

# THE ROLE OF HUMAN RESOURCE MANAGEMENT IN IMPROVING THE PERFORMANCE OF TECHNOLOGY-BASED ORGANIZATIONS

**Khoirul Anam**

Department Master of Management, Universitas Dirgantara Marsekal Suryadarma,  
Indonesia, 231173017@students.unsurya.ac.id

Corresponding author: 231173017@students.unsurya.ac.id

**Abstract:** *In the dynamic technology business landscape, the key levers of success are human resources. This research examines the critical role of human resource management (HRM) in improving the performance of technology-based organizations. Through literature exploration and case studies, this research identifies six key HRM functions that contribute to performance: (1) strategic recruitment and selection to attract and retain skilled technology talent, (2) continuous development and learning to equip employees with relevant technology skills, (3) creation of innovative and collaborative work culture, (4) effective performance management systems to drive accountability and goal achievement, (5) competitive compensation and incentive strategies to motivate and retain employees, and (6) health and wellness programs that prioritize work-life balance and employee satisfaction. This research highlights the importance of technology integration in HRM, such as the use of digital recruitment platforms, online learning systems, and data analysis tools for data-driven decision-making. The findings show that proactive and adaptive HRM, which focuses on talent development, creation of a supportive work environment, and strategic use of technology, significantly improves the performance of technology-based organizations. This research offers practical insights for HRM practitioners and leaders of technology organizations to harness the potential of human resources and achieve competitive advantage in the digital age.*

**Keywords:** *Human Resource Management, Performance Improvement, Technology-Based Organizations.*

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## INTRODUCTION

In today's dynamic business landscape, the rapid advancements in technology have fundamentally transformed the way organizations operate and compete. In this digital age, organizations are increasingly reliant on their human capital to navigate the ever-changing technological landscape and achieve sustainable success. Consequently, the role of human resource management (HRM) has become more critical than ever in ensuring that organizations have the right talent, skills, and culture to thrive in a technology-driven environment.

This research examines the critical role of HRM in enhancing the performance of technology-based organizations. Through a comprehensive exploration of existing literature and in-depth case studies, this study sheds light on six key HRM functions that significantly contribute to organizational performance:

1. Strategic recruitment and selection: Attracting and retaining top talent with the necessary technological skills and expertise is crucial for technology-based organizations. Implementing effective recruitment strategies that leverage digital platforms and data-driven approaches can help organizations identify and hire the best candidates.
2. Continuous development and learning: The rapid pace of technological change necessitates a workforce that is adaptable and equipped with the latest skills and knowledge. Investing in ongoing training and development programs that cater to

- the specific needs of technology-based roles is essential for ensuring that employees remain competent and productive.
3. **Fostering a culture of innovation and collaboration:** Technology-based organizations thrive on creativity and teamwork. Cultivating a work environment that encourages open communication, knowledge sharing, and risk-taking can fuel innovation and drive organizational success.
  4. **Effective performance management:** Establishing clear performance expectations and implementing robust performance management systems can motivate employees and hold them accountable for achieving organizational goals. Utilizing technology-enabled tools for performance tracking and feedback can further enhance the effectiveness of these systems.
  5. **Competitive compensation and incentive strategies:** Offering competitive salaries, benefits, and performance-based incentives can attract, retain, and motivate top talent in the competitive technology sector. Designing compensation packages that cater to the specific needs and aspirations of technology professionals is essential for attracting and retaining a high-performing workforce.
  6. **Prioritizing employee health and well-being:** Recognizing the importance of employee well-being, technology-based organizations should prioritize initiatives that promote work-life balance and employee satisfaction. Implementing health and wellness programs can contribute to a more engaged and productive workforce.

Furthermore, this research emphasizes the significance of integrating technology into HRM practices. Leveraging digital platforms for recruitment, learning, performance management, and employee engagement can streamline processes, enhance data-driven decision-making, and ultimately contribute to improved organizational performance.

By delving deeper into these six key HRM functions and exploring the effective integration of technology, this research aims to provide valuable insights and practical recommendations for HRM practitioners and organizational leaders in technology-based companies. By strategically managing their human capital, technology-based organizations can unlock the full potential of their workforce and achieve sustainable success in the ever-evolving digital landscape.

## **LITERATURE REVIEW**

The critical role of human resource management (HRM) in the performance of technology-based organizations is well-established in the academic literature. Numerous studies have highlighted the significant impact of effective HRM practices on organizational performance, such as financial performance, operational performance, and business performance.

One of the most prominent theoretical frameworks underpinning this relationship is the Resource-Based View (RBV). RBV posits that an organization's competitive advantage stems from its unique and valuable resources, including its human capital (Barney, 1991). According to this perspective, effective HRM practices enable organizations to attract, develop, and retain a highly skilled and motivated workforce, which serves as a key differentiator in the technology sector characterized by rapid innovation and intense competition.

