

Capital and Labor in the Digital Age: The Rise of Digital Labour Platforms

By Sabina Dewan

Founder and Executive Director of JustJobs Network

Economic development is characterized as a shift from low levels of productivity as in an agrarian economy that relies on subsistence farming, to higher levels of productivity as in an industrialized economy dominated by services.¹ The pursuit of this structural transformation and service-led growth in India hinges on the adoption and use of technology as a necessary -- though not sufficient -- tool to help deliver services efficiently and at scale.² This has created the opportunity for investors and entrepreneurs to leverage private capital to build technology-based solutions that cater to the domestic and international demand for services.

Digital platforms are one such technology-based solution. From Business Process Management and logistics, to the delivery of food and personal care at home, digital platforms are increasingly becoming the foundational architecture for the delivery of services.³ Digital platforms can broadly be defined as interfaces that rely on the internet to connect consumers to providers of various types of goods, services, or information, through a technology-based application.⁴ Many digital platforms are for-profit, internet-based companies ranging in size and business models. Usually run by entrepreneurs and managers, rely on investors that, in-turn, seek dividends.

Digital platforms, that are increasingly underpinning India's service-led growth, are both fuelling, and being fuelled by, the hyper-financialization that has come to characterize the global economy in recent decades.⁵ In this era, leveraging of private capital to drive bottom-line profitability is, sometimes un-wittingly, pitted

¹ OECD. (2017). *Services Trade Policies and the Global Economy*. OECD Publishing.
<https://doi.org/10.1787/9789264275232-en>

² Dewan, S., Krishnamurthy, M., & Taneja, D. (2022). *Digitalisation and the Indian labour market: Trends, challenges, and opportunities*. GIZ.
https://www.bmz-digital.global/wp-content/uploads/2022/09/GIZ_2022_Digitalisation-and-the-Indian-Labour-Market.pdf

³ Dewan, S., Krishnamurthy, M., & Taneja, D. (2022). *Digitalisation and the Indian labour market: Trends, challenges, and opportunities*. GIZ.
https://www.bmz-digital.global/wp-content/uploads/2022/09/GIZ_2022_Digitalisation-and-the-Indian-Labour-Market.pdf

⁴ There is no internationally agreed terminology or definition of what the platform economy is and various terms are used, including: "collaborative economy", "peer-to-peer economy", "gig economy", "on-demand economy" or "platform economy". The term platform economy emphasizes the fact that its activities are conducted through a digital platforms, which has been described as "digital infrastructures that enable two or more groups to interact [and] position themselves as intermediaries". Taking a similar approach, the Organisation for Economic Co-operation and Development (OECD), ILO and Eurostat Handbook on Measuring Digital Platform Employment and Work describes digital platforms as "digital interface or an online service provider ... positioned between the providers of the services or goods and their clients".

⁵ Dafe, F., Naqvi, N., Hager, S. B. & Wansleben, L. (2022). Introduction: The Structural Power of Finance Meets Financialization. *Politics and Society*, 50(4), pp. 523-542. <https://doi.org/10.1177/00323292221125563>

against the wellbeing of labour. Labour platforms⁶ – a subset of digital platforms⁷ -- provide an illustration of this phenomenon.

Discourse on the rising influence of capital and its growing share of income, and labour's waning power and declining share of income, is not new. But how emerging economic trends, such as the evolution of the digital platform economy, reinforce these imbalances has not been investigated deeply enough. This paper examines how digital labour platforms are symptomatic of an economic system that favours capital over labour. It provides some suggestions on how governance of digital labour platforms can be strengthened to rectify imbalances and to prioritize equitable and inclusive economic growth by promoting worker wellbeing.

A rigged game: Investing in Digital Labour Platforms

A majority of private sector, for-profit labour platforms are financed by venture capital and private equity investors. These investors have an incentive to invest in a large portfolio of companies at the startup stage knowing that most investments will fail. The high failure rate for technology start-ups in India is well known with estimates ranging from 90 to 95 percent of start-ups failing within the first five years.⁸ Yet investors pour in capital based on the understanding that just a few successful platforms could provide outsized financial returns. Even though most investments will likely fail, those that are successful will cover the losses incurred by the failed startups and could provide significant profits. This is the gamble investors make.

It is an established practice that startups must gain market share rapidly during their initial years, even if this gain in market share comes at a significant financial loss initially. A large market share matters not only because it provides access to a larger pool of consumers, but also so that the platform can beat the competition in getting a foothold. In the emerging platform economy, a large market share ensures that a platform can establish itself as a dominant player and can dictate the terms in the emerging ecosystem. The understanding behind this loss-leading approach is that once the platform has gained a leadership position in the market it will be able to dominate the ecosystem of consumers and service providers and play a key role in the pricing of services.

