International Journal of Economic Practices and Theories (IJEPT)
ISSN: 2247-7225
Volume 2026, Issue 1

Artificial Intelligence and Job Security: Examining the Adequacy of Indian Labour Law in Regulating Technological Retrenchment

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Abstract:

Everyday a new Artificial Intelligence (AI) company is getting incorporated with an aim developing Agentic models or Generative models for every part inclusive in the human life. From the Job perspective, Introduction and Application of them in the workplace creates a positive and negative emotional impact on the employee, either existing or about to get recruited. As these models are keep on affecting the IT sector in the majority, Students enrolled in an IT-related course often have a similar thought of getting replaced, which is leading to discouragement towards studies. While a few countries recognise the prohibition of applying AI in the job market and provide meaning to technological redundancy, Indian Labour Law remains unaffected and is on the verge to be amended. Analysis of existing literature showcases that 89% of employers require AI fluency from employees at entry-level positions with a consequence, i.e. if the employee does not have a particular skill set, the AI software will automatically reject the Job application. The Job market is currently shifting from degree-based hiring to skill-biased hiring. This article recommends amending the existing labour codes, ensuring provisions related to the definition of Technological retrenchment and Harmonious application of AI at the workplace.

Keywords: Retrenchment; Job Displacement; Artificial Intelligence; Job security; AI Fluency;

Introduction

The word “technology” derives from the sixteenth-century word teknologia “systematic treatment” and tekhnē meaning “art, craft” and logia “-ology”. Technology transformed human abilities since we learned how the process was used to use nature’s resources and gain an edge over others in terms of competition and acquisition. (Skilton & Hovsepian, 2018). It can be stated that technology is the most important factor driving the development of the intellectual economy. This contemporary economic gain period is known by various names for instance the fourth industrial revolution, Industry 4.0, and Industrial Internet of Things (IoT) (Kolade & Owoseni, 2022). The phrase “Fourth Industrial Revolution” was coined by Klaus Schwab, and this phrase describes an epoch defined by a technological revolution where constraints among physical, digital, & biological realms are becoming diminished (Ross & Maynard, 2021). Today’s society and infrastructure have gone through changes in preceding three Industrial Revolutions. The First wave harnessed use of steam and water for powering machines and structures, while the Second utilized electricity to introduce mass production. Lastly, the Third wave saw personal computer creation and internet and was therefore referred to as the “Digital Revolution”. The Fourth Industrial Revolution will be characterised by an advancement from its predecessor by capitalising on the availability of digital technology introduced during the Digital Revolution. Five years back, the technology existed, but it was regarded as very futuristic and was not quite ready for being commercialised on a mass scale. The Fourth Industrial Revolution heralds drastic changes in the lives of employees, companies and public at large (Ross & Maynard, 2021). It has been observed that in particular, occupations with routine tasks are the most vulnerable to computerization and up to fifty percent of jobs may become obsolete over the coming decade (Kolade & Owoseni, 2022). Contemporary era uses AI, IoT, & Big Data for creating more effective systems. It leads to optimization of productivity and necessitates changes in skills of the workers (Maria et al., 2025). As per the World Economic Forum’s Future of Jobs Report, some of the key skills that the future labour market will demand include analytical thinking, active learning, and technology utilisation (Resh et al., 2025). Also, AI technology carries the values and biases of its creators, which creates ethical and social issues that affect organisational culture. The AI-driven

automation of repetitive tasks in organisations can help to simplify work, increase efficiency, and allow workers to concentrate on tasks that add value. Also, AI technology carries the values and biases of its creators, which creates ethical and social issues that affect organisational culture. The employees may feel insecure because of the introduction of technology into the workplace, as they fear that their jobs are at risk, while the employees' unawareness of the AI technologies may increase these fears. To implement AI technologies, an organisation needs to have certain special skills. Lack of experience and knowledge in these fields will create barriers for implementing AI projects and interpreting results of AI technologies for an organisation (Murire, 2024). This has led to debate about the reallocation of jobs as well as the need for learning new skills (Maria et al., 2025). With the never-ending process of acquiring knowledge and advancements in technology, social development can take place much faster. However, it must also be noted that there is another way in which it has helped bring about economic inequalities among individuals because of what has been termed as “skill-biased technological change” (Santoso, 2015). From the comparative analysis, it is clear that the manufacturing and retail industries suffer the most from job displacements because of automation, while industries like healthcare and Education have more job creation. It is clear that AI adoption creates huge changes in labour markets as job displacement and job creation happen simultaneously (Maria et al., 2025).

