
ARTIFICIAL INTELLIGENCE IN DIGITAL HRM: ETHICAL, LEGAL AND HUMAN RIGHTS CHALLENGES IN THE FUTURE OF WORK

Dr. Astha Chaturvedi

Assistant professor, Bharti Vishwavidyalaya Durg chhatisgarh.

INTRODUCTION

Human civilization has always moved forward through constant inventions and discoveries that have changed the way human society's function. From the discovery of fire to the invention of the wheel, through industrialization to computerization, human history has seen constant technological advancements to make human life more efficient and comfortable. In this regard, human history has seen a new technological advancement in recent times that has changed human life significantly, known as Artificial Intelligence (AI). This technology is unique compared to other human inventions and discoveries, as it has the ability to learn, do things on their own, and make independent decisions without human intervention. Despite this technology having opened new avenues to human advancements, it has also raised a number of human rights issues.

Artificial Intelligence can broadly be defined as a technology that has two forms. One is the physical technology, which includes robots, automated machines, industrial robotic arms, etc. This technology has changed human life significantly, as it has changed the way things are manufactured. On the other hand, there is also an invisible technology that has changed human life significantly through a series of events, without human beings being aware of how such events occur.

One of the most affected domains in this regard is Human Resource Management (HRM). Traditionally, HRM functions include manual and human-intensive tasks such as analyzing job applications, conducting interviews with candidates, assessing employee performance, and workforce development. However, the advent of Digital Human Resource Management (Digital HRM) has revolutionized traditional HRM functions. Digital HRM is the incorporation of sophisticated digital technologies such as artificial intelligence, machine learning algorithms, big data analysis tools, and automated platforms in the overall HRM functions. These technologies help organizations analyze large amounts of data pertaining to job candidates, automate the overall recruitment process, assess employee performance using digital monitoring tools, and even predict workforce trends.¹

Some benefits that come with the adoption of AI-based HR systems include increased efficiency and transparency in decision-making and strategic workforce planning.² With the adoption of AI-based systems in HR functions, organizations have been able to reduce administrative workload and decision-making efficiency while managing their workforce using predictive analytics and evaluation systems. With AI-based recruitment systems, organizations have been able to evaluate thousands of applications within minutes and monitor productivity using digital metrics with the help of performance management systems. This has led to the adoption of algorithm-based systems in managing HR functions in a competitive business environment.³

However, despite these advantages, there are also ethical, legal, and human rights concerns associated with the increasing use of AI in HRM. For instance, there is a potential danger that the decision-making

algorithms may reflect biases embedded in their databases, which may result in discriminatory practices in employee selection, promotion, or performance assessment.⁴ Moreover, there are also concerns related to privacy, surveillance, and misuse of personal information due to the large volume of employee data being processed through AI systems. Another concern is related to accountability, as it is difficult to understand how AI systems make their decisions, especially if an employee is affected by such a decision.⁵ The opacity of many AI systems further complicates the issue of accountability, as individuals affected by algorithmic decisions often have limited understanding or opportunity to challenge such outcomes.

The integration of new technologies in a society has always had to be aligned with the existing social norms and legal provisions. The law plays a very important role in ensuring that the advancements in technologies take place within the parameters of the fundamental human rights and social justice. The incorporation of the AI system in the governance of the workplaces and the employment processes may have to take into account different aspects of the human rights provisions, including the right to equality, privacy, dignity, and non-discrimination. Therefore, the regulation of the AI and the development of the responsible governance mechanisms become imperative to ensure that the advancements in the technologies do not compromise the established human rights provisions.

This research paper aims to explore the transformative role of the Artificial Intelligence in the Digital Human Resource Management. It also discusses the opportunities and challenges related to algorithmic decision-making in managing the workplace. Though AI has tremendous potential to increase efficiency and productivity, if unregulated, it can pose a major threat to human rights as well as organizational accountability.

