633.

Mufron, A., & Wei, Z. (2024). Applying Biometric Technology in School Attendance and Security Management. Al-Hijr: Journal of Adulearn World, 3(2), 310–322. https://doi.org/10.55849/alhijr.v3i2.667

Paridah, sakia darajat, R. (2025). Universitas Mulawarman Samarinda, Indonesia. 10(September).

Purwanto, D., Putri, R. E., Fadly, Y., & Pratiwi, D. C. (2024). Sistem Absensi Online Berbasis Web Dengan Penggunaan Teknologi GPS. Jurnal Minfo Polgan, 13(2), 1800–1811. https://doi.org/10.33395/jmp.v13i2.14258

Puspitasari, Y., Lilianti, L., & Deluma, R. (2025). Optimalisasi Monitoring Kehadiran Pegawai: Implementasi Sistem Absensi Berbasis Barcode Untuk Efisiensi Dan Kedisiplinan. Edum Journal, 8(1), 92–105. https://doi.org/10.31943/edumjournal.v8i1.252

Rifaldi, M., Kamariyah, S., Pramudiana, I. D., Anwar, M. K., Prahmana, K. A., & Administrasi, F. I. (2025). Efektifitas Absensi Online Terhadap. 11, 533–546.

Sabrina Shela Fatimah Zahra, & Sungkono. (2024). Pengaruh Disiplin Kerja Terhadap Kinerja Karyawan. PENG: Jurnal Ekonomi Dan Manajemen, 1(2), 92–97. https://doi.org/10.62710/pbtwc016

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Setiadi, A., Firmasnyah, F. I., Kusuma, N. R., & Fauzia, R. R. (2024). Effect Of Attendance Applications mobile Online (Akku Mobile) On Official Discipline At The Indramayu District Inspectorate. Jurnal Manajemen Pelayanan Publik, 8(2), 359–370. https://doi.org/10.24198/jmpp.v8i2.51998

Silitonga, Uus Mohammad Darul Fadli, E. R. (2024). Research In Management Of Technology And Rmtb The Effect of Work Discipline on Performance with Work Stress as an Intervening Variable in Employees of PT . KIA. 5(1), 66–77.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.