

Navigating Job Loss Due to Artificial Intelligence: Global Trends, Asian Perspectives, and the Indian Scenario

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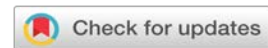
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Abstract

The fast progress of Artificial Intelligence (AI) is having a big impact on the world's workforce, providing some chances and issues at the same time. The focus of this paper is on a global view of job losses created by AI, with a deeper examination on Asia, mainly centering on India. It looks at how different sectors are exposed, the difference in ability among employees and income inequality can drive AI-driven change. Based on the study, it seems that developed nations can bring in AI relatively safely, re-training people and providing help for those who lost jobs, but many Asian countries, especially India that hires many unregistered employees, face a much greater risk of losing jobs and facing inequality. This research focuses on the need for corporate leaders to use AI in smart, fair and ethical ways through its analysis of recent policies, job market trends and AI adoption. The report finishes with suggestions for encouraging AI's benefits and cutting down job loss, saying that education, infrastructure, social assistance and cooperating regions are vital. This paper sheds light on the labor-related aspects of AI and suggests a path for secure employment shifts in rising economies.

Keywords: Artificial Intelligence, Job Displacement, Automation, Workforce Reskilling, Informal Sector, India, Asia, Digital Transformation, Employment Policy, Economic Impact

1. Introduction

Artificial Intelligence (AI) entering the field has caused a major revolution in economies worldwide. Because AI is able to think, process information and carry out tasks that were once just done by people, it is being used more often in manufacturing, finance, healthcare, customer service and logistics. The development has helped the economy grow and encouraged new technologies, but it has also raised serious worries about future jobs.

Job losses caused by automation and AI are now a very real problem. As autonomous vehicles take over for drivers and AI is used in back-office processes, the nature of many jobs is being changed. The World Economic Forum says that AI and automation will create some new jobs, yet the change is expected to be difficult for workers who perform routine jobs.



AI affects different regions of the world differently in terms of jobs and work. Wealthy nations are investing in future-proofing their workforces by leaning on AI in knowledge industries, but in developing countries, AI risks both increasing joblessness and leaving many workers unable to improve their skills. Asia, where most of the workforce is based, is rapidly embracing AI because of a need to compete on the world stage and change with new technology. At the same time, this progress replaces millions of manufacturing positions in places like China, Vietnam and India.

Indian public health issues are quite complicated. It is at the forefront of global IT and has seen many young companies adopt artificial intelligence. Alternatively, a big part of the workforce is described as unskilled or semi-skilled and is consequently at risk of losing their jobs to automation. As AI improves, it creates important problems regarding how jobs will be supported which workers can adapt and the actions needed by government.

The paper examines the overall trends of job loss caused by AI, with a closer focus on Asia and especially on India. By reviewing findings from various sources, the study plans to brief policymakers, business leaders and educators about the threats and immediate need for plans.

2. Literature Review

For ten years now, there has been an increase in talk about how Artificial Intelligence (AI) will change jobs. Experts, decision-makers and researchers have investigated the way AI-powered automation is changing labour markets all over the world. This section brings together the main ideas from other studies.

2.1 Global Perspectives on Job Displacement

- In 2013, Frey and Osborne estimated that about half of U.S. jobs could be automated within the following two decades. The study said that jobs that mostly involve set and predictable duties were more at risk.
- Arntz, Gregory, and Zierahn (2016) challenged Frey and Osborne's approach by incorporating task-based analysis. Their study for the OECD concluded that only 9% of jobs in OECD countries were at high risk of automation, suggesting that individual tasks—not entire occupations—are being automated.
- World Economic Forum (2020), in its Future of Jobs Report, projected that AI and automation would displace 85 million jobs globally by 2025, but would also create 97 million new roles, primarily in technology, data science, and green economy sectors.
- McKinsey Global Institute (2017) estimated that by 2030, up to 800 million jobs could be lost worldwide due to automation, with 375 million workers requiring reskilling or a change of occupation. Their later 2021 update emphasized that low-wage and low-skill jobs would be hit hardest, especially in retail and food services.

