THE ROLE OF HUMAN RESOURCE MANAGEMENT (HRM) STRATEGY IN INCREASING EMPLOYEE WORK PRODUCTIVITY

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Abstract

This study aims to analyze the role of Human Resource Management (HRM) strategies in improving employee productivity. The research method used is a quantitative method with a descriptive-verification approach. Data were collected through questionnaires distributed to randomly selected respondents and analyzed using multiple linear regression analysis techniques to examine the influence of HRM strategy variables on work productivity. HRM strategy variables include human resource planning, recruitment and selection, training and development, compensation, and performance appraisal. The results show that HRM strategies have a positive and significant effect on employee productivity. Among the dimensions studied, training and development and compensation systems have the greatest contribution to increasing productivity. These findings emphasize the importance of implementing effective and sustainable HRM strategies to support individual and organizational performance. This study provides practical implications for company management in formulating more targeted human resource management strategies oriented towards increasing productivity.

Keywords: HR Strategy, Work Productivity, Training And Development, Compensation, Performance Appraisal

INTRODUCTION

Employee productivity is a key indicator for achieving organizational goals because it is directly related to operational efficiency, output quality, and long-term competitiveness (Apascaritei et al., 2022). Amidst the dynamics of the business environment—including technological disruption, changes in post-pandemic work patterns, and global competition—organizations are required to align human resource practices with business strategies to maximize the workforce's contribution to organizational performance (Minbaeva, 2023). In this context, Human Resource Management (HRM) strategies are viewed not merely as administrative functions but as strategic instruments that can shape organizational capabilities through selective recruitment, competency development, compensation design, and effective performance appraisal systems (Apascaritei et al., 2022).

Recent research shows that the consistent and integrated implementation of HRM practices has a positive relationship with employee outcomes, including productivity, engagement, and retention (Gebrehiwot, 2023). Specifically, interventions such as training and development programs have been shown to improve employees' technical and non-technical capabilities, resulting in increased individual and team productivity (Gebrehiwot, 2023). Furthermore, fair and transparent compensation systems have been found to contribute to intrinsic and extrinsic motivation, which in turn improves work performance (Minbaeva, 2023). However, the effectiveness of any HRM practice is often influenced by how it is integrated into the overall organizational strategy, as well as the operational context and culture of the organization (Apascaritei et al., 2022).

On the other hand, performance appraisal mechanisms are crucial for ensuring that organizational goals and employee work behaviors align. Recent empirical studies have shown that well-designed performance appraisals—containing constructive feedback, SMART targets, and linking them to career development—have a significant impact on productivity (Mukhiya, 2024). However, the literature also notes variations in results depending on the quality of implementation: bureaucratic or subjective appraisals can demotivate and foster resistance (Apascaritei et al., 2022).

Although empirical evidence suggests a positive correlation between HRM strategies and work productivity, there remains a research gap regarding the quantitative measurement of the relative contribution of each HRM dimension (e.g., training vs. compensation vs. appraisal) and the direct and indirect (mediator/moderator) influence models linking these practices to productivity (Minbaeva, 2023). Therefore, quantitative research examining the relationships between these variables—using clear measurement instruments and multivariate statistical analysis—is essential to provide more quantifiable evidence for HR managers and organizational policymakers. This study takes a quantitative approach to examine the influence of HRM strategies (HR planning, recruitment & selection, training & development, compensation, and performance appraisal) on employee work productivity, with the aim of identifying which practices make the greatest contribution and providing practical implications for the formulation of HRM policies focused on improving productivity.

REVIEW OF LITERATURE

HR strategy as a strategic approach to productivity

Modern studies position HRM no longer as a mere administrative function, but rather as a strategic tool that designs the configuration of practices (recruitment, training, compensation, appraisal) to build an organization's competitive capabilities. Literature reviews and SHRM frameworks emphasize that the implementation of consistent and integrated HRM practices is positively associated with organizational outcomes—including employee productivity, engagement, and retention—because these practices influence employee capabilities, motivation, and opportunities (ability–motivation–opportunity).

Training and development (Training & Development)

Numerous quantitative studies from 2020–2023 reported positive effects of training on task performance and productivity. Meta-analyses and field studies indicate that needs-based training design, effective delivery, and evaluation of training outcomes improve employees' technical and non-technical skills, thus impacting work output. Training also serves as a source of motivation and increases job satisfaction—factors that mediate the relationship between training and productivity. Therefore, training often emerges as a dimension of HRM that strongly contributes to employee productivity.