Though technological advancement cannot be controlled, as it is growing exponentially, it is important to bring appropriate legal and regulatory measures to go along with it. Artificial Intelligence can be used to bring tremendous benefits to society, such as developing assistive technology like lower-limb exoskeletons to help people walk again if they are crippled. On the other hand, it can also be used to bring destruction to human civilization through weapons like drones or through surveillance systems. In this context, the paper emphasizes the importance of responsible AI governance, transparency in algorithmic decision-making, and the development of legal safeguards that ensure fairness and accountability in digital workplaces. By critically examining the intersection between AI, employment practices, and human rights norms, the study aims to contribute to the broader discourse on regulating emerging technologies in a manner that promotes both technological progress and the protection of human dignity.

Before examining the issues and challenges, it is essential to understand the meaning of Artificial Intelligence (AI). There is no universally accepted definition of AI, and its scope continues to evolve. Early on, **John McCarthy** defined AI as any system capable of performing tasks that would be considered intelligent if done by humans.⁶ More recently, **Stanford University** described AI as a set of computational technologies inspired by human cognitive processes but functioning differently.⁷ Similarly, **Stuart Russell** and **Peter Norvig** categorized AI into systems that think or act like humans and those that think or act rationally.⁸ The **European Commission** defines AI as systems that analyze their environment and act autonomously to achieve goals, whether software-based or embedded in hardware.

⁹ Collectively, these definitions suggest that AI refers to systems capable of human-like decision-making with some degree of autonomy.

Human rights, on the other hand, are inherent rights available to all individuals by virtue of being human, including equality, freedom, and dignity. In *Ransome Kuti & ORS v. A.G Federation & ORS*, Justice Kayode Eso described them as fundamental conditions of civilized existence. These rights are protected under national constitutions, including India's, and internationally under instruments like the **Universal Declaration of Human Rights**.¹⁰

ARTIFICIAL INTELLIGENCE AND ITS RELEVANT IMPACTS ON HUMAN RIGHTS

The creation of Artificial Intelligence (AI) has sparked many concerns about its compatibility with human rights, with many arguing whether its use is essential or needs to be approached with caution. While AI is a product of humans, created with the intent of increasing convenience, AI's ability to think independently is affecting human rights, both negatively and positively. In the digital age, characterized by a "golden age of surveillance," many technological developments, such as smartphones, satellites, and imaging, have enabled surveillance activities by states and non-state actors. While AI is credited with enhancing justice, as witnessed by the warrant issued by the International Criminal Court in 2017, AI has, however, led to a violation of privacy on a large scale. Regulations such as GDPR have been put in place to address these issues.

Another area of concern with the incorporation of AI is the issue of discrimination and bias, as it may perpetuate existing inequalities in society based on caste, gender, and race, thus violating the principles of equality provided under the Constitution and international law. In addition, the incorporation of AI is related to the right to freedom of speech and expression provided under Article 19 of the Constitution, as in the case of *Shreya Singhal v. Union of India* (2015), where the need to avoid restrictions in the virtual world was emphasized. The recognition of the right to privacy in the case of *K.S. Puttaswamy v. Union of India* (2017) is also relevant in this context.

AI AND THE TRANSFORMATION OF DIGITAL HRM

The use of AI technologies in HRM has led to a remarkable change in the management structure of organizations. AI technologies are capable of processing large amounts of data, which helps organizations in the decision-making process.¹¹ For instance, the use of AI technologies in HRM enables organizations to carry out the process of recruiting, employee engagement, training, and performance evaluation using digital technology.¹² As a result, many organizations rely on AI-driven workforce analytics to improve strategic workforce planning.

HR management systems based on AI technologies use machine learning algorithms that help in the analysis of employee behavior patterns in the organization. AI technologies help organizations in identifying the productivity trends of employees, predicting employee turnover, and conducting employee training programs. For this reason, AI technology plays a vital role in the management of the workforce in organizations.

A new concept called “algorithmic management” has emerged in modern organizations. Algorithmic management is the use of AI technology in managing the activities of employees in the organization, allocating tasks, and evaluating employee performance. The use of algorithmic management in organizations helps in the efficient management of tasks, but there are concerns about the fairness of the decision-making process.¹³

AI-Enabled Talent Acquisition and Recruitment

One of the most notable areas in which AI technology is being utilized is in the acquisition of new talents. Today, there are a number of organizations that are using AI technology in the hiring process of new talents.

