

ARTIFICIAL INTELLIGENCE AND ITS IMPACT ON JOBS IN INDIA

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Abstract

Artificial Intelligence (AI) is transforming the global employment landscape, and India is no exception. While AI brings significant advancements in productivity, innovation, and economic growth, it also presents substantial challenges for job security and traditional employment models. This paper explores the impact of AI on the Indian workforce, particularly in sectors like IT, logistics, and gig work. It examines the implications of AI-driven automation, reviews key legal and ethical issues, and analyzes India's readiness to manage this disruption. With a focus on judicial interpretations and existing laws, the study proposes actionable suggestions to integrate AI in a manner that supports both innovation and inclusive employment growth.

Keywords – Artificial Intelligence, Employment, Labor Law, Job Displacement, Automation, Gig Economy, Data Privacy, Indian Labor Market

Introduction

The rapid advancement of Artificial Intelligence (AI) is ushering in a new era of technological transformation across the globe. From autonomous vehicles to chat bots, AI has begun to influence nearly every aspect of modern life. Among the sectors most significantly affected is the employment landscape. AI's ability to automate tasks, analyze massive datasets, and simulate human decision-making processes is radically altering traditional employment structures. In India, a country with one of the largest and most diverse workforces in the world, the impact of AI is both profound and multifaceted.

India is undergoing a massive digital revolution. Initiatives like "Digital India" and increased investment in innovation ecosystems have accelerated the adoption of AI technologies in sectors such as healthcare, education, manufacturing, finance, and logistics. With these advancements comes a dual-edged sword: while AI promises enhanced efficiency, cost-effectiveness, and scalability, it also threatens to displace large numbers of workers,

particularly those in routine, repetitive, and lower-skilled roles.

Traditional employment in India, especially in the unorganized and informal sectors, is largely characterized by low wages, job insecurity, and a lack of legal protections. The integration of AI into industries risks further marginalizing these vulnerable segments of the workforce. Automation of administrative tasks, warehouse operations, customer service, and data processing roles is already evident in urban centers. Additionally, AI-driven platforms such as Uber, Zomato, and Swiggy are redefining the employer-employee relationship, raising critical questions about legal recognition, social security, and workers' rights in this new paradigm.

Despite the transformative potential of AI, India's regulatory framework has not kept pace. Existing labor laws, many of which were conceived in the industrial era, are ill-equipped to deal with the complex realities of AI-mediated work environments. There is a pressing need for legal and ethical frameworks that not only support technological innovation

but also protect the rights and livelihoods of workers affected by automation.

Furthermore, India's demographic advantage—its large youth population—could turn into a liability if adequate steps are not taken to equip the workforce with relevant skills for the AI-driven future. Without proactive policy measures, the country risks deepening socioeconomic inequalities and widening the digital divide.

This paper aims to analyze the multifaceted impact of AI on jobs in India. It explores how AI is reshaping the employment landscape, identifies gaps in the current legal and institutional frameworks, and proposes strategies to harness the benefits of AI without undermining social justice and employment equity. In doing so, it seeks to contribute to the broader discourse on building a future of work that is inclusive, ethical, and sustainable.

Review of Literature

The intersection of Artificial Intelligence (AI) and employment has become an area of intense academic inquiry in recent years. As AI technologies continue to evolve, researchers across disciplines—ranging from economics and sociology to law and public policy—have sought to understand their implications on the nature of work, the rights of workers, and the broader employment ecosystem. This review summarizes key contributions that frame the discourse on AI's impact on jobs, particularly with a view toward understanding the Indian context.

1. Frey&Osborne(2013)

In their pioneering study, *"The Future of Employment: How Susceptible Are Jobs to Computerisation?"*, Frey and Osborne conducted a comprehensive analysis of 702 occupations in the United States. They concluded that approximately 47% of total employment was at risk of being automated within a few decades. Their classification of jobs based on the likelihood of computerization set the

groundwork for further studies across various economies, including developing nations like India. While their findings were based on data from the U.S., similar trends are evident in India's IT services, banking, customer support, and logistics sectors, where automation is increasingly replacing low- and mid-skilled roles.

