THE NEXT GREAT DIVERGENCE
WHY AI MAY WIDEN INEQUALITY BETWEEN COUNTRIES

UNDP

Lessons from Online Gig Work in India and Indonesia

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Generative artificial intelligence is transforming many global labor markets, especially in online gig work. Using information from India and Indonesia, this study examines AI's dual role, both as a substitute for routine tasks and as a complement to human skills. Based on existing quantitative analysis, it assesses its effects on economic inequality, including gender gaps. This is supplemented with interviews with online gig workers and experts. The chapter concludes with recommendations for governments, platforms and workers – aimed at creating an inclusive AI-resilient workforce.

The current preoccupation with the potential impact of new technology, especially AI, to replace people and cause a loss of jobs is not new. Throughout history, major technological innovations have profoundly reshaped global economies and labor markets.[1] Similar fears emerged during the Industrial Revolution with the advent of machines and factories and more recently again in the 1990s with the rise of computerization.[2] Historically, economists have countered anxieties by highlighting the compensatory effects of increased productivity, lower production costs, and rising demand.[3] And in practice technological advancements have often led to the creation of new types of job to replace those lost through automation.[4]

It is also important to consider the quality of employment. The deployment of new technology typically changes skill requirements, increasing the demand for some skills while making others less valuable, or obsolete.[5]

The new world of gig work

Online gig work has gained in popularity since the onset of COVID-19, particularly among workers outside the formal labor market.[6] Gig work is typically divided into two main categories: location-based platform work (offline) and cloud work (online). Offline gig work includes services such as food delivery, ride-hailing, and domestic assistance, whereas online gig work consists of tasks that can be performed and delivered remotely. This chapter adopts an expansive definition of online gig work that encompasses both offline and online employees as well as independent contractors, covering paid and unpaid tasks.[7]

In 2023, the global gig workforce was estimated to be 435 million, representing 12 percent of the global job market, with online platforms playing a crucial role in this expansion.[8] The gig economy market is projected to reach $1,847 billion by 2032.[9]

Both offline and online work offer flexibility and autonomy to workers while enabling businesses to access specialized talent on demand. Online gig work is typically carried out through marketplaces such as Upwork, Fiverr, Freelancer.com, and Guru.com – which allow gig workers or freelancers to bid for and complete projects posted by clients.

Both offline and online work rely on AI in the form of algorithmic management. In offline gig work, AI optimizes dynamic pricing, for example, or routes, but without directly replacing workers since GenAI cannot perform physical tasks such as food delivery and domestic services.[10]

In online gig work AI-based systems match freelancers with clients, and also monitor worker performance, and implement human resource decisions.[11] Since many online gig jobs can readily be automated there are likely to be continuing changes and a significant shift in workers' skill profiles.[12] AI systems are likely to amplify demand for advanced digital and cognitive skills while reducing the demand for routine and clerical activities. Also in greater demand will be skills that complement GenAI, such as critical thinking, creativity, and emotional intelligence.[13] Even highly skilled freelancers may see fewer jobs and declining incomes.[14] This could also increase the gap between high-skill, high-paying jobs and low-skill, low-paying jobs.[15]

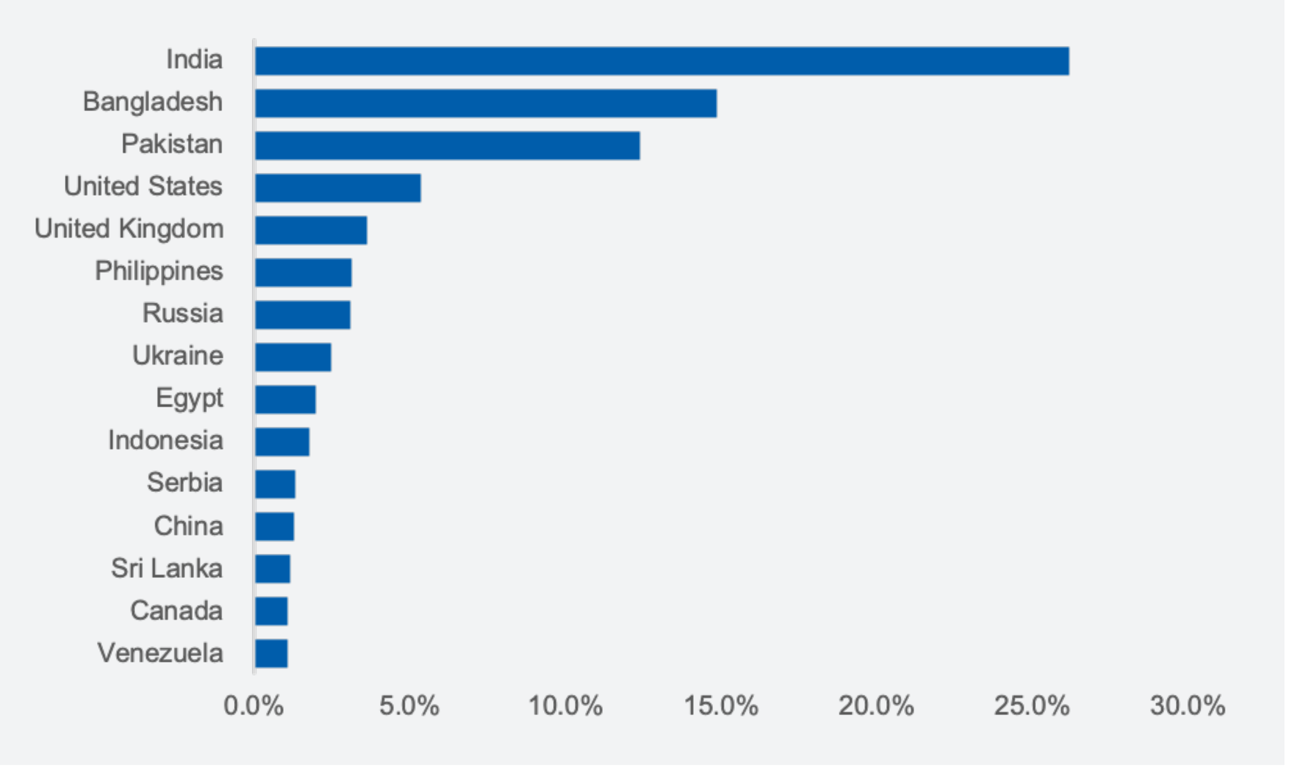
The workers most likely to be displaced are those in the formal sector, who may then need to transition to informal work.[16] This has serious implications for emerging markets and developing economies where employment is already highly dependent on informal labor markets.[17 18 19] Both forms of gig work share characteristics of informal employment in that they typically lack access to unemployment insurance, health benefits, or retirement plans.[20]

