



# A STUDY ON ROLE OF DIGITAL HUMAN RESOURCE MANAGEMENT TOWARDS ORGANIZATIONAL PERFORMANCE

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## Abstract:

Digital (HRM) Human Resource Management is digital advancement in the field of Human Resource management. The working procedure of DHRM will acquire place through mobile, electronic media, social media through the internet, and also with the assist of IT (information technology). All these resources will create HRM more considerable in the current situation. Digital HRM is competent of doing Human work by the way of software, through a number of apps, and with the internet implanted in it. Digital Human Resource will support organizations in the course of the optimization of Social, Mobile, Analytics, and Cloud (SMAC) technology, towards management and responsibility in helping them to make certain that assumptions and prospect within the organization impel the right behaviour. Digitalization in HRM will make it added proficient and applicable in the future. Without digital transformation, HRM will holdup far in the wake of the demands of the organization worldwide. This research paper tries to emphasize the role of digital HRM in humanizing the performance of the organization. The data used for this study are secondary. The upshot of the research would be very significant for a business organization to put into practice digital human resource management and also for improving and enhancing organizational presentation.

## Key Index Terms:

*Digital Human Resource Management (DHRM), Employee Retention, Digitalization of HR Processes, Performance Indicators, Digital Skills in HR, HRM in the Digital Era, Organizational Success, Mixed Methods Research.*

## I. Introduction

In today's rapidly evolving business landscape, organizations are increasingly recognizing the importance of digital technologies in driving their operations and gaining a competitive edge. As technology continues to reshape the way business's function, the field of Human Resource Management (HRM) has also undergone significant transformations. Traditional HR practices are being revolutionized by the adoption of digital solutions, giving rise to a new paradigm known as Digital Human Resource Management (DHRM).

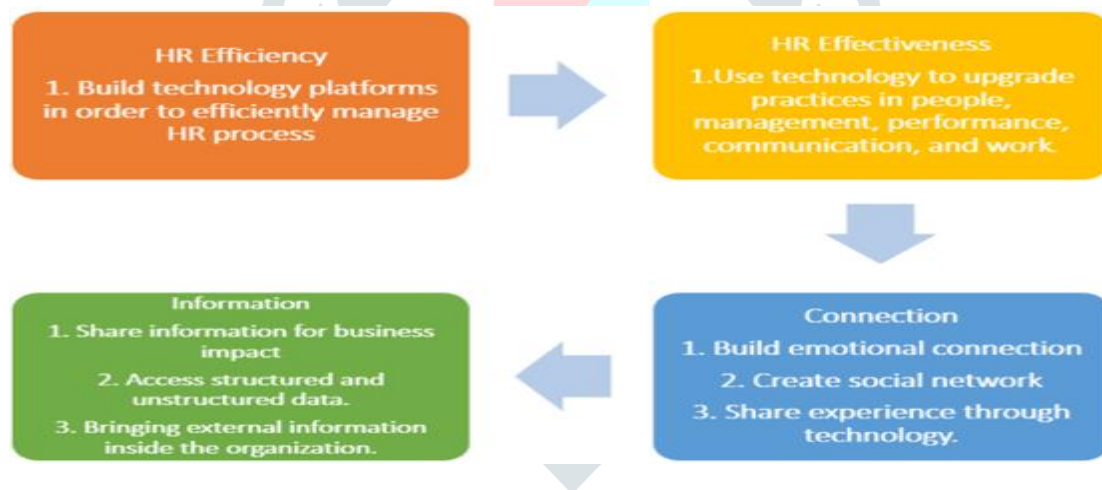
Digital HRM leverages digital technologies to optimize HR processes, enhance communication and collaboration, improve decision-making, and ultimately contribute to organizational performance. It encompasses a range of practices, including the implementation of HR software systems, automation of routine HR tasks, digitization of employee records, utilization of data analytics for HR insights, and the integration of digital tools for recruitment, training, performance management, and employee engagement.