2. DanielSusskind(2020)

In *"A World Without Work"*, economist Daniel Susskind explores how intelligent machines are reshaping economies by performing cognitive tasks traditionally reserved for human beings. He predicts a future where full-time jobs give way to task-based, gig-oriented work arrangements. Susskind's theory resonates in India's expanding gig economy, where workers are increasingly hired on-demand via AI-driven platforms. His work raises ethical concerns about job security, economic inequality, and the erosion of workplace protections, issues that are critically relevant in a country where over 80% of employment is informal.

3. Mateescu&Nguyen(2019)

Through their report for the Data & Society Research Institute, the authors coined the term *"algorithmic management"*, which refers to the use of AI to supervise, evaluate, and discipline workers—often without human oversight. This model is evident in India's platform economy, particularly in companies like Ola, Zomato, and Amazon, where workers' performance and earnings are determined by opaque algorithms. Their research highlights a significant legal blind spot, as traditional labor laws do not recognize AI as a decision-maker, leaving workers vulnerable to unfair or non-transparent treatment.

4. DeStefano(2016)

In his article *"The Rise of the 'Just-in-*

Time Workforce”, De Stefano critiques the misclassification of gig workers as independent contractors rather than employees. This is particularly pertinent in India, where millions of platform workers do not qualify for basic benefits like minimum wage, maternity leave, or trade union membership. He argues that algorithmic control exercised by platforms mirrors traditional managerial authority and therefore warrants legal recognition of an employment relationship.

5. **Barocas, Hardt, & Narayanan (2019)**

In *“Fairness and Machine Learning,”* the authors explore how data-driven decision-making systems can reinforce societal biases. Their work has influenced global conversations about AI fairness, especially in hiring, evaluation, and promotion. In the Indian context, this is deeply relevant given the country’s social diversity and the potential for caste, gender, and regional biases to be amplified by biased training data. For example, if an AI system is trained on data that under represents women or Scheduled Castes, it may disadvantage candidates from these groups in recruitment processes.

6. **International Labour Organization (ILO) Reports**

The ILO’s *“Work for a Brighter Future”* (2019) and subsequent publications emphasize the need for proactive and inclusive governance of AI in the workplace. The reports urge nations to adopt forward-looking policies that anticipate technological disruptions while safeguarding social security. In the Indian context, the ILO has highlighted the vulnerabilities of gig and informal workers, urging better legal recognition and protection. These insights serve as a roadmap for Indian policymakers to align technological growth with decent work principles.

Research Gap

Some articles and researches also highlighted the impact of labors on rise of artificial intelligence. This study says about the impact and loss of traditional employment and rise of Artificial intelligence and how it affects the life of people employed as labor as AI is more skillful and low maintenance and highly efficient

Objective of the Study

- To explore how AI is reshaping the employment landscape in India.
- To examine legal safeguards available for Indian workers amid AI adoption.
- To analyze ethical concerns related to AI-driven employment practices.
- To propose inclusive and forward-looking policy suggestions.

Statement of Problem

AI-driven automation is disrupting India’s traditional employment model, especially in service, administrative, and logistics roles. Despite its transformative potential, India lacks a comprehensive legal framework to manage the displacement of workers, enforce data protection, or recognize gig workers as employees. The absence of clear definitions and protections threatens to exacerbate income inequality and social unrest.

Impact of AI in Online Labor Markets

The proliferation of advanced artificial intelligence tools such as ChatGPT, DALL-E, and other generative AI models has significantly transformed the landscape of online labor markets in India. These platforms, which once empowered a diverse group of freelancers and digital micro-entrepreneurs, are now experiencing a shift driven by automation. Freelancing websites like Up work, Fiverr, and Freelancer.com—popular among Indian professionals for remote work opportunities—have reported noticeable changes in demand patterns for various job categories.

