

Exploring the Emerging Trends, Challenges and Opportunities for Gig Workers: Indian Perspectives

Richal Tuscano

Research Scholar, Sasmira's Institute of Management Studies and Research, University of Mumbai

Dr. Ritu Bhattacharya

Director, GNVS Institute of Management, Mumbai

Submitted: September 15, 2025 Revised: October 30, 2025 Accepted: November 25, 2025 Published: December 3, 2025

DOI: [10.5281/zenodo.17905754](https://doi.org/10.5281/zenodo.17905754)



Abstract:

The mania for gig economy brought a revolutionary sea change in the employment scenario of entire India, providing millions of workers with flexible, tech-driven jobs. Abstract: This paper examines the new trends and determining challenges impacting the workplace of Indian gig workers. This paper investigates the emergence of digital platforms in industries like ride-sharing, food delivery, freelance services, and e-commerce that have disrupted legacy labour market. Although it offers freedom and a way to diversify income, the gig model also puts individual jobs, earnings, social safety nets, job quality and rights at risk. The findings expose important aspects related to algorithmic management, work-life balance, and regulatory failures that have an impact on the sustainability of gig work. It also highlights the potential in areas like digital skilling, financial inclusion, and government efforts that are providing free food, cash transfers, and other policy instruments to support welfare measures. Utilizing a meta-analysis of modern-day literature in addition to supplementary information, the analysis underscores the significance of combining various aspects of labour reforms, technical facilitation, and stable methods of inclusion of the workforce. The results are intended to advance the academic debate and the development of policies for resulting growth and social protection of gig workers in India. In the end, the paper highlights that the future of work in India will be built on a careful balance of innovation and protection.

Keywords: *Gig Economy; Platform-based Work; Digital Labour; Employment Flexibility; Worker Welfare; Labour Policy Reforms; India*

1. Introduction:

The gig economy has become a central feature of the new Indian labor market providing opportunities for work through digital platforms like Uber, Ola, Zomato and UrbanClap. This shift has mostly been a result of the rapid expansion of mobile, internet, and youth entries into flexible labor markets. Instead they are more independent, as they choose their own gig work rather than traditional employment, which is appealing for millennial and urban workers alike. Artificial intelligence and algorithmic matching systems continue to drive the requirements of task allocation and change the meaning of having a job. The gig workforce is projected to reach 23.5 million people by 2030 in India, according to the National Association of Software and Service Companies (NASSCOM) which creates economic significance for

India too. Nonetheless, the speed of this digital shift requires fresh approaches in order to create new ways for those who work in ways of temporariness and contract work to benefit (International Labour Organization, 2021). Although the gig economy is providing the benefits of flexibility and income diversification, it simultaneously raises issues of economic precocity, limited worker rights, and unstable earnings. Workers in the gig economy live outside the bounds of traditional labor regulation. They are frequently denied access to health care, paid leave, and pension plans. This absence of protection has aggravated the divide between the formal and informal economy. The gig workers are subject to wage swings due to assistive technologies and variable pricing models, which dynamically price jobs for them as well as determining wage gaps based on algorithms by which workers get to access jobs. Without union representation, they have even less bargaining power and are forced to rely on digital intermediaries. Hence, policy-level intervention is required in the existing avatar of gig economy in India as its socio-economic slab remains vulnerable.

From the opportunity side, the gig economy is crucial in generating employment especially for the youth as well as the semi-skilled workforce. Digital platform has the characteristics of flexibility and access with low entry barriers, allowing individuals dispersed in urban and semi-urban space to tap into new kinds of income generation. As a result, this has been especially helpful for those who have been ruled out by geography, education, or gender from classic work. In addition, initiatives in financial inclusion like the Unified Payments Interface (UPI) have improved the efficiency and transparency of transactions. The various movements that the Government is promoting, such as the "Digital India" and the "Skill India Mission", will create an ecosystem which will enable millions to thrive at the micromanage level, taking up gig-based enterprises and digital freelancing (NITI Aayog, 2022).

