

Reforming Gig Economy in Indonesia: A Sustainable Model to Support 8% Economic Growth

Alwan Setiawan¹

Faculty of Economic and Business, State Islamic University Syarif Hidayatullah
Jakarta, Indonesia

E-mail: alwan3772@gmail.com

Abstract

Indonesia's gig economy has been growing in line with increasing digital platforms offering flexible work opportunities. However, it has not been matched by the kind of regulations allowing for worker status to be defined, for social security to be paid, and for income to be reliable. This research applies the qualitative method through the study of literature, laws, and research, as well as literature, and quantitative data obtained from BPJS Ketenagakerjaan, the World Bank, and the ILO. Examples, including the Spanish and UK are brought into the review to consider the current regulatory structure. The findings show that most gig workers in Indonesia do not receive employment protection, including social security and stable wages. Platform algorithms that determine workers' income are often not transparent, increasing economic instability for gig workers. To address this problem, this study proposes a hybrid regulatory model that balances work flexibility with worker protection. This model includes a contribution-based social security scheme, algorithmic transparency in payment systems, and incentives for digital platforms to enroll gig workers in welfare programs. This approach has been successfully implemented in several countries, improving worker well-being without reducing work flexibility. By adopting this mechanism, Indonesia can create a more sustainable and inclusive gig economy while ensuring that this sector contributes to the national economic growth target of 8%.

Keywords: J21, J38, O33, K31

INTRODUCTION

The work paradigm has undergone a profound transformation, becoming increasingly complex in line with dynamic technological advances. The traditional notion of employment characterized by a permanent attachment between workers and companies, with the company taking full responsibility for the worker's well-being, is no longer the only model. In recent years, digital platforms facilitating on-demand, or 'gig', work have proliferated across industries and geographies (Tan et al. 2021). The emergence of innovative technologies in the service economy has given rise to hybrid employment relationships, where workers are formally classified as independent but remain subject to significant levels of control by the platforms they work for (Montgomery and Baglioni 2021). These shifts signal a new era in employment relations, presenting both opportunities and challenges for economic sustainability and social protection frameworks around the world.

Many international organizations have noted that the rapid growth of online labor platforms in low and middle-income countries has or has the potential to lead to increased employment and poverty alleviation efforts. (Tan et al. 2021) This growth is particularly pronounced in Asia, where 84% of talent managers employ gig workers, surpassing the global average of 65% (Cheng and Tian 2023). In developing countries, the freelance workforce has grown from 14–20% in 2014 to 35% in 2021, highlighting shifting employment patterns, particularly among younger generations seeking flexibility (Ray, Herman, and Sen 2021). Conversely, developing countries exhibit high levels of gig workers, which often correlate with lower educational and economic challenge indices (Okunkova et al. 2023).

Indonesia is among the countries experiencing rapid adoption of digital technologies. Within this context, the digital platform economy is increasingly recognized as a key driver of national growth (Okunkova et al. 2023). According to data from Statistics Indonesia (BPS) as of August 2024, approximately 57.95% of the workforce equivalent to around 83.8 million individuals are classified as informal workers, including those engaged in gig work. This number continues to rise in tandem with the expansion of technology platforms that facilitate gig-based employment. A survey conducted by the Research Institute of Socio-Economic Development (RISED) found that flexibility in working hours is the primary motivation for individuals choosing to become gig workers, particularly in the online transportation sector. Additionally, a survey by Fiverr highlighted other motivations, including the desire for financial security (44%), the ability to work from anywhere (30%), aspirations to run their own businesses (25%), and early retirement goals (20%).

Unfortunately, the gig economy in Indonesia obtained a noticeably poor grade from the Fairwork initiative for its fairness despite its possibilities and promise. The Fairwork project, which was completed in December 2021, evaluated the five global Fairwork principles of fair compensation, fair working conditions, fair contracts, fair management, and fair representation. Thus, the Indonesian government should pledge to review and change the current system to pursue long-term economic competitiveness and ensure the political power of government towards the development of gig economy (Murdani and Wijayati 2023).

