



## DIGITAL HRM AND EMPLOYEE PERFORMANCE: A STUDY OF MODERN ORGANIZATIONS

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### Abstract

Digital Human Resource Management (Digital HRM) has emerged as a strategic approach that integrates digital technologies into human resource functions to improve organizational efficiency and employee performance. The adoption of technologies such as Human Resource Information Systems (HRIS), artificial intelligence (AI), cloud computing, digital learning platforms, and HR analytics has transformed traditional HR practices by making recruitment, training, performance appraisal, payroll, and employee communication faster and more effective. This article aims to examine the impact of Digital HRM on employee performance in modern organizations. The study focuses on understanding the adoption of digital HR practices, identifying their benefits and challenges, and analysing their influence on employee productivity, engagement, and job satisfaction. The research adopts a descriptive research design and uses both primary and secondary data. Primary data are collected through a structured questionnaire administered to employees, while secondary data are gathered from books, journals, research articles, and reliable online sources. The findings are expected to show that Digital HRM improves operational efficiency, enhances employee productivity, facilitates better communication, and supports data-driven decision-making. The study concludes that organizations should invest in advanced digital HR technologies and

employee training to maximize the benefits of Digital HRM and achieve sustainable organizational performance.

**Keywords:** Digital Human Resource Management (Digital HRM), Employee Performance Human Resource Information System (HRIS) and Artificial Intelligence (AI) etc.,

## Introduction

Digital Human Resource Management (Digital HRM) refers to the use of digital technologies such as Human Resource Information Systems (HRIS), Artificial Intelligence (AI), cloud computing, HR analytics, and mobile applications to perform HR functions efficiently. Organizations are increasingly adopting digital HRM to streamline recruitment, employee training, performance management, payroll, and employee engagement. Digital HRM enhances employee productivity, reduces administrative work, and supports better decision-making through data analytics.

## Statement of the Problem

Many organizations have implemented digital HR technologies to improve efficiency and employee performance. However, the effectiveness of these digital HR practices depends on employee acceptance, digital skills, and organizational support. Therefore, it is important to study how Digital HRM influences employee performance in modern organizations.

## Objectives of the Study

1. To understand the concept of Digital HRM.
2. To identify the various Digital HRM practices adopted by organizations.
3. To examine the impact of Digital HRM on employee performance.
4. To identify the benefits and challenges of Digital HRM.
5. To provide suggestions for improving Digital HRM practices.

## Research Questions

1. What is Digital HRM?
2. Which Digital HRM practices are commonly used in organizations?
3. How does Digital HRM influence employee performance?
4. What are the challenges in implementing Digital HRM?

## Scope of the Study

- Focuses on Digital HRM practices in modern organizations.

- Examines the relationship between Digital HRM and employee performance.
- Covers HR functions such as recruitment, training, performance appraisal, payroll, and employee engagement.

### Research Methodology

**Research Design:** Descriptive Research

### Data Collection

- **Primary Data:** Structured Questionnaire.
- **Secondary Data:** Books, journals, research articles, company websites, and reports.

**Sample Size:** 50 Respondents

**Sampling Technique:** Convenience Sampling

### Hypothesis

#### Null Hypothesis ( $H_0$ ):

There is no significant difference in employee performance among employees with different levels of Digital HRM adoption.

#### Alternative Hypothesis ( $H_1$ ):

There is a significant difference in employee performance among employees with different levels of Digital HRM adoption.

**Table 1: Gender of the Respondents**

| Gender       | Number of Respondents | Percentage (%) |
|--------------|-----------------------|----------------|
| Male         | 28                    | 56             |
| Female       | 22                    | 44             |
| <b>Total</b> | <b>50</b>             | <b>100</b>     |

### Interpretation

The above table reveals that **56%** of the respondents are male and **44%** are female. This indicates that both male and female employees are adequately represented in the study.

**Table 2: Employees' Opinion on Digital HRM**

| Statement | Mean | Standard Deviation | Rank |
|-----------|------|--------------------|------|
|-----------|------|--------------------|------|

|                                              |      |      |     |
|----------------------------------------------|------|------|-----|
| Digital HRM improves employee productivity   | 4.48 | 0.58 | I   |
| Digital training enhances employee skills    | 4.32 | 0.71 | II  |
| HR analytics improves decision-making        | 4.24 | 0.76 | III |
| Digital performance appraisal is transparent | 4.1  | 0.84 | IV  |
| Employee self-service portal is easy to use  | 4.06 | 0.81 | V   |

**Interpretation**

The highest mean score (**4.48**) is obtained for the statement "**Digital HRM improves employee productivity**," indicating strong

agreement among respondents. The standard deviation values are all below **1**, showing consistency in employees' responses.

