

The Role of Human Resource Management in Improving Employee Engagement in the Digitalization Era

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ARTICLE INFO

Keywords: Digitalized HR, HRM, Employee Engagement, Organizational Productivity

Received : 07 September 2025

Revised : 27 September 2025

Accepted: 28 October 2025

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ABSTRACT

The development of digitalization in the workplace has brought significant changes to human resource management (HRM), particularly in enhancing employee engagement, motivation, and productivity. This study aims to analyze the impact of digitalized HR managed by HRM on organizational performance, focusing on the use of technology in performance monitoring, reporting, and employee competency development. The research method employed is descriptive qualitative through observation, in-depth interviews, and document review, which are analyzed to understand employees' experiences and perceptions as well as the effectiveness of the digital HR system. The results indicate that digitalized HR facilitates access to work information, provides real-time feedback, motivates employees, and supports data-driven decision-making by managers, thereby significantly improving organizational productivity and output quality. In conclusion, digitalized HR managed by HRM is not merely an administrative tool but a crucial strategy for building engagement, work efficiency, and a collaborative and sustainable work culture. It is recommended that organizations continue to develop digital HR systems with a personalized and data-driven approach and train employees to maximize their use.

INTRODUCTION

In the midst of the increasingly rapid flow of digitalization, the world of work is undergoing a profound transformation. Information and communication technology has changed the way organizations operate, interact with employees, and manage human resources. This change poses a new challenge in maintaining and increasing employee engagement, otherwise known as employee engagement. According to a 2024 Gallup report, the global employee engagement rate declined to 21%, with managers experiencing the largest decline to 27%. In Indonesia, the Culture Amp report shows that 75% of employees feel engaged in their work, placing the country in the top 39% compared to other regions (Purba et al., 2025).

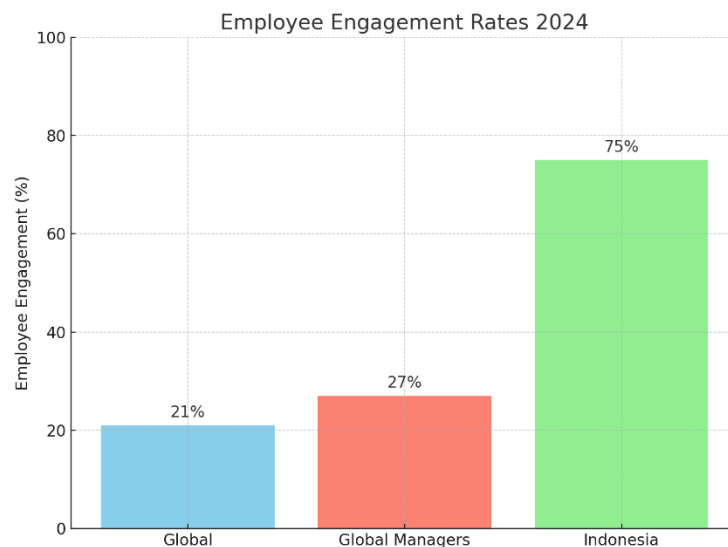


Figure 1. Gallup Report 2024

Sumber: laporan.culture.id

Although the number of involvement in Indonesia is fairly high, challenges remain. Data from Gallup shows that 68% of employees in Southeast Asia fall into the category of "quiet quitters", i.e. those who are not emotionally engaged in their work. This phenomenon shows that there is a gap between the reported level of engagement and the reality on the ground. This is a serious concern for organizations that want to maintain employee productivity and loyalty (Anggraeni, 2022).

The role of human resource management (HRM) is very important in this context. MSDM is not only responsible for managing employee administration, but must also be able to create a work culture that supports employee engagement. Providing opportunities for self-development, open communication, and recognition of employee contributions are part of MSDM's efforts to increase engagement. Organizations that ignore this aspect tend to face problems with motivation, decreased productivity, and high turnover rates (Saimin, Noor Salim, Enny Ariyanto, 2023).