Despite the flexibility offered by gig work, the gig economy has raised several concerns regarding worker welfare. Several studies have shown that the gig economy often contributes to increased job insecurity, the loss of employment benefits, and the absence of clear career pathways (Healy, Nicholson, and Pekarek 2017). Many platform companies exploit legal loopholes to avoid employer responsibilities, such as by classifying gig workers as independent contractors who are denied access to labor rights like sick leave, annual leave, and social protection (Bajwa et al. 2018; Minter 2017). There are also widespread allegations that platform companies engage in practices of "false contracting" to circumvent obligations toward workers, including the failure to provide pension funds and health benefits (Bornstein 2015).

Building on these concerns, the uncertainty over how gig workers should be legally classified has further created opportunities for regulatory arbitrage and ethical lapses by platform companies (Koutsimpogiorgos et al. 2020). The

absence of clear social and legal protections exacerbates the insecurity, instability, and vulnerability experienced by gig workers (Raphelson 2017). By categorizing their workers as self-employed independent contractors, platforms are able to avoid legal and fiscal obligations, thereby significantly reducing their operating costs (Sprague 2015).

These labor market vulnerabilities present a critical challenge for Indonesia in its quest to achieve its ambitious economic goals. According to the President's economic development agenda, Indonesia is targeting an 8% growth rate by 2029, aiming to elevate the country to high-income status. Achieving this target requires not only accelerating growth but also aligning economic strategies with the unique demographic opportunities and challenges facing Indonesia. As highlighted by Resosudarmo and Abdurrohman (2018) in their paper "Is Being Stuck at a Five Percent Growth Rate the New Normal for Indonesia?", the country must undertake more stringent economic reforms. This includes promoting greater and more productive capital investment and expanding fiscal capacity to support critical infrastructure improvements, especially by encouraging innovation to increase revenue generation.

One of the reforms that potentially induce the economic growth for now is the digital economic way. As the digital economy expands, integrating gig workers into national development strategies is critical. Studies show that formalizing gig work through digital platforms, improved labor protections, and social security inclusion can enhance productivity and reduce inequality (Kuek et al. 2015). For Indonesia, reforming the gig economy not only improves the livelihoods of millions but also aligns with broader development goals, including poverty reduction and labor market resilience key components to achieving the 8% growth target. Without such reforms, the economy risks deepening the precarity of work and missing out on the full economic potential of its digitally active population (Chen et al. 2020).

Therefore, an approach is needed that takes into account the balance of gig economy work which is being touted as a future framework (Sargeant 2017). Various countries are taking the gig economy issue seriously, such as Spain, England, and China. In the United Kingdom, recent court rulings have reclassified certain gig workers, such as ride-hailing drivers, as "workers" entitled to minimum wage and paid leave strengthening labor rights within platform-based employment (UK Supreme Court, 2021). Spain introduced the "Rider Law" in 2021, which obligates food delivery platforms to formally hire riders as employees rather than independent contractors, thereby ensuring better legal protection (Scheele, Im, and Leschke 2023).

Recognizing the importance of learning from global best practices, this study seeks to develop a robust reform framework aimed at enhancing the welfare of gig workers in Indonesia. By benchmarking against countries that have demonstrated notable success in supporting their gig economy workforce and thoughtfully adapting these lessons to Indonesia's distinct socio-demographic context and bureaucratic dynamics, we aspire to propose a model that is not only relevant but also transformative for Indonesia's future labor landscape.

LITERATURE REVIEW

The gig economy is a phenomenon that is rapidly expanding, redefining the nature of work and contributing to a significant change in how contemporary economies are organised (Tan et al. 2021). The comprehensive scope of the “gig economy” refers to a working subset in which entrepreneurs (or workers) obtain work through an internet-based program that matches the consumers’ who are inquiring about their services (Kurin 2016). The gig economy is a form of sharing economy using digital media. The gig economy characterized by its simple to tap into the world's talent pool, which fosters creative, competitive, adaptable, and economical methods of handling gig employment (Zaman et al. 2020). From any circumstances before, It leads to a characterisation of the gig economy in terms of three criteria (Tan et al. 2021):

- 1) the use of digital platforms, mechanisms and processes
- 2) that enable the de/re-construction of work into smaller, distributable tasks, which in turn
- 3) enables more flexible, short-term, and heterogeneous working arrangements and relationships (people can have many jobs at the same time, offering more autonomy but less security, for example).