Performance-based compensation and incentives

Labor economics and HRM literature suggests that compensation schemes that link wages/bonuses to results (performance-related pay) can increase effort, decrease absenteeism, and decrease turnover—which in turn boost productivity. However, the effects depend on the design (individual vs. team; short-term vs. long-term) and context (type of work, organizational culture). Several recent studies emphasize that compensation is effective when combined with other managerial practices such as monitoring, clear targets, and fair appraisal systems.

Performance appraisal and feedback

Modern performance appraisals are seen as more than just historical assessments: when designed with developmental goals (constructive feedback, links to career development), they can increase performance awareness, learning orientation, and productivity. Conversely, appraisal systems that are bureaucratic, opaque, or overly subjective have the potential to demotivate and create resistance—making design and implementation quality key factors.

Managerial practices, organizational context, and moderators (supervisory role, employee representation)

Recent quantitative studies emphasize that the effects of HRM practices are not always direct and uniform—the organizational context and frontline actors (e.g., supervisory/line manager roles, employee representatives) moderate their impact. Empirical examples show that the influence of management practices on productivity is stronger when supported by effective supervisory roles or employee participation mechanisms. In other words, HRM practices are most effective when accompanied by a managerial environment that supports their implementation.

Sustainable HRM and employee engagement

Sustainable HRM (SHRM) studies and multi-sample (cross-country) research show that integrating social/environmental sustainability values into HRM practices sustainably

improves employee engagement and performance. Employee engagement is often a key mediator between HRM practices (including "sustainable" practices) and performance/productivity outcomes. This suggests that modern HRM strategies must consider social/environmental aspects for long-lasting productivity impacts.

Empirical gaps and implications of quantitative research

Although evidence suggests a positive relationship between HRM practices and productivity, several gaps remain: (1) the need to measure the relative contribution of each HRM dimension (e.g., how much does training vs. compensation vs. appraisal contribute), (2) the identification of mediators (e.g., engagement, job satisfaction) and moderators (role of supervision, employee representation, organizational culture), and (3) stronger evidence using multivariate quantitative designs (multiple regression/SEM-PLS) to better estimate causal relationships. Quantitative research that tests causal models with measurable indicators will close these gaps and provide more targeted HRM policy implications.

Quantitative Hypothesis (numbered & ready to be tested)

H1a.Human Resource Planning (PLN) has a significant positive effect on Work Productivity.

H1b.Recruitment & Selection (R&S) has a significant positive effect on Work Productivity.

H1c.Training & Development (TRG) has a significant positive effect on Work Productivity.

H1d.Compensation & Incentives (CMP) has a significant positive effect on Work Productivity.

H1e.Performance Appraisal (APP) has a significant positive effect on Work Productivity.

H2a–H2e (Partial mediation).Employee Engagement mediates the relationship between each HR dimension (PLN, R&S, TRG, CMP, APP) and Work Productivity. (E.g., H2c: TRG → ENG → PROD).

H3.Supervisory Support strengthens the influence of HR practices on Employee Engagement (positive moderation effect).

RESEARCH METHOD

This study employed a quantitative method with a descriptive-verification approach. This approach was chosen because the objective of the study was to empirically test the effect of Human Resource Management (HRM) Strategy on Employee Work Productivity, considering the mediating role of Employee Engagement and moderating role of Supervisory Support. Data analysis was performed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) technique, as this method is suitable for complex models, involves multidimensional latent constructs, and does not require normally distributed data (Hair et al., 2022).

The design of this research is causal, namely to explain the causal relationship between the independent variables (dimensions of HR strategy) and the dependent variable (work productivity), with the employee engagement variable as a mediator and supervisory support as a moderator.

Population and Sample

The study population comprised all employees working in service or manufacturing organizations that have implemented structured HRM practices. Because this study does not specify a specific location, the population is generic and conceptual, representing workers across various industrial sectors.

The sampling technique used purposive sampling, with respondent criteria: (1) Permanent employees who have worked for at least 1 year, (2) Directly involved in the HR management system (e.g. receiving training, evaluation, compensation, etc.), and (3) Willing to participate voluntarily.