Measuring gig employment

Despite its rapid growth, online gig work remains under-researched and largely invisible.[21] Gig workers are a new workforce segment that is difficult to measure precisely. Gig workers are often categorized as independent contractors, self-employed workers, or day laborers. However, there have been some advances. Singapore, for example, in its 2023 labor force survey, accounted for gig workers. Australia has also added digital platform workers as a category in its labor survey. India's Code on Wages (2019) and its Code on Social Security (2020) have introduced definitions for gig workers, for workers participating in arrangements outside the traditional employee-employer relationships.[22]

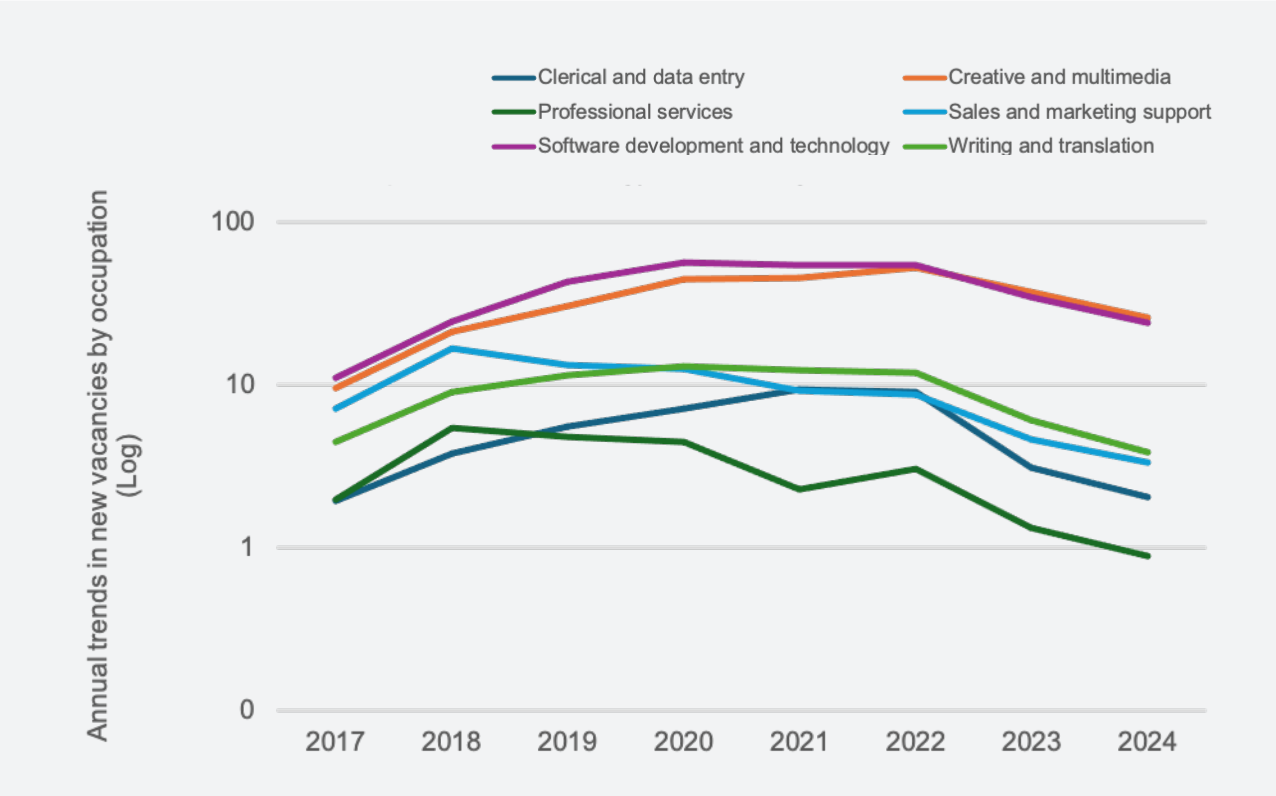
One important source of global data on gig work is the Online Labor Index (OLI), from the International Labor Organization with Oxford University. As indicated in Figure 1, the OLI indicates that a significant share of such workers are from India, Bangladesh and Pakistan.[23]

Figure 1– Percentage distribution of workers on online labor platforms – top 15 countries



Source: OLI database

Figure 2 – Annual trends in new vacancies by occupation, globally



Source: OLI Database; Aapti Analysis.

According to the OLI, since the introduction of ChatGPT the number of automation-prone online jobs declined more rapidly (Figure 2).[24] Nevertheless, between 2020 and 2021 the OLI also suggested an increase in demand for clerical and data entry work – including labelling and annotating data. Occupations like software development, creative and multimedia, professional services and sales and marketing have also seen a slight increase, while occupations like writing and translation have fallen.

Patterns of inequality in online gig work

In principle, seamless global access to work, combined with fewer requirements for certifications, should offer more equal access to employment.[25] However, gig workers face uncertain and unstable employment with a lack of benefits, and an overall precarious status,[26] and there are persistent wage disparities, particularly affecting women.[27]

In certain contexts, flexible working arrangements are attracting women, allowing for complementarity with other duty arrangements, like maternal and domestic care.[28] Indeed, there has been a notable increase in female participation in the online gig economy.[29] Yet this flexibility is often a double-edged sword. Gig work opens doors to economic participation, but it can also trap women in low-paid, unstable roles that lack clear pathways for growth and advancement. The flexibility that initially seems liberating may inadvertently entrench cycles of precarious work with limited benefits and job security.[30] Additionally, women tend to be clustered in roles that align with occupations historically dominated by women such as writing and translation, teaching, and clerical work.[31] Women often face a dual burden: the gender pay gap and occupational segregation, which are further exacerbated by algorithms.[32] Women in these occupations and in sales and professional services also face a unique challenge if they risk being replaced by machines.[33]

Field of study – India and Indonesia

To gain a greater understanding of online gig working, this chapter looks in particular at India and Indonesia. In some respects, labor markets in these countries are similar – both show significant disparities between formal and informal workers and between men and women.[34] These initial inequalities also seep into gig labor markets – and can then be exacerbated by the deployment of AI at scale.[35]

Both countries have high levels of job informality: in India in 2024, 88 percent; in Indonesia, 59.4 per cent as of February 2025.[36] And in both countries, legal protection in terms of safety and security and equality remains rudimentary.[37]

Nevertheless, there are notable differences between the two countries, with respect to formal employment. In India, with its dependence on service industries and IT-driven growth, fewer job opportunities have been created for the average worker. Between 1988 and 2022, growth in formal employment stagnated, increasing by only 10 percent. Indonesia on the other hand which has promoted labor-intensive manufacturing has encouraged workforce participation in the formal sector.