2.2 AI and Employment in Asia

- International Labour Organization (ILO, 2021) found that up to 56% of employment in developing Asian countries is at high risk due to automation. The ILO emphasized that while technology can enhance productivity, the displacement of workers in labor-intensive



industries like textiles, electronics, and agriculture could be significant without adequate social protections.

- Asian Development Bank (ADB, 2020) reported that AI could both disrupt and boost job markets in Asia. Their study warned that economies like Vietnam, Bangladesh, and India—heavily reliant on export-oriented manufacturing—are highly susceptible to automation.
- Chakravorti et al. (2017) in the Digital Evolution Index highlighted the rapid pace of digital adoption in Asia but cautioned that digital inequality within countries could exacerbate the employment divide.

2.3 India-Specific Literature

- NASSCOM (2022) observed that while India's IT and BPO sectors are leading in AI adoption, nearly 69% of routine jobs in these sectors could be automated. However, the same report highlighted significant growth in AI-related employment, especially in data analytics and cybersecurity.
- Deloitte India (2023) surveyed over 300 Indian firms and found that 40% had integrated AI into core functions, with an estimated 12 million jobs facing moderate to high risk of automation by 2030.
- Ernst & Young (EY, 2021) in partnership with the Ministry of Skill Development and Entrepreneurship, projected that by 2025, 20% of India's workforce would need reskilling due to AI, particularly in the BFSI (Banking, Financial Services, and Insurance), logistics, and healthcare sectors.
- NITI Aayog (2018) emphasized the dual role of AI in India's development strategy. Its national AI strategy report promoted "AI for All" to ensure inclusive growth, yet acknowledged the risks of job displacement if workforce training lags behind technological adoption.
- ILO India (2019) noted that informal sector workers, who form over 80% of India's workforce, are least prepared for automation due to lack of formal education and digital skills.

2.4 Theoretical Frameworks

- The Skill-Biased Technological Change (SBTC) theory posits that technological advancement favors skilled workers, exacerbating inequality. This theory is widely supported in the context of AI, where demand for high-skilled labor (e.g., data scientists, AI engineers) is growing while low-skill roles decline.
- The Creative Destruction framework by Schumpeter is also relevant. While AI leads to the destruction of traditional job roles, it simultaneously creates opportunities in new, innovation-driven sectors.

3. Objectives

1. To examine global patterns and sectoral trends of job displacement attributed to the increasing deployment of artificial intelligence (AI) technologies.



2. To analyze the differential impact of AI on employment across various Asian economies, with an emphasis on socio-economic, technological, and policy-related factors.
3. To investigate the specific implications of AI-induced job displacement within the Indian labor market, focusing on both formal and informal sectors.
4. To evaluate governmental, institutional, and private sector responses to AI-driven employment challenges in India, and assess their effectiveness.
5. To propose a policy-oriented, human-centered framework aimed at mitigating the adverse effects of AI on employment and supporting workforce transition strategies.

4. Methodology

This paper uses a mixed-method approach, combining secondary data from international reports, government databases, and industry publications. Tables and percentage analysis are used to represent job loss patterns across regions.

5. Global Overview of AI-Driven Job Displacement

The global impact of AI on labor markets is uneven, influenced by factors such as economic structure, technological maturity, labor laws, and investment in workforce development. While developed economies are seeing a transition toward AI-enhanced job roles, many developing nations are facing direct displacement due to the lack of supportive infrastructure and reskilling initiatives.

5.1 Global Job Displacement Trends

AI is affecting three main categories of work:

- Routine Manual Work: Such as assembly line operations, warehouse logistics, and agriculture.
- Cognitive Routine Work: Including bookkeeping, customer service, and administrative roles.
- Low-Skill Non-Routine Work: Such as driving, retail assistance, and courier services.