The role of DHRM in driving organizational performance has gained substantial interest among researchers and practitioners. Organizations across industries are increasingly realizing that the effective utilization of digital HR practices can yield numerous benefits, including improved employee productivity, enhanced employee satisfaction and engagement, and increased employee retention rates. As a result, understanding the impact and potential of DHRM has become crucial for organizations aiming to thrive in the digital era.

This study aims to explore the role of DHRM in enhancing organizational performance. By investigating the influence of digital HR practices on key performance indicators, such as employee productivity, satisfaction, and retention, this research seeks to provide valuable insights for organizations looking to harness the power of DHRM effectively. By identifying the ways in which digital HR practices can positively impact organizational outcomes, this study can inform HR professionals, managers, and organizational leaders in making informed decisions and strategic investments in DHRM.

The study will employ a comprehensive research approach that combines quantitative and qualitative methods. It will involve collecting data through surveys to gauge employee perceptions of DHRM practices and their impact on performance indicators. In addition, in-depth interviews with HR professionals and managers will be conducted to gain deeper insights into the challenges and opportunities associated with the implementation of DHRM. By integrating both quantitative and qualitative data, this study will provide a holistic understanding of the role of DHRM in driving organizational performance.

The findings of this study are expected to contribute to the existing body of knowledge on HRM in the digital era. By demonstrating the relationship between DHRM practices and organizational performance, this research will provide practical implications for organizations seeking to optimize their HR practices in the digital age. The insights gained from this study can guide organizations in developing effective strategies to leverage digital HR technologies, overcome implementation barriers, and achieve improved performance, competitive advantage, and organizational success.



*Fig-1: Digital Human Resource Management (DHRM) working agenda*

### 1.1 Digital Human Resource Management (DHRM):

It refers to the utilization of digital technologies and solutions to enhance and streamline HR processes within an organization. It encompasses the integration of various digital tools, software systems, and data-driven approaches to manage and optimize HR functions, such as recruitment, onboarding, performance management, training and development, employee engagement, and employee data management.

#### Advantages of Digital Human Resource Management (DHRM):

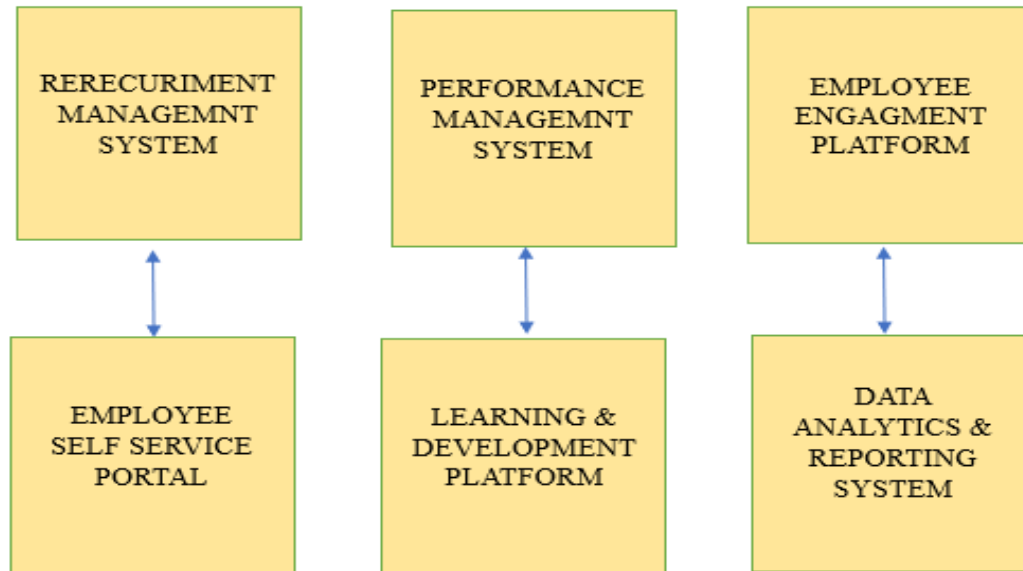
**(i) Improved Efficiency:** DHRM automates manual and time-consuming HR tasks, reducing the administrative burden on HR professionals. This allows HR teams to focus on strategic initiatives and value-added activities, improving overall efficiency.

