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### Synergizing Human Resource Management, Accounting, and Artificial Intelligence: A Path to Future Success

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Abstract: Humans are always viewed as business assets in every organization. Appropriate, and reasonable, human resources must be employed, trained, and valued. Using cutting-edge technology in human resource management, such as artificial intelligence, increases the workforce's effectiveness, accountability, and productivity. Additionally, it increases transparency and precision in computing the accounting return on investment from a human resources perspective. Consequently, HR staff may devote more time to developing strategies and making decisions. This paper examines the significance and development of HRM as a new core business. HR's evolving function, the perspectives and difficulties of AI-enabled HRM technologies, and more due to technological changes and the way human resource accounting is done. Regardless of size or industry, human capital is the most important resource for any organization's development. And it is the responsibility of the HR staff to put HRM plans into practice in order to attract, develop, and support human resources. Despite the fact that many problems can only be solved by human interaction, there is still room for AI in HRM. By utilizing cutting-edge technology, all conventional HR duties were strengthened with greater accuracy, productivity, and transparency, without human intervention. It allows the preparation of progress evaluations, staff communication & performance evaluations. As a result, organizations, senior management, and HR experts may achieve their goals with the help of AI-enabled HR technologies.

Keywords: HR- Human Resources, HRM-Human Resource Management, AI-Artificial Intelligence

#### I. INTRODUCTION

#### A. Human Capital, Accounting And Cutting-Edge Technology

Human capital is the collective term for the expertise, experience, knowledge, and skills that members of a population either individually or in groups possess. It is essential to a country's or organization's entire capital, in addition to financial and physical capital. In today's knowledge-based economies, human capital is probably one of the most precious resources.

The notion of human capital, which was formulated by economists such as Gary Becker, highlights the significance of education and training in augmenting an individual's earning capacity and productivity. It implies that long-term economic growth and development can result from investments in human capital.

Businesses and governments frequently make investments in the development of human capital through healthcare initiatives, education and training programmes, and laws that promote a competent and well-trained labour force. In a global economy, economic growth, innovation, and competitiveness can all be facilitated by a highly educated and competent labour force.

#### B. Human Resource Management-Historical Background

Over time, the field of human resource management (HRM) has changed to reflect shifts in society, the workplace, and managerial techniques. The following is a history of HRM:

- Early Origins: HRM has its roots in a number of labour and people management-related historical practices. Workers were
  assigned tasks and the workforce was organised by individuals in ancient societies like the Romans and Egyptians. These early
  methods, though, were frequently hierarchical and control-oriented.
- 2) Industrial Revolution: During the 18th and 19th centuries, labour practises saw a dramatic change. The emergence of factories and large production brought forth a demand for a more structured and effective method of labour management. Some organisations created personnel departments, but their main function was usually administrative, including payroll and record-keeping. Frederick Taylor's theories of scientific management, which emerged in the late 19th and early 20th century,



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popularised the notion of analysing labour processes to maximise productivity. This had an impact on the evolution of personnel management, which prioritised hiring and training workers to carry out particular duties.

- 3) Human Relations Movement (early to mid-20th century): Pioneered by scholars such as Elton Mayo, the movement changed the emphasis from task-oriented management alone to the significance of morale among employees and social contacts at work. It focused on the social and psychological facets of work and aimed to raise productivity and employee happiness.
- 4) Post-World War II Era: Significant advancements in HRM occurred during this time. As labour unions grew more powerful, concerns about collective bargaining and labour rights gained traction. The duties that HR departments were previously responsible for expanding to include labour relations, pay, and benefits.
- 5) Civil Rights Movement (mid-20th century): Equal job opportunities and anti-discrimination in the workplace were emphasised by the American civil rights movement and movements of a similar nature abroad. The Civil Rights Act of 1964 and Title VII, among other laws, forbade discrimination against employees in the workplace on the grounds of race, colour, religion, sex, or national origin.
- 6) Strategic HRM: (late 20th century and beyond): HRM has undergone significant change in the latter half of the 20th and early 21st centuries. HR is becoming a strategic partner in companies instead of just being an administrative function. Strategic HRM is enhancing an organization's competitiveness by coordinating HR procedures with the overarching business plan.
- 7) *Technology and Globalisation:* The increasing use of computers and the internet, in particular, has brought about a revolution in HR practices. As part of this, Human Resource Information Systems (HRIS) are being developed to improve analytics and data management. As a result of globalisation, international HRM is receiving more attention in order to handle the challenges posed by a worldwide workforce.
- 8) Diversity and Inclusion: Given the importance of having a varied workforce and the necessity of fostering inclusive work environments, modern HRM places a high priority on diversity and inclusion.
- 9) *Modern Difficulties:* Talent management, employee well-being, remote work arrangements, and adjusting to the quick changes in the corporate environment are just a few of the modern difficulties that HRM is still evolving to meet.