Conceptual And Theoretical Framework

Understanding Artificial Intelligence in the Workplace

There have been major changes in the discourse on the AI implications on employment since the emergence of generative AI, especially since many tasks that entail language processing, content generation, and analysis are within the capabilities of AI (Resh et al., 2025). The integration of AI has proved revolution, changing work practices in organisations forever . As technology continues to advance, organisations are employing AI to systematise tasks, augment determination, and foster progress (Murire, 2024). By AI-based workplace inclusion we mean the incorporation of AI into organizational processes to achieve workplace inclusion (Lazazzara et al., 2025). The definition of Artificial Intelligence (AI) refers to capacity of machine to replicate the individual's capacity to perceive the environment, make deductions, and communicate (Ramaswamy, 2018). One of the fundamental elements of the fourth wave of industrial elements is AI as the means that helps facilitate the evolution and upgrade of the digital economy sector. In collateral to development of the technologies of AI technologies, few organisations have been driven to quicken the speed up their “machine replacement” process and replace their employees with robots for carrying out repetitive and standardised work. Consequently, in a machine-to-machine form of labour organisation, unskilled occupations would vanish, and there would be newly created occupations and occupations not yet realised today. From the time that machines have appeared as the means of labour, they have started competing with labourers themselves (Shen & Zhang, 2024). Whereas Machine learning (ML) is an application of AI through which machines learn from experience (Howard, 2019). It forms the base level, consisting of algorithms which detect patterns within the data sets and provide probabilistic outputs without any program being written to perform a task (Tanoy, 2025). While many improvements in terms of the management of employees are expected due to the use of AI in the HRM of organisations, scientific literature shows that AI in the sphere of HRM mostly reinforces biases already present rather than eliminates them. In addition to particular activities of HRM, including recruitment, the notion of AI-based workplace inclusion is poorly researched in terms of theory. The current status of AI application in HRM entails a phenomenon known as inclusion blindness, which refers to the adoption of innovative technology in a manner that disregards its different implications regarding workplace inclusivity. The decisions of AI HRM systems are considered to be less fair than those made by people, particularly in cases where employees see the adoption of such systems as an effort to reduce costs instead of making things fairer. The confluence of AI and workplace inclusion is a topic which has been greatly neglected yet highly significant for current organisational studies (Lazazzara et al., 2025).

Automation, Augmentation and Substitution

Automation is associated with innovation and implementation of new technologies that make it possible to substitute capital for labour in various activities. The activity of production workers is getting affected due to the emergence of industrial robots and other automated equipment. Tasks that are currently done by white-collar

employees working in some professions are getting automated through specific software and artificial intelligence (Acemoglu & Restrepo, 2019). Overall, automation (computerization, introduction of robots and artificial intelligence) impacts mainly on routine work in a stationary and predictable environment, which is usually in middle skilled work whenever the task involves just rule application, and not cognitive analysis of information. Technological substitution of jobs does not lead to displacement of low-skilled tasks but routine tasks (Vermeulen et al., 2018). Whereas The term augmentation denotes the combination of the power of the AI and human intelligence for synergy, which helps to make effective decisions and improve efficiency. While in the case of substitutivity, it involves the replacement of human intelligence, augmentation focuses on collaboration with machines to enhance the capabilities of the human mind. In augmentation, humans need to change their approach to a certain job role in the context of understanding the implementation of AI. (Resh et al., 2025). An increase in the productivity of the task performed by an individual means that there are other organizational implications as well (Tschang & Almirall, 2021). Such an approach in AI emphasizes the imitation of human intelligence or making substitutes for human thinking in scenarios where human thinking is not highly valued. Deploying substitutive AI is common in simple tasks in areas like data entry and customer support services (Resh et al., 2025). The arrival of AI technology can impact existing labour and employment in two ways. These are known as internal and external effects. Internal effects pertain to changes in skill demand in occupations which are linked to AI activity, while external effects relate to other impacts that emerge from differences in AI demand between organizations and geographical regions (Mäkelä et al., 2024). This creates an irony which necessitates that AI technology effects be explored using a comprehensive approach (Chhibber et al., 2025).