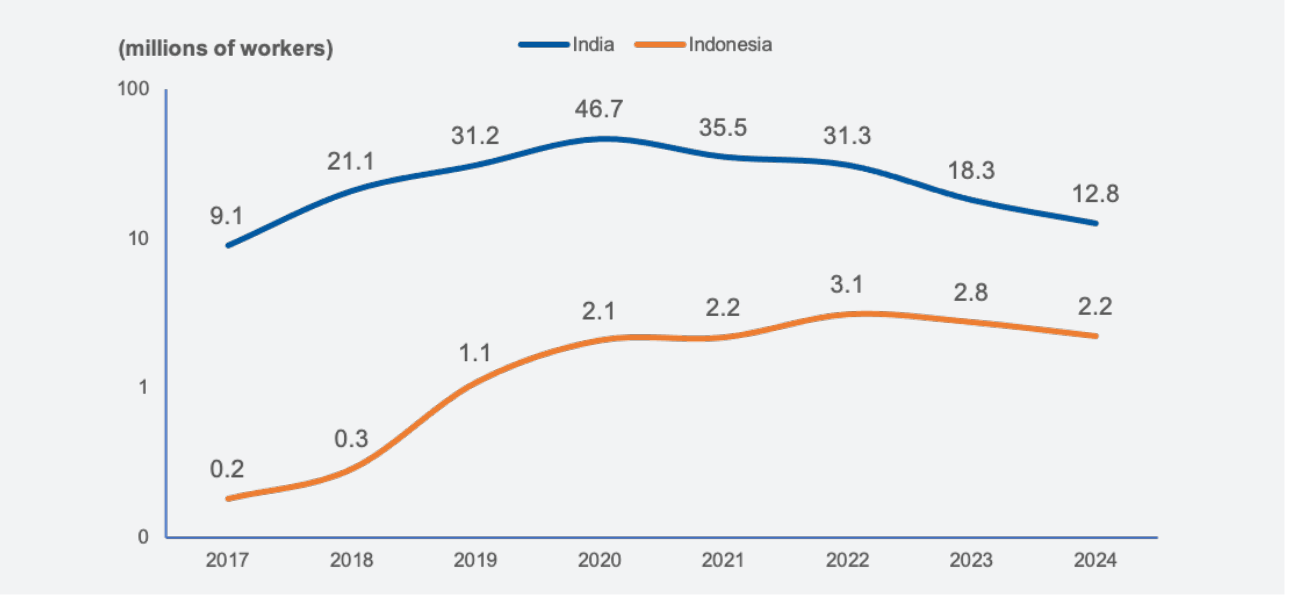
AI is thus likely to have different impacts. In India, the IT service-focused labor market is already seeing disruption.[38] In Indonesia, labor-intensive formal labor markets may see a more staggered impact, though with fewer productivity gains.[39]

In both countries labor protection for gig workers remains limited.[40] In India, social protection is gingerly being extended to offline gig workers,[41] but there is negligible consideration for their online counterparts.

Trends in online gig labor markets in India and Indonesia

India and Indonesia are at different stages of worker engagement for their online gig labor markets. India represents a more mature, saturated market for online gig jobs, while Indonesia is an emerging market with recent uptake and adoption. Between 2017 and 2024, India experienced a steady plateauing of workers registering on labor platforms, while Indonesia saw a significant rise (Figure 3).

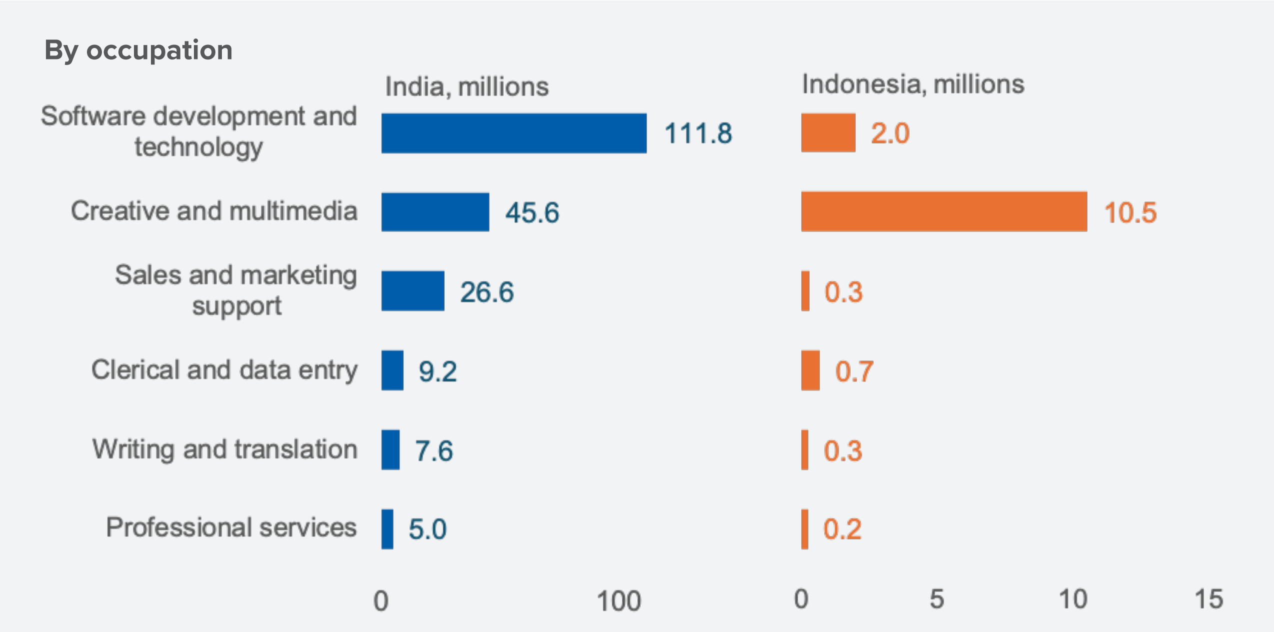
Figure 3 – Number of workers in online gig platforms, India and Indonesia, 2017–2023.



