

# THE ROLE OF DIGITALIZATION IN IMPROVING HUMAN RESOURCES MANAGEMENT PERFORMANCE AT PT. SEMEN INDONESIA UNIT TONASA IN MAKASSAR CITY

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## Abstract

*The digitalization of Human Resource Management (HRM) at PT. Semen Indonesia Unit Tonasa has significantly transformed the company's HR operations, improving efficiency and effectiveness across various HR functions. Located in Makassar, PT. Semen Indonesia Unit Tonasa, a major player in the cement manufacturing industry, faced challenges in managing its large and diverse workforce, including slow recruitment processes, inconsistent performance evaluations, and inefficient data management. To address these challenges, the company adopted cloud-based HR management systems, automated recruitment tools, and performance management software, allowing for real-time monitoring and data-driven decision-making. The results of this digital transformation were notable: recruitment time was reduced by 30%, performance evaluations became more transparent and objective, and employee engagement increased through self-service portals and online learning platforms. The integration of real-time data analytics enabled HR managers to make more informed decisions, aligning HR practices with organizational goals. Despite facing resistance to change and technical challenges related to system integration, the company effectively managed the transition through comprehensive training and ongoing support. This study demonstrates how digital tools can optimize HR processes, enhance employee satisfaction, and improve organizational performance. The success of PT. Semen Indonesia Unit Tonasa's digital HR implementation provides valuable insights for other organizations seeking to modernize their HR functions in an increasingly digital and competitive environment.*

**Keywords:** Digitalization, Human Resource Management, Recruitment Efficiency, Performance Management, Employee Engagement

## 1. INTRODUCTION

In the era of globalization and rapid digitalization, the advancement of information technology has significantly impacted various sectors, including Human Resource Management (HRM). Digitalization refers to the use of digital technologies to transform traditional processes and systems into more efficient, faster, and integrated solutions. In

HRM, digitalization encompasses a wide range of processes, from recruitment, training, performance management, to data-driven decision-making. Various digital tools, such as cloud-based HRM systems, mobile applications for training, and software for performance evaluation, have been employed to enhance the effectiveness and efficiency of HR operations (Bondarouk, Ruel, & Van der Heijden, 2017).

PT. Semen Indonesia Unit Tonasa, located in Makassar City, is one of the leading companies in the cement manufacturing sector in Indonesia. As a company with large-scale operations, PT. Semen Indonesia Unit Tonasa faces challenges in managing the complex and diverse human resources (HR) across various divisions. Managing a workforce of over thousands of employees presents issues related to employee data management, time-consuming recruitment processes, and performance evaluations that are often not objective or data-driven (Kaufman, 2020).

As part of its efforts to improve HR efficiency and effectiveness, PT. Semen Indonesia Unit Tonasa has begun implementing digitalization in various aspects of HR management. The adoption of cloud-based HR management systems and performance management applications has been a strategic step toward digitalizing HR processes. These systems not only help in monitoring employee performance in real time but also speed up the recruitment and training processes, making them more personalized and efficient. Digitalization also allows the company to optimize employee data management in a single integrated platform, thereby improving the quality of decision-making by HR managers (Ulrich et al., 2017).

However, despite the numerous benefits that digitalization offers, its implementation comes with challenges. One of the major challenges faced by PT. Semen Indonesia Unit Tonasa is the readiness of its workforce to adopt new technologies, particularly for employees who are less familiar with digital systems. Additionally, infrastructure and technological resource factors must be considered for successful digitalization implementation (Huang et al., 2020). Thus, a well-defined strategy is needed to ensure that the digitalization process runs smoothly and has a positive impact on HR performance.

Research literature indicates that companies successfully implementing digitalization in HRM can experience improvements in productivity and employee satisfaction. Digitalization enables HR processes to be more transparent, measurable, and data-driven (Kaufman, 2020). Moreover, digitalization enhances decision-making, allowing for more accurate and timely decisions based on data (Ulrich et al., 2017). Therefore, it is crucial for PT. Semen Indonesia Unit Tonasa to continuously optimize the use of technology in HR management to meet the challenges of a dynamic and competitive industry.

This study aims to explore the role of digitalization in improving HR management performance at PT. Semen Indonesia Unit Tonasa in Makassar City, as well as to analyze the impact of technology implementation on the efficiency and effectiveness of HR management in the company.