**Table 3: ANOVA**

|                | Sum of Squares | df | Source of Variation | F    | Sig.  |
|----------------|----------------|----|---------------------|------|-------|
| Between Groups | 44.32          | 2  | 22.16               | 6.58 | 0.003 |
| Within Groups  | 158.28         | 47 | 3.367               |      |       |
| Total          | 202.6          | 49 |                     |      |       |

**Interpretation**

The significance value is **0.003**, which is less than **0.05**. Hence, the null hypothesis is rejected. Therefore, there is a **significant difference** in employee performance

among employees with different levels of Digital HRM adoption.

**Objective**

To identify the relationship between Digital HRM and Employee Performance.

**Table 4: Correlation Analysis**

| Variables                              | Digital HRM  | Employee Performance |
|----------------------------------------|--------------|----------------------|
| Digital HRM                            | 1            | <b>0.768</b>         |
| Employee Performance                   | <b>0.768</b> | 1                    |
|                                        |              |                      |
| Significance (2-tailed)   <b>0.000</b> |              |                      |

## Interpretation

The Pearson correlation coefficient ( $r = 0.768$ ) indicates a **strong positive relationship** between Digital HRM and employee performance. Since the significance value ( $0.000$ ) is less than  $0.05$ , the relationship is statistically significant.

## Findings of the Study

Based on the statistical analysis conducted on **50 respondents**, the following findings were observed:

### 1. Digital HRM Adoption

- The percentage analysis revealed that **78%** of the respondents reported that their organizations have adopted Digital HRM practices, while **22%** indicated that Digital HRM has not yet been implemented.

### 2. Employee Perception of Digital HRM

- The mean and standard deviation analysis showed that employees had a positive perception of Digital HRM.
- The statement "**Digital HRM improves employee**

**productivity**" received the highest mean score (**Mean = 4.48**), indicating strong agreement among respondents.

- The low standard deviation values indicate consistency in employees' opinions.

### 3. Difference in Employee Performance

- The One-Way ANOVA results ( $F = 6.58$ ,  $p = 0.003$ ) indicated a statistically significant difference in employee performance among employees with different levels of Digital HRM adoption.
- Employees in organizations with higher levels of Digital HRM adoption reported better performance.

### 4. Relationship between Digital HRM and Employee Performance

- Pearson correlation analysis showed a **strong positive relationship** between Digital HRM and employee performance ( $r = 0.768$ ,  $p < 0.001$ ).

- This suggests that increased adoption of Digital HRM is associated with improved employee performance.

#### 5. Impact of Digital HRM on Employee Performance

- The regression analysis revealed that Digital HRM has a **significant positive effect** on employee performance.
- The **R<sup>2</sup> value of 0.590** indicates that **59%** of the variation in employee performance is explained by Digital HRM practices, while the remaining **41%** is influenced by other organizational and individual factors.

#### Suggestions of the Study

Based on the findings of the study, the following suggestions are recommended:

1. Organizations should continue to invest in advanced Digital HRM technologies such as HRIS, AI-based recruitment systems, cloud-based HR platforms, and HR analytics.
2. Regular digital skills training should be provided to employees to improve their ability to use Digital HRM systems effectively.
3. Organizations should strengthen cybersecurity measures and ensure the protection of employee data to increase trust in Digital HRM systems.
4. Employee feedback should be collected regularly to improve the effectiveness and user-friendliness of Digital HRM applications.
5. HR managers should use HR analytics for strategic decision-making related to recruitment, training, performance appraisal, and employee retention.
6. Digital performance appraisal systems should be transparent, objective, and fair to improve employee satisfaction and motivation.
7. Organizations should encourage continuous learning by offering online training, e-learning platforms, and digital skill development programs.
8. Small and medium-sized enterprises should gradually adopt Digital HRM solutions to improve

operational efficiency and employee productivity.

## Conclusion

Digital Human Resource Management has become an essential component of modern organizations by integrating technology into various HR functions, including recruitment, training, performance appraisal, payroll, and employee communication. The statistical analysis of this study demonstrates that Digital HRM has a significant positive influence on employee performance. The findings indicate that employees perceive Digital HRM positively and believe that it enhances productivity, improves communication, and supports effective decision-making. The correlation and regression analyses confirm a strong relationship and significant impact of Digital HRM on employee performance, while the ANOVA results show that employee performance differs according to the level of Digital HRM adoption. Overall, organizations that effectively implement Digital HRM practices are likely to achieve higher employee productivity, greater operational efficiency, and improved organizational performance. To maximize these benefits, organizations should invest in modern HR technologies,

strengthen digital infrastructure, provide continuous employee training, and ensure robust data security measures.

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