**(ii) Enhanced Decision-Making:** Digital HR tools provide real-time access to HR data and analytics, enabling HR professionals and managers to make data-driven decisions. This helps in identifying trends, predicting workforce needs, and aligning HR strategies with organizational goals.

**(iii) Increased Employee Engagement:** DHRM offers digital platforms and tools for effective employee communication, collaboration, and feedback. It promotes a culture of transparency, empowers employees to participate in decision-making, and fosters a sense of engagement and belonging.

**(iv) Improved Talent Acquisition:** Digital HR technologies enable organizations to streamline the recruitment process, attract top talent, and enhance the candidate experience. Automated applicant tracking systems, online job portals, and AI-powered screening tools facilitate efficient and effective talent acquisition.

**(v) Enhanced Learning and Development:** DHRM facilitates the implementation of digital learning platforms, e-learning modules, and personalized training programs. This enables employees to acquire new skills and knowledge conveniently, leading to continuous learning and development within the organization.



*Fig-1: Block Diagram of Digital Human Resource Management (DHRM)*

### **Limitations of Digital Human Resource Management (DHRM):**

**(i) Technological Dependency:** Implementing and maintaining digital HR systems require investment in technology infrastructure and ongoing technical support. Organizations may face challenges if they lack the necessary resources, expertise, or face technical glitches.

**(ii) Data Security and Privacy Concerns:** With the digitization of employee data, organizations must ensure robust data security measures to protect sensitive information. Compliance with data protection regulations and maintaining employee privacy becomes critical.

**(iii) Resistance to Change:** Introducing digital HR practices may face resistance from employees and HR professionals who are accustomed to traditional methods. Organizational culture, employee training, and change management efforts are essential to overcome resistance and drive adoption.

**(iv) Integration Challenges:** Integrating various HR systems, software, and platforms can be complex. Ensuring seamless data flow and compatibility between different digital HR tools can be a challenge, requiring careful planning and coordination.

## **II. Literature Review:**

Digital Human Resource Management (HRM) has emerged as a significant component of organizational success in the digital age. This literature review aims to explore the existing research on the role of digital HRM in enhancing organizational performance. By examining the key findings and perspectives from various scholarly articles, this review aims to provide insights into the benefits, challenges, and potential outcomes associated with the adoption of digital HRM practices.

Varadaraj et al. (2021) tries to highlight the role of digital HRM in improving the performance of the organization. The data used for this research are secondary. The outcome of the research would be very

important for a business organization to implement digital human resource management and also for improving and enhancing organizational performance. [1]

Wang et al. (2022) found that the use of digital HRM practices impacts HRM effectiveness through the internal consistency of HR practices and external social networking of HR managers with line managers. The positive or negative effects of digital HRM practices depend on the enterprise's HRM capability maturity. While the majority of previous studies have explored the impact of digital HRM on organizations, including the effects on cost reduction and organizational performance, the study expanded the focus on the outcomes of digital HRM to include employees' perceptions of HRM effectiveness, which can further influence employees' attitudes and organizational behaviors. [2]

Anh et al. (2022) show that digital HRM plays an important function of organization in terms of boosting satisfaction of remote workers as well as enhancing the relation to employee with their working and non-working time. Additionally, the mediating effect of work-life balance in association with digital HRM and job satisfaction has been confirmed from this study. [3]

Altun (2022) revealed that there is no significant effect of rewards and career on employee wellbeing; in contrast compensation, communication and training respectively have significant positive impact on employee wellbeing. In terms of the digital human resources dimensions, the study has concluded that only activities regarding digital training impact employee wellbeing significantly and other digital human resources activities do not affect the wellbeing of employees. [4]

Theres (2021) motivating the principal categorization of constructs and deriving the guiding research question. Then describe the various perspectives to the multifaceted phenomenon of DHRM research. Each perspective is introduced with clarifications regarding associated terminology and substantiated by relevant examples to derive open research questions. A research framework is then presented to capture the essence of these perspectives in a holistic overview. [5]