If we talking about a platform based working, there are some main types of labour-based platforms (e.g) crowd-sourced, micro-work platforms and work-on-demand platforms (De Stefano 2015). It leads to a characterisation of the gig economy in terms of three criteria such as the use of digital platforms, mechanisms and processes that enable the de/re-construction of work into smaller, distributable tasks, which in turn enables more flexible, short-term, and heterogeneous working arrangements and relationships (Tan et al. 2021) (people can have many jobs at the same time, offering more autonomy but less security, for example).

For reforming a gig economy to lead a better welfare purposes, Koutsimpogiorgos et al. (2020) said the first avenues will be focuses on the new nature of work in the gig economy. Recommendations in this category include providing workers with a “Digital Skills Personal Learning Account” that could help to reduce the lock-in effect of platform work; facilitating communities of practice to foster informal group learning; and upgrading career counselling to allow workers to adapt to a digital workplace (and by extension, the unseen algorithms that act as implicit managers).

The second avenue of reform focuses on ensuring “decent work” in the gig economy. Proposed interventions here include mitigating occupational safety and health risks, with a focus on mental health and stress; updating labour laws to equalise the treatment of standard and nonstandard work arrangements; and creating a new “Social Dialogue” between workers and other stakeholders.

The third avenue of reform focus on “preventing economic and social polarization in labour markets”. Recommended reforms in this category include ensuring social protection for workers regardless of their employment status; the creation of a “Digital Single Window” to manage employment contributions and taxes for gig economy work; and redistributing the value of digital ownership by treating the data generated or provided by workers as either capital, labour or intellectual property.

Evidence from various countries highlights the positive impact of well-structured gig economy reforms on workers' well-being, providing a strong basis for policy interventions. In Nigeria, statistical analysis using Structural Equation Modeling found that participation in gig work significantly increased household income and consumption, leading to measurable improvements in well-being (Udaah, Abubakar, and Joseph 2024). In the United States, access to ride-sharing platforms such as Uber reduced reliance on unemployment benefits by 4.8%, reduced credit card debt by 1.3%, and lowered delinquency rates by 2.9%, illustrating the gig economy's role as an informal safety net (Fos et al. 2019).

The recent EU directive to reclassify gig workers as employees is projected to improve social protection for over 28 million people by guaranteeing access to minimum wages, holiday pay and unemployment benefits (source: The Guardian). Meanwhile, insurance reforms in Argentina have shown that increasing benefits can increase re-employment wages and lead to overall welfare gains, particularly for informal sector workers (González-Rozada and Ruffo 2023). These results suggest that incorporating social protection, legal clarity and income support mechanisms into the freelance economy framework can lead to significant and measurable welfare gains..

Social Welfare Theory

Social Welfare Theory encompasses principles and frameworks that aim to improve the well-being of individuals and communities through equitable distribution of resources, access to public services, and protection from socioeconomic vulnerabilities (Barr 2020). At the core of this theory is the belief that the state has a responsibility to guarantee a minimum standard of living for all its citizens, especially those facing economic insecurity and social marginalization (Titmuss 1975).

In the gig economy, Social Welfare Theory provides a more critical approach to non-standard work which tends to be more vulnerable in nature. For instance, gig workers are often self-employed or freelance workers who do not have access to traditional social welfare protections like a health insurance plan, pension scheme, or unemployment benefits (De Stefano 2015). In the sociological context, this can be termed as “non-participation,” which Amartya Sen describes as the loss of real ability and opportunity to live a life they value (Todaro and Smith 2006). Within this framework, the gig economy exposes systemic weaknesses in social protection mechanisms that fail to respond to the changes in Employment Structures. There is a consensus among some scholars that the rise of platform-based employment increases the need for social welfare to be redefined in the context of the digital economy (Fabo, Karanovic and Dukova 2017). Hence, applying social welfare concepts to the governance of gig work will help to mitigate the drivers of disparity and inequality.