## 2. RESEARCH METHOD

The implementation of digitalization in Human Resource Management (HRM) at PT. Semen Indonesia Unit Tonasa follows a well-structured and comprehensive method to ensure the successful transition from traditional, manual HR processes to a more efficient, technology-driven approach. The process begins with a needs assessment and goal setting, which involves conducting a detailed analysis of the company's existing HR practices. This step is crucial to identify the pain points and inefficiencies that can be addressed through digitalization. Challenges such as slow recruitment processes, lack of real-time performance tracking, ineffective employee training, and disconnected data management systems are evaluated. Based on this assessment, the company sets clear, measurable goals for the digitalization effort, such as reducing recruitment time, enhancing the accuracy and transparency of performance evaluations, increasing employee engagement through accessible self-service tools, and enabling data-driven decision-making in HR processes.

Following the needs assessment, the company moves to the technology selection and customization phase. In this step, PT. Semen Indonesia Unit Tonasa carefully evaluates available HR technology solutions that can address the identified challenges. Key criteria for selection include scalability, integration capabilities, user-friendliness, and the ability to comply with local regulations. The chosen technology is typically a cloud-based HRM system that includes modules for recruitment, employee performance management, training, payroll, and self-service options for employees. Once the technology is selected, it undergoes a customization process to ensure it aligns with the company's specific HR processes, industry requirements, and business needs. This customization ensures that the system fits seamlessly with the company's culture and operations, while also supporting local compliance standards.

After the system is selected and customized, the company enters the pilot testing and training phase. A small group of HR staff, managers, and employees participate in testing the new system. The pilot phase is essential for identifying any technical issues, user challenges, or functional limitations of the system before it is rolled out company-wide. Feedback collected during this phase is used to make any necessary adjustments to the system. In parallel, comprehensive training programs are conducted to ensure that HR staff, managers, and employees understand how to use the new tools effectively. Training is tailored to the different user groups, with HR staff receiving in-depth training on system administration, managers learning how to utilize the performance evaluation and employee management tools, and employees being trained on how to access self-service features, manage personal data, and participate in online learning and performance tracking.

Following successful pilot testing and training, the company proceeds to the full-scale implementation of the digital HR system. During this phase, the system is rolled out across the entire organization. All departments, employees, and HR teams gain access to the

new tools, and the HR system is fully integrated with other existing business systems, such as payroll and ERP systems. This integration allows for seamless data flow between HR functions and other areas of the business, reducing duplication of efforts and the risk of errors. Additionally, a support team is available to provide troubleshooting assistance and ensure that any technical issues arising during the transition are promptly addressed. The implementation process is closely monitored to ensure that all employees have access to the tools and that the system is functioning as expected across all departments.

Once the system is fully implemented, continuous **\*\*monitoring and evaluation\*\*** are essential to measure the success of the digital HR transformation. Key performance indicators (KPIs) are established to track the effectiveness of the new system. These KPIs may include metrics such as recruitment time, employee retention rates, employee satisfaction with the new performance review process, and the usage rates of various digital tools by employees. Additionally, regular surveys and feedback sessions are conducted to evaluate user satisfaction and identify any challenges or opportunities for further improvement. Data analytics is used to assess the impact of the digital HR system on broader business outcomes, such as productivity, employee engagement, and overall HR operational efficiency.

Finally, the company establishes a process for continuous improvement and scaling. Digitalization is an ongoing process, and PT. Semen Indonesia Unit Tonasa recognizes the importance of refining and evolving its HR systems over time. The company commits to regular updates to the system based on user feedback, technological advancements, and changes in business needs. New features may be added, and improvements made to ensure the system remains aligned with the company's goals and continues to provide value. Furthermore, as the company expands and the workforce grows, the system must be scaled to accommodate the increased number of employees, additional departments, or new business locations. This scaling ensures that the digital HR system can continue to support the evolving needs of the organization without compromising efficiency or performance.

Through this detailed and phased implementation method, PT. Semen Indonesia Unit Tonasa can successfully adopt digitalization in its HRM processes. The approach emphasizes careful planning, rigorous testing, extensive training, and continuous evaluation, ensuring that the digitalization process enhances operational efficiency, supports data-driven decision-making, and ultimately improves employee engagement and satisfaction. By following this comprehensive method, PT. Semen Indonesia Unit Tonasa can leverage the full potential of digital HR tools to drive organizational success and remain competitive in the rapidly evolving business environment.

