

## **ANALYSIS OF THE IMPACT OF USING HRIS TECHNOLOGY IN IMPROVING THE EFFICIENCY OF HUMAN RESOURCE MANAGEMENT**

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### **Abstract**

This study aims to analyze the impact of the use of HRIS (Human Resource Information System) technology in improving the efficiency of human resource management in companies. Along with the rapid development of information technology, HRIS has become one of the crucial tools in managing data and human resource administration processes. This study uses a quantitative approach with a survey method, where data is collected through questionnaires distributed to HR managers and employees in several companies that have implemented HRIS. The results of the study indicate that the use of HRIS can significantly improve efficiency in managing employee data, recruitment processes, payroll, and performance reporting. The use of HRIS also minimizes human error, speeds up workflows, and provides more transparent access to information for managers and employees. This study is expected to provide insight for companies in considering the adoption of HRIS technology as a solution to improve overall human resource management performance.

**Keywords:** HRIS Technology, Efficiency, Human Resource Management, Information Systems

### **INTRODUCTION**

The development of information technology has brought significant changes in various sectors of life, including in the business world. In this increasingly competitive era of globalization, companies are required to continue to innovate and improve operational efficiency in order to survive and grow. One important aspect of company operations according to Khashman, I. M. A., & Khashman, A. M. (2016) is human resource management, which is the backbone of the organization's success. However, complex human resource management is often a challenge for companies, especially in dealing with various administrative tasks that take time, money, and resources.

Human Resource Information System (HRIS) is here as a solution to answer these challenges. HRIS is an information technology-based system designed to integrate and manage various human resource management

functions, such as employee data management, payroll, attendance, performance appraisals, recruitment, and training. By automating these processes, HRIS can help companies improve efficiency, reduce manual errors, and provide accurate data for better decision making (Kaygusuz, 2016).

According to Sadiq et al., (2022) efficiency in human resource management is an urgent need amidst the dynamics of a changing business environment. Time-consuming manual processes, such as manual employee data management, payroll calculations, or performance reporting, can slow down a company's response to change and reduce productivity. By using HRIS, these tasks can be automated, allowing human resource managers to focus on more value-added strategies, such as employee competency development, increasing engagement, and long-term workforce planning.

On the other hand, HRIS adoption is also not without challenges. Implementing this system requires significant investment, both in terms of cost, time, and human resource training. In addition, companies need to ensure the readiness of the organization to adopt this technology, including ensuring adequate technological infrastructure, overcoming employee resistance, and adapting the system to the specific needs of the organization. Therefore, analyzing the impact of using HRIS is a crucial step to ensure that this technology truly provides optimal benefits for the company (Shahreki, 2019).

The importance of this impact analysis is also supported by the paradigm shift in human resource management. In recent decades, the role of human resource management has evolved from an administrative function to a strategic function focused on developing organizational capabilities. HRIS enables this transformation by providing data and tools that support informed decision-making (Siengthai, S., & Udomphol, 2016). For example, HRIS can provide real-time performance reports, allowing managers to identify training needs or anticipate employee turnover risks early.

Furthermore, HRIS not only impacts human resource operations but also plays a strategic role in data-driven decision-making. With centralized and easily accessible data, companies can analyze various important indicators, such as employee turnover rates, training needs, and workforce productivity trends. This information allows companies to formulate policies that are more targeted and responsive to business needs.

HRIS also supports the integration between human resource management and the company's overall business strategy. In a competitive business environment, the ability to respond to change quickly and efficiently becomes a competitive advantage. An integrated HRIS system allows managers

to monitor and evaluate employee performance in real time, identify areas for improvement, and design development programs that are in line with organizational goals (Wang, 2024).

In addition, it is important to conduct a comprehensive HRIS impact measurement to ensure that the implementation of this system provides optimal benefits. Some indicators that can be used include reducing time in administrative processes, increasing data accuracy, operational cost efficiency, and employee satisfaction with the system used. With a comprehensive analysis, companies can identify the strengths and weaknesses of the HRIS system implemented, and make the necessary adjustments to improve overall organizational performance. In addition, HRIS also supports the integration of human resource processes with the company's overall business strategy. With centralized and easily accessible data, companies can conduct a more in-depth analysis of workforce trends, development needs, and cost efficiency. This not only increases operational effectiveness but also provides a competitive advantage in increasingly fierce business competition (Begum et al., 2020).

However, to maximize the potential of HRIS, a comprehensive approach is needed in measuring the impact of its use. Some relevant key performance indicators (KPIs) include time savings in administrative processes, increasing data accuracy, employee satisfaction with the system, and the system's contribution to achieving the company's strategic goals. This analysis not only helps companies evaluate the success of HRIS implementation but also provides insight into areas that need improvement. By considering these various aspects, the analysis of the impact of using HRIS in improving the efficiency of human resource management becomes a very relevant and important topic to discuss. The results of this analysis are expected to provide guidance for companies in adopting HRIS technology effectively, so that it can support the achievement of business goals and increase competitiveness in the global market.