Concept of Job Security

The concept of job security is perceived to be a traditional source of security among employees and employment relations (Zekic, 2016). Job security refers to "…staff remaining employed with a company without any reduction of seniority, salaries, pension benefits, and other such aspects". Indeed, the employees tend to quit the workplace whenever their employment is insecure. Job security, in effect, is an important aspect not only to the employees but also to the employer since it ensures that existing employees are retained and recruiting cost is minimized (Al-Harthy & Yusof, 2022). Whereas Employment security was first employed by the International Labour Organisation in the year 1994 within one of their reports. In their reports, the organisation stated that "Employment security involves having protection against arbitrary and short notice dismissal from employment as well as long term employment contracts and non-casual employment relations" (Borghouts-van de Pas, 2012). Labour policy is becoming more and more interested in the concepts of employment security and employability these days. The latter one, defined as safeguarding employment with one particular employer. Both of these concepts are used widely and often advocated as the job security alternatives. Actually, both of these concepts of job and employment security may be described as ambiguous, as well as even elusive ones. There are no definite (legal) definitions (Zekic, 2016). Whereas Income security is all about the protecting income in cases, where there is a discontinuation in employment (Borghouts-van de Pas, 2012). Effective transitions between employment are essential within a globalizing and rapidly transforming economy that demands quick reactions from the governments of nations, firms, and workers (Borghouts-van de Pas, 2012). It becomes clear that the concept of security of workforce engagement relates to the very essence of labour and employment law (Zekic, 2016).

Technological Retrenchment

The emergence of AI technology is bringing about far-reaching changes that necessitate adaptation and adjustment by organisations. Despite being highly regarded because of its potential to modernise and automate processes within businesses, AI could be behind job displacement, especially of low-skilled jobs (Baloyi et al., 2026). Technological Unemployment in the Age of AI is a situation whereby technological progress is such that the skill set of the workforce is unable to cope with new demands, and organisational structures and institutions have failed to keep up with technological developments (Krutova et al., 2022). Technological unemployment is described as "unemployment as a result of our ability to economize on the engagement with work exceeding the ability to establish new engagement with work (Lima et al., 2021). No existing publication is conceptualizing job displacement, which is basically the process of job loss or replacement subsequent of AI adoption. Despite, job displacement has lately become one of the key topics in academia due to the increase in interest in the issue of job

displacement in the job market, the problem of defining it has not been properly addressed. Job displacement is defined as “the loss of employment resulting from external conditions that render specific skills and occupations obsolete”. In other words, taking the definition into account, it can be said that the process of automation of some processes performed in the organization becomes the core of job displacement (Baloyi et al., 2026). The other issue that is considered among the most important in the 21st century is technological development. This development will give rise to consequences in the labour market. This process can take place gradually, which makes it hardly noticeable for a careless person (Lima et al., 2021).

AI, Automation And The Indian Labour Market

Mankind is on the threshold of entering the fourth wave of industrial revolution, where emerging technologies would lead to the development of high-end applications like social robots, self-driving cars, and so forth. On one side, there are studies indicating the rate at which the introduction of new productivity technologies causes job losses may be faster than man can find new ways of employing the unemployed (Vermeulen et al., 2018). The AI influence in employment in India is multidimensional. Firstly, automation through AI technology is making low-skill or low-tech jobs redundant, especially those jobs in industries like call centers, data entry, accounting, recruiting process, and basic content creation. Jobs like data entry, administrative tasks, call center jobs, accounting, and manufacturing jobs were becoming increasingly susceptible to automation. Research done in 2025 showed that almost 38% of low-skill urban jobs in India were at moderate to high risk of automation in the coming decade (Kumar, n.d.). Applications of AI are applied in different industries for the purpose of optimizing workflow, automation, and improved decision making. The robotics industry has brought about the application of chatbots that facilitate human-to-human interaction in the digital era, showing the dynamics of collaboration between humans and robots as well as robots and robots in the workplace. The education industry is undergoing a paradigm shift that concentrates on speeding up skill development using AI (Babashahi et al., 2024). There is a paradigm shift taking place within the BFSI industry in India due to the fast-paced adoption of artificial intelligence (AI). This technology brings about automation, predictive capabilities, and personalized financial services. The consumer goods and retail industry is witnessing a revolution because of the automation, personalized marketing, and supply chain management brought about by artificial intelligence. Within the logistics industry, there is automation of inventory management, demand forecasting, and route optimization. In addition, analytics brought about by AI help in making informed decisions (Veeranan, 2026). There are also major developments in the retail industry where AI is being applied to inventory management, automated checkouts, and sales predictions. AI is revolutionizing retail industries as it provides businesses with an opportunity to be more customer-oriented and operational-efficient. Companies like Flipkart, Amazon India, Reliance Retail, and BigBasket are employing AI to understand the customer's needs and preferences, offer product recommendations and forecasts as well as optimize their delivery routes. With the increasing trend of online retailing in Tier-2 and Tier-3 cities, AI technologies that help in dealing with regional languages and hyperlocal logistics have given rise to micro-entrepreneurial opportunities, particularly for delivery agents, influencers and small-scale entrepreneurs who sell their products through digital platforms. Manufacturing industry is also making use of AI in quality control performed by smart machines and sensors. Manufacturing industry has routine, predictable tasks that can be efficiently completed with the help of AI and robotics. Jobs such as assembly line worker, first class controls inspector or even a machine operator can be substituted through AI machinery which will be capable of working continuously, reducing costs and eliminating human mistakes (Soueidan & Shoghari, 2024). The transport industry is set to be disrupted by the emergence of driverless cars, drones, and other intelligent transportation solutions based on artificial intelligence (Kumar & Jain, 2025). In administrative services, positions such as Clerical work, especially those involving data entry and simple customer service, are unexpectedly vulnerable to replacement by artificial intelligence. Tasks such as scheduling, customer inquiries and handling of customer information can be automated using AI (Soueidan & Shoghari, 2024). There is a report that the Indian IT companies like TCS, Infosys, and Wipro have downsized their employees to more than 60,000 people. In May 2023, it is estimated that around 4,000 jobs of IT professionals were cut due to AI (Sharma et al., 2025). In administrative services, positions such as Clerical work, especially those involving data entry and simple customer service, are unexpectedly vulnerable to replacement by artificial intelligence. Tasks such as scheduling, customer inquiries and handling of customer information can be automated using AI. (Soueidan & Shoghari, 2024).