The following table provides a comparative snapshot of AI's impact by region:

Region	Jobs at Risk (%)	Key Affected Sectors	AI Maturity Level	Primary Concerns	Sources
North America	42%	Manufacturing, Transport, Customer Service	High	Income inequality, retaining gaps	WEF (2020), McKinsey (2021)
Europe	36%	Finance, Public sector, Manufacturing	High	Worker protection	Eurostat (2022),



				policies, skill mismatch	OECD (2021)
Asia-Pacific	52%	Retail, Agriculture, BPO, Manufacturing	Medium-High	Large unskilled workforce, tech adoption gap	ILO (2021), ADB (2020)
Latin America	34%	Mining, Agriculture, Public Administration	Medium	Informal labour, digital divide	Inter-American Dev Bank (2020)
Africa	25%	Agriculture, informal Sector	Low	Poor AI infrastructure, low digital literacy	McKinsey (2020), AfDB (2021)

5.2 Sector-Wise Impact Summary

- **Manufacturing:** One of the most affected sectors globally. In countries like the U.S., China, and Germany, smart factories are using AI-driven robotics for assembly, inspection, and predictive maintenance. This has led to massive workforce reductions in traditional manufacturing.
- **Transport and Logistics:** Self-driving trucks, automated delivery systems, and AI-powered route optimization tools are reducing reliance on human drivers, warehouse workers, and logistics coordinators.
- **Customer Service and Retail:** Chatbots, voice assistants, and self-checkout systems are replacing call center agents and retail staff, especially in countries with a high penetration of e-commerce.
- **Agriculture:** AI is transforming agriculture in developed countries through precision farming, drones, and predictive analytics. In developing countries, displacement is slower due to limited infrastructure, but long-term impacts are expected as technology becomes more accessible.

5.3 Global Trends and Observations

- **Job Polarization:** As AI replaces middle-skill jobs, there is a growing divide between high-skill, high-wage jobs (e.g., AI engineers, data analysts) and low-skill, low-wage jobs (e.g., janitorial, food service), increasing income inequality.
- **Geopolitical Variability:** Advanced economies have better capacity for reskilling and managing transition, whereas developing economies risk mass unemployment if intervention measures are delayed.



- **Rise of the Gig Economy:** Displaced workers are increasingly turning to gig platforms (e.g., Uber, Amazon Mechanical Turk), which often offer low job security and benefits, exacerbating precarious employment trends.
- **Policy Gaps:** Despite growing awareness, few countries have implemented comprehensive national strategies to address AI-driven job loss. Exceptions include countries like Singapore, Germany, and South Korea, which are investing heavily in AI education and reskilling.

6. AI Impact in Asia

Asia, home to over 60% of the global population, is at the epicentre of the AI revolution. While the region shows immense potential for economic growth through AI, it also faces unique challenges related to labour-intensive economies, digital inequality, and limited social safety nets. The impact of AI on jobs in Asia varies greatly across sub regions, depending on each country's level of technological advancement, economic structure, and policy readiness.

6.1 Overview of Regional Disparities

Country/Region	AI Adoption Level	Jobs at High Risk (%)	Main Vulnerable Sectors	Notable Trends
Japan	High	32%	Manufacturing, Healthcare	Rapid automation due to aging population and labor shortage
South Korea	High	30%	Electronics, Automotive, Services	Heavy investment in AI startups and robotics
China	Medium-High	43%	Manufacturing, Finance, Logistics	Government-driven AI strategy aims to lead globally by 2030
Southeast Asia (ASEAN)	Medium	56%	Garment, BPO, Retail	High automation risk in export-dependent sectors



India	Medium	45%	IT, Agriculture, Education	Digital push and demographic dividend, but low formal skilling
Bangladesh/ Vietnam	Low-Medium	57%	Garment, Light Industry	Heavily reliant on low-cost labor; AI adoption could be disruptive

6.2 Southeast Asia: A Critical Risk Zone

The International Labour Organization (ILO, 2021) reported that nearly 56% of jobs in Cambodia, Indonesia, the Philippines, Thailand, and Vietnam are at high risk due to automation. These economies are heavily reliant on low-skilled labor in manufacturing (especially garments and electronics), which is easily replaceable by machines.