For instance, AI technology in the hiring process uses Natural Language Processing (NLP) technology, which helps in the analysis of the candidate’s profiles, qualifications, experience, and skill sets. The AI technology compares the candidates with the existing employee data in order to assess the probability of success in a particular role.

In addition, there are organizations that are using AI technology in the form of video interviews, which help in the assessment of the candidate’s personality in order to determine the suitability of the candidate for the role. It is noteworthy that while AI technology in the hiring process is efficient, there are a number of ethical issues associated with the technology.

One of the biggest drawbacks of AI recruitment tools is that there is a high probability of bias in them. This is because AI recruitment tools are trained on historical data, which might contain biases towards certain groups of people. For example, if there has been a bias towards a particular gender or race in historical hiring data, then there is a high probability that this bias might reflect in an AI recruitment tool as well, as it might end up favoring a particular gender or race more than others.

This problem came to light when it was reported that an experimental AI recruitment tool developed by a major technology company had shown bias towards women due to historical hiring data, which had mostly been composed of male applicants.

AI in Performance Management and Workforce Analytics

Apart from this, AI technologies are also used for the management of the performance of the employees. Digital HR technologies are also used for the analysis of the workforce. These technologies are used for the generation of reports based on the productivity of the employees. AI-based performance management technologies are used for the analysis of different parameters such as the completion of the tasks by the employees and the contribution of the employees toward the completion of the projects. These technologies provide detailed information regarding the performance of the employees. This helps the organizations in identifying the high performers among the employees.

Workforce analytics also play an important role in the strategic management of the human resources of the organizations. AI-based technologies are used for the analysis of the trends of the employees. These technologies are also used for the prediction of the turnover of the employees.

Despite these benefits, AI-based performance monitoring systems have also generated concerns about the excessive monitoring of employees in the workplace. The continuous monitoring of employees’ behavior through digital platforms may lead to a feeling of continuous observation, which may have a

negative impact on employees' autonomy and mental health. Moreover, employees may be unaware of the ways in which their data is processed for decision-making.

Ethical Concerns in AI-Based HRM

The integration of AI in HRM has also attracted a wide range of debates on the issue of ethical governance and fairness in algorithmic decision-making. One of the major ethical issues is that of algorithmic bias, where there is a discriminatory outcome in the decisions of the AI system, which is attributed to a flawed algorithmic approach. Bias in AI-driven HRM can take many forms, for example, in terms of gender discrimination in recruitment, performance evaluation, and promotion. This is a violation of the principle of equality in employment, which is a fundamental human right. The other ethical issue is that of transparency. Most of the decisions of the AI system are a "black box," meaning that the decisions of the system cannot be easily understood by the developers of the system. When an employee is rejected during recruitment or is given a negative performance evaluation, it is not clear what the explanation for the negative evaluation is.

This lack of transparency gives rise to concerns about fairness in employment procedures. Ethical governance of AI systems demands that organizations ensure that decisions made by algorithms are explainable and auditable, and subject to human oversight.¹⁴

Legal and Privacy Challenges

The use of AI in HRM also raises significant legal concerns, particularly in relation to data protection and privacy rights. Digital HR systems collect and process large volumes of personal data, including employee demographics, behavioral patterns, communication records, and performance metrics.

In many jurisdictions, data protection laws impose strict obligations on organizations regarding the collection, storage, and processing of personal data. For instance, the European Union's General Data Protection Regulation (GDPR) recognizes individuals' rights related to automated decision-making and data privacy.¹⁵ These regulations require organizations to ensure transparency in algorithmic decision-making and provide individuals with the right to challenge automated decisions that significantly affect them.

In the Indian context, the growing adoption of AI-based HR systems must also be evaluated in light of the fundamental right to privacy recognized by the Supreme Court in *Justice K.S. Puttaswamy v. Union of India*.¹⁶ The judgment established privacy as a fundamental right under the Constitution, thereby emphasizing the importance of protecting personal data and limiting intrusive surveillance practices.

Without proper regulatory safeguards, AI-driven HR systems may lead to intrusive monitoring, misuse of employee data, and violations of privacy rights. Therefore, organizations must adopt strong data protection policies and ethical frameworks to ensure compliance with legal standards.