However, in India, about 86% of workers doing unskilled or low-skilled labor would be exposed to highly vulnerable outcomes as a result of automation (Behera & Nigam, 2025). Fourth wave of Industrial Revolution is all about leveraging AI ability for making transition from a conventional factory to a smart production facility (Kumar & Jain, 2025). Having just educational qualifications is not enough to get hired in AI-driven industries anymore. There is a need for having specific technical competencies, including programming, machine learning, cloud computing, big data analytics, cybersecurity, prompt engineering, and training of AI models (Kumar, n.d.). Managing this transformation will depend on reskilling and upskilling. The workers have to be given learning pathways that will enable them to shift from their precarious jobs to resilient ones. This automation process minimizes the reliance on labor-intensive work, but at the same time creates a need for skilled jobs like automation engineers and robotics programmers (Kumar & Jain, 2025). Digital technology is advancing faster than the skills of organizations and workers. Automation is reducing the requirement of skills of people in the mid-level range but increasing their requirement for variation of skills. Lastly, technological deployment takes on an exponential form, the workers may not be able to retrain their skills sufficiently fast **(**Lima et al., 2021). However, on the bright side, AI has created an increasing demand for skill sets (Rahman & Mehnaz, 2024).

Job Loss, Just Transition And The Distribution Of Technological Risk

Economic Consequences of AI-Induced Job Loss

The Nobel Prize winner in economics, Herbert Simon, said in 1956 "Within 20 years, machines will be able to do everything that men can do". This statement means that modern technology will put an end not only to all blue-collar jobs but also to many other types of employment (Ernst et al., 2019). Another trend that has taken place in the US and Europe in connection with this is the "polarization" of labour force across different skill categories and income inequality among three categories of skilled labour. "Polarization" is referred to as an increase in the number of high-skill and low-skill jobs together with a decrease in the number of middle-skill jobs (Ramaswamy, 2018). The widening gap between educated individuals and uneducated ones is known as the polarisation of work and skills. The job polarisation will continue in the case of high skilled work and tasks because of the increase in tasks that can be automated (Behera & Nigam, 2025). However, there are three main aspects that would affect the effect of the adoption of a widespread AI technology on jobs and wages. They include capital supply flexibility versus labour, substitution elasticity between capital and labour and the type of technical change that the adoption of the technology generates either capital augmenting or labour augmenting. Skilled labour has lower elasticity compared to unskilled labour, and this is one of the reasons for the higher wages of skilled labour. Substitution flexibility between capital and labour causes reduction in demand of labour upon adoption of new technology (Ernst et al., 2019). Whereas in wage polarization, Income inequality may even be made worse through unequal distribution of the advantages of AI. In a global perspective, nations that are fast developing but have many low-skill jobs will be highly affected (Soueidan & Shoghari, 2024). Productivity, according to Paul Krugman, is not everything but in the end, productivity is almost everything. A nation's capacity to enhance the standards of living depends upon the capacity of a nation to increase the output per worker, which encompasses the labour needed for manufacturing various items such as pencils, paper, food, clothes, and weapons. Because of the advancements in technology, educated workers earn more, while uneducated workers earn less or remain stagnant (Behera & Nigam, 2025).

