



Artificial Intelligence and Employment in India- “Job Creation vs Job Displacement”

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Introduction

India is standing at an unusual crossroads. It has the largest young population in the world, one of the fastest-growing major economies, and, at the same time, one of the fastest-growing appetites for Artificial Intelligence. Walk into an IT services company in Bengaluru, a bank's back office in Mumbai, or a factory floor in Pune today, and AI is already at work somewhere in the process -screening resumes, flagging fraudulent transactions, predicting when a machine will break down, or answering a customer's query before a human ever picks up the phone.

That quiet, steady spread of AI into everyday work has opened up a debate that touches almost every working Indian, directly or indirectly: is AI going to create more jobs than it destroys, or is it going to hollow out the very sectors -IT, BPM, banking, customer support that built India's modern middle class. Government reports, industry bodies and international institutions have all weighed in, and the honest answer that emerges from their research is not a clean yes or no. It's "both, depending on what India does next." Some roles will disappear. New ones, many of which don't have a name yet, will take their place. Whether the net result is good for Indian workers depends on how quickly and how seriously the country invests in reskilling, policy, and industry coordination.

This article walks through the evidence for both sides of the argument, lays out the key numbers from credible sources in one place, and closes with some practical suggestions for how India can come out ahead in this transition rather than behind it.

The Case for Job Creation

Start with the optimistic case, because there's real substance to it. As far back as 2019, the Ministry of Electronics and Information Technology projected those digital technologies, AI among them, could help redeploy 40-45 million workers through retraining by 2025, while adding roughly 20 million new jobs in areas like IT-BPM, manufacturing, agriculture, and logistics. A



year later, NASSCOM estimated that AI and data could add somewhere between USD 450 and 500 billion to India's GDP by 2025 a figure large enough to reshape entire industries around it.

More recent research backs this up with sharper detail. NITI Aayog's Roadmap for Job Creation in the AI Economy, released in October 2025 in partnership with NASSCOM and Boston Consulting Group, found that if India moves in a coordinated way, its technology and customer experience sector alone could generate up to 4 million new AI-enabled jobs over the next five years. Many of these are roles that simply didn't exist a few years ago AI prompt engineers, AI operations engineers, ethical AI specialists, quantum machine-learning engineers. The World Economic Forum's Future of Jobs research points in a similar direction globally, estimating that while AI could displace around 85 million jobs worldwide by 2025, it could create roughly 97 million new ones in the same window a net gain, even if the composition of the workforce shifts considerably.

Perhaps the most telling data point, though, is how Indian workers themselves feel about it. ADP Research surveyed 38,000 working adults across the world for its People at Work 2025 report and found India to be the second most optimistic country globally about AI's effect on jobs 34% of Indian employees said they expect AI to have a positive impact on their role in the coming year, against just 17% who worry it will replace them outright. That's a strikingly different mood from the anxiety often reported in Western labour markets.

The Case for Job Displacement

The other side of the picture is harder to ignore, and it centres on exactly the sectors that made India's services-led growth story possible. That same NITI Aayog roadmap that projects 4 million new jobs also carries a warning: without decisive action, India's technology sector could see a net loss of over 1.5 million jobs by 2031. The roles most exposed are the routine and repetitive one's manual software testers, data entry analysts, QA engineers, and Level-1 customer support agents precisely the entry-level jobs that have historically served as the first rung on the career ladder for millions of young graduates.

The scale of what's at stake becomes clearer when you look at how large this sector already is. India's Economic Survey 2025-26 notes that the ICT-BPM industry alone employed 5.4 million people and contributed 7.5% of GDP in 2023. A serious disruption here wouldn't be a niche problem it would ripple through the broader economy. Globally, the IMF has estimated that close to 40% of all employment is exposed to AI in some form; in advanced economies that exposure climbs to around 60% of jobs, roughly split between roles that benefit from AI and roles that see reduced demand because of it. Emerging economies like India show somewhat lower exposure,



near 40%, which suggests the disruption may be real but not quite as severe as in wealthier, more automated economies at least for now. Some independent industry analyses have painted a more urgent picture still, warning that a large share of India's white-collar roles in IT, finance and customer service face meaningful AI-driven disruption within the next five years, especially in the most process-heavy, routinised jobs.

Sector-wise Impact

The disruption isn't spread evenly. In IT and BPM, the sector most exposed overall routine work like manual testing, data entry, and first-line support is under the most pressure, even as new AI-first roles open up in parallel. Banking and financial services are seeing similar patterns: AI-driven fraud detection, robo-advisory tools, and automated loan processing are cutting into repetitive back-office and entry-level analyst work, while creating fresh demand for AI risk modelling and compliance specialists. Manufacturing looks somewhat different AI is mostly being used for predictive maintenance and quality control, which tends to make existing skilled workers more productive rather than replace them outright, though repetitive assembly-line tasks remain exposed. Agriculture and logistics are generally seen as net job-creating areas, with AI opening up new technical and support roles around precision farming and supply-chain optimisation. Healthcare, for its part, is largely using AI to support professionals in diagnostics and administrative work rather than replace them, given how much the sector still depends on human judgement and trust.

Data at a Glance

The table below brings together the key figures cited above from government, industry, and international sources. It's worth noting that these studies use different methodologies, time horizons, and definitions of "exposure" or "displacement," so the numbers are best read as indicative ranges rather than figures that can be added or compared directly.