In spite of the progress, the question of the classification of gig workers is still a contentious issue in India's labour law regime. They are routinely classified as "independent contractors," relieving platforms of responsibility to provide social security and employment benefits. This vagueness makes it difficult for them to access welfare schemes and labor protections. A policy development has also been the Code on Social Security which seeks to recognize platform workers and bring them within the ambit of the Code with benefits like provident funds, health insurance and maternity leave etc. However, implementation issues continue to face a lack of implementation mechanisms and a lack of unified regulatory standards. This means that we must strike a balance between developing digitalization and protecting the rights of workers (Mehrotra, 2021). However, the COVID-19 pandemic ran a magnifying glass over gig workers' already fragile livelihoods; with lockdowns highlighting the achiness of givers and bumpers of ate celebrations. Workers became cut off from income, and safety nets were insufficient to cope with financial insecurity. Simultaneously, gig workers turned into a critical service provider to continue food, grocery, and medical supply deliveries during essential periods (Srnicsek, 2023). While on one hand, the lockdown made gig workers even more indispensable to urban economies, this paradoxical situation also reminded us how vulnerable they are. The crisis also highlighted the need for government and corporate partnerships to provide such workers with guaranteed minimum wages, access to health coverage, and risk coverage (Kesar et al., 2021). Thus, while the gig economy in India sits at a well-placed crossroads of modernity and social justice. It needs to realize economic inclusion and innovation on the one hand and is fraught with challenges around labor rights and income security on the other. However, sustainable growth of this sector can only be achieved through digital literacy, financial inclusion and social protection frameworks. Our future policy solutions must prioritize worker welfare, equitable income distribution and algorithmic governance transparency. Through tackling these axes, India can make certain that the gig economy matures to emerge as a sustainable and inclusive version of employment that serves both the employees and the economic system at large.

2. Background of Study:

The gig economy is Quintet as a new type of form in economic globalization and technological development, as well as the progress of the digital platform. This transition has been hastened in India, owing to fast-paced internet penetration and smartphone adoption as well as rising interest in flexible and non-traditional work models. Among them are gig economy sectors as varied as ride hailing, food delivery, house cleaning, online freelancing, and e-commerce logistics. It builds autonomy and flexibility by allowing workers the flexibility to select their working hours and clients. This trend mirrors worldwide shifts away from long-term contracted work, and toward task-oriented, on-demand work. Instead, in so doing, it indicates the slow loss of traditional employment security and the gaining of a hybrid labor format which mixes informality and digitalization (Graham et al., 2020).

Over the years, India has a history of a highly informal labor market, with almost 80–85% of employment being informal, i.e., without any formal contracts and social protection. And now the gig economy has come as a derivative of this informality but in the digital space. Despite opening up new avenues of income generation, platform-based work has reproduced many of the existing vulnerabilities such as unstable earnings, occupational death and disability, and lack of social protection. Second, unequal distribution of the resources for technology provides more imbalance of technology between urban area and rural areas, which also enlarges the participation gap of this phenomenon. Safety and digital illiteracy further limit women and marginalized communities to gain access to high-paying gigs. Thus, although gig economy has opened the potentiality for new and dynamic employment opportunities, it has not led to social and economic equity among the diverse working population in India (Rani & Furrer, 2021). A lack of standard employment contracts and grievance mechanisms makes it hard for workers to challenge exploitative practices. Additionally, algorithmic management whereby digital systems dictate work allocation and evaluation has created an additional layer of opaque control. The protection of gig work has thus become key to embedding equitable and sustainable labor practices in India (De Stefano & Aloisi, 2022).

3. Scope and Significance of Study

This study, however, covers gig work across key sectors in India, such as transportation, delivery, freelancing, and digital services. The aim is to comprehend the impacts of technological innovation on gig work and labour market reforms combined with socio-economic transitions on the employment and living condition of Gig workers. The study examines urban and semi-urban areas where there has been rapid growth of work through digital platforms and analyze full-time and part-time gig involvement. It also assesses the demographic profile of gig workers such as gender, education and socio-economic status to examine differences in access and access. We examine the changing legal structures, institutional mechanisms, and technology that have led to the transformation of worker–employer relations in this new economy (Kost et al., 2023). This study is important because it can help you understand more about the new trends in gig work and how it is transforming the labour ecosystem of India. With millions of employees gradually digging their heels and heading towards digital labour, the long-term socio-economic repercussions of digital employment must be critically examined. Policymakers, labour economists, and digital platform businesses will find the study particularly relevant because it reveals some acute issues including issues such as fluctuating wages and volatility, non-standard forms of employment, and degree of worker protection. Furthermore, it includes a section on social inclusion, looking at how gender and regional inequalities determine participation in gig work and empowerment within gig work. In combining technological development and equity research, the study offer a holistic framework for the