Social and Psychological Consequences

Rapid advancements in generative AI, robotics process automation, and algorithmic decision-making pose ever more complex problems for the workforce (Sharma et al., 2025). Since job security causes employees to fear the probability of being unemployed, it may be psychologically challenging for workers. Based on the Jahoda's model of potential deprivation, work contributes to the material and social satisfaction of employees, hence acting as a platform of self-development. In case employees are dismissed from their companies, and this is done unwillingly, then they will not be able to satisfy themselves. Despite the fact that previous studies indicate that job security is not associated with unemployment, the work-stress theory indicates that the reason behind employee anxiety is the anticipation of stress and roles-related events (Zhu, 2023). Job Insecurity can have negative impacts on employees' job satisfaction, job involvement, organizational commitment, trust, turnover intention, and health

(Lee et al., 2018). Unemployment is usually characterized by a loss of income, status, social network, and identity which are key factors in maintaining good psychological health. Research has also revealed that technology-induced job loss causes more psychological distress than traditional job loss due to the perception of being inevitable and irreplaceable because of automation. A number of people felt a shock or disorientation, stressing the point that unemployment is not just the end of employment but a great disturbance of their self-identity and reality. The job loss because of the development of AI technology was not only seen as a professional problem but also as the destruction of their identity. People talked about waking up every morning feeling scared or worried about their future. This is a clear symptom of anticipatory anxiety. People constantly feel the anxiety and have repetitive thoughts about the insecurity of the situation, about the skills becoming irrelevant and the inability to find employment. People distanced themselves from their social and professional network not due to anger but because of shame and exhaustion (Sharma et al., 2025). The notion of technostress is gaining more recognition recently as it means the psychological stress caused by the introduction or presence of new technologies (Sharma et al., 2025).

Unequal Effects of Technological Change

Innovation has been viewed as an important variable that has helped determine economic growth and prosperity. Waves of previous automation due to progress in the area of information and communication technology have been found to favor high-skill workers by displacing low-skill workers and facilitating sophisticated skill worker practices (Behera & Nigam, 2025). These people may not necessarily be able to enjoy any sort of complementarity with capital, especially if their skills do not suit the needs of developing any new application for AI (Ernst et al., 2019). Age discrimination in the workplace has resulted from AI-driven employment transitions. Younger people who are adept at AI have an easy time coping with the changes brought about by AI. Conversely, older people find it difficult to learn new skills (Maria et al., 2025). The AI skills gap was seen by 84% of respondents as a major issue. Most people do not possess enough technical knowledge for jobs in AI-enabled industries, which makes it difficult to shift careers. This is especially the case in more traditional industries, where workers have little interaction with digital technology (Maria et al., 2025). The comparative analysis further reinforces this conclusion by demonstrating that sectors where there are higher levels of AI adoption. Although its adoption may be favourable, it requires huge efforts in terms of upskilling and digital literacy. Moreover, the trend analysis proves this idea as the analysis reveals that the trends in job creation are rising, but the capacity of the workers to adopt those jobs in connection with AI is lagging behind. Although jobs created due to AI have risen by 55%, (Maria et al., 2025). The primary policy approach to deal with AI implications in favour to labour market i.e. enhancing worker's skills in order to work in partnership with AI and retraining those displaced from their jobs to take up new jobs. The labour market researchers have found some skills in greater demand during the process of adoption of AI. These include, not only educational and training expansion, but also skills that are complementary to AI. Some socioemotional skills are also gaining more value due to automation of routine analysis tasks (Tanoy, 2025).