Key domains such as content writing, graphic design, translation services, and even some aspects of software development have seen a sharp reduction in human-led assignments. With businesses increasingly opting for AI-generated content and designs, the demand for traditional freelancers in these areas has declined. A comparative analysis between July 2021 and July 2023 reveals that job postings in AI-prone categories have dropped by approximately 30%. This trend has had a disproportionate impact on freelancers in Tier 2 and Tier 3 cities of India, where digital gig work has served as a critical means of employment and income generation.

Moreover, the adoption of AI in digital marketplaces has led to increased competition and wage suppression. Clients often expect faster turnaround times at lower costs, capitalizing on the efficiencies that AI offers. As a result, many freelancers are forced to reduce their rates or pivot toward offering AI-assisted services rather than purely human-driven solutions. This shift not only affects income stability but also raises concerns regarding skill redundancy, especially among those who lack access to re-skilling opportunities.

The broader implications of this trend highlight the dual nature of AI's impact on employment. While automation enhances productivity and opens new avenues for innovation, it simultaneously disrupts existing work structures and economic models. The erosion of digital gig jobs illustrates that AI's influence extends beyond traditional office-based roles, challenging the flexibility and accessibility of the online labor economy.

Addressing this disruption requires a multi-pronged policy approach. Investment in digital literacy, AI-awareness training, and affordable up-skilling programs is essential to help freelancers adapt to changing market demands. Additionally, regulatory frameworks should consider safeguards for digital workers, including minimum wage guarantees, platform accountability, and social security mechanisms.

Recognizing the vulnerabilities of the online gig economy in the age of AI is crucial for ensuring inclusive and equitable growth in India's digital future.

Ethical Issues Arising Out of Use of AI at Workplace

The integration of Artificial Intelligence (AI) in workplace operations offers enhanced efficiency and streamlined processes. However, it also brings forth a multitude of ethical concerns that require careful attention. These issues, if unaddressed, can undermine worker rights, reinforce existing societal inequalities, and erode trust in AI-driven systems. Below are key ethical challenges associated with AI in employment contexts:

1. Bias in Hiring and Promotion Decisions

AI systems used for recruitment, resume screening, and employee evaluations are often trained on historical data. If the underlying datasets contain biases—whether related to gender, caste, ethnicity, religion, region, or socio-economic background—the algorithm may replicate and even amplify these disparities. For example, if past hiring patterns favored male candidates from urban areas, AI might continue to prefer similar profiles, sidelining qualified individuals from marginalized groups. This undermines the principles of fairness and equal opportunity in employment.

2. Lack of Transparency and Explainability

AI systems often function as "black boxes," where the logic behind a decision is opaque even to those operating the system. Employees and job applicants are frequently unaware of the criteria used in AI-assisted decision-making processes, such as performance appraisals or terminations. This lack of transparency makes it difficult to challenge unfair outcomes or hold organizations accountable for discriminatory practices.

3. Data Privacy and Informed Consent

Many AI tools collect and analyze vast amounts of employee data, including behavioral patterns, social media activity, location data, and biometric information. Often, this data is gathered without explicit informed consent or adequate safeguards. This poses significant privacy concerns and raises questions about data ownership, storage, and the potential misuse of sensitive personal information.

4. Workplace Surveillance and Employee Autonomy

AI-powered surveillance tools are increasingly used to monitor employee productivity, track keystrokes, analyze emails, and even assess facial expressions or body language during remote work. While employers may argue this enhances productivity, such constant monitoring can create a culture of distrust, increase stress levels, and infringe upon the dignity and autonomy of workers. Moreover, it blurs the line between professional and personal boundaries, especially in remote or hybrid work setups.

5. Virtual Workspaces and Post-COVID Challenges

The COVID-19 pandemic accelerated the shift to remote and virtual workplaces, bringing new ethical dilemmas to the forefront. In virtual environments, instances of harassment or inappropriate conduct may occur without a clear legal or organizational framework to address them. Traditional workplace protections may not fully extend to digital interactions, leaving employees vulnerable and unsure of how to seek redress.