Indicator	Figure / Projection	Source
New jobs from digital/AI redeployment in India (by 2025)	~20 million new jobs; 40-45 million workers redeployed via reskilling	Ministry of Electronics & IT (MeitY), 2019
AI and data's projected contribution to India's GDP by 2025	USD 450-500 billion	NASSCOM, 2020
Potential new AI-enabled jobs in India's tech/CX sector (next 5 years, with coordinated action)	Up to 4 million	NITI Aayog Roadmap for Job Creation in the AI Economy (with NASSCOM & BCG), Oct 2025
Potential net job loss in India's tech sector by 2031 (without timely action)	Over 1.5 million	NITI Aayog Roadmap, Oct 2025
ICT-BPM sector employment and GDP contribution (2023)	5.4 million jobs; 7.5% of GDP	Economic Survey 2025-26, Government of India



Global jobs displaced vs. new roles created (by 2025)	85 million displaced; 97 million new roles created	World Economic Forum, Future of Jobs Report
Global employment exposed to AI	~40% overall; ~60% in advanced economies; ~40% in emerging markets incl. India; ~26% in low-income countries	International Monetary Fund (IMF)
Indian employees optimistic AI will help their jobs (next year)	34% (2nd most optimistic country globally)	ADP Research, People at Work 2025 (38,000 workers surveyed)
Indian employees who fear AI will replace their job	17%	ADP Research, People at Work 2025
India's technology and customer experience (CX) sector size	USD 245 billion	NITI Aayog Roadmap, Oct 2025
Existing technology and CX talent pool in India	Over 9 million professionals	NITI Aayog Roadmap, Oct 2025

Suggestions

None of this needs to end badly for Indian workers, but it won't sort itself out on its own either. A few things seem worth prioritising:

1. Move fast on a coordinated national reskilling push. NITI Aayog's proposed National AI Talent Mission needs to actually happen, and at scale building AI literacy from school onward, not just at the postgraduate level.
2. Focus reskilling resources on the workers most exposed right now those in routine testing, data entry, and L1 support roles rather than spreading efforts too thin across the whole workforce.
3. Deepen the kind of industry-government-academia coordination NITI Aayog modelled with NASSCOM and BCG and extend it to other exposed sectors like banking and manufacturing.
4. Don't forget MSMEs and informal workers. Large companies can absorb the cost of this transition; smaller businesses and informal workers, who make up most of India's workforce, need direct support and affordable access to AI tools.
5. Invest in better, more frequent labour-market data on AI's employment effects, so policy can respond in real time rather than after the fact.
6. Encourage employers to treat AI as a tool for augmenting their workforce and redeploying staff internally, rather than defaulting to headcount cuts.
7. Build stronger safety nets unemployment support, portable benefits, transition assistance for workers who are displaced despite everyone's best efforts.

Conclusion

Put together, the evidence from India's own government bodies, from international institutions like the IMF and WEF, and from industry research by NASSCOM, ADP and BCG



tells a fairly consistent story: AI's effect on Indian employment isn't a simple case of jobs won or jobs lost, it's a transition, and a fairly significant one. The technology and services sectors that carried India's growth story for the last three decades face real risk of disruption in their more routine, repetitive roles, particularly as the 2031 horizon approaches. But there's a genuine upside too several million new AI-related jobs could open up if the country moves with enough urgency and coordination.

As NITI Aayog puts it, the difference between a future marked by large-scale job loss and one where India becomes a genuine global hub for AI talent comes down to the choices made now in how seriously reskilling is funded, how well industry and government coordinate, and how much support is extended to the workers most at risk. India has the scale, the young population, and the existing technology talent base to tip this in its favour. What it needs now is speed.

References

1. Ministry of Electronics and Information Technology (MeitY), Government of India (2019). Report on digital economy and job redeployment projections. Cited in: Drishti IAS, "Impact of AI and Automation on India's Employment Landscape."
2. NASSCOM (2020). Report on AI and data's contribution to India's GDP. Cited in: Drishti IAS, "Impact of AI and Automation on India's Employment Landscape."
3. NITI Aayog, NASSCOM & Boston Consulting Group (October 2025). Roadmap for Job Creation in the AI Economy. NITI Aayog, Government of India. niti.gov.in
4. Press Information Bureau, Government of India (October 2025). "NITI Aayog releases a 'Roadmap for Job Creation in the AI Economy'."
5. Government of India (2025-26). Economic Survey 2025-26. Ministry of Finance. Cited in: The Federal, "The white-collar jobs India built its economy on are now most at risk from AI." thefederal.com
6. World Economic Forum (2020). Future of Jobs Report. Cited in: International Journal of Law, Social Sciences and Sustainability (IJLSSS), "The Impact of Artificial Intelligence on Employment in India."
7. International Monetary Fund (IMF, 2024). Analysis on global AI exposure and employment. Cited in: Drishti IAS, "Impact of AI and Automation on India's Employment Landscape."
8. ADP Research (August 2025). People at Work 2025 — global survey of 38,000 working adults. ADP India.



9. IISPPR (2025). "AI Automation and Its Impact on the Indian Job Market."
iisppr.org.in/ai-automation-and-its-impact-on-the-indian-job-market
10. ANI News (October 2025). "NITI Aayog releases 'Roadmap for Job Creation in AI Economy'."