Legal Framework Governing Retrenchment In India

In general, it is stated that all central and state laws had to be aligned in accordance with the Constitution, as it is every nation's ground norm required to be followed. If any of the rule, regulation or law is not established in accordance with the Constitution, it is derogatory as per Article 13 (Constitution of India, art. 13). Article 14 which states that, "The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India" acts as an important tool to prevent any kind of discriminatory algorithms in hiring and firing (Roy, 2025). In cases where AI systems are fed with data that is discriminatory in nature, it poses a danger to the perpetuation of systematic injustices and thus violates the constitutionally mandated principle of non-discrimination (Sujith & Dinkar, 2025). As an essential component of the fundamental right to life and dignity, under Article 21 which states that "No person shall be deprived of his life or personal liberty except according to procedure established by law", the right to livelihood may be regarded as the most important constitutional safeguard against technological retrenchment (Roy, 2025). Section 19(1)(g) confers that "All citizens have the right to practise any profession, or to carry any occupation, trade or business" that provides for the right to engage in any profession is also instrumental in protecting occupational rights of workers against any abrupt threat arising

from automation without fair process (Kumar & Kuar, 2025). The DPSPs support these rights. India's State has a duty according to the Indian Constitution to take care of its workers. This duty of the State to create these laws has been made clear in Part IV, which covers the Directive Principles of State Policy ("DPSP") (Ramaswamy & Binnuri, 2023) Article 41 states that the State shall strive to secure the right to work and means of livelihood in case of unemployment (De Oliveira, 2026). The idea of introducing an "Algorithmic Due Process" (ADP) standard has been suggested as an obligatory requirement of the Constitution for automated management (Gudla, 2025). Retrenchment is an approach that seeks to decrease organizational expenses and obligations through such means as layoffs, sale of assets, and other ways of reducing the business scale (Achbah & Rouchon, 2026). Before the enactment of the Industrial Relations (IR) Code, there have been several labour laws regulating the rights of workers where Industrial Disputes Act 1947 defined retrenchment. According to section 2(oo), 'retrenchment' can be defined as 'the termination of the services of the employee by the employer for any reason not related to an act of misconduct of the worker'. However, this does not involve the situation of a worker resigning from work either voluntarily or being terminated from his services on the basis of his age or reaching retirement age. In other words, the termination of the employee's services cannot be due to any reason such as (a) employee-specific retirement; (b) employee-superannuation related retirement in case the employment contract had its respective provisions in that regard; or (c) termination of the employee based on any provision in the employment contract regarding the termination of employment (Industrial Disputes Act, 1947, s. 2(oo)). In *State Bank of India v. N. Sundara Money*, it was held that the "termination of employment, even if it occurs automatically by efflux of time, falls within the definition of retrenchment, as the statute's language "termination...for any reason whatsoever is broad and inclusive". Consequently, the court affirmed that the defendant was qualified to retrenchment remuneration, and the appeal filed by the State Bank of India (SBI) was rejected (State Bank of India v. N. Sundara Money, 1976). Court focused on liberal significance of "retrenchment" in order not to allow the employers to use any methods in order to ensure the legal provisions. Under new provisions, the provision for retrenchment, when the government permission is required, remained the same at 100 employees. However, the same threshold can be altered via a notification. Thus, it gives more flexibility to the employers when they want to terminate the employment relationship. Presently, when there are more than 100 employees, government permission is required for retrenchment (Kumar & Talukdar, 2021). Section 2(zh) from Industrial Relations (IR) Code, 2020 defines it as "termination by the employer of the service of a worker for any reason whatsoever, otherwise than as a punishment inflicted by way of disciplinary action, but does not include

[1] voluntary retirement of the worker; or
[2] retirement of the worker on reaching the age of superannuation; or
[3] termination of the service of the worker as a result of the non-renewal of the contract of employment between the employer and the worker concerned on its expiry or of such contract being terminated under a stipulation in that behalf contained therein; or
[4] termination of service of the worker as a result of completion of tenure of fixed term employment; or
[5] termination of the service of a worker on the ground of continued ill health" (Industrial Relations code, 2020, s. 2(zh)).

The Adequacy Of Indian Labour Law In Regulating Ai-Driven Technological Retrenchment

In Post Covid era, Indian Labour Laws comprising of Industrial Relations (IR) Code of 2020 provides definition to retrenchment i.e. limited traditional method. It neither comprises technological retrenchment in the definition clause or in the explanation of any other sections available in the code. From the beginning of 2025 where different AI companies launched there super capable models terminating routine and cognitive works, Recruiters are much focused for having a employee or worker with AI fluency at the final phase of recruitment. Due to sudden release of different categories of AI models with change to responsibilities at the workplace and reduction of working hours, Junior employee have to pivot from the existing role to a different at a different job market. For skilling up existing employees, employers have a responsibility to provide funds to employees for courses related to enhancement of duties at workplace. Such funds will also assist in future employability of the employee. Accessibility to AI education and training is one of the major obstacles to bridging the AI skills gap. The current educational system has not adapted to integrating the new AI and automation knowledge. Most of the university