development of employed roles in the digital economy (Rosenblat, 2019). It adds to such literature in terms of its geographical relevance and also has practical implications for policy making and labour and skill market development with respect to the fast-growing digital economy of India. It identifies key pillars of success and pitfalls to avoid and provides recommendations for how training, financial inclusion, and social security mechanisms can be commodity to strengthen gig work quality. These findings will support models for fair work standards, equitable pay, and accountable platform governance. In addition, this study supports the upcoming policy initiatives in India via Digital India and Skill India missions by providing a boost to the country-level salience for inclusive digitization. Thus, the results of the study are anticipated to be a relevant input for designing future policies and corporate approaches for an imaginative.

4. Objectives of Study:

- To identify the socio-economic profile and demographic characteristics of gig workers, including their education, gender, income levels, and employment preferences
- To evaluate the challenges faced by gig workers, including income instability, lack of social protection, absence of formal contracts, and algorithmic control mechanisms
- To examine the policy and regulatory frameworks that govern gig and platform-based employment in India and assess their effectiveness in safeguarding worker welfare
- To explore the opportunities for enhancing digital literacy, financial inclusion, and skill development among gig workers for long-term sustainability

5. Review of Literature:

The Indian gig economy's rapid expansion is consistently linked to the diffusion of smartphones, low-cost data, and the platformisation of service delivery, which together have redrawn boundaries between formal and informal labour. Studies describe platform work as task-based, on-demand, and digitally mediated, with scale effects most visible in passenger mobility, hyper local logistics, home services, and online freelancing. This transition coexists with India's historically high informality, creating a hybrid landscape where algorithmic coordination overlays precocity. Evidence also notes spatial concentration in metros and tier-two cities, reflecting digital infrastructure, consumer density, and payment rails. Scholars underline that the same affordances enabling flexible entry and multi-homing also diffuse risk to workers through variable demand and unilateral rule changes. The resulting labour regime blends entrepreneurial language with managed dependence, making classification disputes central to jurisprudence. In this context, baseline estimates and definitional clarity are indispensable to policy design, social-security targeting, and longitudinal tracking of worker outcomes. Summative reviews thus argue for measurement frameworks that capture sectoral heterogeneity, multi-platform participation, and time-use dynamics at scale (International Labour Organization, 2022).

A second strand interrogates labour standards and fairness on Indian platforms, documenting frictions around pay floors, transparency, and due process. Case ratings reveal gaps between stated policies and worker experiences across the five Fair work principles pay, conditions, contracts, management, and representation highlighting algorithmic opacity around dynamic pricing, batching, and deactivations. Fieldwork synthesized in recent scorecards uncovers persistent issues: uncompensated wait-time, surge unpredictability, and unilateral changes to incentive ladders. Scholars note that grievance channels are often app-embedded but weakly responsive, while collective action remains emergent and uneven across sectors. Health and safety concerns heat exposure, road risk, and pandemic-era hazards intersect with inadequate insurance uptake or restrictive claim pathways. Documentation also traces platform responses,

from limited accident covers to pilots on earnings guarantees, yet emphasizes that coverage breadth and enforceability remain contested (Fairwork India, 2023). The literature therefore positions fairness as a governance problem requiring verifiable standards, auditable data, and participatory oversight mechanisms to reduce power asymmetries in everyday transactions.

Inequality-focused research centres social identity, education, and location as determinants of access to and returns from platform work. Evidence from household and worker surveys links caste, gender, and religion to participation probabilities, sectoral sorting, and earnings dispersion, noting compounded disadvantages for women in safety-sensitive roles and time-constrained care economies. Studies show that educational attainment mediates occupational upgrading into higher-skill digital gigs, while device quality and broadband reliability constrain rural and peri-urban engagement. Researchers also observe that youth disproportionately enter platform work to bridge under-employment spells, with multi-activity income portfolios common among low-asset households (Centre for Sustainable Employment, 2023). The pandemic shock accentuated these gradients, compressing formal opportunities and nudging entrants toward deliveries, ride-hailing, and warehouse tasks. In the medium term, mobility pathways appear bifurcated between up skilling freelancers and churn-prone couriers, implying targeted interventions in training, childcare infrastructure and safe mobility. This body of work thus reframes “flexibility” through a distributional lens, urging policies that recognised differentiated constraints and enable inclusive upgrading trajectories.