Providing gig workers with sufficient social welfare benefits, including but not limited to health insurance, paid leave, social security, and income protection, would be beneficial on an individual level, as well as help the economy at large. First, these benefits are likely to enhance income consistency and alleviate the financial strain associated with worrying about income in ongoing precarious work conditions (Kassi and Lehodonvirta, 2018). With adequate income, workers

become confident, leading to skills development and long-term career framing, which further increases productivity. Second, older people with social protection schemes would reduce the public emergency and poverty caregiving aid burden, enabling them to spend time during embarking on other productive spheres (OECD, 2019). Third, a comprehensive welfare system would allow for greater participation from women, people with disabilities, other informal sector workers, and caregivers who become digitally active but face structural and systemic barriers to accessing platform-based employment (Behrendt, Nguyen, and Rani, 2019).

Furthermore, strengthening social protection for gig workers can create a healthier and more competitive labor market by preventing a “race to the bottom” in terms of wages and working conditions (De Stefano and Aloisi, 2018). In the long run, implementing social welfare principles into the gig economy framework will not only improve individual well-being, but also promote sustainable and inclusive economic development.

METHOD

This study uses a multimethod approach that combines qualitative and contextual analysis techniques to assess the welfare conditions of freelancers in Indonesia and formulate policy recommendations that are in line with social and political realities. The research begins with a bibliometric analysis using VOSviewer to identify and map the current academic literature related to the economic welfare of freelancers. By exposing the emergence of keywords and thematic clusters from basic data such as Scopus and Web of Science, this stage highlights emerging global trends, conceptualizations and policy themes that inform the theoretical foundations of the study.

In the second stage, comparative case studies are conducted in Spain, China, and the United Kingdom, representing two different regulatory approaches, namely the Spanish labor reclassification model and the United Kingdom's hybrid worker status framework. These cases are examined through legal documents, policy evaluations, and international reports from organizations such as the ILO and OECD to understand the structure, implementation, and outcomes of each model in improving worker well-being.

The final stage synthesizes insights from the bibliometric, comparative, and contextual analysis to develop an evolutionary model tailored to Indonesia's socio-demographic characteristics. The model includes algorithm transparency, contribution-based social protection, and sign-up platform incentives, aiming to protect gig workers while preserving collaboration. These steps are guided by a logistical framework that aligns global insight, political feasibility, and Indonesia's national development goal of achieving 8% economic growth through an inclusive and sustainable freelance economy.

RESULTS AND DISCUSSION

The economic downturn due to the pandemic has meant that more people in wider segments of the population have taken up work in the gig economy to supplement lost income (Semuels 2020). This became clear during the COVID-19 pandemic, when Amazon, Deliveroo and other gig economy workers continued to work mostly out of necessity rather than choice despite the ‘lockdown’ orders in

many countries, endangering their health as a result. The gig economic research and growth is continued for many years until now and had the opportunity and some problem also. To know it, we conducted the literature review methodology using VOS Viewer and get the results by:

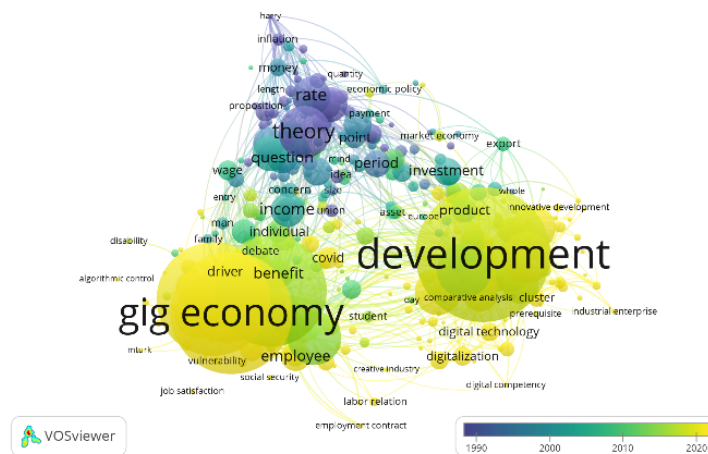


Figure 1. Keyword Co-Occurrence Mapping on Gig Economy Research
Source: Processed using VOSviewer, 2024.