Source: OLI Database; Aapti Analysis.

Note: A logarithmic scale is employed to allow comparison between India and Indonesia. OLI data contains online workers only; ride-hailing/delivery are excluded. "Registrations" may include multi-platform accounts and inactive users; smaller values are produced when "active" workers are used.

Figure 4 - Gig workers in India and Indonesia, by occupation, 2016-2024 (millions)



Source: OLI Database; Aapti Analysis

There are also differences between the two countries in the occupations of online gig workers. As indicated in Figure 4, in India they are likely to be in software development and technology, while in Indonesia they are employed more in creative and multimedia tasks.

Substitution and complementary effects of AI

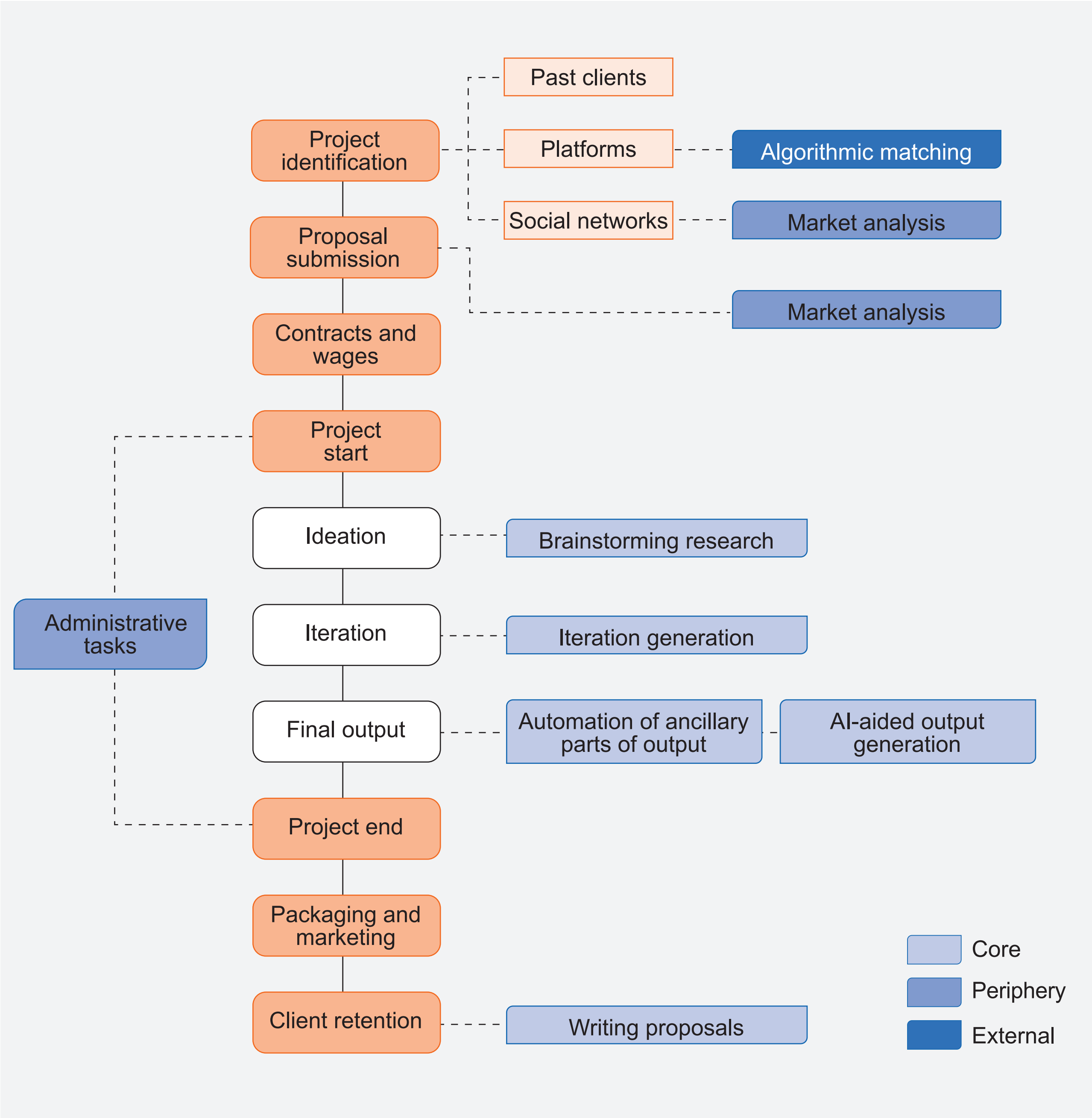
Figure 5 represents the project lifecycle of an online gig worker as well as the various touchpoints of AI interventions across three different categories, core, periphery and external.

AI can either substitute for or complement human labor. Substitution occurs when AI automates a substantial part of a task.[42] Complementarity emerges when AI handles repetitive tasks, freeing people to work on more creative or social aspects.[43] Generally, the effect of GenAI depends less on the sector or industry, and more on the composition of underlying tasks and skills and AI capabilities. For low-wage or low- cognitively intensive jobs, for example, GenAI skills can replace core and routine tasks. Tools like ChatGPT have already reduced the demand and wages for some freelance jobs.[44] In high-wage or high-cognitively-intensive jobs AI is more likely to complement existing worker capacities such as critical thinking, creativity, and emotional intelligence – which may in the long run become more valuable and enjoy greater demand.[45] Even here, however, some workers benefit more than others. Older workers are finding it more challenging than college-educated and younger people to move to roles complemented by AI.[46]

The study looks at changes in demand on online labor platforms in India and Indonesia. The first part of this analysis was quantitative, counting the postings on online labor platforms for two groups of jobs: AI-mature tasks where its tools produce high quality results that mimic human outputs; and less AI-mature tasks where the capabilities of the new tools remain nascent. This data was used to compare demand for labor before and after the release of publicly available GenAI tools.[47] This did show a weak effect, but it was not statistically significant.[48]

In addition, this study interviewed some online gig workers in India and Indonesia – three each from AI-mature and less AI-mature categories. There were also interviews with 12 experts, including researchers and clients, and businesses using gig labor platforms.