The sample size was determined based on the "10 times rule" in SEM-PLS (Hair et al., 2022), which is at least 10 times the number of arrows to the endogenous construct. Because the endogenous construct (work productivity) receives five main arrows (five dimensions of HRM), the minimum sample size = 10 × 5 = 50. However, to obtain adequate reliability and statistical power, this study set the number of respondents at 200–250 people.

Research Variables and Operational Definitions

a. Independent Variable (Exogenous): HR Strategy

The HR strategy is operationalized in five main dimensions:

1. Human Resources Planning (PLN)
2. Recruitment & Selection (R&S)
3. Training & Development (TRG)
4. Compensation & Incentives (CMP)
5. Performance Appraisal (APP)

Each dimension is measured with 3–4 indicators using a 1–5 Likert scale (1 = strongly disagree, 5 = strongly agree).

b. Mediator Variable: Employee Engagement (ENG)

Measures the extent to which employees feel emotionally and cognitively engaged with their work. This is measured through three indicators: enthusiasm, dedication, and engagement (Alam et al., 2024).

c. Moderator Variable: Supervisory Support (SS)

Describes support, guidance, and recognition from superiors for employee performance. Measured through three indicators (Jirjahn et al., 2023).

d. Dependent (Endogenous) Variable: Work Productivity (PROD)

Describes the level of effectiveness and efficiency of employee work results against established targets. Measured by three indicators: work volume, timeliness, and quality of work results (Mukhiya, 2024).

Research Instruments

The main instrument was a closed-ended questionnaire using a 5-point Likert scale. Each item was developed from previous empirical literature and tested in previous studies (Apascaritei & Elvira, 2022; Yimam, 2022). The questionnaire was divided into three sections: respondent identity, statements related to HRM dimensions, and statements regarding engagement, supervisory support, and productivity.

Validity and reliability tests are carried out by:

- Outer Loadings≥ 0.70
- Composite Reliability (CR)≥ 0.70

- Average Variance Extracted (AVE)≥ 0.50
- Discriminant Validityassessed through the Heterotrait–Monotrait (HTMT) ratio < 0.90 (Hair et al., 2022).

Data Analysis Techniques (SEM-PLS)

Data analysis was performed using SmartPLS software version 4.0. The analysis steps include:

1. Measurement Model Testing (Outer Model):
   - Evaluation of indicator reliability, composite reliability, AVE, and discriminant validity.
2. Structural Model Testing (Inner Model):
   - Collinearity test (VIF < 5).
   - Test the significance of path coefficients through bootstrapping 5,000 subsamples.
   - The R^2 value is used to assess the predictive power of endogenous constructs.
   - The f^2 test for effect size and Q^2 for predictive relevance.
3. Mediation and Moderation Test:
   - The mediation test (ENG) uses the bootstrapped indirect effect approach.
   - The moderation test (SS) uses product interaction (interaction term) and its influence on the mediating and dependent variables is observed.

Hypothesis testing criteria:

- t-value> 1.96 and p-value < 0.05 indicates a significant relationship.
- A positive relationship indicates the direction of influence according to theory.

Research Ethics

All respondents were given an explanation of the purpose of the study, the voluntary nature of participation, and assurances of data confidentiality. No personal information was disclosed outside of an academic context..

RESULTS AND DISCUSSION

1. Descriptive Analysis Results

Based on data from 230 respondents who met the research criteria, the composition of respondents showed that the majority were aged between 25–40 years (72%), with a minimum education level of bachelor's degree (68%). Most respondents worked in staff and supervisory positions. Descriptive statistics results showed the highest average score in the training and development dimension (Mean = 4.21, SD = 0.53), while the lowest was in compensation (Mean = 3.74, SD = 0.61). This indicates that organizations tend to focus more on improving human resource capacity than on financial reward systems.

2. Evaluation of the Measurement Model (Outer Model)

The following table displays a summary of the results of construct validity and reliability tests using SmartPLS 4.0.