Key points:

- Garment industry in Bangladesh and Vietnam is already seeing semi-automated production lines.
- Call centre jobs in the Philippines are under threat from AI-powered customer service platforms.
- Governments have begun implementing “Industry 4.0” roadmaps but often lack strong reskilling infrastructure.

6.3 East Asia: Transitioning Toward a Smart Economy

Japan and South Korea are leading Asia in AI readiness, partly due to aging populations and shrinking workforces, which create incentives for automation rather than causing mass job displacement. However, middle-skill jobs are still at risk.

- Japan’s government has invested over \$1 billion in AI research and robotics since 2018.
- South Korea’s “Digital New Deal” includes a national AI curriculum and tax incentives for automation.

China, meanwhile, is rapidly industrializing its AI sector with state-led investments in facial recognition, surveillance, smart manufacturing, and fintech. While AI could displace up to 100 million workers in China by 2030 (McKinsey, 2021), it also aims to become the world leader in AI innovation.

6.4 South Asia: Balancing Growth and Disruption

- India, Pakistan, and Bangladesh present a more complex picture. These nations have large, youthful workforces and growing digital economies but also face high informality and underemployment.
- In India, over 45% of jobs are at risk according to a 2023 World Bank estimate. The IT/BPO sector, a traditional employment generator, is increasingly adopting AI-based automation for backend processes and customer interactions.



- Bangladesh's export-driven garment industry is beginning to adopt robotics and AI for quality control, threatening low-skilled sewing and finishing jobs.
- Pakistan lags in AI adoption but faces long-term risk in agriculture and textile sectors if AI becomes widespread without local capability-building.

6.5 Skills and Education Gaps

A recurring theme across Asia is the skills mismatch—many workers do not possess the digital and cognitive skills required to transition into AI-enhanced jobs. According to the Asian Development Bank (ADB, 2021), less than 30% of the Asian workforce has access to digital skills training.

6.6 Emerging Opportunities

Despite the risks, AI is also creating demand for new job categories, including:

- AI and ML engineers
- Data analysts
- Robotics technicians
- Cybersecurity experts
- Digital marketing and e-commerce specialists

Countries like Singapore, India, and South Korea are investing in these opportunities through public-private partnerships, AI research hubs, and digital skilling initiatives.

7. Focus on India: AI's Growing Footprint and Workforce Implications

India, with a population exceeding 1.4 billion and a workforce of over 500 million, stands at a critical juncture in the global AI revolution. As one of the fastest-growing digital economies, India is both poised to benefit from and vulnerable to AI-driven disruptions. While the country has emerged as a hub for software and IT services, much of its workforce remains engaged in low- and semi-skilled jobs, particularly in agriculture, manufacturing, and informal sectors—many of which are highly susceptible to automation.

7.1 Sector-Wise Impact of AI in India

Sector	Job Risk (%)	Current AI Adoption	Implications
IT & BPO	69%	High	Routine coding, testing, and support jobs are being automated
Agriculture	34%	Low-Medium	Precision farming, crop monitoring by drones, and predictive analytics emerging
Manufacturing	52%	Medium	Robotics in textiles, automotive assembly; semi-skilled jobs at high risk



Retail & E-commerce	48%	Medium-High	Automated checkout, inventory tracking, chatbot-based support replacing workers
Banking & Finance	35%	High	AI in fraud detection, customer service, loan processing
Education	30%	Growing	EdTech platforms using AI for personalization, but teachers face limited threat
Logistics & Transport	50%	Medium	Driverless tech and AI-based delivery optimization impacting employment

7.2 Informal Sector and Unorganized Labor

Over 80% of India's workforce is employed in the informal sector, including daily wage laborers, small vendors, construction workers, and domestic help. This segment lacks access to formal training and social protection, making it highly vulnerable to displacement without recourse.