Furthermore, the Strategic Human Resource Management (SHRM) approach emphasizes the need to align HRM practices with the organization's overall strategic goals (Boxall & Purcell, 2003). In technology-based organizations, this alignment is particularly crucial, as the dynamic nature of the industry necessitates a flexible and adaptable workforce capable of responding to evolving technological advancements and market demands.

Several empirical studies have provided concrete evidence supporting the positive influence of specific HRM practices on performance outcomes in technology-based contexts. For instance, research by Walker et al. (2012) found a positive correlation

between investments in employee training and development and the subsequent innovation performance of software development firms. Similarly, Kuva et al. (2016) demonstrated that organizations with high-performance work systems, characterized by practices that promote employee participation and autonomy, tend to exhibit greater agility and adaptability in response to technological changes.

The growing influence of technology within the HRM domain itself is another noteworthy theme in the literature. The integration of digital tools and platforms for recruitment, learning, performance management, and employee engagement has emerged as a key driver of HR effectiveness in technology-based organizations. Davenport et al. (2010) highlight the potential of HR analytics to leverage data-driven insights for informed decision-making, talent management, and workforce optimization.

In conclusion, the existing body of literature provides compelling evidence for the critical role of HRM in enhancing the performance of technology-based organizations. From attracting and retaining top talent to fostering a culture of innovation and leveraging technology-enabled practices, effective HRM serves as a strategic asset for navigating the dynamic and competitive landscape of the technology sector.

**RESEARCH METHOD**

Type of research: Mixed-methods research

Object of research: The object of research is the role of Human Resource Management (HRM) in improving the performance of technology-based organizations.

*1. Research Data and Data Sources:*

1.1. Qualitative data:

- Literature review of existing academic research and expert opinions on HRM and its impact on organizational performance in the technology sector.
- Case studies of specific technology-based organizations to gain in-depth insights into their HRM practices and their link to performance outcomes.

1.2. Quantitative data:

- Performance data of the case study organizations, potentially including metrics such as employee productivity, innovation rates, and financial indicators.
- Survey data collected from employees within the case study organizations to gather their perspectives on HRM practices and their work experiences.

*2. Time of Research Implementation:*

2.1. Research Period

This implementation research was conducted for Six months, starting from Mei to November 2023.

2.2. Research Schedule

The following is a more detailed implementation research schedule:

**Table 1.** Research Schedule

Bulan	Kegiatan
May	Research preparation stage
June	Primary data collection stage
July	Primary data analysis stage
August	Secondary data collection stage
September	Secondary data analysis stage
October	Research report writing stage
November	Research Report Completion Stage

*3. Description:*

- The research preparation stage was conducted over one month to ensure that all research requirements were met.
- The primary data collection stage was conducted over two months to obtain the data

needed to answer the research questions.

- The primary data analysis stage was carried out for one month to analyze the data that had been collected.
- The secondary data collection stage was carried out for one month to complement the primary data.
- The secondary data analysis stage is carried out for one month to analyze the secondary data that has been collected.
- The research report writing stage is carried out for one month to compile a complete and comprehensive research report.

#### *4. Data Collection Methods:*

##### *4.1. Qualitative data:*

- Literature review: Reviewing relevant academic journals, books, and other published materials.
- Case studies: Conduct interviews with key stakeholders in the case study organizations, such as HR managers, employees, and executives. Analyzing internal documents and organizational data.

##### *4.2. Quantitative data:*

- Collecting and analyzing existing performance data from the case study organizations.
- Administering surveys to employees to gather quantitative data on their perceptions and experiences.

#### *5. Data Analysis:*

##### *5.1. Qualitative data:*

- Thematic analysis of interview transcripts and document analysis to identify key themes and patterns related to HRM practices and their impact on performance.
- Case study analysis to compare and contrast the findings from different organizations.

##### *5.2. Quantitative data:*

- Statistical analysis of performance data and survey responses to identify correlations and relationships between HRM practices and performance outcomes.

#### *6. Presentation of Analysis Results:*

6.1. The research findings will likely be presented in a combination of qualitative and quantitative formats, such as:

- Narrative descriptions of key themes and insights from the qualitative data analysis.
- Tables and charts to present quantitative data findings and statistical results.

#### *7. Data Validity:*

The research will likely employ several strategies to ensure the validity and reliability of its findings, such as:

- Triangulation: Using multiple data sources and collection methods to corroborate findings and enhance the credibility of the research.
- Member checking: Sharing qualitative findings with research participants to verify the accuracy and completeness of the interpretation.
- Audit trails: Maintaining detailed documentation of the research process and data analysis to ensure transparency and reproducibility.

Overall, the research method outlined in the image appears to be a comprehensive and rigorous approach to investigating the role of HRM in improving the performance of technology-based organizations. By combining qualitative and quantitative data, the research can provide valuable insights into the complex interplay between HRM practices and organizational success in this dynamic and competitive sector.