Figure 5 – AI use across a gig worker's project cycle



Source: Aapti Analysis

Impact of GenAI on online gig work

Table 1 summarizes how respondents said they were using AI tools. At the core, GenAI tools were primarily used in the ideation stage and for research; however, when these tools produce work of sufficient quality outputs, they are also used to aid the creation of the final output – workers reporting gains in both efficiency and quality. At the periphery, on the other hand, GenAI tools were being used to automate repetitive ancillary parts of the project cycle, enabling workers to focus on core tasks, leading to perceived gains in productivity.

Table 1 – Total factor productivity growth by major region: 2000–2024

Task category	Associated tasks	Use of GenAI
Core *The essential activities and processes that directly create a project's primary deliverables.*	Brainstorming and research support	Most respondents said GenAI tools were used for brainstorming and research. Such tools are typically used to understand the project at hand, often playing an assistive role in ideation, and in some cases, further probing to help strategizing and to deliver innovative outputs.
	Iteration generation	Respondents claimed to use GenAI tools to create multiple draft iterations of the output as part of the ideation process.
	Automation of ancillary parts of outputs	In some cases, AI models demonstrated the ability to produce quality outputs, but workers suggested the use of text and image-generating models to automate ancillary parts of the final output, such as background images or written copies for creative and design outputs.
	AI-aided output generation	A small cross-section of the respondents suggested the use of GenAI tools to generate outputs in some projects; however, these were never claimed to be final outputs, often needing human tweaking.
	AI-enabled product offering	Beyond the scope of a project cycle, some respondents claimed to be able to offer other services that they were previously unable to produce, using GenAI tools for support in such tasks.
Periphery *The supplementary tasks and support functions that facilitate or enhance the core work.*	Market analysis	Respondents were using AI-enabled search tools to conduct market research, particularly for identifying in-demand skills or exploring gig opportunities. They mentioned that these tools significantly enhanced the ease and efficiency of their research process.
	Proposal writing	Online gig workers often need to submit proposals for project opportunities. According to the respondents, GenAI tools have made this process more efficient and, in some cases, even improved the quality of the submission.
	Administrative tasks	Tasks like progress reports, presentations, and drafting emails form an important part of a gig worker's tasks within a project cycle. Such tasks were also seen to be either AI-automated or supported.
External *The outside systems, influences, or factors that lie beyond the worker but affect their functioning and experience.*		Online labor platforms, as seen in other gig labor platforms[49], also use AI models to algorithmically match clients to workers and rank workers.[50] One respondent suggested a lack of transparency on what factors are considered by such algorithms, restricting access to work opportunities. However, this lies outside the scope of the current study.

Source: Aapti analysis

Reports of users for core functions

For core activities, such as writing software or offering ideas, workers considered GenAI as a beneficial assistive technology. AI chatbots, for example, were used to brainstorm and ideate and enable workers to improve the quality of work. The tools also eased the process of making draft iterations, allowing workers to improve the quality of the final output. The benefits did, however, vary according to the maturity of AI models. For example, while AI chatbots produced relevant outputs for software development, and writing and translation, they were of less use in occupations like professional services, such as online help services.

Workers also reported negative impacts. Some suggested a shrinking demand for work on simpler tasks and projects. A similar decrease in opportunities was indicated in interviews with experts and employers, especially for repetitive tasks, with defined workflows and output requirements, for which AI models were mature enough to mimic human outputs. A few respondents reported AI's inability to comprehend or manage complex workflows, or to produce abstract outputs requiring contextual knowledge.

Reports of users for peripheral functions

For cognitive repetitive tasks like managing calendars, most respondents reported a gain in overall productivity: AI tools were helping workers either automate or aid in tasks like research and communication. A cross-section of respondents also reported using AI translators to overcome language barriers in international markets especially for platforms where the market remains dominated by global clients.

These responses also identified two crucial factors: AI-skill compatibility and the complexity of workflow and output.

- *AI-skill compatibility* – Where GenAI skills are mature and can mimic or better human skills they can substitute for them or be complementary. This also aligns with our tentative quantitative observation suggesting some reduction in employment as well as with international research.[51]
- *Complexity of workflow and output* – Where the work is more complex and dependent on contextual factors or experiential knowledge, GenAI has less to offer. Jobs requiring outputs with complex workflows are likely to see minimal disruption.

Table 2 shows how these two factors can be considered in four combinations, offering a starting framework considering the impact of GenAI.

Inequality analysis

In many cases, AI adoption deepens existing inequalities among gig workers by influencing employment structure, skill barriers, job quality, and digital preparedness, shaping who benefits and who is left behind in the evolving digital labor market. This section considers the aspects that will be affected, as summarized in Figure 6.

Employment terms and support infrastructure

Factors such as wages, labor regulations, taxation systems, and access to connectivity can leave workers in exposed and precarious situations.

Wages – The absence of a formal wage framework made it difficult to predict income and budgets. Monthly earnings fluctuated depending on whether working with local or international clients. One worker in Indonesia said that working with domestic clients could bring up to $200 to $300, whereas international clients might pay $600 to $900 for a similar task. Additionally, wages were also dependent on levels of experience. A worker with more than five years of work experience could make up to $1,000 a month.