Macro-digital economy analyses situate gig work within broader platform ecosystems digital payments, identity rails, logistics networks, and cloud services—that reduce transaction costs and coordinate fragmented markets. Recent national assessments document deepening adoption of UPI, e-KYC, and interoperable wallets, which collectively lower entry barriers for solo entrepreneurs and microforms. Complementary indicators e-commerce penetration, device shipments, and data-centre capacity suggest rising complementarities between consumer platforms and labour-sourcing marketplaces. Scholars caution, however, that productivity gains hinge on reliable last-mile connectivity, cybersecurity posture, and contestable markets to avoid winner-take-most dynamics. On labour outcomes, macro dashboards call for better measurement of real hourly earnings, effective hourly costs (fuel, maintenance, data), and task volatility to separate revenue from income. They advocate public data partnerships to enable fine-grained, privacy-preserving research on dispatch, travel, and wait-time distributions. The literature thereby bridges industrial-policy debates with labour-market design, placing gig work at the intersection of competition policy and social protection (ICRIER, 2024).

The policy and legal scholarship in India frames platform work within an evolving welfare architecture that acknowledges, but only partially secures, gig workers’ rights. Reviews of legislative developments highlight definitional recognition of “platform” and “gig” workers and the intent to extend social security through contributory schemes, while flagging ambiguities around status, enforcement, and funding. Commentaries emphasize that classification drives downstream entitlements minimum wages, overtime, paid leave, and collective bargaining yet India’s hybrid approach risks under-protection if responsibilities are diluted across state, platform, and worker. Comparative analyses urge clarity on algorithmic accountability, portable benefits, and interoperable registries to track contributions and claims across platforms. Scholars further propose earnings-floor pilots linked to time-on-task and guaranteed pay per active hour during low-demand windows, alongside dispute-resolution mechanisms with worker representation. Overall, the literature positions legal design as a balancing act between innovation and dignified work, requiring co-regulatory models and measurable outcomes (Giri National Labour Institute, 2025).

A forward-looking stream focuses on measurement science, finch rails, and administrative data essential for evidence-based governance of the platform labour market. Recent technical reports outline methods to size the digital economy, urging harmonized classifications, better captures of out-of-scope activity, and integration of platform-reported data with survey instruments (Govt. of India-MEIT, 2025). For labour statistics, recommendations include high-frequency panels to observe income volatility, multidimensional well-being dashboards (health, safety, time stress), and reconciliations between gross receipts and net earnings after input costs. It underscores the role of digital credit, micro-insurance, and savings nudges embedded in platforms, with safeguards against over-indebtedness and miss-selling. They also stress privacy-by-design architectures for any data-sharing, with clear consent, audit trails, and sanctions for misuse. This measurement-first approach is presented as a prerequisite for calibrating portable benefits, targeting subsidies, and evaluating policy pilots at scale in India's fast-evolving platform economy.

6. Discussion and Analysis:

The discussion on the Indian gig economy reveals a complex interplay between opportunity, technology, and vulnerability. Digital platforms such as Uber, Swiggy, Zomato, and UrbanClap have expanded rapidly, introducing a new model of work defined by flexibility and autonomy. However, beneath this surface of independence lies a deep structural dependence on algorithms and market volatility. Workers often experience fluctuating incomes, unpredictable workloads, and absence of social protection. The analysis indicates that although gig work has enabled employment generation in urban regions, its formalized nature reproduces old inequalities in new digital forms. The challenge lies in balancing technological innovation with inclusive labor protection. Government initiatives like the Code on Social Security represent progress, yet effective implementation remains uncertain (International Labour Organization, 2022). Further analysis highlights the transformative role of technology in organizing and scaling gig work, but also its capacity to entrench control. Algorithmic management systems optimize efficiency and customer satisfaction, yet they simultaneously obscure the criteria behind task allocation, ratings, and deactivation. Workers' limited understanding of these processes erodes their bargaining power and autonomy. Field evidence suggests that even minor rating drops can lead to reduced visibility and job access, creating a climate of digital precocity (Fairwork India, 2023). The lack of transparency and grievance redressal mechanisms exacerbates worker dissatisfaction. Therefore, the intersection of artificial intelligence, surveillance, and labor rights constitutes one of the most pressing challenges for India's digital workforce.