courses tend to focus on traditional aspects of business and engineering but do not include AI ethics and automation (Maria et al., 2025). In the end, however, the first and foremost issue is going to be the labour/skills shortage. According to the latest Forbes report, almost 40% of the core skills required for virtually any occupation will become obsolete, whereas more and more businesses are already citing skill shortages as one of the key impediments for organisational growth. One of the main factors in this regard is the ever-present skills mismatch; there is a significant number of employees who do not have enough education, training, or skills to work in modern industries. Research has indicated time and time again that a sizable share of educated young Indians cannot find work because of a skills mismatch. Finally, India's main economic problem is going to be related to this transition, since the country needs to retrain its workforce in order to leave redundant manual occupations behind and enter the "unlimited avenues" of the high-skill economy (Aditya et al., n.d.). The four labour codes neglect a legal loophole, codes define a framework for termination of employment assuming conscious human intervention, making AI terminations non-existent from legal perspective whilst leaving employees without procedural protections. In addition, it has been noted that artificial intelligence has shown bias on the basis of gender during hiring and compensation, however, the codes assume that the unfairness is voluntary and deliberate, thus non-existent ('The Invisible Algorithm', 2026). As AI annotation companies view their annotators as third party contractors or gig workers, they have been intentionally deprived of being considered employees according to Industrial Relations (IR) Code 2020.Aforementioned amendments are called as an innovative move by the government towards minimum wage laws and social security across the board, closer scrutiny shows that the Codes are still tied down to the physical realities of the industrial era (Singh, 2026).

International And Comparative Approaches

European Union

The rapid rate of development that AI is undergoing, together with the use of Algorithmic Management (ARM), Cloud Computing, and Machine Learning, has sparked much interest in relation to how AI will shape the future of work (Wright, 2025). Artificial Intelligence Act (AIA) of European Union, the first comprehensive regulation that addresses artificial intelligence (AI), even in hiring, and harmonizes regulations concerning AI. It is regarded as a global benchmark, being built on the strengths of the EU's internal market and impact beyond borders (Rigotti et al. 2026). "It is forbidden for AI to be involved in marketing, implementation procedures, or the processing of AI systems that aim to determine a person's feelings in the field of employment and education. However, this restriction does not apply if the AI system is to be used or sold for any medical or safety purpose" (Regulation (EU) 2024/1689, 2024, art. 5). "Artificial Intelligence systems designed for the purpose of recruitment or selection of individuals, especially for creating targeted job announcements, assessing and filtering applications, and evaluating people" and "AI systems have been developed to assist in making decisions concerning the conditions under which work-related relationships are established or terminated and for the purpose of assigning tasks on the basis of individual behaviour or personal characteristics of individuals" are the high risk AI systems (Regulation (EU) 2024/1689, 2024, Annex III, point 4). Notably, the Act implicitly acknowledges that it serves as a minimum protection standard for AI in the workplace, as evident in article 2(11), which states: "The Regulation does not prohibit the Union or Member States from continuing to apply or establishing laws, regulations, or administrative provisions which are more favorable for the workers in protecting their rights in relation to the use of the AI systems by the employers or encourage or allow the implementation of collective agreements which are more favorable to the workers" (Regulation (EU) 2024/1689, 2024, art. 2). Article 86(1) clearly applies to AI systems in the workplace as it states that, 'any affected person subject to a decision which is taken by the deployer on the basis of the output from a high-risk AI system listed in Annex III...shall have the right to obtain from the deployer clear and meaningful explanations of the role of the AI system in the decision-making procedure and the main elements of the decision taken' (Minotakis, 2025).