Jani et al. (2021) HR transformation using Digital human resource technology (HRT) can significantly enhance business outcome of fortune 500 companies of India if it is mediated by different HR role (strategic, employee champion, change agent and administrative expert). The result also proved that just implementation and adaption of the Digital HRT may not guarantee HR Transformation unless HR optimises the specific role as per the need of the hour. [6]

Setyaningrum et al. (2022) analyzed the data using the triangulation method through documentation, interviews and direct observation in the field with case studies. The results of the study explain that several digital HRM practices have been carried out in several companies, but other practical activities have not been carried out optimally. This is because the support from the system and the digitization of business processes that are included in HR practices are not yet optimal. However, the company realizes that DHRM is able to improve business performance in a sustainable manner. [7]

Mia et al. (2020) mainly reveals the current status, prospects, and challenges of using digital HRM in the garments industry in Bangladesh. To serve this purpose a focused group discussion has been conducted of most renowned eight garment factories along with digital HRM practices therein. Being the second position of readymade garments products exporting countries Bangladesh is certainly on the right track to capitalize on it with lots of prospects and challenges. Meanwhile, number one ranked China is moving on advancing on the automation. To keep track of this competition Bangladesh should not lag. Hence, the proper application of digital HR practices can be blessed to convert the mass into human resources. [8]

### **III. Objectives of this paper using DHRM**

**(i) To examine the digital HR practices adopted by organizations and their impact on employee productivity:**

This objective aims to analyze the digital HR practices implemented by organizations, such as the use of HR software systems, automation of HR processes, and data-driven decision-making. The objective further focuses on understanding how these digital HR practices influence employee productivity and efficiency. To examine

the digital HR practices adopted by organizations and their impact on employee productivity, quantitative analysis can be conducted using the following formula:

$$\text{Employee Productivity} = (\text{Output} / \text{Input}) * 100$$

In this formula, "Output" represents the quantity or quality of work produced by employees, and "Input" refers to the resources, time, or effort invested by employees to accomplish the tasks.

### (ii) To assess the influence of DHRM on employee satisfaction and engagement levels.

This objective aims to explore the impact of DHRM on employee satisfaction and engagement. It involves examining how digital HR tools and platforms contribute to effective communication, collaboration, and feedback within the organization, ultimately leading to higher levels of employee satisfaction and engagement. Assessing the influence of DHRM on employee satisfaction and engagement levels typically involves measuring these subjective constructs using surveys or questionnaires. While there isn't a specific formula to calculate employee satisfaction and engagement, the following steps outline a general approach:

- **Survey Design:** Design a survey or questionnaire that captures relevant aspects of employee satisfaction and engagement. Include items related to job satisfaction, work-life balance, communication, recognition, opportunities for growth, and overall job engagement. Use established scales or Likert-type rating scales to collect responses.
- **Data Collection:** Administer the survey to employees within the organization. Ensure confidentiality and anonymity to encourage honest responses. Aim for a representative sample size to ensure the validity and reliability of the findings.
- **Scoring and Analysis:** Assign numerical values to the responses, typically on a scale (e.g., 1-5 or 1-7), with higher scores indicating higher satisfaction or engagement. Calculate average scores for each item and overall scores for satisfaction and engagement by aggregating the responses.
- **Comparison and Statistical Analysis:** Compare the average scores for satisfaction and engagement across different groups or segments, such as departments, job roles, or levels of digital HR practices implementation. Conduct statistical analyses, such as t-tests or analysis of variance (ANOVA), to determine if there are significant differences between groups.
- **Interpretation:** Interpret the findings to assess the influence of DHRM on employee satisfaction and engagement. Analyze the survey results to identify patterns, trends, and relationships. Look for any notable differences in satisfaction and engagement levels between groups with varying levels of digital HR practices adoption.
- **Qualitative Data Analysis:** Consider incorporating qualitative data from open-ended survey questions or follow-up interviews to gain deeper insights into the specific aspects of DHRM that contribute to employee satisfaction and engagement. Analyze the qualitative data for common themes, concerns, or positive experiences.