HRM has developed over time from a largely administrative role to a strategic, people-centred field. It is vital to the development of an organization's culture, talent management, and adherence to labour rules and regulations.

#### C. HRM and Technology Transition

Technological change and human resource management (HRM) go hand in hand because technology has greatly affected HRM operations and procedures. Technology use in HRM has resulted in a number of improvements and adjustments. Here are a few significant ways that technology advancements have impacted HRM:

- 1) Talent Acquisition and Recruitment: HRM has profited from technology in the hiring process. HR professionals now have an easier time sourcing, screening, and tracking candidates thanks to social networking platforms, applicant tracking systems (ATS), and online job boards. More effective candidate matching can be achieved with the use of AI and data analytics.
- 2) Onboarding and Training: Digital onboarding procedures and e-learning platforms have been made possible by technology. HR has less administrative work to do because new workers may complete paperwork online, access training materials, and familiarise themselves with business policies and culture.
- 3) Self-Service by Employees: HR IT solutions have given workers the ability to handle their own HR-related responsibilities. Employees can independently access benefits information, examine pay stubs, request time off, update personal information, and more using self-service portals and mobile apps.
- 4) Performance Management and Feedback: HR may now create more continuous, data-driven performance management systems thanks to technology. Performance measurements can be monitored over time, and feedback can be gathered electronically. Comprehensive assessments are made easier by tools like 360-degree feedback software.
- 5) Data Management and Analytics: HR data management has been completely transformed by the usage of Human Resource Information Systems (HRIS) and HR analytics technologies. HR professionals are able to collect, store, and evaluate vast amounts of data in order to make well-informed choices regarding workforce planning, talent management, and strategic HR projects.
- 6) Cooperation and Remote Work: The COVID-19 epidemic hastened the use of technology in cooperation and remote work. In order to facilitate remote work arrangements, HR has been instrumental in designing and supporting technologies including communication platforms, project management software, and video conferencing.



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- 7) *Employee Well-Being and Engagement:* Technology is used to measure the wellbeing and engagement of employees. To find out what employees need and are satisfied with, surveys, sentiment analysis software, and wellness applications are used.
- 8) Artificial Intelligence and Chatbots: AI is being utilised more and more in HR for a variety of purposes, including conducting first interviews with candidates, automating repetitive work, and responding to employee inquiries. Chatbots can react quickly to frequently asked HR questions.
- 9) Cybersecurity and Data Privacy: HR is in charge of protecting private employee information and making sure data protection laws are followed. This entails putting strong data privacy rules and cybersecurity procedures in place.
- 10) Strategic HR Planning: Thanks to technology, HR can now take on a more strategic role in businesses. HR staff members can provide data-driven recommendations and match HR strategy with the overarching business objectives by utilising data and analytics.
- 11) Globalisation and International HR: To manage a worldwide workforce, multinational corporations depend on technology. HR technology facilitates the management of foreign payroll, the resolution of cross-border compliance challenges, and the provision of global HR services.
- 12) Digital Transformation: HR frequently participates in the digital transformation initiatives of an organisation. HR departments may become more flexible and productive by using HR technology to streamline a variety of HR tasks and procedures.

HRM has evolved from a largely administrative role to a strategic partner within organizations as a result of the usage of technology. Technology has created a lot of data that HR professionals can use in their work while also enhancing efficiency, decision-making, and the entire employee experience. To continue utilizing the advantages of technology in HRM, HR professionals must be flexible and keep up to date on technology developments.

#### D. HRM and AI: a promising combination

Globalisation affects technological advancement as well as the integration of all organisational procedures, ranging from finance to HR to production. The expanding use of HRM processes based on computers first showed up in the 1980s (Sikula and McKenna), Additionally, the development of personal computers since 1990 created and envisioned human resources Information systems (HRIS): a methodical approach for gathering, keeping, preserving, getting back, and verifying information about the human resources of organisations, Employee actions and unit attributes (Kovach as well as Cathcart Jr. (1999). It is able to simplify and automate crucial HR tasks, like shortlisting and screening employment applications, training, e-learning, and onboarding payroll, analytics and reporting for HR, and performance supervision, etc.