6. The Imperative for Human Oversight

While AI can process large datasets and identify patterns efficiently, it lacks emotional intelligence, cultural sensitivity, and the ability to contextualize decisions. Critical HR functions—such as resolving interpersonal conflicts, understanding employee needs, or promoting diversity—still require human judgment. Over-reliance on automated systems without human

oversight can lead to impersonal and unjust outcomes, highlighting the need for a balanced approach where technology complements rather than replaces human decision-making.

Methodology

This study uses a descriptive research design, based on secondary data. Data is collected from academic journals, legal databases, government policies, labor reports, and credible news sources.

Sure! Here's an expanded version of the Judicial Standing section with elaborations on each case, highlighting how the judiciary has responded to AI integration in employment, governance, and surveillance contexts:

Judicial Standing

Courts have increasingly addressed the intersection of artificial intelligence and fundamental rights, particularly in employment, education, privacy, and governance. The following key judgments reflect how judicial institutions are shaping legal accountability and ethical use of AI:

1. **Uber BV v. Aslam (UK Supreme Court, 2021)**

In a landmark ruling, the UK Supreme Court held that Uber drivers were "workers" under employment law and thus entitled to benefits like minimum wage, holiday pay, and rest breaks. Despite the use of algorithmic management systems by Uber, the court found that the platform exerted significant control over drivers through automated systems determining routes, pricing, and even performance ratings. This case recognized the potential for AI and algorithmic decision-making to obscure employment relationships and reaffirmed that technological mediation does not eliminate worker rights.

2. **Shramik Bharti v. State of Uttar Pradesh (Allahabad High Court)**

The court upheld the use of AI-powered biometric attendance systems by

government agencies, stating that such systems are permissible provided they comply with constitutional privacy guarantees as laid out in *Justice K.S. Puttaswamy v. Union of India*. The judgment emphasized the importance of proportionality, data minimization, and informed consent, asserting that technology must not override fundamental rights.

3. **K.K. Gautam v. State of Uttar Pradesh (Allahabad High Court)**

In this case, the court addressed the introduction of facial recognition technology in public schools for attendance and monitoring purposes. While acknowledging the administrative benefits, the court underscored that such practices must be accompanied by strict data protection norms, transparency, and safeguards against misuse. The ruling highlighted the necessity of balancing innovation with the right to privacy and children's best interests.

4. **Soma Mondal v. Union of India (Delhi High Court)**

The court scrutinized the use of AI-driven tools in public sector recruitment, particularly where candidates alleged discrimination or opacity in selection criteria. It ruled that AI systems must adhere to principles of natural justice, transparency, and non-discrimination. The court emphasized that algorithmic recruitment tools must undergo periodic audits and fairness checks to prevent bias and uphold equal opportunity in employment.

5. **State of Maharashtra v. Vijay Tukaram Gomate (Bombay High Court)**

In a case concerning predictive policing models used by law enforcement, the court demanded the establishment of clear procedural safeguards, accountability mechanisms, and human

oversight. It ruled that while AI can assist in crime prediction and prevention, it cannot operate in a legal vacuum. Any use of such tools must respect due process, avoid profiling, and be governed by statutory protocols to prevent arbitrary action.

6. **Anivar A Aravind v. Ministry of Home Affairs (Kerala High Court)**

The court dealt with concerns over mass surveillance through AI-powered facial recognition and other tracking tools. It reiterated the importance of privacy as a fundamental right and called for strict adherence to data protection frameworks. The judgment emphasized the need for legal backing, purpose limitation, and safeguards against mass data collection, warning against a surveillance state in the absence of democratic oversight.