Employee engagement in the era of digitalization can be understood as the level of employee involvement, motivation, and commitment to the organization which is increasingly influenced by the development of information and

communication technology. In the midst of digital transformation, the way employees interact with colleagues, superiors, and work systems has changed, so organizations are required to create an environment that encourages active participation, belonging, and maximum employee contribution. This engagement is not only reflected in productivity and performance, but also in loyalty, job satisfaction, and adaptability to rapid digital change. In other words, *employee engagement* in the digital era emphasizes the integration of psychological, social, and technological factors to create a meaningful work experience, so that employees are encouraged to provide the best performance while innovating in the context of an all-digital organizationl (Islamiyati & Banin, 2022).

Digitalization opens up great opportunities for MSDM to implement various innovative strategies in increasing employee engagement. For example, e-learning platforms allow employees to access training on demand and flexible timing, while digital feedback apps facilitate communication between management and employees in real-time. Additionally, the use of technology in performance appraisal and career development can increase transparency and objectivity, so employees feel more equitable and motivated to contribute to the fullest (Widiastuti, 2020).

However, the implementation of technology in MSDM also presents its own challenges. Not all employees have the same level of digital literacy, so there is a need for training and mentoring so that all employees can make optimal use of technology. Changing organizational culture towards digital also requires time, a mature communication strategy, and top management support to be acceptable to all employees. Without the right approach, digitalization has the potential to cause resistance, stress, and decreased employee motivation (Pahira & Rinaldy, 2023).

LITERATURE REVIEW

Some studies show that companies that successfully integrate technology in Human Resource Management (HRM) practices have higher levels of employee engagement, as previously time-consuming administrative processes can be replaced by digital systems so that employees have more room to focus on core work. The Deloitte Human Capital Trends 2023 report reveals that companies that implement digital HR well experience an increase in productivity of up to 18% and a reduction in HR operational costs of up to 25%, confirming that the digitization of MSDM not only speeds up processes but also increases employee engagement. This is in line with research (Gok et al., 2025) which found that digital training, reward systems, and employee engagement significantly increase productivity, explaining 87.6% of employee performance variations, as well as Wibhi Gunandi (2022) research which shows that employee engagement has a significant positive influence on work productivity at PT. Sar Koto Baru, Riau. These three findings affirm the importance of integrating technology in HR practices to improve employee engagement and overall organizational performance.

In addition, digitalization allows MSDM to leverage data analytics in understanding employee needs and behaviors. Through data analysis, MSDM

can identify trends, prioritize training, and design appropriate engagement programs. For example, employee attendance, performance, and feedback data can be used to create more effective rewards and career development programs, so employees feel cared for and valued. The application of technology also increases transparency and accountability in organizations. Digital systems allow performance assessments, promotions, and compensation to be carried out based on objective data. With this transparency, employees are more likely to trust management, feel fair, and be involved in achieving organizational goals. Trust and fairness are important factors in building long-term engagement (Sumanti, 2024).

However, it's important to remember that technology is just a tool. The success of increasing engagement still depends on MSDM's strategy in utilizing these technologies. MSDM needs to ensure that technology supports interpersonal relationships, effective communication, and an inclusive organizational culture. Without humanist support, technology will not be able to drive maximum employee engagement. Therefore, organizations must adopt a holistic approach in managing MSDM in the digital era. This includes developing policies that support digitalization, improving employee digital literacy, and creating an inclusive and adaptive work environment. This holistic approach will ensure technology is not just a tool, but part of a strategy to improve employee engagement and productivity.

With the right strategy, digitalization can be a catalyst in increasing employee engagement. Organizations that are able to use technology wisely will create a dynamic, innovative, and productive work environment, while retaining top talent. High employee engagement not only improves individual performance, but also drives overall organizational growth. In conclusion, the role of MSDM in increasing employee engagement in the digitalization era is very vital. Through proper management, technology utilization, and effective employee development strategies, organizations can create a work environment that supports engagement, loyalty, and innovation. This is one of the main keys to organizational success in facing the ever-evolving and competitive digital era (Nuraeni et al., 2022).