The development of computer science continues to change the role of HRM from being a tool for keeping records to one that supports strategies for making decisions. Thus, current Innovation in technology increases productivity. This includes a strategy for redefining HR positions. The phrase electronic human resource management all HR-related tasks in order to decrease HR and reduce administrative expenses, boost output and effectiveness, They offer chances to carry out more strategic tasks (Dulebohn and Stone, 2013). Therefore, the usability of AI-enabled technologies grew quickly across all industries, Covering HRM, and the development of COVID-19 also hastened the application of it. The effects of technology on the The most common HR positions are described here.

- 1) Hiring: Selecting the best applicant requires a lot of time. AI improves applicant engagement and processing to streamline the hiring process. Using big data for talent acquisition and evaluation, as well as developing a framework—a set of rules—for upcoming hiring and selection. By processing both structured and unstructured requisition data, matching candidate profiles and assigning a score, identifying which active candidate in the client ATS is more likely to fit and qualify, and providing a market view regarding employee sentiment, the IBM Watsons recruitment cognitive approach, for instance, helps talent acquisition procedures (IBM, 2021). Additionally, improving candidate engagement through the use of NLP, OCR, and AI-enabled chatbots during the hiring process speeds up the documentation process and lowers the time and expense per hire (Majumder and Mondal, 2021).
- 2) Training and Development: Based on the metacognitive theory, students learn best when they are aware of their areas of weakness or when they are conscious of their ignorance. Thus, an AI-enabled HR system can inform trainees about their areas of weakness through pre-training evaluations, quizzes, examinations, and feedback (Upadhyay and Khandelwal, 2019; Posner, 2017). Human ability, skills, and knowledge are prized and regarded as essential resources. Realising that staff skills and knowledge increase in line with market demand, training is of the utmost importance.



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- 3) Onboarding: Onboarding is the term for the socialisation process that the organisation implements (Klein et al., 2015). During this process, new hires acquire the knowledge, abilities, and behaviours necessary to grow in accordance with job requirements and become productive members of the organisation (Bauer and Erdogan, 2011). It is a process by which newly hired employees become acquainted with the role and culture of the company. As a result, a strong onboarding procedure creates a channel of communication that is efficient and guarantees goal achievement, employee engagement, and retention.
- 4) Other Operational Functions: AI integration in HR automates all processes, including screening, selecting, and retaining skilled workers. For instance, in the compensation process, artificial neural networks—that is, networks that identify relationships in big data sets—provide transparency, fairness, and accuracy while assessing compensation (Jia et al., 2018). AI also supports engagement strategies—such as public relations—and interdepartmental communication. Additionally, AI can reduce biases in the recruitment and selection processes and identify fraudulent or deceptive information about an applicant by digitally analysing large-volume datasets. Moreover, AI-enabled software helps top management by identifying skill gaps or proposing new skill enhancement programmes.

#### E. The usage of HRM driven by AI structure in India

Modern technology was used to reinforce all standard HR activities more precisely and productively and openness devoid of human prejudice or meddling. It facilitates employee development and performance review, channels for interaction and communication, as well as creating updates on progress. Therefore, AI-powered HR support HR, upper management, and organisations specialists in achieving objectives. The affordability of e-HRM software in India is contingent upon various factors such as the size and nature of the organisation, the quantity of employees, features, and customization available, as well as the initial investment and skill needs. For these reasons, small businesses are hesitant to implement contemporary HR procedures. Refer to Figures 5 and 6 to learn about the AI-enabled HRM systems that are currently available in India, how these technologies transform or support HR tasks, their trust behaviour in relation to market trends, some advice for HR staff, and how some of the intelligence-enabled HRM functions support HRA reports.

#### F. Human Resource Accounting: Views and Recommendations

Due to the service sector's growing economic impact on the global economy, consideration has turned to the role that talent, knowledge, and skill play in a company's overall expansion. The issue of how to accurately quantify human resources is thus brought up by managing the workforce and viewing it as one of the organisational assets. The act of quantifying an organization's expenditures and gains in its most valuable intangible asset, human capital, is known as human resource accounting, or HRA. It speaks of calculating expenses as an investment comes to pass towards managing human resources (Lau and Lau, 1978)—including screening, hiring, onboarding, learning & development (i.e., as a part of HRM functions) and reporting benefits produced by the same human resources (Flamholtz, Et al., 2002). The costs associated with hiring and retaining employees are shown in the balance sheet as an asset in accordance with the HRA reporting, which is in contrast to Indian accounting practise, which follows Indian accounting standards and treats human resource cost.