Contracts – Respondents in India often worked with clients on retainers, allowing them to earn a baseline monthly income. Workers in Indonesia, on the other hand, were more likely to have a project-based relationship, so their income depended on the number of clients they

Table 2 – The impact of AI on different categories of work and tasks

When AI skill compatibility is high and complexity of workflow and outputs is low: There is a higher probability of GenAI tools substituting for human labor. *For example: AI text generators can produce high-quality writing work, particularly in areas like copywriting and search engine optimization, reducing the reliance on human labor.*	**When AI skill compatibility is high and complexity of workflow and outputs is high:** There is a higher rate of complementarity with existing human labor, helping workers not only increase their productivity but also the quality of outputs. *For example: tasks like product design require contextual awareness and experiential knowledge so there is limited automation; instead, AI tools assist workers, producing perceived productivity gains.*
When AI skill compatibility is low and complexity of workflow and outputs is low: Limited impact in terms of substitution or complementarity. *For example: for jobs within the online gig economy requiring physical presence, like photography or video production, the substitution impact of AI can be assumed to be negligible and there are also limited complementary effects.*	**When AI skill compatibility is low and complexity of workflow and outputs is high:** Workers use AI tools to automate or assist with peripheral tasks, resulting in minor productivity gains. *For example: in professional services AI can be used in the periphery to aid and assist workers, improving overall productivity.*

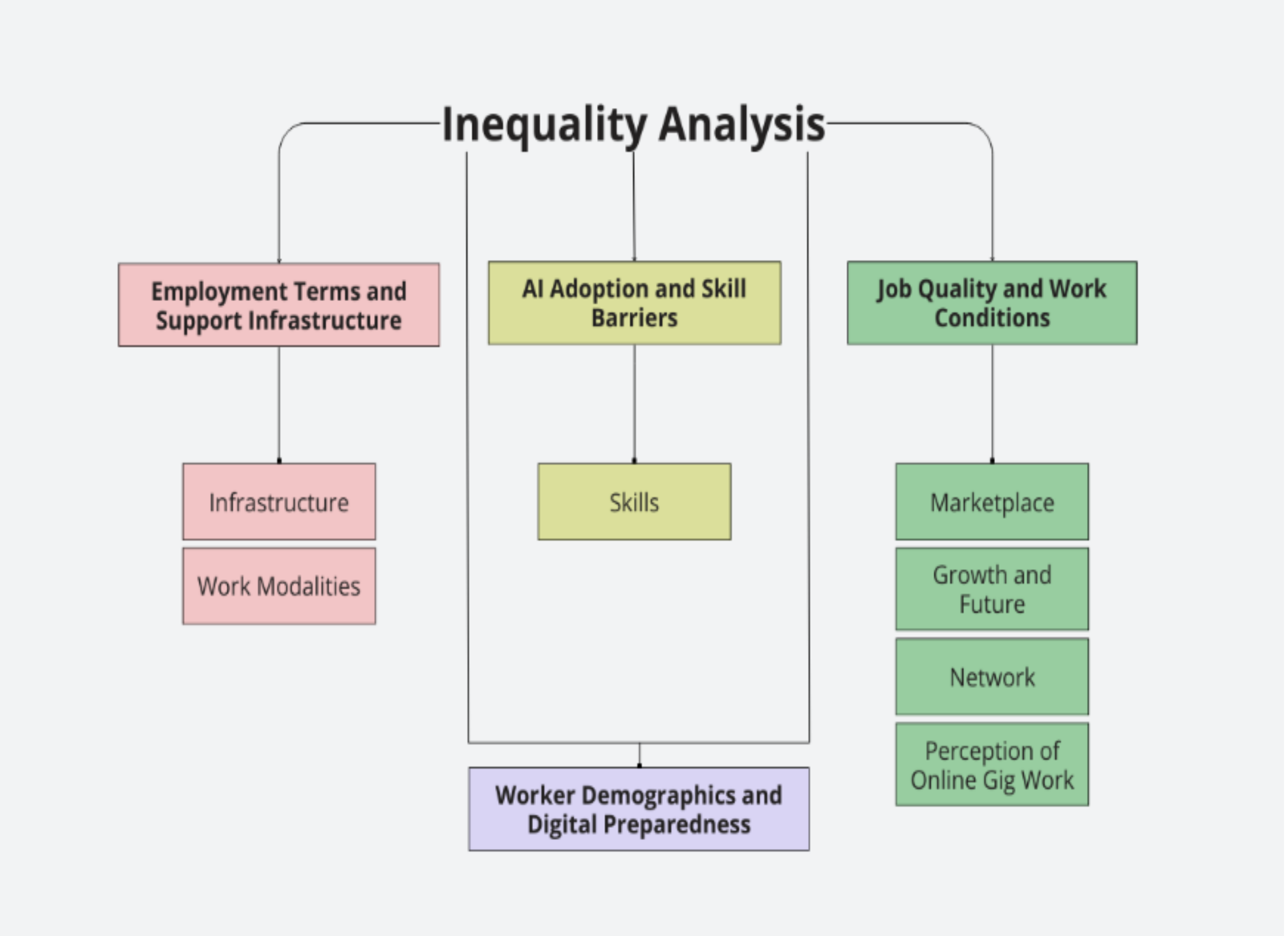
worked for. This also limited their capacity to work on multiple projects for the same client. Platform workers tend to operate with vague contracts that often lack clear payment schedules, indications of the scope of deliverables, or processes for dispute resolution. This leaves workers exposed to conflicts with clients, with minimal remedies at their disposal.[52]

Taxation – Given the unclear employment classification of online gig work, it may be difficult for workers to understand and fulfil their tax obligations. Indian workers often relied on chartered accountants, whereas Indonesian workers depended on assistance from personal contacts.

Infrastructure – Infrastructure includes access to the internet, hardware to perform the job, government support, and community support. None of the workers reported problems with hardware or software infrastructure. However, workers from Indonesia mentioned needing more support from the Government in terms of better job opportunities, access to social security and skill development programs. One worker mentioned the need for awareness campaigns by the Government around training and development on AI models for creative work. In terms of community support, workers from both countries said that they had taken up mentorship roles for those entering the workforce. Additionally, workers from Indonesia mentioned the value of community-based organizations that focused on skill development and network building.

Gender – Although our interview data did not capture the nuances of gender-based concerns, secondary research

Figure 6 – Structure of the inequality analysis



Source: Authors

indicates gender factors in online platforms though the impacts vary. In other contexts, early evidences suggest that wage gaps disadvantaging women are a feature of online platform too.[53 54] Another important factor in India hindering online women workers is lower smartphone ownership,[55] combined with lower digital literacy rates.[56]

AI adoption and skill barriers

Insights from the interviews under this theme comprise three dimensions of skills: skill types, job roles, and AI adoption.

Skill types – Workers and experts emphasized the growing importance of soft skills. While hard skills help workers perform the required tasks, soft skills such as communication, critical thinking, and creative thinking are essential for maintaining strong client relationships, both directly and off-platform. Soft skills cannot yet be entirely replicated by AI tools. One worker in Indonesia for whom AI had largely been unhelpful in expanding the business, underscored the necessity of soft skills in building a professional network. To thrive, workers need to strike a balance between hard skills and soft skills.