- Automation in small-scale industries (e.g., textile dyeing, brick kilns) is reducing labor demand.
- App-based gig work (e.g., Swiggy, Ola, Urban Company) is increasing, but these roles often lack stability, benefits, or growth.

7.3 Geographic and Demographic Variability

- Urban areas like Bengaluru, Hyderabad, and Pune are becoming AI innovation hubs, with high investment in startups and R&D.
- Rural areas, however, lag in infrastructure, internet access, and education, widening the digital divide.
- Youth (aged 15–29) face a paradox: a tech-driven economy with insufficient quality jobs for millions of new entrants each year.

7.4 Government Initiatives and Policy Response

India has launched several national strategies and schemes to harness AI while minimizing job disruption:

- NITI Aayog's National AI Strategy (2018): Promotes "AI for All" focusing on sectors like healthcare, education, agriculture, smart mobility, and fintech.
- National Programme on AI (2021): Implemented by MeitY to boost AI research, startups, and AI adoption in governance.
- Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana (PMKVY): Aims to reskill and upskill over 400 million people by 2025.



- FutureSkills Prime: A joint initiative by NASSCOM and MeitY to train professionals in emerging technologies including AI, blockchain, and cloud computing.

7.5 Challenges in Mitigating Job Loss

Despite progressive policies, several challenges persist:

- Skill mismatch: Traditional education systems are not aligned with future labor market needs.
- Low female participation: Women are disproportionately employed in vulnerable informal sectors and have limited digital access.
- Funding gaps: Micro, Small & Medium Enterprises (MSMEs), which employ ~110 million people, lack resources to adopt AI sustainably.
- Data and privacy issues: Concerns about AI deployment without robust regulatory frameworks.

7.6 Future Outlook

While estimates vary, it is projected that by 2030, between 20–25 million Indian jobs may be displaced due to AI and automation. However, this loss could be offset by the creation of 15–20 million new jobs if India:

- Rapidly expands digital literacy and vocational training.
- Promotes entrepreneurship and innovation in AI and related fields.
- Ensures inclusive and regional development in AI deployment.
- Establishes social security nets for displaced workers.

AI is both a threat and an opportunity. If managed wisely, India can position itself as a global AI leader while ensuring equitable employment transitions.

8. Policy Implications and Recommendations

With AI transforming how people work around the world, policies need to be updated fast to cope with problems such as removing jobs, creating inequality and rebuilding workforces. For countries such as India and those in Asia, the plan must target education, reform the labor market, build digital infrastructure and improve social protection.

8.1 Strategic Policy Areas

a. Skilling and Reskilling the Workforce

- Action: Invest in large-scale, future-oriented training programs in AI, machine learning, robotics, data analytics, cybersecurity, and cloud computing.
- Justification: McKinsey (2021) estimates that 375 million workers globally will need to switch occupational categories by 2030. India alone may need to reskill over 120 million workers.

Example: Expand initiatives like FutureSkills Prime and PMKVY with industry partnerships to align training with market demand.

b. Strengthening Digital Infrastructure



- Action: Expand affordable internet access, especially in rural and underserved areas, and invest in cloud and AI computing facilities.
- Justification: Unequal access to technology deepens the digital divide, leaving large sections of the population excluded from AI-related opportunities.

c. Supporting MSMEs in AI Transition

- Action: Provide tax incentives, AI-readiness toolkits, and subsidized tech access to Micro, Small & Medium Enterprises.
- Justification: MSMEs account for 30% of India's GDP and employ over 110 million people but are often unable to adopt new technologies.

d. Creating an Inclusive AI Ecosystem

- Action: Implement gender-sensitive skilling programs and promote AI careers among women and marginalized communities.
- Justification: Currently, less than 20% of AI professionals in India are women (NASSCOM, 2023). A just transition must be inclusive.