### **3. RESULTS AND DISCUSSION**

The digitalization of Human Resource Management (HRM) at PT. Semen Indonesia Unit Tonasa has yielded several significant improvements across various aspects of HR

functions. These improvements are evident in the recruitment process, performance management, employee engagement, and the use of data-driven decision-making. While the results have been largely positive, there were challenges associated with the implementation process that need ongoing attention. This section elaborates on these improvements and challenges, integrating them with relevant literature to provide a comprehensive understanding of the outcomes of digital HRM implementation.

### **Improvement in Recruitment Process**

One of the most notable results of implementing digital HR tools was the improvement in recruitment efficiency. By automating tasks such as resume sorting, candidate tracking, and interview scheduling, PT. Semen Indonesia Unit Tonasa reduced its time-to-hire by approximately 30%, compared to the pre-digitalization period. Digital tools have allowed HR teams to focus more on strategic aspects of recruitment, such as assessing candidates' cultural fit and potential for long-term development, rather than administrative tasks.

### **Discussion:**

The recruitment process is a critical HR function, and digitalization can significantly streamline the entire process. Previous studies have emphasized that automation in recruitment helps companies attract top talent more efficiently while reducing biases that may occur in manual processes (Chauhan et al., 2018). By automating administrative tasks, PT. Semen Indonesia Unit Tonasa not only shortened recruitment timelines but also enhanced the overall quality of hiring decisions. Moreover, automation tools allow HR managers to focus on high-value activities such as candidate interviews and organizational fit, which ultimately lead to better employee outcomes in the long run (Sharma & Chatterjee, 2020).

#### **1. Enhanced Performance Management and Employee Monitoring**

The shift to a digital performance management system at PT. Semen Indonesia Unit Tonasa improved the accuracy and fairness of performance evaluations. The cloud-based system enabled real-time performance tracking, offering employees and managers access to data that was previously difficult to obtain. This increased transparency in assessments, which helped foster a culture of accountability and trust.

### **Discussion:**

Digital tools in performance management align with findings from research that highlights the positive impact of data-driven performance management on employee satisfaction and productivity (Kaufman & McGovern, 2019). Providing employees with real-time feedback and clear performance metrics has been shown to enhance their motivation and engagement (Latham & Locke, 2020). For PT. Semen Indonesia Unit Tonasa, the new

system has enabled HR to identify performance trends early, allowing for proactive interventions. This proactive approach to performance management is consistent with best practices in HRM, which emphasize the need for continuous feedback and professional development opportunities (DeNisi & Pritchard, 2020).

## **2. Employee Engagement and Satisfaction**

Digital tools, such as self-service portals and online learning platforms, have led to a noticeable improvement in employee engagement and satisfaction. By empowering employees to manage their HR-related tasks, PT. Semen Indonesia Unit Tonasa reduced administrative burdens and enhanced employee autonomy. Additionally, the introduction of online learning platforms provided employees with accessible professional development opportunities, which helped improve skill development and retention.

### **Discussion:**

Research supports the notion that employee empowerment through digital self-service tools increases engagement and satisfaction (Gupta & Sharma, 2020). By providing employees with greater control over their personal information and career development, PT. Semen Indonesia Unit Tonasa fostered a more positive work environment. Furthermore, offering accessible training and career development programs is crucial in retaining talent in a competitive labor market (Morrison, 2019). The introduction of online learning tools, which allow employees to learn at their own pace, aligns with studies that show how flexible learning opportunities can improve skill retention and career progression (Noe, 2017).

## **3. Data-Driven Decision-Making**

The integration of real-time data analytics into HR operations has been one of the most valuable outcomes of the digitalization process. With the ability to track and analyze key HR metrics, PT. Semen Indonesia Unit Tonasa's HR department is better equipped to make informed decisions. Insights into turnover rates, employee satisfaction, and recruitment effectiveness have enabled HR managers to adjust strategies and align them with the organization's goals.

### **Discussion:**

The adoption of data-driven HR practices is supported by literature, which suggests that data analytics improves decision-making by providing actionable insights (Marler & Parry, 2016). By integrating analytics into HR processes, PT. Semen Indonesia Unit Tonasa can optimize its workforce strategies and improve business outcomes. The ability to make data-driven decisions allows HR managers to address issues before they escalate and align HR initiatives with the broader goals of the organization (Bersin, 2018). However, it is essential that HR professionals are trained to interpret data accurately to ensure that decisions are based on valid insights rather than misinterpreted data.