Job roles – These are categorized into six clusters based on the OLI database: creative and multimedia, software development and tech, writing and translation, clerical data entry, professional services, and sales and marketing support. Experience with AI can, however, be quite diverse. For example, one worker from the professional services cluster mentioned that many of their clients have been paying for the use of premium

AI models. On the other hand, another worker from the creative cluster mentioned that while AI can improve productivity, its outputs are too generic and lack the human touch and sensibility.

Effect on projects – Workers from Indonesia mentioned that, given the rapid integration of AI tools, most clients expected shorter turnaround times and have at times encouraged the use of AI to facilitate completion. Conversely, workers from India reported no such expectations from their clients; rather, they were happy to work through the creative process to arrive at the final output. Within creative work, workers mentioned that different types of projects offer different scope for AI use. For example, specific social media work that requires outputs to be generated quickly might utilize AI capabilities for final output generation. Contrastingly, an end-to-end brand strategy project which is largely abstract, might only require AI for brainstorming. It was also reported that in most AI-generated output processes, a trained worker's experience and perspective were still required.

Learning and skill development – All workers reported that their knowledge for AI tools was acquired through self-initiated exploration driven by curiosity. None had any formal training or structured skill development. This underscores a significant gap in support systems for upskilling within the online gig economy.

Gender – The interviews did not directly capture gender-based differences, which calls for exploration in future studies.

Job quality and work conditions

This theme considers work culture, job stability, and available benefits which are explored across four dimensions: marketplace, growth and future, network, and perceptions of online gig work.

Marketplace – Work was secured in diverse ways. In Indonesia, many gig workers relied on digital platforms such as Upwork and Fiverr. However, this dependence comes with significant drawbacks: high platform fees, commission-based earnings, and opaque algorithmic matching – which affected earnings, predictability, and job security. In India on the other hand, workers frequently relied on word-of-mouth referrals, which tends to result in more stable and repeatable business. Another crucial factor is client mentality. Two female workers from India recounted instances when male clients were dismissive and devalued their feedback, an unpleasant experience that can also damage long-term professional relationships, especially in environments with persistent gender stereotyping.

Growth and future – Gig workers follow various career trajectories. Some become full-time workers by joining their clients' organizations or building their own companies.[57] In Indonesia, freelancers often use their platform-mediated experience as stepping stones for launching their own agencies. In India, on the other hand, many workers preferred to build their clientele through traditional word-of-mouth channels while maintaining their independent status. Nevertheless, the inherent uncertainty of gig work often leads workers to combine freelance projects with part-time or full-time employment.

Networking – Networks are indispensable not only for acquiring new opportunities but also for obtaining guidance on navigating platforms. In Indonesia, the primary mode of community support was digital, operating through Facebook groups, Twitter, and Reddit. In India, on the other hand, workers followed a hybrid model where community support was both in person and digitally via WhatsApp groups.

Perception of gig work – Workers in both countries appreciated the flexibility and autonomy of remote work. These could however, be limited by traditional gender norms – with women largely concentrated in professional services, clerical and data entry, and creative and multimedia. One female worker from Indonesia who was involved in community skills teaching for gig work, mentioned that almost every candidate in the professional services cluster was female. Expert interviews suggested that this was because working remotely allows women to make time for their domestic work. This indicates the need for targeted interventions aimed at improving worker well-being and long-term career prospects.

Worker demographics and digital preparedness

Worker demographics can be analyzed through three dimensions: age, years of experience, and digital preparedness.

Age – All the workers in the sample were between 20 and 30 years of age. The experts indicated that gig work seems to attract a young workforce that includes recent high-school graduates, early-career professionals, mid-career individuals exploring new opportunities, and generally, those under the age of 30.[58]

Experience – A worker's adaptability and resilience will often depend on previous experience in the gig economy or related fields. Those with extensive experience may have developed an expansive portfolio and a deep understanding of client expectations. This typically gives them an advantage over those entering the market at junior positions, especially when AI tools are rapidly taking over many tasks. However, more experienced workers may also be reluctant to adopt new tools that fundamentally change established workflows. One worker with more than five years experience did not want to incorporate AI tools in any capacity beyond brainstorming.

Digital preparedness – This is defined as a worker's ability to navigate online platforms, master digital tools, and adapt to shifting technological landscapes. All workers in this small sample had a basic understanding of digital tools and maintained a minimum level of familiarity, and most were early adopters, and self-starters.

The preliminary analysis based on a small sample in India and Indonesia thus indicates potential challenges and emerging inequalities among workers in online gig economies. They indicate issues such as consistent wage structures and limited government support systems with skills and training barriers and opportunities influenced by traditional gender norms. Workers typically have to self-teach new tools potentially widening gaps between adaptable and less adaptable workers. Overall, these findings highlight the urgent need for inclusive policies and interventions aimed at improving digital labor rights.

Policy recommendations

Governments

Governments can improve worker well-being and aid the creation of an inclusive and AI-resilient online gig workforce, acting in areas including employment classification to address informality, including through stronger data and evidence-based, skilling and re-skilling, with a particular focus on vulnerable groups and women. In the specific,

- *Labor laws* – Update labor laws and codes to include online gig workers as a distinct category of workers. For example, India's Code on Wages (2019) and Code on Social Security (2020) have introduced definitions for gig workers, for workers participating in arrangements outside the traditional employee-employer relationships.
- *Social protection* – Create dedicated policies or social protection schemes for gig/platform workers that address their specific needs, including health insurance,
- *Labor force surveys* – To ensure visibility, include online gig work as a formal category in labor surveys. Ensure that data are disaggregated by gender, region, and level of skill. Singapore and Australia are among the countries that have added gig and digital platform workers in their labor surveys.
- *Skills training* – Integrate AI skill building into formal education and focus on holistic capabilities like problem-solving, communication, and strategic thinking – partnering with private and academic institutions to deliver diverse, adaptive and accessible training programs.

- *Retraining* – Offer subsidized access to reskilling programs for current workers affected by automation and AI substitution, along with interoperable and nationally recognized certifications that encourage worker participation. In Indonesia, for example, the Kartu Prakerja training program caters for the existing workforce as well as young workers without formal education. Partnering with enterprises and universities, it is also offering advanced technological skills, focusing on AI, data science, and cybersecurity.