e. Promoting Human-Centric AI Development

- Action: Encourage development of AI that augments human capabilities (e.g., AI-assisted healthcare, education) rather than fully replacing them.
- Justification: A shift from substitution to augmentation can reduce mass displacement while enhancing productivity.

f. Regulatory Framework for Ethical AI

- Action: Develop and enforce national AI regulations ensuring data privacy, algorithmic transparency, and labor rights.
- Justification: Ethical concerns around bias, surveillance, and job profiling must be addressed to ensure responsible AI use.

g. Establishing Social Protection Mechanisms

- Action: Introduce unemployment insurance, universal basic income (UBI) pilots, and portable benefits for gig and displaced workers.
- Justification: Having safety nets becomes extremely important as more jobs in informal and gig industries become unstable.

h. Regional and International Collaboration

- Action: Collaborate with ASEAN, OECD, and other international bodies for knowledge sharing, AI governance models, and skill migration frameworks.
- Justification: AI makes a difference across countries and uniting efforts can increase the ability of countries to adapt and do more.



8.2 Policy Roadmap for India

Time Frame	Priority Actions
Short Term (1–3 yrs)	Launch targeted reskilling programs, MSME AI funds, and rural digital initiatives
Medium Term (3–5 yrs)	Implement AI regulatory frameworks, UBI pilots, and digital curriculum reforms
Long Term (5–10 yrs)	Universal AI literacy, national job displacement monitoring system, global AI hubs

And for India and Asia, we should focus on using AI wisely and handling its negative effects thoughtfully. For this reason, we need policies that link the use of economics, justice and technology to support digitalization.

9. Focus on Manipur:

The impact of AI on work around the world is becoming more obvious and is very worrying for many. What used to seem like a future possibility is now fully here: AI is transforming many sectors and starting to take over jobs that depend on common tasks, simple skills or middle-skill mental jobs.

Since many Manipuris depend on professions that are rooted in tradition, public service, teaching, retail, farming and small-scale businesses, the consequences of job loss from AI are much bigger than just technology.

Automation and the Disappearing Worker

Roles that used to be handled by clerks, receptionists, data entry operators and junior teachers are now being taken over by machines. Artificial intelligence voice assistants have caused the shrinking of entire call centers in major cities.

Many young people with education in Manipur are discovering that stable work in either the private sector or with government projects is becoming more scarce. They are college degree-holders without jobs, now having to compete against endless, no-cost machines.

Traditional Occupations at Risk

Traditional craftsmen, weavers and traditional doctors are now losing their unique work to AI platforms. Now, algorithms can reproduce indigenous designs, web robots can oversee sales and translation software can handle sacred texts, all quicker and more economically without regard for cultural background.

The result?

Humans aren't needed anymore, it's just that machines can now do the same work more efficiently and at a lower cost.

Education: A System Lagging Behind

Surprisingly, AI is racing forward quickly, yet education in the Northeast region is still based on outdated ideas. Teachers are receiving the same education as students, who will live in a world much different from the present. If curriculum content and digital skill development are not improved right away, many youths have no idea where they are headed.

A grim irony emerges: AI is moving faster than our capacity to respond to it.

The Psychological and Social Cost

Not only is employment about money; it also defines who we are, what we do and how stable our lives are. Unemployment results in more mental health issues, more people moving to other cities, stress on families and, in some cases, opens them up to antisocial influences.

A person losing their job doesn't just lose their pay, they also lose the feeling that they belong.

What Can Be Done?

A quick and responsible action is necessary to avoid this potential job crisis from harming society:

- Help workers and graduates gain skills they need to use new technologies at work.
- Dedicate public support to tasks that only humans can do well such as caregiving, teaching, arts and services from the community.
- Ethics rules and laws need to make certain AI doesn't take away more jobs than it brings about.
- Promoting models where AI is used to support tasks rather than replace people in their jobs.