### (iii) To investigate the relationship between DHRM and employee retention rates.

This objective seeks to understand the connection between DHRM and employee retention. It involves analyzing how digital HR practices, such as personalized training and development programs, performance management systems, and employee recognition platforms, influence employee retention rates and reduce turnover within the organization. To investigate the relationship between DHRM and employee retention rates, a quantitative analysis can be conducted using the following formula:

$$\text{Employee Retention Rate} = ((\text{Number of Employees at the End of a Period} - \text{Number of Employees Who Left during the Period}) / \text{Number of Employees at the Start of the Period}) * 100$$

In this formula, "Number of Employees at the End of a Period" refers to the total number of employees in the organization at the end of a specific time frame, "Number of Employees Who Left during the Period" represents the count of employees who voluntarily or involuntarily left the organization during that time frame, and "Number of Employees at the Start of the Period" indicates the total number of employees at the beginning of the same time frame.

**(iv) To identify potential challenges and barriers associated with the implementation of DHRM.**

This objective focuses on identifying the challenges and barriers organizations may encounter during the implementation of DHRM. It involves exploring factors such as resistance to change, technological limitations, data security concerns, and integration issues that can hinder the successful adoption and utilization of digital HR practices.

*To identify potential challenges and barriers associated with the implementation of Digital Human Resource Management (DHRM), a qualitative analysis can be conducted using the following steps:*

- **Data Collection:** Gather data through interviews, surveys, or focus groups involving HR professionals, managers, and employees who have experience with the implementation of DHRM. Collect qualitative data to gain insights into their perspectives, experiences, and challenges encountered during the implementation process.
- **Coding and Categorization:** Analyze the qualitative data by coding and categorizing the responses based on common themes, challenges, and barriers. Use qualitative analysis techniques, such as content analysis or thematic analysis, to identify patterns and recurring issues.
- **Theme Development:** Develop themes or categories that represent the challenges and barriers associated with the implementation of DHRM. Group the coded responses into meaningful themes that capture the different aspects of implementation challenges, such as resistance to change, lack of resources, data security concerns, or integration difficulties.
- **Frequency Analysis:** Calculate the frequency or occurrence of each identified theme to determine the prevalence of each challenge or barrier. This helps prioritize the most common and significant challenges faced during DHRM implementation.
- **Interpretation:** Interpret the findings by analyzing the qualitative data to understand the challenges and barriers associated with the implementation of DHRM. Look for patterns, unique insights, and connections between different challenges. Analyze the data to identify the underlying causes or factors contributing to each challenge.
- **Reporting and Recommendations:** Summarize the identified challenges and barriers in a comprehensive report. Provide recommendations based on the findings to address and mitigate the challenges. These recommendations can include strategies for change management, resource allocation, training and development, or organizational culture transformation to facilitate a smoother implementation of DHRM.

**(v) To provide recommendations for organizations seeking to optimize DHRM for improved organizational performance.**

This objective aims to provide practical recommendations and guidelines for organizations looking to optimize their DHRM practices. It involves synthesizing the study's findings, best practices, and lessons learned to offer actionable insights on how organizations can effectively leverage digital HR tools and strategies to enhance organizational performance, productivity, employee satisfaction, engagement, and retention.

*The following steps can guide organizations in optimizing their DHRM practices for improved organizational performance:*

- **Assess Organizational Needs:** Conduct a thorough assessment of the organization's current HR processes, systems, and challenges. Identify areas where digitalization can have the most significant impact on improving efficiency, productivity, and employee experience.
- **Set Clear Objectives:** Define clear objectives and key performance indicators (KPIs) for the implementation of DHRM. These objectives should align with the organization's overall goals, such as enhancing employee engagement, improving talent acquisition, streamlining HR operations, or reducing administrative burdens.
- **Invest in Robust HR Technology:** Invest in and implement robust HR technology solutions that align with the organization's needs and objectives. This can include HR management systems, employee self-service portals, performance management tools, talent acquisition platforms, and analytics solutions.