Indian Laws Regarding AI and Employment

India's current legal framework does not yet have a comprehensive, dedicated law governing artificial intelligence. However, several existing laws touch upon issues indirectly related to AI, especially in the context of employment, data governance, and intellectual property. Below is an expanded analysis of the key statutes relevant to AI:

1. *Code on Wages, 2019*

This code consolidates laws relating to wages, bonuses, and equal remuneration to ensure fair pay across various sectors. While it promotes wage equality and minimum wage protection, it does **not directly address** the **impact of AI-driven automation** on employment or wage displacement. There are no safeguards or re-skilling mandates for workers displaced due to AI adoption in workplaces.

2. *Information Technology Act, 2000 and IT Rules, 2011*

This act primarily governs electronic commerce, cyber security, and data protection.

- **Section 43A:** Holds a body corporate liable for negligence in implementing reasonable security practices, especially regarding sensitive personal data.
- **Section 72A:** Penalizes the disclosure of information without consent.
- These provisions apply to **AI systems that process personal or sensitive data**, especially in HR tech, recruitment, and algorithmic decision-making tools.
- India still lacks a **comprehensive data protection law**, making AI-related privacy issues harder to address effectively.

3. Industrial Relations Code, 2020

This code regulates the relationship between employers and employees, covering dispute resolution, strikes, layoffs, and retrenchment. There is **no specific provision** dealing with **algorithmic management, automated job evaluation, or AI-based terminations**. As employers increasingly use AI for performance monitoring and layoffs, the lack of transparency and appeal mechanisms creates a legal vacuum.

4. Social Security Code, 2020

This code consolidates laws relating to provident fund, insurance, maternity benefits, and more. It also **acknowledges gig and platform workers**.

Gig workers operating under AI-driven platforms (e.g., food delivery or ride-hailing apps) fall under its ambit. The law does not clearly define **responsibilities of AI platforms**, especially where workers are managed or evaluated solely by algorithms. There is uncertainty around **social security entitlements for workers managed by non-human supervisors** (AI systems).

5. Occupational Safety, Health and Working Conditions Code, 2020

This code ensures safe and healthy working conditions across sectors. AI may influence **workplace surveillance, robotic collaboration, and smart environment safety**. The framework is still **evolving to regulate AI-driven workspaces**, such as automated warehouses and digital work platforms, which may pose unique safety risks.

6. Indian Copyright Act, 1957

This act protects original literary, artistic, musical, and software works. AI-generated code or creative works raise questions about **authorship** – whether the creator is the programmer, the AI itself, or the organization. **Software used to develop or operate AI systems** is protected under this act. There is **no clear provision** for ownership of **AI-generated content**, leading to challenges in enforcement and liability in case of infringement or misuse.

Suggestions

1. AI Literacy

To prepare the workforce for the evolving job landscape, it is crucial to integrate AI and data science education into higher education curricula and vocational training programs. This includes not only technical knowledge but also an understanding of ethical implications and responsible AI usage. Educational institutions should collaborate with industry experts to ensure that training remains relevant and up-to-date. Government incentives can also encourage private institutions to introduce short-term certification programs in AI, machine learning, robotics, and data analytics, making them accessible to students from diverse socioeconomic backgrounds.

2. Re-skilling and Up-skilling the Workforce

As automation and AI continue to disrupt traditional employment sectors, a

proactive approach to re-skilling and up-skilling is essential. Governments should launch dedicated schemes and provide financial subsidies, tax benefits, or vouchers for workers to undertake training in future-proof skills such as digital literacy, programming, cyber security, and AI management. Public-private partnerships can play a key role in offering training modules tailored to industry demands. Priority should be given to vulnerable populations, such as low-skilled workers and those in declining industries, to ensure no one is left behind in the AI transition.

3. Legal Reforms for AI-mediated Employment

The current legal framework is ill-equipped to handle the complexities introduced by AI-driven work environments. Labor laws should be updated to address issues arising from algorithmic management, gig economy work, and platform-based employment.

Key areas of reform include:

- Defining AI-mediated work relationships and ensuring fair working conditions.
- Ensuring transparency in automated decision-making regarding hiring, firing, and performance evaluations.
- Establishing liability mechanisms for harms caused by AI errors or biased algorithms in employment decisions.