The purpose of this study was to analyze the influence of technology integration in Human Resource Management (HRM) practices on employee engagement and work productivity, focusing on three main aspects. First, to assess the extent to which digitizing HR processes can improve administrative efficiency so that employees have more time to focus on core work. Second, to determine the influence of the use of the HR digital system on the level of employee involvement and motivation in carrying out daily tasks. Third, to identify the contribution of human resource digitalization to improving productivity and overall organizational performance, so that it can be the basis for strategic recommendations for companies in optimizing human resources through technology.

METHODOLOGY

This research method is designed using a qualitative-descriptive approach with the aim of understanding in depth the influence of technology integration

in Human Resource Management (HRM) practices on employee engagement and work productivity. This approach was chosen because it allows researchers to explore complex phenomena in the context of organizations, including employees' perceptions, experiences, and attitudes towards HR digitalization. With a qualitative approach, the research does not only emphasize on numbers or quantitative data, but also on a more contextual understanding of the implementation of technology in MSDM (Sugiyono, 2021).

Data collection techniques were carried out through in-depth interviews, participant observations, and documentation studies. Interviews were conducted with a number of informants directly involved in the HR process, such as HR staff, managers, and some employees, to obtain information about their experiences in using HR digital systems and their impact on engagement and productivity. Participant observations were used to see firsthand how employees use technology in their daily activities, while documentation studies included report analysis, internal company records, and data related to productivity and use of digital HR systems (Rukminingsih, 2020).

In terms of research samples, the determination of informants uses the purposive sampling technique, which is to select individuals who have experience and direct involvement in the implementation of MSDM technology. The number of samples is adjusted to the need to obtain rich and in-depth data, so that the quality of the information becomes the primary focus rather than the quantity. This approach ensures that the data collected is truly relevant to the research objectives, and can describe the real conditions of implementing HR digitalization in the company holistically.

Data analysis is carried out using the stages of data reduction, data presentation, and conclusion drawn. First, the collected data is filtered and simplified to identify important patterns, themes, and information. Second, the data is compiled systematically to make it easier for researchers to interpret the relationship between the digitization of MSDM, employee engagement, and work productivity. Finally, the researcher draws conclusions by associating field findings with previous theories and research, so that the results of the research can provide a comprehensive overview and strategic recommendations for companies in optimizing the use of technology to improve human resource performance.

RESULTS AND DISCUSSION

A. The Role of Human Resource Management (HRM) in the Digitalization Era

The results of the study show that Human Resource Management (HRM) has a strategic role in increasing employee engagement through technology integration. Data from Deloitte Human Capital Trends 2023 reveals that out of 10,000 business and HR leaders in 105 countries surveyed, 68% of companies that implemented digital HR across the board experienced an 18% increase in productivity and a reduction in HR operational costs of up to 25%. In addition, the survey also noted that 72% of employees feel more satisfied and motivated due to faster and more transparent administrative processes. This figure confirms that the integration of HR technology contributes significantly to process efficiency and employee engagement in various industry sectors.