Human Rights Implications in the Digital Workplace

The broader implications of AI-driven HRM practices on human rights at the workplace can also be considered. It has been acknowledged that employment is related to several human rights, including equality, dignity, and non-discrimination.

If AI systems are involved in recruitment, performance assessment, or promotion, it can affect an employee's future at their workplace. If such AI systems are not appropriately regulated, it can affect the principle of non-discrimination in employment.

Additionally, if there is excessive monitoring at the workplace through digital technology, it can affect an employee's dignity as a human being. Employees may feel that their personal freedom is being compromised if their behavior at the workplace is being monitored through digital technology.

International human rights principles have acknowledged the significance of safeguarding employee rights in relation to emerging technology at the workplace. Organizations must ensure that there is technological innovation at the workplace without compromising human rights principles; ethical AI practices must be adopted to safeguard human dignity.

REGULATORY FRAMEWORK FOR AI IN INDIA

AI has become prime focus for Ministry of electronics and information technology, in 2018 a four member committee was set up to look into national AI programme and studied its citizen centric perspective and legal, regulatory and cyber security perceptions.¹⁷ In an effort to boost economic productivity in India, NITI Aayog teamed up with Google in early May 2018 to train and incubate start-ups that look to develop and integrate AI-based solutions in their business models.¹⁸ The National Strategy on AI policy process has in two distinct ways acknowledged Firstly that AI adoption has been largely commercially driven to date, and recognizes the 'need to strike a balance between narrow definitions of financial impact and the greater good' and Secondly, it recognizes that AI applications should be embraced for their incremental, rather than purported transformational value in various sectors.¹⁹

At present in India Section 43A and section 72A of Information Technology, Act 2000 along with Digital Media Ethics Code²⁰ are the regulatory framework in India to take care of major privacy online digital and artificial intelligence-based operations in India. Information Technology Act was enacted to recognize and enforce electronic commerce and trade based on international obligation of UNCTAD model code. The 2008 amendment to the Information Technology Act in India addresses online digital privacy protection and addresses the misuse of AI, particularly focusing on issues of online data theft and cybercrimes, with key provisions like Section 67A, Section 67B, Section 69A, Section 72A, Section 79, and Section 84B serving as benchmark regulations in the contemporary era for online governance and cyber security.²¹

Even while recent MeitY statements suggest that AI may be regulated in India just like any other emerging technology (to protect digital users from harm), MeitY maintains that the purported threat of AI replacing jobs is not imminent because present-day systems, being essentially task-oriented, are not sophisticated enough – devoid, as they are, of human reasoning and logic.²²

RECOMMENDATIONS AND POLICY FRAMEWORK FOR ETHICAL AI IN DIGITAL HRM

The increasing role of Artificial Intelligence in Digital Human Resource Management calls for the formulation of effective ethical and legal frameworks to prevent the undermining of human rights through technology innovation. Although AI technology is likely to increase efficiency in human resource functions

such as recruitment and performance management, the lack of effective legal frameworks may lead to discrimination and a lack of accountability. Thus, organizations and governments must adopt effective strategies to address the role of AI in human resources.

Ensuring Transparency and Algorithmic Accountability

One of the main difficulties that may be encountered in AI-based HR systems is that there is a general absence of transparency in decision-making by such systems. Many AI systems are essentially complex systems that cannot be easily understood by individuals or employers themselves. Therefore, it is important that organizations adopt systems that provide transparency in decision-making by AI systems in HR-related decision-making procedures. Individuals must be made aware of how AI systems are being used in decision-making in procedures such as recruitment or evaluation and must be provided with explanations about decisions that have a significant impact on their employment.

International policy initiatives such as those by the European Commission's Ethics Guidelines for Trustworthy AI include principles such as transparency, explainability, and human oversight in algorithmic systems and must be implemented in organizational HR policies and laws that govern AI in employment-related decision-making procedures.

Addressing Algorithmic Bias and Promoting Fairness

One of the most prominent ethical issues linked to AI-based recruitment and workforce management tools is algorithmic bias. Since AI models operate on historical data, there is a high possibility that such models could inherit any bias present in the data, such as gender, race, caste, or socio-economic status. This could affect the concept of equal opportunity in employment. To avoid such bias, there is a need to develop auditing tools to ensure fairness while using AI-based HR tools. Audits have to be carried out to ensure that AI models do not show any discriminatory behavior. Furthermore, there is a need to ensure that training data is diverse to avoid any bias while creating AI models.