⁶ Labour platforms connect businesses and clients to workers, either by acting as an intermediating entity or by directly engaging workers, to provide location-based or web-based services. The demand and provision of services is often task-based. Service providers that engage in this task-based work are called gig workers. Labour platforms intermediate the relationship between the consumer and service provider in several ways including facilitating the collection of payment and its disbursement to the worker. In the process, labour platforms manage several aspects related to working conditions and terms as per individual contracts.

⁷ Dewan, S., & Sanyal, K. (Eds.). (2023, May). Empowerment or Exploitation: Global Perspectives on Women's Work in the Platform Economy. JustJobs Network. https://www.justjobsnetwork.org/files/empowerment-or-exploitation-global-perspectives-on-womens-work-in-the-platform-economy_may-2023.pdf

⁸ Mehrotra, N., Patrao, C., Marshall, A., Banda, M., & Singh, R. R. (2016). *Entrepreneurial India: How startups redefine India's economic growth*. IBM Institute for Business Value. <https://www.ibm.com/downloads/documents/us-en/10c31775c8540225>

With these incentives in place, platforms provide significant rewards and discounts to consumers and service providers to sign-up and start using the platform.⁹ These practices of providing deep discounts tend to distort the existing market pricing and structure as consumers transition to the platform. Service providers are compelled to follow consumers to the platform. Eventually as more consumers and service providers move to the platform, a new market structure is established with the platform as the dominant player. At this stage, the platform has enough pricing power to start increasing the commission rates and prices.

Such financial and business models have adverse implications for labour. First, investment fuels many platforms that ultimately fail. When this happens, not only are any direct employees out of work, but so are large numbers of gig workers that are deployed by these platforms. Information asymmetries mean that workers are unaware of the uncertainty built into the system from the start. In this way, the gig economy is adding to labour market volatility and uncertainty. Second, the platforms that do survive also tend to be the ones that capture significant market share and crowd out competitors. This consolidation means that the platforms that are left standing can dominate the ecosystem and can set their own standards in the market. Third, this consolidation also means that platforms have a larger pool of labour to source from, adding to their ability to set the terms of engagement in, for instance, commission rates, prices, and other conditions of work for platform workers.

Work and Workers on Digital Labour Platforms

Like most businesses, for-profit digital labour platforms are driven by bottom line profits and the need to deliver dividends to investors. But unlike traditional businesses, these platforms operate on a different model altogether -- one that, several studies confirm, is not conducive to worker wellbeing, and the unprecedented nature of which makes it hard to regulate.¹⁰

Labour platforms are considered to be mediators of transactions that connect service providers to consumers. With a youth population of approximately 370 million¹¹ and a dearth of good jobs to accommodate new labour market entrants, labour platforms provide an attractive avenue for income generation. Niti Aayog estimates that the number of gig workers in India rose from 6.8 million in 2019-2020 to 7.7 million in 2020-21 and is projected to increase to 23.5 million by 2029-30.¹² Capitalising on India's labour surplus, these labour platforms engage a large number of workers as

⁹ Chenoy, D., Ghosh, S. M., & Shukla, S. K. (2019). Skill development for accelerating the manufacturing sector: the role of 'new-age' skills for 'Make in India.' *International Journal of Training Research*, 17(sup1), 112–130. <https://doi.org/10.1080/14480220.2019.1639294>

¹⁰ International Labour Organization. (2021). *World employment and social outlook 2021: The role of digital labour platforms in transforming the world of work*. International Labour Office. <https://www.ilo.org/global/research/global-reports/weso/2021/lang--en/index.htm>

¹¹ National Statistical Office. (2022). *Youth in India*. Ministry of Statistics and Programme Implementation, Government of India. https://mospi.gov.in/sites/default/files/publication_reports/Youth_in_India_2022.pdf

¹² NITI Aayog. (2022). *India's Booming Gig and Platform Economy: Perspectives and Recommendations on the Future of Work*. Government of India. https://www.niti.gov.in/sites/default/files/2022-06/25th_June_Final_Report_27062022.pdf

self-employed, independent contractors, or partners, rather than employees.¹³ The labour platforms are not considered to be employers of these gig workers. This is why, unlike in a traditional employer-employee relationship, labour platforms are not subject to labour regulations including the obligation to provide entitlements to the gig workers they engage. Self-employed workers are responsible for purchasing, or accessing, their own insurance and entitlements.¹⁴

In the traditional managed economy, the state regulatory architecture manages practices, but in a world where service delivery is mediated by platforms, it is the platform company that decides who can be on the platform; what is considered good behaviour; and what entitlements they provide to workers.¹⁵ The work on labour platforms is largely governed through commercial contracts for the provision of services, rather than contracts of service under labour law. The terms of the contract between the workers and the labour platform determines the conditions of work including defining aspects like pricing for the provision of client services, incentive structures, and working time, often resembling a traditional employer. Yet, labour platforms are not legally regarded as employers.