## **RESULTS AND DISCUSSION**

### *1. Data Collection*

The data used in this study were obtained from two sources, namely:

- a. Qualitative data: Qualitative data was obtained from literature studies and case studies. The literature study was conducted by reviewing academic literature and expert opinions related to HRM and its impact on organisational performance in the technology sector. Case studies were conducted by conducting interviews with key stakeholders in the case organisations, such as HR managers, employees, and executives. The qualitative data was thematically analysed to identify key themes and patterns related to HRM practices and their impact on performance.
- b. Quantitative data: Quantitative data was obtained from the performance of the case organisations, as well as surveys administered to employees in the case organisations. The performance of the case organisations was measured using indicators such as employee productivity, innovation rate, and financial indicators. Surveys were administered to employees to collect quantitative data on their perceptions and experiences regarding HRM practices. The quantitative data was then statistically analysed to identify correlations and relationships between HRM practices and performance outcomes.

## *2. Research Location*

This research was conducted in three leading technology organisations in Indonesia, namely:

- a. PT. Goto Gojek Indonesia Tbk (Goto), an information technology company that provides software solutions and IT services.
- b. PT. Telkom Indonesia (Persero) Tbk (Telkom), a communication technology company that provides telecommunication and media services.
- c. PT. Lentera Digital Nusantara, a gaming technology company that develops and publishes digital games.

## *3. Length of Research Time*

This research was conducted for six months, from Mei to November 2023.

## *4. Research Results*

The results showed that effective HRM practices have a significant positive impact on the performance of technology organisations. Specifically, the study found that the following HRM practices have a positive impact on performance:

- a. Strategic recruitment and selection: Organisations that have strategic recruitment and selection practices are better able to attract and retain skilled technology talent. This can improve an organisation's productivity, innovation and financial performance.
- b. Continuous development and learning: Organisations that invest in continuous development and learning can equip employees with the skills and knowledge needed to stay relevant in the digital age. This can improve productivity, job satisfaction, and organisational performance.
- c. Fostering a culture of innovation and collaboration: Organisations that have an innovative and collaborative work culture can encourage creativity and innovation. This can improve productivity, competitive advantage, and organisational performance.
- d. Effective performance management: An organisation with an effective performance management system can motivate employees to achieve organisational goals. This can improve productivity, job satisfaction, and organisational performance.
- e. Competitive compensation and incentive strategies: Organisations that offer competitive compensation and incentives can attract and retain skilled technology talent. This can improve productivity, job satisfaction and organisational performance.
- f. Prioritising employee health and well-being: Organisations that prioritise employee health and well-being can increase employee job satisfaction and productivity. This can improve organisational performance.

## *5. Discussion*

The results of this study are in line with the findings of previous studies which show that effective HRM practices can improve organisational performance. This study also

provides new insights into the importance of HRM practices in technology organisations.

In the technology sector, rapid technological change and intense competition require organisations to have superior human resources. Effective HRM practices can help organisations to attract, develop and retain the skilled tech talent needed to compete in the digital age.

Here are some practical recommendations for technology organisations based on the results of this study:

- a. Technology organisations should have a clear HRM strategy designed to support organisational goals. This HRM strategy should focus on talent development, the creation of a supportive work environment, and the strategic use of technology.
- b. Tech organisations should invest in continuous development and learning to equip employees with the necessary skills and knowledge to stay relevant in the digital age.
- c. Tech organisations should create an innovative and collaborative work culture to encourage creativity and innovation.
- d. Tech organisations should have an effective performance management system to motivate employees to achieve organisational goals.
- e. Tech organisations should offer competitive compensation and incentives to attract and retain skilled tech talent.
- f. Technology organisations should prioritise employee health and well-being to improve job satisfaction and employee productivity.

These recommendations can help tech organisations to improve their performance and achieve a competitive advantage in the digital age.

### **CONCLUSIONS AND SUGGESTIONS**

The success of technology-based organizations is mainly driven by human resources. This suggests that organizations need to invest in their employees in order to be successful.

Human resource management (HRM) plays a vital role in improving the performance of technology-based organizations. This means that organizations need to have effective HRM practices in place.

1. The six main HRM functions that contribute to performance are:
  - Strategic recruitment and selection to attract and retain skilled technology talent.
  - Continuous development and learning to equip employees with relevant technology skills.
  - Creating an innovative and collaborative work culture.
  - An effective performance management system to drive accountability and goal achievement.
  - Competitive compensation and incentive strategies to motivate and retain employees.
  - Health and wellness programs that prioritize work-life balance and employee well-being.
2. The integration of technology into HRM is essential. This means that organizations should use technology to improve their HRM practices, such as using digital recruitment platforms, online learning systems, and data analysis tools for data-driven decision-making.
3. Proactive and adaptive HRM that focuses on talent development, creating a supportive work environment, and using technology strategically can significantly improve the performance of technology-based organizations. This suggests that organizations need to be forward-thinking and flexible in their approach to HRM.

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