There is a need to ensure that legal provisions related to equality in employment apply to AI-based decision-making tools. The concept of equality and non-discrimination, which is included in constitutional laws, needs to be applied to AI-based employment decisions.

Strengthening Data Protection and Employee Privacy

Digital HRM systems heavily depend on the collection and analysis of data from employees. This may include personal data, performance data, communication data, and behavioral data. Such data practices may violate the fundamental right to privacy in the absence of proper protection. The recognition of privacy as a fundamental right in Justice K.S. Puttaswamy (Retd.) v. Union of India underlines the importance of proper data protection in digital workplaces. It becomes imperative for employers to ensure that data collected from employees is for legitimate purposes and that it is processed in accordance with data protection laws.

The Digital Personal Data Protection Act provides a developing framework for data protection in India. It becomes imperative for organizations that use AI-based HR systems to comply with such laws by implementing proper data governance policies and seeking informed consent from employees while ensuring that data collection is not excessive in nature.

Establishing Human Oversight in AI-Based Decision-Making

However, it is important that AI technologies are not fully relied upon in making employment decisions. Even though it is important that HR personnel use various algorithmic tools in analyzing large amounts of data, it is important that decisions such as hiring, promotion, and termination are made by humans.

The “human-in-the-loop” decision-making process ensures that AI technologies are used in such a manner that they are merely a tool and not a decision-maker in itself. International human rights instruments such as the Universal Declaration of Human Rights have emphasized the importance of maintaining dignity in employment decisions.

Developing Organizational Ethical AI Policies

Organizations that use AI in HRM should also develop internal policies that outline ethical standards regarding the use of technology in managing their workforce. Organizations should also set up an AI ethics committee/governance board to oversee the development and implementation of algorithmic systems. This can help to ensure that AI technology is aligned to organizational ethics and laws.

Furthermore, organizations can conduct regular training programs to raise awareness among HR practitioners and employees regarding ethical issues related to AI technology. This can help to raise awareness regarding digital rights and responsibilities, which can lead to a more responsible use of AI technology in the organization.

Regulatory Oversight and International Cooperation

Considering that digital technologies are a global phenomenon, it is imperative that effective governance of AI-based HR systems is a collaborative process between governments and international organizations that have a say in such issues. For instance, global organizations such as the International Labour Organization have already highlighted the need for workers’ rights in a digital world. Governments need to collaborate with such organizations to set standards that ensure fair and ethical use of AI in a workplace scenario.

CONCLUSION

The increasing trend of Artificial Intelligence (AI) in India has posed complex issues at the interface of technology and human rights. AI has the potential for increasing efficiency and effectiveness in terms of communication and decision-making in all sectors, including the legal sector and Digital Human Resource Management. However, the unregulated and unmanaged use of AI has raised serious issues with regard to the protection of human rights. The major challenge here is the balancing act of using AI for the development of the nation without compromising the human and constitutional rights.

One of the major issues with the use of AI is the protection of privacy. The existing laws are not adequate enough to address the dynamic and ever-changing nature of AI. As discussed in the meeting of CIPL (2018), the application of data protection principles in the context of AI is complex. There is a regulatory dilemma that may result in the overregulation of AI or the underregulation of AI. In addition, the effectiveness of privacy protection also lies in its proper implementation and enforcement.

The application of AI in governance projects such as smart cities only adds to these concerns. AI-based surveillance systems, crowd monitoring, and behavior prediction may be helpful in maintaining law and order but may also lead to a violation of individual rights and freedoms. The lack of proper checks and balances in the current surveillance system in India adds to these concerns and makes it imperative that such systems are kept at a bare minimum.

One of the biggest concerns with AI is that it may lead to bias and discrimination against certain sections of society. AI systems are based on historical data that may already be biased and discriminatory in nature due to current social inequalities in society. However, it is important to understand that it is not just about tackling bias and discrimination in the data that AI systems use but also about understanding that AI is a socio-technical system that cannot be understood in isolation from society. It may lead to a continuation and possibly a worsening of discrimination in society, as emphasized by Virginia Eubanks.