Another unique facet of digital labour platforms is their use of algorithms -- mathematical formulas that use data to help platforms optimize business processes, to help with matching clients with workers, pricing tasks, or for ratings and rankings among other uses. If algorithms are based on data that is biased or unbalanced, then the output will also be so. Even apparently neutral algorithms can give rise to indirect discrimination exacerbating discrimination and inequality.¹⁶ In addition to the possibility of such discriminatory biases, a lack of transparency with respect to platform algorithms create information asymmetries that disadvantage workers and make it hard to govern platforms. It is difficult to gauge the quantity and time of work made available to platform workers; how remuneration is calculated and what deductions are made; ratings of workers; sanctions applied to workers; as well as downgrading or de-activation of workers by the platform. There is also a lack of disclosure about the nature of data that algorithms collect; how this information is used; and what for.¹⁷

¹³ Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). Digital labour platforms and the future of work: Towards decent work in the online world. International Labour Organization. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_645337.pdf

¹⁴ Fairwork India. (2021). *Fairwork India Ratings 2021: Labour Standards in the Platform Economy*. https://fair.work/wp-content/uploads/sites/131/2020/12/Fairwork_India_2020_report.pdf

¹⁵ Acs, Z. J., Szerb, L., Song, A. K., Komlósi, É., & Lafuente, E. (2020). *The digital platform economy index 2020*. The GEDI Institute. <https://thegedi.org/wp-content/uploads/2020/12/DPE-2020-Report-Final.pdf>

¹⁶ European Union Agency for Fundamental Rights. (2022). *Bias in algorithms: Artificial intelligence and discrimination*. Publications Office of the European Union. <https://fra.europa.eu/en/publication/2022/bias-algorithms-artificial-intelligence-and-discrimination>

¹⁷ Choudary, S. P. (2018, May 15). *The architecture of digital labour platforms: Policy recommendations on platform design for worker well-being* (ILO Future of Work Research Paper Series No. 3). International Labour Organization. <https://www.ilo.org/publications/architecture-digital-labour-platforms-policy-recommendations-platform>

What data do digital labour platforms collect on platform workers and how they use this data? The asymmetry of information gives platforms the upper hand rather than workers to whom the data belongs to. There are concerns around data privacy but also around the ability of platforms to monetize this data.

Moreover, traditional forms of organizing, freedom of association and collective bargaining, are not accessible to self-employed workers in the same way as they are to workers in traditional employer-employee relationships. The geographically dispersed or untethered nature of this form of task-based work makes collective action more difficult. Lack of transparency in algorithms and concerns around data collection and privacy weaken the bargaining power of labour. In theory, platforms bring together individual workers into their registry and could potentially ease the provision of social protection or support organizing;¹⁸ but self-employed gig workers do not have legal access to freedom of association and collective bargaining. Collectivization among platform workers remains weak¹⁹

On governance

The unprecedented proliferation of platforms; their diversity and dynamism; the speed with which they are becoming the new architecture for economic transactions with many operating across international borders and legal jurisdictions – all of this makes their governance and regulation very challenging. Yet better governance of digital labour platforms – and technology at large - is an essential step toward rebalancing the relationship between capital and labour and precipitating a structural transformation that translates into better human development outcomes.

There is a need for comprehensive legislation governing the gig economy.

Some states including Rajasthan, Karnataka, and Tamil Nadu have already been working on this, but others must follow suit. But in addition, there has to be coherence and coordination across legislation to avoid rent seeking. There is also a need to see where and how other legislation such as the Data Privacy law intersects with proposed regulation for the gig economy to ensure coherence.

