

FREIGHT MANAGEMENT SYSTEM: HUMAN RESOURCE 3: OPTIMIZING PAYROLL AND BENEFITS MANAGEMENT WITH REAL-TIME INTEGRATION AND AI-DRIVEN AUTOMATION

ABSTRACT

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Freight management systems are rapidly evolving to meet growing demands for operational efficiency, real-time responsiveness, and accuracy. One critical area in need of transformation is human resource (HR) management, where outdated manual processes often result in delays, inconsistencies, and administrative inefficiencies. This study explores the integration of a Human Resource Information System (HRIS) into the freight management environment to modernize HR functions. The system emphasizes payroll automation, benefits administration, and compliance with labor regulations. Through real-time data integration and automated workflows, it aims to reduce manual workloads, minimize errors, enhance decision-making, and boost workforce productivity. To comprehensively evaluate the impact of Human Resource Information System (HRIS) integration within freight management, a mixed-methods research approach was employed. Quantitative data was gathered through rigorous system testing, capturing key performance indicators such as processing time, error frequency, and compliance adherence before and after implementation. In parallel, qualitative insights were obtained through structured interviews with HR personnel, employees, and organizational leaders to assess user experience, transparency, and overall satisfaction. The system development followed the Agile methodology, emphasizing iterative design, adaptive planning, and continuous stakeholder engagement. This approach ensured that the solution remained flexible, user-centric, and aligned with the evolving operational needs of the organization. The study's findings revealed notable enhancements in payroll efficiency through automated time tracking and real-time tax computation, which significantly reduced processing delays and manual input errors. Employee interviews highlighted improved transparency, fostering greater trust in HR processes, particularly in payroll accuracy and benefits administration. Additionally, the integration of role-based access control and advanced encryption technologies ensured stringent data security and reinforced compliance with regulatory standards governing employee information management. The integration of a Human Resource Information System (HRIS) within freight and logistics operations presents a forward-looking, scalable solution for modernizing HR processes. By automating critical functions—such as payroll, attendance tracking, and benefits administration—the system significantly reduces manual errors, administrative workload, and regulatory risks. Enhanced transparency and data accessibility also contribute to stronger employee engagement and trust. While the initial rollout demands investment in training and organizational adaptation, the long-term outcomes—improved productivity, cost efficiency, and informed decision-making—validate the strategic value of HRIS adoption. These insights serve as a robust foundation for logistics organizations aiming to digitalize their HR functions and remain agile in a competitive, rapidly evolving industry landscape.

RECOMMENDED CITATION

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