## **RESEARCH METHOD**

This study uses a literature review approach to analyze the impact of HRIS use in improving the efficiency of human resource management. The literature review was conducted by collecting, reviewing, and analyzing various academic sources, such as journals, books, research reports, and related articles that are relevant to the topic. These sources were selected based on their credibility and relevance to the research objectives, so that they can provide a strong theoretical basis and empirical evidence.

The analysis process in the literature review involves identifying key themes, such as the benefits of HRIS, implementation challenges, and relevant efficiency indicators. The data obtained are then synthesized to provide a comprehensive picture of the impact of HRIS on human resource management. With this approach, the study is expected to provide comprehensive and in-depth insights, which can be used as a reference for decision making in implementing HRIS in various organizations.

## **RESULT AND DISCUSSION**

### **Analysis of HRIS Benefits on Human Resource Management Efficiency**

The use of Human Resource Information System (HRIS) has a significant impact on the efficiency of human resource management in various organizations (Jayadeva et al., 2022). This system not only speeds up the administrative process but also improves data accuracy, enables in-depth analysis, and reduces operational burdens. The following is a more detailed explanation of the benefits of HRIS according to Bali, A. S. (2019):

1. **Reducing Administrative Burden** HRIS is designed to automate various administrative tasks, such as employee data management, attendance recording, payroll, and reporting. For example, the payroll process that previously took days can now be completed in hours with the help of an automated system. Digital-based attendance management also allows companies to record and monitor employee attendance in real-time, reducing the risk of manual recording errors.
2. **Increasing Data Accuracy and Consistency** Employee data stored in HRIS is centralized and integrated, reducing the possibility of errors due to manual processing. With direct access to accurate and up-to-date data, HR managers can make better and faster decisions. In addition, the data validation feature in HRIS helps ensure data consistency across departments.
3. **Efficiency in Employee Performance Management and Development** HRIS makes it easier for organizations to track employee performance, set targets, and provide feedback. This system allows for more objective data-based performance evaluations, thus supporting decision-making regarding promotions, training, or incentives. With features such as automatic reporting, HRIS helps identify employee training needs based on individual performance, so that competency development programs can be designed in a targeted manner.

4. **Support for Strategic Decision Making** With sophisticated data analysis features, HRIS allows management to evaluate workforce trends, identify potential problems, and formulate evidence-based strategies. For example, employee turnover data can be used to design more effective retention policies, while data related to attendance rates can help in more efficient work scheduling.
5. **Increased Employee Satisfaction** HRIS is often equipped with an employee portal that allows them to access personal information, such as leave schedules, pay slips, or benefit data, independently. By giving employees more control over their information, HRIS not only improves efficiency but also strengthens transparency and job satisfaction.
6. **Effectiveness in Change Management** In the era of digital transformation, HRIS is an important tool to help companies manage change more effectively. With organized data and digitized processes, companies can adapt more quickly to market dynamics or regulatory changes. For example, in a pandemic situation, HRIS helps organizations shift to a remote work model by managing employee attendance online and optimizing internal communications.
7. **Long-Term Cost Savings** Although HRIS implementation requires a significant initial investment, the long-term benefits in the form of operational cost savings are very significant. By reducing reliance on manual processes and increasing efficiency, companies can allocate resources to other strategic areas.

However, to ensure these benefits can be achieved, according to Bal, Y., Bozkurt, S., & Ertemsir, E. (2022) companies need to ensure the success of HRIS implementation by:

1. Providing intensive training for users.
2. Ensuring that the selected system is in accordance with the needs of the organization.
3. Conducting periodic evaluations to measure the effectiveness of the system.
4. Overcoming employee resistance through good communication and transparency in the implementation of technology.

By utilizing HRIS optimally, companies can not only improve the efficiency of human resource management but also create a more productive and innovative work environment, supporting the overall growth of the organization.

## **Evaluation of Challenges in HRIS Technology Implementation**

The implementation of Human Resource Information System (HRIS) technology in various organizations presents great opportunities, but also comes with complex challenges. One of the main challenges is the high initial investment costs required to adopt this technology (Khan et al., 2017). Many organizations, especially those of small to medium scale, often find it difficult to allocate budget for purchasing hardware and software that supports HRIS. In addition, the cost of training employees to use this system effectively is also an additional burden that cannot be ignored.

In addition to the financial aspect, the readiness of technological infrastructure is an important element that influences the success of HRIS implementation. Not all organizations have adequate technological infrastructure, such as stable internet connectivity or compatible hardware. The absence of supporting infrastructure can hinder HRIS performance and reduce the effectiveness of the system in supporting human resource management processes (Matimbwa, H., & Masue, 2019).

Another challenge that often arises is employee resistance to changes brought about by new technology. Changes in the work system, especially if they involve technology, often raise concerns among employees. They may feel uncomfortable with the change or fear losing their jobs due to automation of previously manual processes. In such situations, effective communication and adequate training are key to overcoming resistance and ensuring good acceptance of HRIS (Sharma, 2022).

The complexity of customizing HRIS to the specific needs of the organization is also a significant obstacle. Each organization has unique work processes and management structures, so special customizations are often required in the HRIS system. This customization process is not only time-consuming but also requires additional costs. In addition, if customization is not done properly, HRIS may not be able to meet the needs of the organization optimally (Albouti, A., & BALAJI, 2022).

