

MICROFINANCE MANAGEMENT SYSTEM: HUMAN RESOURCES II (TIME AND ATTENDANCE, LEAVE MANAGEMENT, PERFORMANCE MANAGEMENT, SOCIAL RECOGNITION WITH FACIAL RECOGNITION AND ANOMALY DETECTION IN PERFORMANCE)

ABSTRACT

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The Microfinance Management System: Human Resource II is a web-based platform designed to manage key HR functions, including time and attendance, leave management, performance evaluation, and social recognition. Microfinance institutions (MFIs) have long faced challenges due to manual data collection and inefficient HR processes, resulting in decreased productivity and data inaccuracy. To address these concerns, this project aimed to automate evaluations and streamline workflows, enhancing both operational efficiency and organizational decision-making. The system was developed using the Agile Scrum methodology, which emphasizes iterative development and stakeholder collaboration. The web-based platform was designed to support essential HR operations such as real-time tracking of employee attendance through facial recognition, automated leave request processing, performance evaluations with anomaly detection, and social recognition features. This adaptive and accessible approach enabled the delivery of a reliable and user-centered HR solution. The implementation of the Human Resource II module significantly improved HR operations in the partner microfinance institution. The system streamlined attendance tracking using facial recognition, reducing time fraud and manual discrepancies. Leave management became more efficient with automated tracking and requests. Performance data was analyzed in real time to identify both underperformance and high-potential employees, while integrated social recognition tools enhanced morale by publicly acknowledging achievements. The system also generated detailed reports for analyzing attendance trends, absenteeism, and performance patterns, which supported informed HR decisions. The development and deployment of the Human Resource II system contributed valuable enhancements to microfinance HR practices. Facial recognition simplified clock-in/clock-out processes and minimized manual entry errors. Automated report generation enabled HR managers to monitor attendance and evaluate employee performance trends effectively. Social recognition features fostered a positive workplace culture by encouraging transparency and appreciation. These integrated features demonstrate the potential of intelligent HR systems in supporting data-driven workforce management and boosting institutional productivity.

RECOMMENDED CITATION

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