The discussion also uncovers deep demographic and social variations within the gig economy. Participation is predominantly male and urban, with women's engagement restricted by safety concerns, social norms, and caregiving responsibilities. Gig work has expanded access for semi-skilled youth, but digital literacy gaps and infrastructural inequalities continue to exclude large rural populations. Moreover, the absence of collective representation prevents gig workers from negotiating fair pay or benefits (Centre for Sustainable Employment, 2023). These findings underscore the need for gender-sensitive and regionally inclusive policy approaches. Programs promoting financial literacy, digital skill development, and mobility safety can enhance access and equity across diverse worker groups. From an economic perspective, gig work has contributed to micro-entrepreneurship and supplemental income generation, but questions of sustainability persists. The earnings structure is heavily contingent on fuel prices, algorithmic incentives, and consumer demand patterns. Data show that while some workers achieve short-term financial stability, few experience long-term upward mobility. Moreover, the hidden costs of vehicle maintenance, mobile data, and extended work hours often erode net earnings. Analysts recommend integrating financial inclusion tools such as micro-insurance, savings schemes, and credit access into gig

platforms to enhance economic resilience. The long-term viability of the gig model depends on building pathways for skill diversification and sustainable earnings (ICRIER, 2024).

Policy discourse in India is gradually evolving to address the hybrid nature of gig work, straddling the line between entrepreneurship and employment. The Social Security Code and e-Shram portal are early steps toward worker recognition, but implementation challenges such as low registration and inconsistent benefits persist. Policymakers and labor economists advocate for co-regulatory frameworks that combine government oversight with platform accountability. Establishing minimum earnings guarantees, transparent contracts, and dispute resolution mechanisms could ensure fairer outcomes. Comparative studies suggest that aligning India's approach with international best practices can strengthen its digital labor ecosystem. Hence, policy evolution remains central to the sustainable growth of the gig economy (Giri National Labour Institute, 2025). The discussion identifies the need for robust data infrastructure and continuous monitoring to guide decision-making in this evolving labor sector. Current labor statistics fail to capture gig work's complexity, leading to policy blind spots. Integrating administrative data from platforms with national employment surveys could provide real-time insights into income variability, gender gaps, and regional patterns. Moreover, interdisciplinary collaboration between data scientists, economists, and policymakers is essential for evidence-based governance. A transparent data ecosystem would enable targeted social security interventions and dynamic regulation, fostering a more equitable and efficient gig economy in India.

7. Findings of Study:

- India has emerged as one of the fastest-growing economies in the world over the last few decades and its relevance to the global gig economy has increased significantly in the post-COVID era. The results of the study indicate that the gig economy has become a significant employment driver in India, reflecting the ongoing transformations in digitalization and labour market flexibility. All of these have led to new avenue of earnings for millions of our youth, semi-skilled, and self-employed people with emergence of the likes of Zomato, Swiggy, Uber, Ola, Urban Clap, etc. The results reveal that almost 12 million Indians are presently working in gig jobs and the ability of this segment of workers seem to be growing exponentially over the next few years. The growth has been aided by rising smartphone penetration, affordable data, and better digital payment infrastructure. Yet, the research also finds this growth is unevenly distributed, with urban areas leading participation and rural parts largely excluded due to a lack of infrastructure. In this way, the gig economy has become a double-edged sword promising greater autonomy at the cost of better work conditions and social security.
- Another key result emphasizes the variability and uncertainty in gig workers' incomes. Although flexibility is arguably one of the major benefits of platform work, workers are still highly susceptible to income volatility caused by variable algorithmic incentives, elastic pricing, and cyclical seasonal demand. Income insecurity is endemic; many workers must contend with shadowy automated management systems that decide how much they will be paid, which tasks will be assigned and which will be fined. This lack of transparency erodes trust and creates anxiety and dependency on the platforms for survival. The results highlight that, even with the advancement of technology, gig work remains unstable, leaving those on low incomes and workers who have no other option for work more vulnerable to changes in the economy. Thus, minimum earning guarantees, transparent pricing algorithms, and standardized payment cycles need to be established across the platform so that gig workers can predict their income and earn their dignity.