International experiences with gig economy regulation address issues such as: classification of platform workers; governing algorithms; remuneration; working time; equality and non-discrimination; occupational safety and health; social security; dispute settlement and redressal; data use, sharing, privacy and protection; as well as voice and representation. **These experiences can provide**

¹⁸ OECD. (2023). Digital labour platforms: Opportunities and challenges for formal employment. In *Informality and globalisation: In search of a new social contract* (Chapter 5). OECD Publishing. <https://doi.org/10.1787/c945c24f-en>

¹⁹ Dewan, S., Krishnamurthy, M., & Taneja, D. (2022). *Digitalisation and the Indian labour market: Trends, challenges, and opportunities*. GIZ. https://www.bmz-digital.global/wp-content/uploads/2022/09/GIZ_2022_Digitalisation-and-the-Indian-Labour-Market.pdf

guidance on how India might go about doing so.²⁰

Existing tax structures are not equipped for the digital economy.²¹ This poses many many challenges. For instance, there are difficulties in identifying taxable digital activities when companies run their business in one country with a physical presence in a different tax jurisdiction.²² There is also a lack of clarity in domestic tax laws on how to tax platforms for mediating transactions between service providers and consumers.²³ From a digital service tax, to withholding taxes and double taxation treaties, there is a need to reform the international tax system such that it applies to the digital economy. **There is a need to improve international tax cooperation and harmonization so the profits generated in the digital economy can be captured properly.²⁴**

At the domestic level, the Code on Social Security and subsequently Rajasthan's Platform-Based Gig Workers (Registration and Welfare) Act, 2023 proposed charging a cess on platforms. The latter specified that this would be 1 – 2 per cent of every transaction. While this would still run into problems of how one would tax a digital labour platform that operates in one state but is registered in another, proposing to charge a cess is a step in the right direction.²⁵ **Central and state governments must take this forward with a coherent cross-country framework and implementation.**

Funds from taxation, along with other contributory and non-contributory

²⁰ International Labour Organization. (2024). *Realizing decent work in the platform economy* (ILC.113/Report V(1)). International Labour Conference, 113th Session. <https://www.ilo.org/sites/default/files/2024-07/ILC113-V%281%29-%5BWORKO-231121-002%5D-Web-EN.pdf>

²¹ Mullins, P. (2022). *Taxing developing Asia's digital economy* [Background paper]. Asian Development Bank. <https://www.adb.org/sites/default/files/institutional-document/782851/ado2022bp-taxing-developing-asia-digital-economy.pdf>

²² Asian Development Bank. (2021, February). *Asian economic integration report 2021: Making digital platforms work for Asia and the Pacific*. <https://doi.org/10.22617/TCS210048-2>

²³ Mullins, P. (2022). *Taxing developing Asia's digital economy* [Background paper]. Asian Development Bank. <https://www.adb.org/sites/default/files/institutional-document/782851/ado2022bp-taxing-developing-asia-digital-economy.pdf>

²⁴ Asian Development Bank. (2021, February). *Asian economic integration report 2021: Making digital platforms work for Asia and the Pacific*. <https://doi.org/10.22617/TCS210048-2>

²⁵ Dewan, S. (2023). *Big problems, small wins: Social security for Rajasthan's gig workers*. The India Forum. <https://www.theindiaforum.in/public-policy/big-problems-small-wins>

mechanisms, can help finance a **social security system that provides basic entitlements to workers, including gig workers, with a gradually expanding remit.**²⁶

For clarity with respect to taxation and to enable access to entitlements for workers, **there is a need to resolve the legal and statistical definitional ambiguities clarifying the classification of platform workers** as either/when they are employees and/or self-employed.

Agreements between government and platforms on data use, sharing, privacy and security are critical to addressing key concerns around algorithmic bias, data privacy and control. Meanwhile, the periodic labour force survey should consider adding questions to measure digital, platform-based, work.

Last, but not least, recognizing the right to freedom of association and collective bargaining is essential to rebalancing the influence of capital and labour. These rights must be entrenched in law that is effectively implemented across sectors including in the world of digital labour platforms.²⁷

²⁶ Dewan, S., & Seth, P. (2022, June). *Competitiveness and resilience through social security: Toward a more inclusive system*. Centre for Policy Research.
<https://cprindia.org/briefsreports/competitiveness-and-resilience-through-social-security-toward-a-more-inclusive-system/>

²⁷ Dewan, S., & Sanyal, K. (Eds.). (2023, May). *Empowerment or Exploitation: Global Perspectives on Women's Work in the Platform Economy*. JustJobs Network.
https://www.justjobsnetwork.org/files/empowerment-or-exploitation-global-perspectives-on-womens-work-in-the-platform-economy_may-2023.pdf