United States

AI implementation in the United States (US) has gained momentum in recent years owing to huge investments made by private and governmental entities in this sphere. The regulatory environment of AI in the US is changing, since policymakers try to keep up with technology development. The main emphasis of regulations is made on

the lawful AI use, protecting users' privacy, and unemployment problem because of automation (Adhikari & Hamal, 2024). Today, algorithms are used in various sectors of activity to make decisions. Algorithm implementation within evaluation created new kinds of discrimination that remain concealed in the algorithms, although to some extent it may reduce the subjectivity of the human decision. As stated in the U.S. government, the principles that form the equal protection clause can be applied both to the algorithmic and to the traditional discrimination. It is possible to conclude on the analysis of relevant U.S. legislation and state courts' decisions that algorithmic discrimination is regulated by the principle of equality that does not allow any discrimination in general. For instance, U.S. legislation requires that the Fair Credit Reporting Act and the Civil Rights Act be observed in making decisions based on big data and algorithms (Wang et al., 2024). AI deployment in recruitment shall represent consistency with all applicable employment alongside anti-discrimination laws. In United States, Prohibition of employment discrimination under Civil Rights Act, Americans with Disabilities Act (ADA), and Equal Employment Opportunity Commission (EEOC) regulations apply to AI systems for recruiting candidates. In the U.S., the EEOC developed an initiative on AI and Algorithmic Fairness investigating instances in which automated recruitment tools could cause discrimination of disabled individuals. The regulatory approach to automation in hiring is rather fragmented and uses civil rights and labour laws already in place. For example, the EEOC released algorithmic fairness guidance whereas Illinois has its AI Video Interview Act and Local Law 144 of New York for automate decision tools in the employment context. Federal regulation on matter does not exist and relies on innovation and self-regulation (Oluwasheyi, 2025).

Suggestions

With respect to the fast-paced Artificial Intelligence progression and automation systems, legislature intervenes promptly in order to overcome the mismatch between the development of technologies and the protection of workers. Indian labor law needs to amend the retrenchment provision in such a way that technological retrenchment will be included in the list of reasons for retrenchment in accordance with the Industrial Relations Code, 2020. Currently, the retrenchment definition does not cover the case where an employee gets retrenched due to an AI-based workflow.

Under revised model, there must be an explicit responsibility put on employers to take reasonable measures to help reskill or upskill workers who would otherwise lose their jobs. The responsibility should be reasonable in relation to the financial muscle of the employer, but should not be taken as being just a voluntary corporate effort. Employers who introduce artificial intelligence technology must have a workforce transition plan that identifies the jobs that would be impacted by the new technology, what skills would be needed for the new jobs, duration and means of assessing the employees after training. This is necessary since workers would simply decline to learn new skills because of the cost of training, age, disability, language and regional factors.

Automated decisions for hiring, promotions, assessments of employee’s work, salary determination, disciplinary actions, or firing are not acceptable without any human involvement in the process. If the decision is high risk, the employer should do an impact assessment beforehand, keep a record of the information used, and regularly test the system for discrimination. Workers should be notified about the reason of making such decisions.

The legislature should have regulations that apply to specific sectors while ensuring the provision of fundamental rights for all employees. There is the possibility that in certain sectors like the financial sector, education, healthcare or the public sector, there could be a need for human intervention as the decision taken by the artificial intelligence system will not only affect employment but also public interest. The application of a sectoral approach will ensure that regulation becomes easier than depending on general principles.

Women, aged people, people with disabilities, migrant workers, unskilled laborers and laborers working in the informal sector can find less opportunity for skill development. Sector-specific data should be collected by the state regarding job losses due to artificial intelligence to determine whether AI is affecting the disadvantaged or not. There should be greater social security measures, welfare boards, injury compensation as well as grievance redressal for such workers.

The employer must be subjected to an obligation to take into account redeployment and job training before the retrenchment process through automation. The worker should not become redundant due to automation of the worker's current job role. This will acknowledge the fact that security of employment amidst the rise of algorithmic governance does not imply preserving every job role but rather the provision of opportunities to remain economically active in the society.

Conclusion

The Development in modern technology and Introduction of AI systems within Job market, affected human life in enormous segments. Routine or cognitive workers or entry-level positions have the highest probability of getting replaced with AI, leading to a new concept of AI-driven retrenchment. Indian labour laws recognise traditional method of retrenching an employee and do not recognise the involvement of AI at the workplace. Whereas the United States of America and European nations allow limited usage of AI at the workplace with a human employee behind it, they also state that AI in these places is at high risk because it creates a risk of discrimination among employees who are about to get recruited in this new generation.

To pace up this regulatory gap with the artificial intelligence era, the Industrial Relations Code must be amended to preserve human dignity towards their urge to work and livelihood. By bringing amendments to this code, there will be stability in the multiplicity of legal proceedings concerning such a category of retrenchment, a definition of AI-driven retrenchment, assistance for job transition to vulnerable workers and obligating the state to provide funds to such workers for skilling. These reforms might assist India as a nation to stay at a competitive advantage to address upcoming ethical AI issues related to employment perspective.

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