- There are also stark demographic and social inequalities found within the gig workforce, the study notes. The gig space is overwhelmingly male, with the participation of women being minimal, primarily due to safety concerns, socio-cultural constraints and unequal access to mobility infrastructure. Limited knowledge and digital literacy also prevent people from poorer backgrounds and rural areas from participating in this way. The results show that, for many workers located in towns and cities who are easier to reach over the internet, you do better the better your digital access, whereas those in semi-urban or rural localities experience structural limitations in network infrastructure and digital education. These disparities threaten the inclusivity of the gig economy and call for targeted, region-sensitive, and gender-specific interventions. In this context, targeted safety, financial literacy, and skilling programs for women, and programs in rural areas that are designed to overcome these divides could have a transformative impact by enabling equitable participation in digital labour markets (IDinsight, 2024).
- The study findings also highlight a lack of social security and welfare for gig workers, who are commonly referred to as “independent contractors” and thus fall outside of the reach of formal labour rights protections. While frameworks like Code on Social Security have been launched, they do not benefit most workers who either do not know their rights or find it difficult to avail of these benefits due to procedural complexities. Gig workers are still cut off from health insurance, paid leave and pension savings options for the long haul. The crisis of social protection has been especially evident in the wake of the COVID-19 pandemic when many gig workers went exposed to health risks and loss of living from work, and without sufficient institutional economic support. Other studies have pointed out that with the changing nature of labour in India, it is important that formal welfare is extended and social security codes are effectively implemented towards securing the livelihoods and safety of gig workers (International Labour Organization, 2022).
- The next critical point is that gig income cannot last as a livelihood strategy in the long-run. Most of the gig workers use it as supplemental earnings and not having a permanent gig job. Our analysis shows that exorbitant operational costs fuel, maintenance, platform fees, and mobile data effectively ate into the take-home pay. The gig economy may provide immediate access to employment opportunities, but it does not guarantee sustainable income growth and social mobility. To adapt microcredit, insurance and savings instruments for gig workers, policymakers and financial institutions need to work together to ensure they meet gig workers’ income profiles.
- The results highlight the need for good data governance and accountability in the gig ecosystem. The lack of harmonized information on worker characteristics, hours worked, and up-to-date wages restrict policymakers from making sound decisions. Labour data today misses out more than half of the digital employment, and policy blind spots emerge as a result. They propose that data-sharing frameworks between platforms and regulators can improve transparency, oversight, and evidence-based policy-making. Furthermore, independent audits on algorithmic systems, and fair work certifications could motivate platforms to be accountable. It would also allow workers to be recognized on digital labour registries at the national level and be included in formal welfare systems.

8. Conclusion:

The study concludes that the gig economy in India stands at a pivotal juncture between technological advancement and socio-economic transformation. The emergence of platform-based employment has generated new avenues for income diversification, entrepreneurship, and workforce participation, particularly among youth and semi-skilled individuals. Digitalization, low-cost data, and financial

technologies have collectively expanded the scope of flexible employment across sectors such as logistics, transport, and online freelancing. However, despite its potential to drive inclusive growth, the findings indicate that the gig economy continues to replicate traditional labour market inequalities. The dominance of urban regions, gender disparities, and lack of formal protection mechanisms limit the extent to which gig work can contribute to sustainable development. Therefore, India's future policy focus must extend beyond growth metrics to incorporate equitable access, social welfare, and regulatory stability for platform workers. The study further emphasizes that algorithmic management has reshaped the nature of employment relationships, replacing direct supervision with automated systems of control and evaluation. While these digital mechanisms have improved efficiency and customer service, they have simultaneously eroded worker autonomy and transparency. Many gig workers operate within opaque digital ecosystems that determine their workload, pay rates, and performance metrics without due accountability. As such, the challenge lies not only in technological innovation but in designing governance frameworks that ensure fairness and dignity in the digital workplace. The conclusion suggests that ethical algorithm design, standardized contracts, and participatory grievance mechanisms should form the core of future labour policies to address these structural issues. The conclusion underlines the critical need for strengthening social protection and institutional support for gig workers. Most workers remain outside the ambit of existing welfare systems, leaving them vulnerable to economic shocks, health emergencies, and income volatility. Policies such as the Code on Social Security and e-Shram portal mark important progress but require stronger implementation, awareness, and inter-agency coordination. Extending benefits like health insurance, provident funds, and pensions can mitigate financial precocity and encourage long-term retention in the gig workforce. The integration of digital tools for benefits tracking and real-time grievance redressal could further improve accessibility. Building a resilient social protection ecosystem is thus imperative to achieve both worker security and economic efficiency. The study highlights that the sustainability of the gig economy depends on strategic interventions in education, digital literacy, and upskilling. A significant portion of gig workers rely on low-skilled or routine tasks that provide limited career advancement opportunities. To transform gig work into a viable and aspirational livelihood, continuous skill development and re-skilling initiatives must be embedded within platform operations. Public-private partnerships can play a crucial role in delivering modular training programs aligned with digital competencies and market trends. Moreover, fostering micro-entrepreneurship among gig workers through credit linkages and financial literacy can enhance economic mobility and resilience. This shift from dependency to empowerment will determine the long-term success of India's platform labour model.