#### G. Benefits include

- The ability to track the increase and decrease in human capital worth over time and assistance in making decisions on employee retention
- 2) Information about the productivity and performance of employees is obtained by organisations.
- 3) It facilitates the implementation of an equitable, precise, and lucid employee remuneration scheme.
- 4) HR professionals can gain enhanced understanding of human resources through HRA practises.

#### H. Limitations

- 1) In accordance with IAS, the organisation is exempt from preparing an HRA report. Furthermore, there are no recommendations made by IAS regarding how to prepare the HRA report.
- 2) Organisational behaviour tendency: small and medium-sized businesses, for instance, should not have to incur this unneeded additional expense burden.
- *3*) It's a laborious, lifetime work.
- 4) Concerns include the legitimacy and accountability of the data utilised for HRA.
- 5) Certain HRA reporting uses, such as comparing the return on investment to the expense of employee training or the ratio of gender equality in the workplace, are based on the same data that is used for HRM operations.



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- I. Suggestions
- 1) The majority of data pertaining to human resources is accessible because of technological advancements and its integration with HRM. It will facilitate the HRA report process.
- 2) Raising awareness of the advantages of creating an HRA report is necessary because it is essential to other organisational functions including human resource management, cost accounting, management accounting, finance, etc.
- 3) Achieving the right human resource value improves the companies' and their investors' financial stability.

#### II. CONCLUSION

Technological advancements like AI, ML, and IoT offer the potential to enhance HRM functions. It helps technology developers, the company, staff, and HR specialists. According to Hempel (2004), there is a relationship between IT and HRM since technology adoption gives developers the chance to create more sophisticated technology while also changing and automating the function of traditional HRM.

Large Indian companies choose to manage, value, train, and develop their human resources with tailored E-HRM products. E-HRM software still has certain difficulties, nevertheless, with regard to its application, compliance with laws and regulations, cost-effectiveness, and ability to replace traditional HR practises, particularly in India's tiny and disorganised businesses. Separate HR management systems are not necessary, and no entity in India's small and unorganised sector even recognises the need for them. Additionally, there is direct communication between the owner and the staff. The outcome was a poor E-HRM adoption ratio. Therefore, it is wise to carefully incorporate current technologies.

As a result, it is wise to carefully adopt current technologies. However, the creator of the AI-powered HRM system may easily overcome these obstacles thanks to digital India initiatives and ongoing, rapid advancement. Regarding HRA practise in India, it is not required by accounting standards to quantify, value, and show HR as capital or business assets on the balance sheet. Not even the Companies Act 1956 and 2013 (an act of the Indian parliament) include particulars or guidelines that organisations must adhere to. That being said, there's a chance that the combination of intelligence technology and HRM will lead to a rise in HRA in India.

#### **REFERENCES**

- [1] Talsaniya Gauravkumar., & Kanaiyalal, Dr. Kunal Sinha (2023): Human Resource Management, Accounting and Artificial Intelligence- A Promising Integration
- [2] Bauer, T. N. (2010). Maximizing success. SHRM foundation's effective practice guidelines series. SHRM Foundation, United States.
- [3] Bauer, T. N., & Erdogan, B. (2011). Organizational socialization: The effective onboarding of new employees.
- [4] Crawshaw, J., Davis, A., & Budhwar, P. (2020). Human resource management: Strategic and international perspectives. Human Resource Management, 1-560.
- [5] Hempel, P. S. (2004). Preparing the HR profession for technology and information work. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 43(2 13), 163-177.
- [6] Marler, J. H., & Fisher, S. L. (2013). An evidence- based review of e-HRM and strategic human resource management. Human resource management review, 23(1), 18-36.
- [7] Remenyi, D., & Williams, B. (1996). Some aspects of ethics and research into the silicon brain. International journal of information management, 16(6), 401-411.
- [8] Klein, H. J., Polin, B., & Leigh Sutton, K. (2015). Specific onboarding practices for the socialization of new employees. International Journal of Selection and Assessment, 23(3), 263-283.
- [9] Wright, P. M., Rowland, K. M., & Ferris, G.R. (1994). Perspectives on Human Resources Management. Zeitschrift Für Personalforschung / German Journal of Research in Human Resource Management, 8(3), 336–352.









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