- *Opportunities for women* – Foster flexible training and mentorship initiatives to help women develop technical skills and expand their options for gig work that take into account their domestic responsibilities.[59] Incentivize platforms to create a special program for female workers for proficiency in technical skills. In the Philippines' the SPARK programs for example, bridge digital skill gaps across genders. A similar targeted approach has also been adopted for workers with disabilities.

- *Opportunities for women* – Post-training opportunities and finance for female workers. Embed gender-responsive design in skilling and digital literacy initiatives.

Workers

The second set of recommendations outlines how worker unions and workers can take the initiative to advocate for their rights and equip themselves to succeed in an increasingly AI-dependent online gig-work market.

- *Collective bargaining* – This is an effective mechanism to voice worker demands. Regional or occupation-level collectives can bargain for wage levels and offer peer-to-peer support. In Serbia, for example, workers mobilized to form the Association of internet Workers to protest a new taxation regime and succeeded in gaining new rounds of negotiations with the President.[60]

- *Regional level organization* – Regional workers organizations can support gig workers using social media platforms like Facebook, Reddit, and Twitter/X. Digital communities with effective legal frameworks can play a key role in collective bargaining efforts.

- *Worker networking* – Workers will benefit from networking in digital communities to understand skill demands in the market, and for peer-to-peer learning. In the United States the Freelancers Union, a non-profit entity, offers a wide range of resources to freelancers – finance advice, tax advice, free legal clinics and insurance.[61]

Platforms

The third set of recommendations emphasizes platforms' accountability for worker well-being by addressing issues that directly affect the quality and experience of their work. This could be achieved through:

- *Transparent fee structures* – Platforms should make extra efforts to provide standardized, comprehensive and accessible information that can offer key safeguards for workers. Governments can support such activities, by providing transparency platform standards – concerning the disclosure of all fees, commissions, and hidden charges.[62]

- *Contract standards* – Platforms must work towards standards for clearly written and comprehensive contracts that establish work expectations, outline processes to protect against disputes, specify the scope of work, and detail payment terms. Governments can provide standardized contract templates that include guidelines on key elements like payment terms, deliverables and grievance-redressal mechanisms.

- *Enable worker interaction* – Platforms should allow workers to interact with each other. This can improve peer-to-peer support and information sharing and help build shared identities. To encourage worker-centric features for community interactions governments can incentivize platforms – through endorsements or public procurement partnerships.

The AI revolution for gig work is not therefore simply about job replacement or increasing human productivity but about a fundamental reconfiguration of work. At present, gig work is largely growing organically, offering flexibility and new opportunities to workers, but with most of the control in the hands of employers through algorithms. In future governments, platforms and workers will need to work together to build an inclusive and AI-resilient workforce.

END NOTES

1. (Graetz, Restrepo and Skans, 2022)
2. (Frey, 2019)
3. (Hötte, Somers and Theodorakopoulos, 2023)
4. (Acemoglu and Restrepo, 2019)
5. (Dachs, 2018)
6. (Fairwork, 2023)
7. (Koutsimpogiorgos et al., 2020)
8. (Datta et al., 2023)
9. (World Economic Forum, 2023)
10. (Möhlmann et al., 2021)
11. (Duggan et al., 2020)
12. (Demirci, Hannane and Zhu, 2023; Teutloff et al., 2025)
13. (Auer, Köpfer and Švéda, 2024)
14. (Hui, Reshef and Zhou, 2023)
15. (Demirci, Hannane and Zhu, 2023)
16. (Fernández and Meza, 2015)
17. Research looking at broader labor markets shift of formality to informality is limited. Additionally, micro-data study from Brazil and historical analysis of previous waves of automation, suggest minimal impacts.
18. (Cazzaniga et al., 2024)
19. (Elgin et al., 2021)
20. (Datta et al., 2023)
21. (Howcroft and Bergvall-Kåreborn, 2019; Hussein, 2023)
22. In 2022, India's Niti Aayog also conducted a one-time nationwide estimate, I and projections of gig workers based on existing data, but this is limited as it does not distinguish between online and offline gig workers.
23. (Stephany et al., 2021; Datta et al., 2023)
24. (Demirci, Hannane and Zhu, 2023)
25. (Graham and Anwar, 2019; Van Slageren, Herrmann and Frenken, 2023)
26. (Rodríguez-Modroño, Pesole and López-Igual, 2022)
27. (Galperin and Greppi, 2017)
28. (Rani, Gobel and Dhir, 2022)

29. (Palagashvili and Suarez, 2021)
30. (Rodríguez-Modroño, Pesole and López-Igual, 2022)
31. (Rodríguez-Modroño, Pesole and López-Igual, 2022)
32. (Rani, Gobel and Dhir, 2022)
33. (Korgul, Witczak and Święcicki, 2024)
34. (Sen, 2024)
35. (Schor, 2020; Salari et al., 2025)
36. (Shetty, 2022; Pratomo et al., 2024)
37. (Putri, Darmawan and Heeks, 2023; Chandra and Yadav, 2024; Sharma, 2024)
38. (Muneer, 2025)
39. (ILO, 2024)
40. (Datta et al., 2023)
41. (Mitra, 2025)
42. (Chen, Srinivasan and Zakerinia, 2024)
43. (Autor, 2015)
44. (Demirci, Hannane and Zhu, 2023; Teutloff et al., 2025)
45. (Demirci, Hannane and Zhu, 2023)
46. (Pizzinelli et al., 2023)
47. This invoved two-way fixed effects difference-in-differences analysis Detailed note on the methodology and limitations is available in the appendix
48. There was negative coefficient of -4.113 but not statistically significance (p-value = 0.265). Suggest a trend that needs further investigation.
49. (Kadolkar, Kepes and Subramony, 2024)
50. (Trautwein et al., 2025)
51. (Auer, Köpfer and Švéda, 2024)
52. (Filinovych et al., 2025)
53. (Adams et al., 2025)
54. (Liang et al., 2018)
55. (GSMA, 2024)
56. (Njikho, 2024)
57. (Permana, 2023)
58. (Datta et al., 2023)
59. (Ghosh, Ramachandran and Zaidi, 2023)
60. (Digital Platform Observatory, 2020)
61. https://freelancersunion.org/
62. The EU wants new rules to improve the working conditions of people working in the gig economy https://www.consilium.europa.eu/en/policies/platform-work-eu/

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