Employee Attendance Management at MS Glow Majalengka

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ABSTRACT

Employee attendance is crucial for a company to achieve its goals, impacting the discipline and performance of each employee. Therefore, specific data collection is needed to record attendance and absences so that work activities can be recorded in real-time and accurately. This paper discusses the management of employee attendance at MS Glow Majalengka. The aim of this research is to improve the efficiency and effectiveness of employee attendance management at the company. The methodology used in this research includes literature review, interviews with company representatives, and data collection through surveys and observations. The results of this research show that the use of database systems and computer networks can enhance the management of employee attendance at MS Glow Majalengka.

Keywords: Attendance Management, Employees, Computer Networks, Database.

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INTRODUCTION

Information technology is developing rapidly, requiring business owners and companies to expand their knowledge to facilitate their operations. In terms of improving employee performance quality, the attendance service system is one factor that can motivate employee performance and quality. Employee attendance is an important aspect of human resource management in a company. Good employee attendance management can improve the efficiency and effectiveness of the company in managing employees. Therefore, MS Glow Majalengka needs to implement good and effective employee attendance management. In computer network and database courses, there are several technologies that can be used to enhance employee attendance management in the company.

This research aims to examine the management of employee attendance at MS Glow Majalengka by utilizing computer network and database technology. Efficient and accurate attendance management is crucial for maintaining productivity and managing the company's human resources at MS Glow Majalengka. In the current digital era, the implementation of computer network and database technology can help automate the attendance management process and improve reliability and efficiency.

Currently, MS Glow Majalengka still uses manual methods in managing employee attendance, which includes the use of physical attendance cards or attendance books. This method has several drawbacks, including the possibility of data errors, manipulation, and difficulty in accessing attendance data in real-time. Therefore, a solution is needed to address these issues through the application of computer network and database technology.

The objective of this research is to implement a computer network and database-based attendance management system at MS Glow Majalengka. Thus, this research aims to improve the efficiency and accuracy of employee attendance management, minimize errors and data misuse, and provide easier and faster access to attendance information.

MS Glow Majalengka is a company engaged in skincare products. The company offers solutions for skin health and beauty issues. The products offered by this company are MS Glow brand skincare products. MS Glow Majalengka was established on March 19, 2021, located at JL. KH Abdul Halim No. 129, Majalengka. MS Glow Majalengka itself is one of the agents of MS Glow Beauty.

LITERATURE REVIEW

Employee Attendance Management

There are several main reasons why every company should implement an employee attendance system. Time and attendance systems are a must for all types and sizes of companies and will play a significant role in the development of company performance, business, and employees. Efficient employee attendance management allows companies to monitor employee attendance, calculate working hours, manage leave and permissions, and generate necessary reports for payroll and performance evaluation. Good attendance management can also increase productivity and reduce costs associated with irregular attendance.

Employee attendance management often faces several challenges, such as:

1. Ensuring attendance recording using the most effective system or attendance machine.
2. Maintaining a high level of security on employee attendance data to prevent manipulation by unauthorized individuals.
3. Dependence on manual methods that are prone to errors and time-consuming.
4. Errors and manipulation of attendance data by employees.

Computer Networks

A computer network is a collection of several computers/IT devices connected by wired or wireless media to exchange data/information and communicate with each other. Computer networks enable data sharing, hardware, software, and other resources. In the context of employee attendance management, computer networks can be used to connect various attendance devices, such as attendance machines and computers, so that attendance data can be collected and accessed centrally.

The use of computer networks in employee attendance management has several benefits, including:

1. Real-time attendance recording and processing.
2. Easy and quick access to attendance data.
3. Better integration with other systems, such as payroll and human resource management.
4. Increased operational efficiency and cost savings.

Databases

A database is a collection of data organized with a specific structure, allowing efficient processing, storage, and retrieval of information. A database is not just a collection of related files (tables), but also includes other elements such as relationships between tables, views, and even code (stored procedures). In the context of employee attendance management, databases are used to store and manage attendance data, including information about employees, attendance times, leave, and others.

The use of databases in employee attendance management has several advantages, such as:

1. Accuracy and consistency of attendance data.
2. Efficient and fast data processing.
3. Ease of searching and retrieving attendance information.