It is most crucial to include what local people have to say. The approach to the future of work in Manipur will not come from Delhi or Silicon Valley. Talking points should come from the grassroots, involving students, teachers, decision makers and those in the arts and business alongside others in society.

AI is sure to rise in usage. The loss of many jobs does not need to be permanent. If we treat this moment as a chance to respond with ethics, empathy and fairness, we will ensure technology works for us rather than against us.

Eventually, machines could think, but only humans are capable of learning to care. That ability is something only people can possess.

Manipur and Traditional Jobs

The world is at a key turning point today. While AI is changing industries, education, governance and creativity, it is also causing problems for traditional professions, like blacksmiths, handloom weavers, schoolteachers and traditional healers, all of which have been a major part of many communities for generations.

Where socio-economic activities are connected to craft, agriculture, knowledge shared by mouth and local jobs in Manipur, AI emerging here is not just a technical change — it is both disruptive and offers opportunities.

The Vanishing Craft of the Hands

For Andro and Thongjao, whose traditional job is pottery and the weavers of Wangkhei, the handing down of skills has always been fundamental to making a living in Manipur. These positions help our economy and represent parts of our culture. At the same time, when AI-based



design, computer-aided manufacturing and online algorithms become common, regular artisans struggle to compete.

A loom tells a story, while an AI copies a design. Yet, does it really hold on to history and emotion as closely as we might expect? That is the important question now facing communities.

Agriculture and the Algorithm

Rural economy in Manipur depends largely on farmers and they are also paying attention to the rise of AI. Innovative tools, including smart farming, drone irrigation and climate and yield analysis, are all revolutionary ideas. Yet, in places where infrastructure is still hard to obtain, this shift in technology may keep many on the sidelines.

People such as Pangal fishermen and hill farmers in Ukhrul may not use AI for forecasting, but their years of experience match—or surpass—an innovative system.

The Quiet Automation of Teaching

Education which people thought was secure and worthy, is now facing significant changes. Urban and elite universities are increasingly using AI, language models and online classrooms. Even so, can technology offer students the kindness of a local teacher or the comfort of hearing lessons in their own language?

AI is meant to help, but policies and people's attitudes sometimes act like it is meant to replace us.

Cultural Economies in the Crossfire

Those studying with Thang-Ta masters and practicing Sanamahi rituals are often classified as neither farmers nor businesspeople in the official economy. Such jobs are driven by cultural, spiritual and community factors. When operational decisions rely more on machines and productivity, certain jobs can be neglected by society.

We could lose more than work if everything becomes digitized — we may also lose our cultural heritage.

Rethinking the Future: AI With Tradition, Not Against It

The main issue is not if AI replaces old jobs — it is to find ways to integrate AI that preserve our culture. That means:

- Allowing hybrids where artisans develop with AI and give unique shape to their products.
- Making AI accessible in local languages so it works for teachers, rather than against them.
- Helping rural and traditional communities learn about technology so they can take part in the developments of artificial intelligence.
- Understanding and attaching significance to traditional work in national economy statistics and labor figures.

What matters now is to make sure AI is ethical, just and preserves cultural practices as it is applied. A Spectacle or a Turning Point?

Like for many countries in the Global South with rich cultures, AI brings risks and opportunities to Manipur. Unthinkingly embracing AI could result in its use acting as a trophy for removing jobs, insights and respect. However, when used wisely, it might lead to a period where many fields are renewed and both traditional and technological knowledge go together.



Technology alone cannot make the choice. It's about how we use philosophy and politics to shape the society we want.