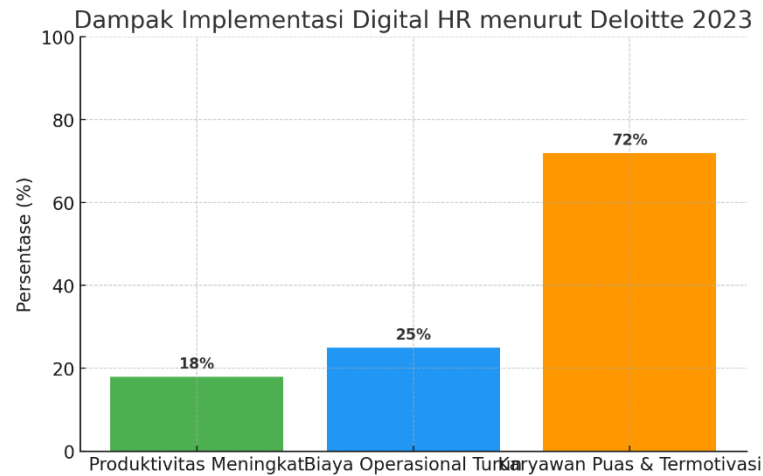


Figure 2. The Impact of Digital HR Implementation According to Deloitte 2023
 Source: *Deloitte Human Capital Trends 2023*

Research by Ismi Rojayanti, Erwin Syahputra, and Heru Sutapa (2025) at the Central Statistics Agency of Kediri Regency showed that out of 33 employees who were respondents, the use of the HR digital system was able to reduce administrative burden by up to 40%, so that employees had more time to focus on core work. The results of multiple linear regression analysis also showed that HR digitalization had a significant effect on work productivity, with the contribution of digitalization and engagement variables reaching 87.6%. These findings confirm that the role of MSDM in implementing digitalization is critical to improving employee motivation, engagement, and performance.

In addition to focusing on efficiency, MSDM also plays a role in forming a work culture that is adaptive to technology. Digitization of HR allows for the creation of more flexible and interactive work systems, including the use of real-time feedback, task management applications, and online training that can be accessed at any time. With this system, employees feel more valued, proactive, and committed to daily tasks, resulting in significantly increased engagement. Therefore, the role of MSDM in managing digitalization is also seen in the provision of technology-based training and competency development. MSDM is responsible for developing training programs that are relevant to digital needs, identifying employee skill gaps, and facilitating capacity building through e-learning platforms or online workshops. This helps employees adapt quickly to technological changes and increasingly complex job demands.

The findings of Wibhi Gunandi's (2022) research show that high employee engagement significantly affects work productivity, where 68.1% of productivity variations can be explained by engagement levels. This confirms that the role of MSDM in managing HR digitalization not only has an impact on administrative efficiency, but also on motivation, active participation, and the achievement of employee work targets. In addition, HR digitalization managed by MSDM facilitates data-driven managerial decision-making. With an integrated system, managers can monitor employee performance in real-time, evaluate target achievements, and design more targeted HR development strategies. This

increases the accuracy of decisions and the effectiveness of HR programs, thus having a direct impact on the overall performance of the organization.

Overall, HR plays a central role in creating a more effective, interactive, and results-oriented work environment through HR digitalization. These roles include improving administrative efficiency, developing a digital work culture, increasing employee engagement and motivation, and improving organizational productivity and performance. With optimally managed technology integration, MSDM not only makes day-to-day work easier, but also enhances employees' contribution to the company's strategic goals.

B. The Effect of the Use of HR Digital Systems on Employee Engagement and Motivation Levels

In the era of digital transformation that continues to grow, human resource management (HRM) has undergone significant changes through the application of digital technology. HR digitization is not only about changing the administrative system or recording employee data, but also plays an important role in creating a more interactive and efficient work experience. With digital systems, employees have easier access to information related to their work, ranging from task schedules, work procedures, to internal company policies. This convenience allows employees to get the information they need faster without having to wait for manual processes, so they feel more valued and actively involved in their daily work.

In addition, the HR digital system provides real-time reporting and feedback mechanisms that were previously difficult to achieve through conventional methods. With this feature, employees can immediately know the results of their performance evaluation and get directions for improvement quickly. This not only speeds up the decision-making process, but also increases employee confidence in carrying out their duties. When employees feel that their contributions are being cared for and feedback is provided transparently, their motivation to work more optimally automatically increases, creating a more proactive and results-oriented work culture.