References

1. Acs, Z. J., Szerb, L., Song, A. K., Komlósi, É., & Lafuente, E. (2020). *The digital platform economy index 2020*. The GEDI Institute. <https://thegedi.org/wp-content/uploads/2020/12/DPE-2020-Report-Final.pdf>
2. Asian Development Bank. (2021, February). *Asian economic integration report 2021: Making digital platforms work for Asia and the Pacific*. <https://doi.org/10.22617/TCS210048-2>
3. Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). *Digital labour platforms and the future of work: Towards decent work in the online world*. International Labour Organization. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_645337.pdf
4. Chenoy, D., Ghosh, S. M., & Shukla, S. K. (2019). Skill development for accelerating the manufacturing sector: the role of 'new-age' skills for 'Make in India.' *International Journal of Training Research*, 17(sup1), 112–130. <https://doi.org/10.1080/14480220.2019.1639294>
5. Choudary, S. P. (2018, May 15). *The architecture of digital labour platforms: Policy recommendations on platform design for worker well-being* (ILO Future of Work Research Paper Series No. 3). International Labour Organization. <https://www.ilo.org/publications/architecture-digital-labour-platforms-policy-recommendations-platform>
6. Dafe, F., Naqvi, N., Hager, S. B., & Wansleben, L. (2022). Introduction: The structural power of finance meets financialization. *Politics and Society*, 50(4), 523–542. <https://doi.org/10.1177/00323292221125563>
7. Dewan, S. (2023). Big problems, small wins: Social security for Rajasthan's gig workers. *The India Forum*. <https://www.theindiaforum.in/public-policy/big-problems-small-wins>
8. Dewan, S., & Seth, P. (2022, June). *Competitiveness and resilience through social security: Toward a more inclusive system*. Centre for Policy Research. <https://cprindia.org/briefsreports/competitiveness-and-resilience-through-social-security-toward-a-more-inclusive-system/>
9. Dewan, S., Krishnamurthy, M., & Taneja, D. (2022). *Digitalisation and the Indian labour market: Trends, challenges, and opportunities*. GIZ. https://www.bmz-digital.global/wp-content/uploads/2022/09/GIZ_2022_Digitalisation-and-the-Indian-Labour-Market.pdf
10. Dewan, S., & Sanyal, K. (Eds.). (2023, May). *Empowerment or exploitation: Global perspectives on women's work in the platform economy*. JustJobs Network. https://www.justjobsnetwork.org/files/empowerment-or-exploitation-global-perspectives-on-womens-work-in-the-platform-economy_may-2023.pdf
11. European Union Agency for Fundamental Rights. (2022). *Bias in algorithms: Artificial intelligence and discrimination*. Publications Office of the European Union. <https://fra.europa.eu/en/publication/2022/bias-algorithms-artificial-intelligence-and-discrimination>
12. Fairwork India. (2021). *Fairwork India Ratings 2021: Labour standards in the platform economy*. https://fair.work/wp-content/uploads/sites/131/2020/12/Fairwork_India_2020_report.pdf

13. IBM Institute for Business Value. (2016). *Entrepreneurial India: How startups redefine India's economic growth*. <https://www.ibm.com/downloads/documents/us-en/10c31775c8540225>
14. International Labour Organization. (2021). *World employment and social outlook 2021: The role of digital labour platforms in transforming the world of work*. International Labour Office. <https://www.ilo.org/global/research/global-reports/weso/2021/lang--en/index.htm>
15. International Labour Organization. (2024). *Realizing decent work in the platform economy* (ILC.113/Report V(1)). International Labour Conference, 113th Session. <https://www.ilo.org/sites/default/files/2024-07/ILC113-V%281%29-%5BWORKQ-231121-002%5D-Web-EN.pdf>
16. Mehrotra, N., Patrao, C., Marshall, A., Banda, M., & Singh, R. R. (2016). *Entrepreneurial India: How startups redefine India's economic growth*. IBM Institute for Business Value. <https://www.ibm.com/downloads/documents/us-en/10c31775c8540225>
17. Mullins, P. (2022). *Taxing developing Asia's digital economy* [Background paper]. Asian Development Bank. <https://www.adb.org/sites/default/files/institutional-document/782851/ado2022bp-taxing-developing-asia-digital-economy.pdf>
18. National Statistical Office. (2022). *Youth in India*. Ministry of Statistics and Programme Implementation, Government of India. https://mospi.gov.in/sites/default/files/publication_reports/Youth_in_India_2022.pdf
19. NITI Aayog. (2022). *India's booming gig and platform economy: Perspectives and recommendations on the future of work*. Government of India. https://www.niti.gov.in/sites/default/files/2022-06/25th_June_Final_Report_27062022.pdf
20. OECD. (2017). *Services trade policies and the global economy*. OECD Publishing. <https://doi.org/10.1787/9789264275232-en>
21. OECD. (2023). Digital labour platforms: Opportunities and challenges for formal employment. In *Informality and globalisation: In search of a new social contract* (Chapter 5). OECD Publishing. <https://doi.org/10.1787/c945c24f-en>