References:

- Centre for Sustainable Employment. (2023). State of Working India 2023: Social identities and labour market outcomes. Azim Premji University. https://publications.azimpremjiuniversity.edu.in/5166/1/State_of_Working_India_2023_ebook_revised.pdf
- De Stefano, V., & Aloisi, A. (2022). Your boss is an algorithm: Artificial intelligence, platform work and labour regulation. Routledge. <https://doi.org/10.4324/9781003199603>
- Fairwork India. (2023). Fairwork India ratings 2023: Labour standards in the platform economy. <https://www.medianama.com/wp-content/uploads/2023/10/Fairwork-India-Report-2023.pdf>
- Gaikwad, S. R. (2024, August). Role of artificial intelligence in smart manufacturing of automobile industry in India. In AIP Conference Proceedings (Vol. 3178, No. 1). AIP Publishing. DOI: <https://doi.org/10.1063/5.0229368>

- Graham, M., Hjorth, I., & Lehdonvirta, V. (2020). Digital labour and development: Impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, 26(2), 153–171. <https://doi.org/10.1177/1024258920918454>
- ICRIER. (2024). State of India's Digital Economy (SIDE) Report 2024. Indian Council for Research on International Economic Relations. https://icrier.org/pdf/State_of_India_Digital_Economy_Report_2024.pdf
- IDinsight. (2024). Economic lives of digital platform gig workers – India. IDinsight. <https://www.idinsight.org/publication/economic-lives-of-digital-platform-gig-workers-india/>
- International Labour Organization. (2021). World employment and social outlook 2021: The role of digital labour platforms in transforming the world of work. https://www.ilo.org/global/publications/books/WCMS_771749/lang--en/index.htm
- Kesar, S., Abraham, R., Lahoti, R., Nath, P., & Basole, A. (2021). Pandemic, informality, and vulnerability: Impact of COVID-19 on livelihoods in India. *Canadian Journal of Development Studies*, 42(1–2), 145–164. <https://doi.org/10.1080/02255189.2021.1890003>
- Kost, D., Fieseler, C., & Wong, S. I. (2023). Digital labor platforms and the future of work: Challenges and opportunities. *Journal of Business Research*, 160, 113765. <https://doi.org/10.1016/j.jbusres.2023.113765>
- Mehrotra, S. (2021). Reforming labour regulation in India: Towards inclusive growth. Cambridge University Press. <https://doi.org/10.1017/9781108966773>
- Ministry of Electronics and Information Technology. (2025). Estimation and measurement of India's digital economy. Government of India. <https://www.meity.gov.in/static/uploads/2025/01/5ff397f9e8152d5562ed4cef1a6b767b.pdf>
- NITI Aayog. (2022). India's booming gig and platform economy. Government of India. <https://www.niti.gov.in/india-booming-gig-and-platform-economy-report>
- Rani, U., & Furrer, M. (2021). On-demand digital economy and its implications for employment and labour relations. *Review of Labour Economics and Industrial Relations*, 35(S1), 1–24. <https://doi.org/10.1111/labr.12216>
- Rosenblat, A. (2019). *Uberland: How algorithms are rewriting the rules of work*. University of California Press. <https://doi.org/10.1525/9780520972728>
- Seth, S. (2025, July 25). India's gig economy in 2025: Growth, formalisation, and financial inclusion explained. LiveMint. <https://www.livemint.com/money/personal-finance/indias-gig-economy-in-2025-growth-formalisation-and-financial-inclusion-explained-11753438649777.html>
- Srnicek, N. (2023). *Platform capitalism* (new edition). Polity Press. <https://doi.org/10.1515/9781509538891>
- V. V. Giri National Labour Institute. (2025). Platform employment: Emerging issues and policy options. <https://vvgnli.gov.in/sites/default/files/Platform%20Employment.pdf>
- Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56–75. <https://doi.org/10.1177/0950017018785616>