4. Better data security through access permission mechanisms and data backup.

METHODOLOGY

This research uses a combination approach of literature study, direct observation, interviews, and document analysis. This approach allows researchers to gain an in-depth understanding of employee attendance management at MS Glow Majalengka, obtain direct perspectives from related parties, and analyze existing attendance management documents. Direct observation was conducted at MS Glow Majalengka to understand in detail the ongoing attendance management process. Through this observation, researchers can identify weaknesses and challenges in the current attendance management. Interviews were conducted with related parties at MS Glow Majalengka, such as the owner, administrative staff, and employees. These interviews aim to obtain information about the ongoing attendance management process, problems faced, user needs, and expectations for the new attendance management system. Documents related to attendance management, such as attendance policies, attendance report formats, and historical attendance data, were analyzed to gain a deeper understanding of the ongoing attendance management system. Based on the results of observations and interviews, the computer network architecture design to connect attendance devices and database servers was created. This architecture includes hardware selection, network mapping, and network configuration. Based on attendance management needs, an appropriate database structure was designed. This includes the necessary entities, attributes, and relationships between entities. The database structure design ensures that attendance data can be stored and accessed efficiently. Using relevant programming languages and development tools, the attendance management application was developed based on the designed network architecture and database structure. This application includes features such as attendance recording, leave and permission management, attendance reports, and attendance data accessibility. After the application development was completed, testing was conducted to ensure the reliability, accuracy, and performance of the attendance management system. Testing includes functionality testing, integration testing with computer networks and databases, and load testing to evaluate system response and performance.

RESULTS AND DISCUSSION

After developing and testing the system, the computer network and database-based attendance management system was successfully implemented at MS Glow Majalengka. This system consists of hardware and software connected through a computer network and uses a database to store and manage employee attendance data. After the system was implemented, employee attendance data could be automatically collected through attendance devices connected to the system. Attendance data includes information such as arrival time, departure time, work duration, leave, and permissions. This data is stored in the database and can be accessed easily and quickly. To evaluate system performance, testing was conducted on several aspects, including the efficiency and accuracy of attendance management, network reliability, and database performance. This evaluation aims to ensure that the attendance management system runs well and meets the company's needs. Evaluation was conducted on the efficiency of attendance data collection and processing. With the computer network-based system, the attendance recording and processing process becomes faster and more efficient. Additionally, the accuracy of attendance data is also improved due to automation in data collection. Network and database reliability was evaluated by testing network connections, system response levels, and database stability. High reliability in network and database infrastructure ensures consistent accessibility and availability of attendance data.

In this discussion, the advantages of the computer network and database-based attendance management system implemented at MS Glow Majalengka will be discussed. Some identified advantages include:

1. Automation of Attendance Data Collection: With this system, attendance data collection becomes more automated and does not require manual input from employees. This reduces the potential for human error and ensures the accuracy of attendance data.

2. Real-Time Data Accessibility: Attendance data is available in real-time and can be easily accessed by management and related parties. Employee attendance information can be obtained quickly, allowing management to make timely decisions.
3. Integration with Other Systems: This system can be integrated with payroll and other human resource management systems in the company. This integration reduces data duplication and increases the efficiency of administrative processes.
4. Improved Data Security: With access permission mechanisms and data security measures, attendance information is better protected from unauthorized access.
5. More Effective Analysis and Reporting: This system allows for the analysis of attendance data to gain valuable insights into employee attendance, absence patterns, and work efficiency. Reports generated from this system help management take corrective actions and make strategic decisions.

In addition to the advantages, the implementation of the computer network and database-based attendance management system also faces several challenges, including:

1. Organizational Readiness: Adopting a new system requires readiness from the entire organization. Employees and management must be prepared to face changes in work processes and attendance management methods.
2. Support and Training: System users, including employees and administrative staff, need adequate support and training to use the system correctly and efficiently.
3. Data Security: Managing sensitive attendance data requires special attention to data security. Efforts to protect data and prevent unauthorized access must be strictly implemented.
4. Network Infrastructure Availability: A network-based system requires reliable and stable infrastructure. Ensure that the computer network used can handle the data load generated by the system.
5. Integration with Existing Systems: Integrating the new system with existing systems in the company can be a challenge. Ensure that the system can interact and integrate well without causing problems or hindrances in company operations.

The discussion can also include a comparison between the computer network and database-based attendance management system and the manual attendance system previously used by the company. Some relevant comparisons include:

1. Efficiency: The network and database-based system provides higher efficiency as attendance data collection becomes automated, reducing time and effort in data processing.
2. Accuracy: The automation system reduces the potential for human error in attendance records, increasing the accuracy and reliability of attendance data.
3. Accessibility: The network-based system allows real-time accessibility of attendance data, which is not possible in a manual system.
4. Cost Savings: Although it requires initial investment, implementing a network-based system can save long-term costs by reducing the need for physical documents and the time required for attendance administration.
5. Data Management and Analysis: The network-based system allows for more effective attendance data analysis, providing valuable insights for management and strategic decisions.

CONCLUSION

In this research, the implementation of a computer network and database-based attendance management system was carried out at MS Glow Majalengka. By using a combination approach of literature study, direct observation, interviews, and document analysis, an efficient and accurate system could be developed. This system allows for automatic attendance data collection, quick and easy data accessibility, and integration with other related systems.

Through the evaluation of system performance, it can be concluded that the implementation of this attendance management system provides significant benefits for MS Glow Majalengka. The efficiency of attendance management has increased, data errors have decreased, and the accessibility

of attendance information has become easier. However, challenges in adopting new technology and maintaining data security need to be addressed properly.

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