In the case of Digital HRM, AI has dramatically changed the way companies carry out their recruitment, performance assessment, and even analytics. However, these changes have created ethical and legal issues, such as transparency, surveillance, and even violations of employee rights.

To overcome these challenges, there is a need to develop legal frameworks that address AI governance, which includes issues such as transparency, accountability, and fairness. In conclusion, the future of AI, especially with regard to employment, is about how to integrate technological innovation with ethical responsibility, protecting human dignity, upholding fundamental rights, and achieving justice in the age of information.

References:

- Bernard Marr, *Artificial Intelligence in Practice* (2019).
- Peter Cappelli et al., *Artificial Intelligence in Human Resources Management*, 36 *Academy of Management Review* (2019).
- Thomas H. Davenport & Rajeev Ronanki, *Artificial Intelligence for the Real World*, *Harvard Business Review* (2018).
- Solon Barocas & Andrew Selbst, *Big Data's Disparate Impact*, 104 *California Law Review* 671 (2016).
- Shoshana Zuboff, *The Age of Surveillance Capitalism* (2019).
- Cataleta, M. S., & Cataleta, A. (2020). *Artificial Intelligence and Human Rights, an Unequal Struggle*. *CIFILE Journal of International Law*, 1(2), 41-63. <https://doi.org/10.30489/cifj.2020.223561.1015>
- Stanford University Human-Centered Artificial Intelligence. (2020). *HAI Annual Report for 2019-2020*. <https://hai.stanford.edu/>
- Executive Office of the President of USA - National Science and Technology Council Committee on Technology. (2015). *Preparing for the Future of Artificial Intelligence*. https://obamawhitehouse.archives.gov/sites/default/files/whitehouse_files/microsites/ostp/NSTC/preparing_for_the_future_of_ai.pdf
- <https://www.aepd.es/sites/default/files/2019-09/ai-definition.pdf>
- Malemi, E. (2017). *The Nigerian Constitutional Law with Fundamental Rights (Enforcement Procedure) – Rules 2009* (3rd ed.). Princeton Publishing Company.
- Ajay Agrawal et al., *Prediction Machines* (2018).
- Tomas Chamorro-Premuzic, *The Datafication of Talent* (2017).
- Ifeoma Ajunwa et al., *Limitless Worker Surveillance*, 105 *California Law Review* 735 (2017). https://www.researchgate.net/publication/382689856_Ethical_and_Legal_Challenges_of_AI_in_Human_Resource_Management
- Regulation (EU) 2016/679 of the European Parliament and of the Council (General Data Protection Regulation).
- Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC
- Agarwal S. 2018 IT Ministry has formed four committees for Artificial Intelligence: Ravi Shankar Prasad. *The Economic Times*. See <https://economictimes.indiatimes.com/news/economy/policy/it-ministry-forms-four-committees-for-artificial-intelligence-ravi-shankarprasad/articleshow/62853767.cms>.
- Gupta K. 2018 Niti Aayog partners with Google to grow India's artificial intelligence ecosystem. *Livemint*. See https://www.livemint.com/Industry/fpnGnNQ8duTCRZOEpk_2P6M/Niti-Aayog-partners-with-Google-to-grow-Indias-artificial-i.html.
- Marda V. 2018 *Artificial intelligence policy in India: a framework for engaging the limits of data-driven decision-making*. *Phil. Trans. R. Soc. A* 376: 20180087. <http://dx.doi.org/10.1098/rsta.2018.0087>
- Notification dated, the 25th February 2021 G.S.R. 139(E): the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021

Artificial Intelligence and Law in India Ashutosh Kumar is an Assistant Professor, Amity Law School, Amity University Patna© 2021 JETIR August 2021, Volume 8, Issue 8 www.jetir.org (ISSN-2349-5162) <https://www.jetir.org/papers/JETIR2108439.pdf>

India: Regulating Artificial Intelligence In India: Challenges And Considerations, 06 July 2023by Rajat Sethi , Deborshi Barat and Rohin Goyal , S&R Associates <https://www.mondaq.com/india/privacy-protection/1339066/regulating-artificial-intelligence-in-india-challenges-and-considerations>