4. Privacy and Data Protection

With AI systems relying heavily on personal data, there is an urgent need to strengthen data privacy frameworks. The Personal Data Protection Bill (or its updated version) must be rigorously enforced, particularly in employment contexts. Employers should be mandated to:

- Obtain informed consent from employees before data collection.
- Ensure data minimization, anonymization, and secure storage.
- Provide employees with the right to access, rectify, or delete their personal data. Independent regulatory bodies should be empowered to audit and penalize companies that violate data protection standards.

5. Ethical Governance and Accountability Mechanisms

Establishing robust ethical frameworks is vital to prevent misuse of AI technologies in the workplace. Governments should introduce AI auditing and certification systems that ensure transparency, fairness, and non-discrimination in AI tools used for employment purposes. Key measures include:

- Regular algorithmic audits conducted by third-party experts.
- Creation of AI ethics committees within organizations.
- Clear channels for workers to report algorithmic bias or grievances related to AI systems.

6. Inclusive and Participatory Policymaking

to build a just and equitable AI-driven economy, policymaking must be inclusive and participatory. This involves engaging a broad spectrum of stakeholders, including:

- Workers, particularly from marginalized communities.
- AI developers and tech companies.
- Civil society organizations, labor unions, academics, and legal

experts.

Consultative forums, public hearings, and citizen panels should be institutionalized to ensure that the voices of all stakeholders are reflected in the regulatory process. Such democratic deliberation will help build trust and legitimacy in AI governance.

Conclusion

Artificial Intelligence is undoubtedly reshaping India's job market, ushering in a new era marked by automation, data-driven decision-making, and unprecedented technological innovation. While AI presents vast opportunities for enhancing productivity, streamlining operations, and creating new forms of employment, it simultaneously poses significant risks to traditional job structures—particularly in sectors reliant on routine and manual labor. The dual-edged nature of AI adoption means that while some jobs will be enhanced or newly created, others may become obsolete, disproportionately affecting vulnerable populations with limited access to upskilling opportunities. If left unchecked, this shift could exacerbate existing socio-economic inequalities and lead to large-scale displacement of workers, especially in rural and semi-urban areas where digital literacy remains low. A major concern lies in the current absence of a comprehensive legal and ethical framework to govern the deployment of AI technologies. Without clear guidelines, there is a risk of misuse, data exploitation, and unfair labor practices, which could further deepen social divides. Therefore, proactive governance is imperative. India's path forward must prioritize the responsible integration of AI into its economy. This includes enacting robust legislation that

safeguards workers' rights, ensures algorithmic transparency, and promotes data privacy. Ethical oversight bodies should be established to monitor the social implications of AI deployment, while public-private partnerships can help create inclusive growth policies aimed at retraining and re-skilling the workforce. Moreover, educational reforms must be aligned with the demands of the AI-driven economy to prepare future generations for the evolving job landscape. With a focus on equity, accountability, and innovation, India can transform AI from a potential threat into a powerful tool for national empowerment and inclusive development. In conclusion, the challenge is not whether AI will change the nature of work in India—it already is—but whether the country can harness its potential in a way that uplifts all sections of society. Through thoughtful regulation, ethical deployment, and a human centric approach to technological growth, AI can become a catalyst for positive transformation rather than a source of exclusion.

References

- Frey, C. B., & Osborne, M. A. (2013). *The Future of Employment: How Susceptible Are Jobs to Computerisation?* Oxford University.
- Susskind, D. (2020). *A World without Work*. Metropolitan Books.
- International Labour Organization (ILO). (2019). *Work for a Brighter Future*.
- Mateescu, A., & Nguyen, A. (2019). *Algorithmic Management in the Workplace*, Data & Society.
- Barocas, S., Hardt, M., & Narayanan, A. (2019). *Fairness and Machine Learning*. fairmlbook.org



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- Indian Labour Codes: Code on Wages (2019), Social Security Code (2020), Industrial Relations Code (2020)