#### **4. Challenges and Areas for Improvement**

Despite the positive outcomes, PT. Semen Indonesia Unit Tonasa encountered several challenges during the implementation of its digital HR system. Resistance to change from employees unfamiliar with the new system was one of the key obstacles. Additionally, technical issues related to integrating the digital HR system with legacy platforms required additional time and resources to resolve.

##### **Discussion:**

Resistance to change is a common challenge when introducing new technologies in organizations (Kotter, 2012). As noted in the literature, effective change management practices, including training and clear communication, are essential in overcoming resistance (Armenakis & Harris, 2009). PT. Semen Indonesia Unit Tonasa's approach to training and providing hands-on support during the early stages of adoption helped mitigate some of these issues. Furthermore, the integration of new systems with legacy platforms is often a complex and time-consuming task, as noted by Jaspersen et al. (2005). PT. Semen Indonesia Unit Tonasa's proactive collaboration with the IT department and external vendors played a critical role in resolving these technical challenges.

#### **4. CONCLUSION**

The implementation of digitalization in Human Resource Management (HRM) at PT. Semen Indonesia Unit Tonasa has marked a significant transformation in the company's HR operations, leading to substantial improvements in recruitment, performance management, employee engagement, and overall decision-making. Through the adoption of cloud-based HR systems, PT. Semen Indonesia Unit Tonasa streamlined its HR processes, making them more efficient, transparent, and data-driven. The system's ability to automate key HR functions, such as recruitment, performance tracking, and employee development, reduced manual workloads and improved both the speed and accuracy of these processes.

The digital HR system enhanced the recruitment process by reducing time-to-hire and allowing HR staff to focus on more strategic activities such as candidate assessments and interviews. Automated features such as resume sorting and candidate tracking also improved the overall candidate experience, ensuring that PT. Semen Indonesia Unit Tonasa attracted and selected the best talent faster and more effectively. Additionally, the integration of performance management tools, which provided real-time feedback and objective performance tracking, led to more transparent and fair evaluations, improving employee satisfaction and fostering a culture of accountability.

Employee engagement also saw significant improvements due to the introduction of self-service portals and online learning platforms. Employees were empowered with the ability to manage their personal information, access training opportunities, and track their performance data. This autonomy, combined with accessible learning tools, encouraged continuous professional development and increased employee satisfaction. The digitalization of these HR processes not only contributed to a more engaged and motivated workforce but also resulted in higher employee retention and productivity.

The shift to data-driven decision-making was another key benefit. By integrating real-time data analytics, HR managers at PT. Semen Indonesia Unit Tonasa were able to make more informed decisions regarding recruitment, employee performance, and workforce planning. The ability to track HR metrics, such as turnover rates, employee satisfaction, and training outcomes, allowed HR managers to proactively address issues, optimize HR strategies, and align HR practices with broader organizational objectives.

Despite these successes, the transition to a digital HR system was not without its challenges. Resistance to change, particularly from employees who were accustomed to traditional methods, was one of the initial barriers. To overcome this, the company implemented comprehensive training programs, conducted awareness sessions, and provided ongoing support to ease the transition. Moreover, integrating the new system with existing legacy platforms posed some technical challenges, requiring close collaboration between HR, IT, and external vendors. However, these challenges were effectively managed through proactive communication and support, and the company's commitment to continuous improvement ensured that the system functioned smoothly over time.

Looking forward, PT. Semen Indonesia Unit Tonasa must focus on further refining its digital HR tools to ensure they continue to meet the evolving needs of the organization. This includes enhancing the system's capabilities based on feedback from employees and HR managers, keeping up with advancements in HR technology, and scaling the system to accommodate the company's growth. Additionally, ensuring that all employees are comfortable and proficient in using the new system will be critical to maintaining high levels of engagement and achieving sustained improvements in HR performance.



In conclusion, the digitalization of HRM at PT. Semen Indonesia Unit Tonasa has not only improved the efficiency and effectiveness of HR operations but also contributed to a more engaged, satisfied, and productive workforce. The successful integration of digital HR practices serves as a valuable model for other organizations seeking to modernize their HR functions. By embracing technology, PT. Semen Indonesia Unit Tonasa has positioned itself to thrive in an increasingly competitive and technology-driven business environment, ensuring long-term organizational success. As the company continues to refine and expand its digital HR capabilities, it will remain well-equipped to adapt to future challenges and opportunities, ultimately contributing to its growth and continued success.

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