Data security and employee information privacy are also crucial issues in HRIS implementation. This system manages a large amount of sensitive data, such as employee personal information, payroll records, and work history. Therefore, companies must ensure that HRIS has strong security mechanisms to protect data from cyber threats. Data security breaches can damage the reputation of the organization and have serious legal implications. The availability of adequate technical support is also an important factor in the success of HRIS implementation. If the system experiences disruption or failure,

fast and efficient technical support is needed to minimize the impact on company operations. The absence of adequate technical support can result in disruptions in work processes and reduce employee confidence in the system.

In addition, the sustainability of HRIS use requires continuous evaluation and updating. Technology continues to evolve, and organizational needs also change over time. Therefore, companies must routinely evaluate HRIS performance and make updates according to technological developments and business needs. This process requires long-term commitment and adequate resource allocation. HRIS implementation also requires integration with other existing systems in the organization. This integration is often a complicated process because it involves compatibility between various technology platforms. If integration is not done properly, it can create gaps in workflow and reduce overall system efficiency (Chabani, 2020).

Despite facing various challenges, HRIS implementation can provide significant benefits if managed properly. To overcome these challenges, companies need to develop a comprehensive implementation strategy, including careful planning, adequate resource allocation, and intensive training for users (Kumar, G. P., & Jagadeesan, 2024). In addition, involving employees in the implementation process and ensuring transparent communication can help create a work environment that supports successful HRIS adoption. By addressing these challenges, organizations can make optimal use of HRIS to improve human resource management efficiency, support strategic decision-making, and create competitive advantage in an increasingly competitive market.

### **Impact of HRIS on Strategic Decision Making**

According to Wijayasriwardana, I., & Karunanayaka, P. (2023) the use of Human Resource Information System (HRIS) has had a significant impact on the organization's ability to make strategic decisions. HRIS provides fast and structured access to relevant data, enabling organizational leaders to make more accurate and data-driven decisions. In a changing business environment, real-time access to information is essential to anticipate challenges and opportunities.

HRIS enables comprehensive data collection and analysis on various aspects of human resource management, such as employee productivity levels, absenteeism trends, training effectiveness, and workforce retention rates. This information allows management to identify areas that require special attention, and design strategies that are more in line with the needs of the organization.

For example, data on retention trends can help organizations develop more attractive career development policies, thereby reducing employee turnover rates (Samy et al., 2023).

In addition, HRIS simplifies the workforce planning process by providing projections of human resource needs based on historical data and market trends. Using the analytical tools provided by HRIS, managers can forecast future workforce needs, identify required skills, and design training programs to bridge the gap. This proactive approach allows organizations to remain competitive and adapt to changing business environments.

HRIS also supports more transparent and informed decision-making in terms of employee compensation and benefits (ADEBAYO et al., 2024). By presenting detailed data on salary structures, benefits, and incentives, HRIS helps management design fairer and more competitive policies. This not only improves employee satisfaction but also strengthens the organization's position as an employer of choice. In addition, HRIS contributes to increased efficiency in the performance evaluation process. By providing integrated and easily accessible employee performance data, HRIS enables managers to provide more constructive and evidence-based feedback. This data also helps in identifying leadership potential among employees, thereby supporting more effective succession planning (Alam et al., 2016).

In the broader context of strategic decision-making, HRIS plays a critical role in managing risk and ensuring regulatory compliance. By providing accurate reporting on compliance aspects such as workplace safety, inclusion, and diversity, HRIS helps organizations mitigate legal and reputational risks. The ability to manage these risks provides organizations with a significant competitive advantage in an increasingly complex marketplace (Handra, T., & Sundram, 2023).

Overall, the impact of HRIS on strategic decision-making is not limited to increasing operational efficiency, but also includes empowering management with deeper and more relevant insights. By leveraging this technology, organizations can make faster, more accurate, and more strategic decisions, ultimately supporting the achievement of long-term goals and business sustainability.

## **CONCLUSION**

The use of Human Resource Information System (HRIS) technology has proven to have a significant impact on increasing the efficiency of human

resource management in modern organizations. HRIS allows the automation of previously complex administrative processes, thereby reducing manual workloads, increasing data accuracy, and accelerating operational decision-making. With better data integration, companies can access employee information in real-time, enabling more effective monitoring of human resource performance and management.

Furthermore, HRIS also supports strategic decision-making through deeper data analysis. With the analytical features available in HRIS, companies can identify relevant trends and patterns to support strategic planning. This allows organizations to respond to market changes more quickly, increase competitiveness, and optimize human resource allocation. In addition, HRIS plays a role in strengthening employee engagement by providing easier access to their personal information, such as work schedules, salaries, and training.

However, HRIS implementation is not without challenges. Factors such as initial investment costs, employee resistance to change, and the need for adequate technology infrastructure are obstacles that must be overcome. Therefore, successful HRIS implementation requires careful planning, comprehensive training, and ongoing technical support. By addressing these challenges, organizations can leverage HRIS to create sustainable operational efficiencies and support the achievement of long-term strategic goals.

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