10. Conclusion

The accelerating advancement of Artificial Intelligence (AI) marks a pivotal shift in the global employment landscape. While AI presents immense potential for boosting productivity, improving service delivery, and fostering innovation, it also poses significant risks to traditional employment models—particularly in labor-intensive economies. This paper has examined the multifaceted implications of AI-driven job displacement across the globe, with a focused lens on Asia and India. Globally, AI threatens to displace up to 800 million jobs by 2030, with routine and repetitive tasks being the most vulnerable. Developed nations such as the U.S., Germany, and Japan are mitigating these effects through aggressive investment in reskilling and human-centered AI systems. In contrast, many developing economies face the dual burden of job loss and insufficient policy readiness.

In Asia, the impact of AI is uneven but profound. Countries like China, Japan, and South Korea are advancing AI ecosystems while actively managing workforce transitions. Southeast Asia, heavily dependent on low-skilled labor and exports, stands at critical risk of displacement without rapid intervention. India's situation is uniquely complex: while it is a global IT powerhouse and a leader in digital innovation, its massive informal workforce and skills gap make it highly vulnerable to structural unemployment due to automation.

The Indian experience highlights a broader regional and global challenge—the need to balance technological progress with social equity. The country faces the daunting task of reskilling over 120 million workers, modernizing its educational framework, supporting MSMEs, and protecting informal labor. At the same time, AI offers India an unprecedented opportunity to leapfrog into a future-ready digital economy, especially if it leverages its youthful population, robust startup ecosystem, and strategic policy initiatives like Digital India, National AI Strategy, and Skill India. Ultimately, the transition into an AI-driven economy must be human-centric, inclusive, and strategically managed. Governments, academia, industry, and civil society must collaborate to design policies that not only cushion the negative impact of job displacement but also empower the workforce to thrive in new, AI-enhanced roles.

The future of work is not one of fewer jobs, but different jobs. With the right interventions, India and other Asian economies can turn the AI disruption into an opportunity for inclusive, sustainable, and equitable growth.

11. Recommendations

To effectively manage the challenges and opportunities posed by AI-driven job displacement, the following strategic recommendations are proposed for policymakers, industry leaders, and stakeholders across Asia, with a special focus on India:

11.1 Enhance Workforce Reskilling and Lifelong Learning



- Develop comprehensive and accessible reskilling programs targeting vulnerable sectors, especially manufacturing, retail, and informal economy workers.
- Integrate digital literacy and AI fundamentals into school and university curricula to prepare future generations for evolving job requirements.
- Promote public-private partnerships to ensure training aligns with current and emerging industry needs.

11.2 Strengthen Digital Infrastructure and Accessibility

- Invest in expanding high-speed internet access and digital tools in rural and underserved urban areas to bridge the digital divide.
- Encourage affordable access to AI technologies for MSMEs to increase productivity without massive layoffs.

11.3 Foster Inclusive Growth and Gender Equality

- Design skill development initiatives that actively include women and marginalized groups to ensure equitable AI benefits.
- Implement policies to promote women's participation in STEM fields and AI-related careers.

11.4 Support MSMEs and Informal Sector Transitions

- Provide MSMEs with financial incentives, AI adoption toolkits, and advisory services to facilitate smooth technology integration.
- Develop social protection mechanisms such as portable benefits and income support for displaced informal workers.

11.5 Promote Human-Centric AI Development

- Encourage innovation in AI applications that augment human work rather than replace it, particularly in healthcare, education, and public services.
- Establish ethical AI guidelines and transparency standards to protect workers' rights and data privacy.

11.6 Establish Robust Policy and Regulatory Frameworks

- Formulate national AI governance policies addressing labor impact, data security, and ethical use of AI.
- Create an AI impact monitoring body to continuously assess labor market shifts and advise on policy adjustments.

11.7 Facilitate Regional and International Collaboration

- Engage in cross-border partnerships for knowledge sharing, skill migration, and AI governance frameworks.
- Collaborate with international organizations such as ILO, OECD, and ADB to access best practices and funding.

Implementing these recommendations will require coordinated efforts across government, industry, academia, and civil society. By proactively addressing AI's impact on employment,



Asia—and particularly India—can harness AI’s transformative power to foster resilient, inclusive, and future-ready economies.

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