The results of a study with a number of employees revealed that they feel more motivated when using digital HR platforms. Some employees state that easy access to work data, schedules, and reporting makes them more focused and efficient. Additionally, the ability to independently monitor task progress through digital systems gives them a sense of control and ownership over their own work. Observations in the field also show that employees who actively use digital platforms tend to be more disciplined in completing tasks and more quickly adapt to changing organizational needs, compared to those who still rely on manual methods.

One of the significant impacts of HR digitalization is the increase in employee participation in competency development programs. Through the digital system, employees can register for training or workshops independently, take part in online learning modules, and monitor the progress of their competencies more easily. This creates an environment that encourages employees to continue learning and improve their skills according to the demands of the job. Thus, HR digitization not only increases administrative

efficiency, but also acts as a means of empowering employees to develop their personal and career potential in the organization.

Research conducted by Wibhi Gunandi (2022) confirms this finding, where high employee engagement significantly affects work productivity. HR digitalization managed by MSDM is able to create conditions where employees feel they have a clear role in the organization and their contributions are recognized. This sense of belonging, often referred to as "employee ownership," has proven to be a key factor in increasing motivation and engagement. When employees feel that the organization is paying attention to their well-being and development, loyalty and commitment to the company also increases, which in turn has a positive impact on overall performance.

Thus, HR digitization allows MSDM to collect rich data regarding employee behaviors, preferences, and needs. This data can be analyzed to design a more personalized and targeted engagement strategy. For example, information about work patterns, satisfaction levels, and interest in specific training can be used to offer development programs that fit each employee's needs. With this data-driven approach, MSDM not only functions as an administrative manager, but also as a strategic partner in improving employee productivity and well-being through more accurate and effective decisions.

Overall, the implementation of the HR digital system managed by MSDM proves that technology and human resource management can synergize to create a more dynamic, structured, and motivating work environment. Employees who feel valued, have clear access to information, and get feedback in a timely manner will show higher engagement in their work. This emphasizes that HR digitalization is not just a technology trend, but an important strategy in building sustainable engagement, increasing motivation, and fostering a strong sense of belonging to the organization, so that work productivity can increase significantly.

C. The Contribution of Digitalization of MSDM to Increase Productivity and Organizational Performance

In addition to increasing employee engagement, digitalization managed by MSDM has a direct contribution to the overall productivity and performance of the organization. Digital transformation allows organizations to utilize data and technology as strategic tools in human resource management, rather than just an administrative system. With digital platforms, performance monitoring, reporting, and evaluation processes can be carried out in real-time, so managers can immediately know employee progress and make more timely decisions. This is in stark contrast to conventional methods that are often slow and less responsive to changing organizational needs.

One of the important benefits of digitizing MSDM is the ease of monitoring employee performance individually and as a team. Through the digital dashboard, managers can see the achievement of targets, daily productivity, and other performance indicators transparently. This information makes it easier for managers to identify areas that need more attention, provide constructive feedback, and design improvement strategies quickly. With an

integrated system, performance evaluations are no longer subjective, but based on accurate data, so fairness and objectivity in employee appraisals are increased.

In addition to facilitating monitoring, the digitalization of MSDM also allows the planning and implementation of competency development programs that are more targeted. Data collected through digital systems can be analyzed to understand employee skill needs, training interests, and career development patterns. With this information, MSDM can design a more personalized and effective training program, so that each employee gets the appropriate support to improve their skills. This not only encourages individual skills, but also directly improves team productivity and the quality of organizational output.

The results of Deloitte's research (2023) show that companies that implement comprehensive MSDM digitalization have experienced an increase in productivity of up to 18%. This finding is strengthened by the research of Ismi Rojayanti et al. (2025), which confirms that HR digitalization not only speeds up administrative processes, but also improves the quality of employee work results. This improvement in output quality occurs because digital systems allow for more accurate monitoring, proper resource allocation, and early identification of problems before they impact overall performance. In other words, digitalization is becoming a strategic tool to ensure organizations work more efficiently and effectively.