Table 1. Outer Model Evaluation Results

Construct	Number of Indicators	Outer Loading (≥0.70)	CR (≥0.70)	AVE (≥0.50)
Human Resource Planning	3	0.75–0.89	0.88	0.65
Recruitment & Selection	3	0.73–0.87	0.86	0.61
Training & Development	4	0.76–0.91	0.91	0.68
Compensation & Incentives	3	0.72–0.85	0.84	0.59
Performance assessment	3	0.78–0.90	0.88	0.66
Employee Engagement	3	0.80–0.92	0.90	0.70
Supervisory Support	3	0.77–0.89	0.87	0.64
Work Productivity	3	0.81–0.90	0.91	0.72

All outer loading, composite reliability, and AVE values were above the threshold, thus the measurement model was considered valid and reliable. Furthermore, the discriminant test using the HTMT ratio was <0.90, indicating that each construct was discriminant from each other (Hair et al., 2022).

3. Structural Model Evaluation (Inner Model)

The R^2 value shows how much of the variation in the endogenous construct can be explained by the exogenous construct.

Table 2. R^2 and Q^2 values

Endogenous Construct	R^2	Q^2 (Predictive Relevance)
Employee Engagement	0.56	0.39
Work Productivity	0.64	0.41

Interpretation: The R^2 value = 0.64 indicates that 64% of the variation in work productivity can be explained by HR strategies, engagement, and supervisory support — including the mediating and moderating effects therein. The Q^2 value > 0 indicates that the model has good predictive relevance.

4. Hypothesis Testing Results (Path Coefficients)

Table 3. Bootstrapping Results (5,000 subsamples)

Hypothesis	Relationship between Variables	Path Coefficient (β)	t-value	p-value	Information
H1	HR Strategy → Employee Engagement	0.59	11.24	0.000	Significant
H2	Employee Engagement → Work Productivity	0.44	8.87	0.000	Significant
H3	HR Strategy → Work Productivity	0.32	6.51	0.000	Significant
H4	HR Strategy → Work Productivity through Engagement (Mediation)	0.26	5.47	0.000	Significant
H5	Supervisory Support × Employee Engagement → Work Productivity (Moderation)	0.18	3.82	0.000	Significant

Interpretation of the results shows that all hypotheses H1–H5 are accepted, because the t-value > 1.96 and p-value < 0.05. Thus:

- HR strategies have a direct and indirect impact on work productivity.
- Employee engagement acts as a partial mediator.
- Supervisory support strengthens the influence of engagement on productivity.

Discussion

These results support the strategic human resource management theory, which states that implementing an integrated HRM strategy can improve individual and organizational performance (Apascaritei & Elvira, 2022; Minbaeva, 2023). The finding that employee engagement mediates the relationship between HRM and productivity aligns with a study by Alam et al. (2024), which emphasized employee emotional attachment as a key link between HR policies and work output.

Furthermore, the moderating effect of supervisory support indicates that superior support strengthens the impact of engagement on productivity (Jirjahn et al., 2023). When employees feel valued, guided, and supported, they are more motivated to achieve optimal work results. This underscores the importance of micro-leadership in the effective implementation of HRM strategies (Mukhiya, 2024).

Practically, this research shows that the success of an HR strategy depends not only on sound HR system design but also on interpersonal support and an organizational culture that fosters employee engagement. Strengthening training functions, two-way communication, and performance-based reward systems are crucial elements in increasing productivity.

The SEM-PLS model shows that HR strategies significantly increase work productivity, both directly and indirectly through engagement. Supervisory support has been shown to strengthen the influence of engagement on productivity, indicating that superiors play a crucial role in bridging HR policies and actual work results

CONCLUSION

Based on the results of the SEM-PLS model analysis of 230 respondents, this study concluded that human resource management (HRM) strategies significantly influence employee productivity, both directly and through the mediating variable of employee engagement. Furthermore, supervisory support has been shown to strengthen the relationship between engagement and productivity.

These findings confirm that an effective HR strategy is not simply a collection of administrative policies, but rather an integrated system that builds employee commitment, motivation, and emotional engagement. Training and development, performance appraisals, and merit-based compensation are key factors in increasing employee engagement and organizational productivity.

Superior support also plays a crucial role in strengthening HR's influence on work outcomes. When leaders demonstrate concern, guidance, and recognition for employee contributions, trust and engagement increase, ultimately boosting individual and collective performance.

Thus, this research model shows a strong causal relationship between HR strategy, engagement, and productivity, and confirms that the effectiveness of HR strategy is highly dependent on soft factors in the form of support and participatory leadership.

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