Choose technologies that integrate well with existing systems and are user-friendly for both HR professionals and employees.

- **Foster a Culture of Digital Adoption:** Create a culture that embraces digital transformation and encourages the adoption of digital HR practices. Provide training and support to employees to enhance their digital literacy and ensure they are comfortable using the new technologies.
- **Streamline HR Processes:** Identify and streamline HR processes through automation and digitization. Eliminate manual, paper-based tasks and replace them with digital workflows. Automate repetitive tasks such as payroll processing, leave management, performance evaluations, and on boarding to reduce errors, save time, and improve efficiency.
- **Enable Employee Self-Service:** Implement employee self-service portals or mobile apps that empower employees to access and manage their HR-related information independently. This includes features such as leave requests, updating personal information, accessing pay stubs, and training and development resources..
- **Leverage Data Analytics:** Utilize data analytics to gain insights into HR metrics and trends. Leverage analytics tools to analyze employee performance, engagement levels, turnover rates, and other relevant HR data. Use these insights to make data-driven decisions, identify areas for improvement, and enhance HR strategies.
- **Continuous Evaluation and Improvement:** Regularly evaluate the effectiveness of DHRM practices through feedback mechanisms, surveys, and performance indicators. Monitor key metrics and make necessary adjustments to ensure continuous improvement.

### View on Digital Hr from the Perspective of Other Countries:

Digitalization takes place in Human Asset administration since the conventional HR pushed them to be portion of this advanced world. Only 56 % of companies around the world have rebuilt their human asset program to bring advanced innovation and portable phones. 51% of companies around the world have actualized advanced innovation within the organization. From the overview report it appeared that nearly 33% of organization is utilizing AI to convey way better Human Asset Arrangement, and 40% of them have created portable application to convey noteworthy human asset arrangement for trade organization.

*Here we provide a general overview of the perspectives on digital HR from the standpoint of other countries:*

**(i) United States:** The United States has been at the forefront of digital HR adoption, with a high percentage of organizations embracing digital HR practices. Many companies utilize advanced HR technologies, such as cloud-based HR systems, employee self-service portals, and AI-driven tools.

**(ii) United Kingdom:** The United Kingdom has also witnessed substantial adoption of digital HR practices. A considerable percentage of organizations in the UK leverage technology to enhance their HR processes.

**(iii) Germany:** Germany places a strong emphasis on data protection and privacy, which influences the implementation of digital HR practices. While the percentage of organizations adopting digital HR may be slightly lower compared to some other countries, German companies still invest in technology to optimize HR processes.

**(iv) Canada:** In Canada, digital HR practices have gained significant traction, with a notable percentage of organizations adopting technology to enhance their HR functions. Canadian companies utilize HR software systems, employee self-service portals, and digital communication tools.

**(v) Australia:** Australia has shown a growing interest in digital HR practices, with a notable percentage of organizations embracing technology for their HR processes. Australian companies utilize various digital tools for recruitment, on boarding, performance management, and talent development.

(vi) **India:** India has experienced rapid growth in digital HR adoption, driven by the country's strong IT sector. Many organizations in India leverage advanced HR technologies, cloud-based systems, mobile apps, and AI-enabled tools.



Fig- 2: Digital HR practice worldwide and its percentage of utilization

#### IV. Conclusion:

The study on the role of Digital Human Resource Management (DHRM) towards organizational performance highlights the significant impact of digitalization on HR practices and its potential to enhance overall organizational performance. Through the examination of digital HR practices adopted by organizations, the study aimed to understand their influence on employee productivity, satisfaction, engagement levels, and retention rates. The findings of the study demonstrate that organizations that effectively implement DHRM practices can experience several benefits. By leveraging digital tools and technologies, organizations can streamline HR processes, automate administrative tasks, and enable employee self-service, resulting in improved efficiency, cost-effectiveness, and time savings. Additionally, digital HR practices enable data-driven decision-making by providing valuable insights into employee performance, engagement, and talent management.

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