The role of MSDM in this context is crucial, as the success of technology integration depends on how they design systems, train employees, and utilize data for decision-making. MSDM not only acts as a system operator, but as a strategy manager that ensures technology is used optimally to support organizational goals. They must be able to identify employee needs, adapt digital systems to business processes, and guide employees to be able to make the most of digital platforms. Without the active role of MSDM, the potential for digitalization to increase productivity and organizational performance will not be optimally achieved.

Thus, digitalization allows organizations to build a more transparent and accountable work culture. Employees can monitor the progress of their tasks, see the contributions of coworkers, and understand how their work affects the organization's achievements. This transparency encourages individual responsibility as well as team collaboration, as everyone can assess performance based on the same data. In the long run, this data-driven and transparent work culture will help increase employee loyalty, motivation, and enthusiasm.

Digitalization also supports evidence-based decision-making by managers and HRM. The data available through digital systems allows for more accurate strategic planning, including in terms of human resource management, budget allocation, and work process improvement. With comprehensive data, organizations can reduce the risk of making mistakes that often arise due to assumptions or incomplete information. This makes the organization more adaptive to changes in the business environment, so that performance can be maintained or improved despite external challenges.

Overall, HR digitalization managed by MSDM is not just an administrative tool, but a comprehensive strategy to drive productivity and organizational performance in a sustainable manner. With the use of digital

systems, real-time performance monitoring, data-driven competency development planning, and more accurate decision-making, organizations can work more efficiently and effectively. The role of MSDM as a strategy manager and liaison between technology and employees ensures that digitalization really has a positive impact, both for individuals and organizations, so that productivity, output quality, and employee engagement can increase simultaneously.

CONCLUSIONS AND RECOMMENDATIONS

Overall, HR digitalization managed by MSDM has been proven to have a significant impact on employee engagement, motivation, and productivity. Digital systems allow employees to access job information, report progress, and receive feedback in real-time, so they feel valued and more proactive in carrying out their daily tasks. Additionally, managers can accurately monitor performance, design data-driven competency development programs, and make timely decisions. With the support of effective human resources, HR digitalization is not only an administrative tool, but also an important strategy to improve the quality of output, work efficiency, and employee sense of belonging to the organization on an ongoing basis.

Based on these findings, it is recommended that organizations continue to develop and expand the implementation of HR digitalization with a more personalized and data-driven approach. MSDM needs to continue to train employees to be able to utilize digital systems optimally, as well as monitor the effectiveness of competency development programs. Additionally, organizations can leverage available data to design engagement and performance management strategies that are more adaptive to changing business needs. With these measures, HR digitization not only improves productivity and organizational performance, but also builds a transparent, collaborative, and sustainable work culture.

ADVANCED RESEARCH

Future research can focus on exploring the long-term effects of HR digitalization on organizational culture and employee well-being. While this study highlights the positive influence of digital systems on engagement, motivation, and productivity, future studies could examine how sustained use of digital HR tools impacts employee satisfaction, stress levels, and work-life balance over time. Moreover, researchers could investigate how different levels of digital literacy among employees influence the success of HR digitalization initiatives. Comparative studies between organizations that have fully implemented HR digitalization and those that are still in transition could also provide deeper insights into the stages and challenges of digital transformation in human resource management.

Another potential direction for future studies is to explore the role of artificial intelligence (AI) and predictive analytics in enhancing HR decision-making and employee experience. Researchers can examine how AI-driven systems, such as automated feedback tools or predictive performance analytics, contribute to improving engagement and reducing bias in HR processes.

Furthermore, cross-industry and cross-cultural analyses could reveal how contextual factors—such as organizational size, industry type, and national culture—affect the implementation and outcomes of HR digitalization. These studies would help strengthen the understanding of digital HR as not only a technological innovation but also a strategic component for sustainable organizational growth.

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