The VOSviewer visualization presents a clear evolution of academic interest in the gig economy from the early 1990s to the 2020s. In the early stages (1990–2005), academic discussions mainly centered around macroeconomic concepts such as inflation, interest rates, and economic theories indicated by the blue and purple nodes that formed the basic context for subsequent developments. From 2005 to 2015, research started to shift towards more applied economic themes such as income distribution, investment, and labor market structure, represented by the green cluster. In the most recent period (2015–2023), the focus has increasingly shifted to the gig economy, digital technologies, employee benefits, algorithmic control, and worker vulnerability, as evidenced by the dominant yellow nodes in the visualization. This transition highlights increasing attention to how digital platforms are reshaping labor markets and influencing sustainable economic development.

This visualization supports the idea that the gig economy is not just a growing area of academic interest, but also a critical component of modern economic transformation. This visualization underscores the urgency of reforming gig work policies to align with inclusive growth and technological progress which is particularly relevant for developing countries like Indonesia which aims to maintain economic growth at 8%. The strong linkages between the gig economy, digitalization and development reinforce the need for adaptive and forward-looking social and employment protection frameworks in the digital era.

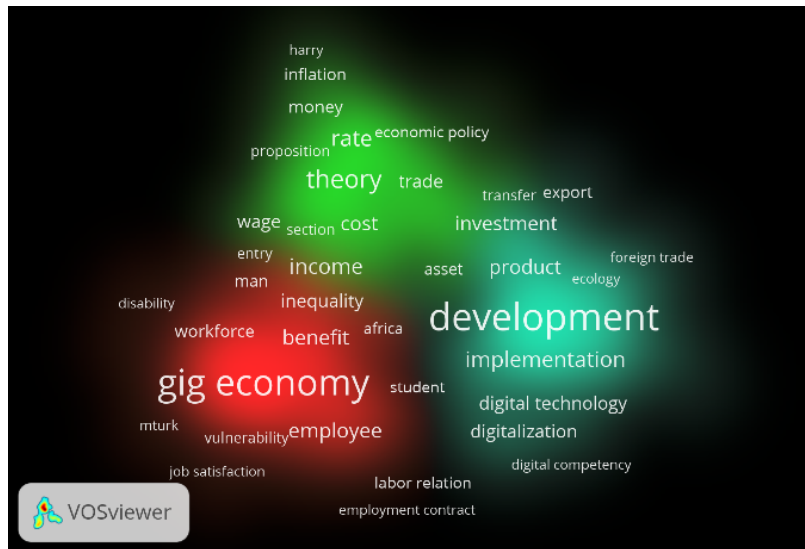


Figure 2. Keyword Density Visualization on Gig Economy Research
Source: Processed using VOSviewer, 2024.

The visualization generated using VOSviewer also illustrates the complex and multidimensional issues associated with the gig economy. The red cluster highlights key social and labor-related concerns, featuring terms such as gig economy, employee, vulnerability, inequality, and job satisfaction. These keywords indicate that gig workers often face precarious working conditions, lack formal employment contracts, and generally lack traditional labour protections and benefits. While the gig economy is often praised for offering flexibility and freedom, it also raises serious concerns regarding labour rights, social security, and income stability.

The green cluster represents macroeconomic and theoretical perspectives on the gig economy. Keywords such as theory, rate, wage, cost, and economic policy show that the gig economy is also analysed through the lens of labour costs, income distribution, inflation, and the broader economic framework. These linkages confirm that the impact of gig work is not only felt individually, but also has the potential to affect national economic structures and long-term developments strategies.

Meanwhile, the blue cluster highlights the central role of digitalisation and technological transformation in shaping the gig economy. Terms such as a growing reliance on digital platforms and tools. However, this transformation also presents challenges, particularly regarding the digital skills gap and unequal access to technology, which risk exacerbating existing inequalities if not addressed through inclusive and adaptive policies.

Overall, the visualization shows that the challenges of the gig economy are complex, encompassing social, economic and technological dimensions. Therefore, gig economy reforms, particularly in developing countries such as Indonesia, require a holistic and integrated approach (Koutsimpogiorgos et al. 2020). This includes strengthening labor protections (De Stefano 2015), adjusting macroeconomic policies to support equitable income distribution (González-Rozada and Ruffo 2023), and investing in digital competencies to ensure inclusive participation in the digital job market (Tan et al. 2021). Such

reforms are essential for the gig economy to make a real contribution to sustainable development and economic growth (Zaman et al. 2020).

Indonesia and Its Conditions to be Reformed

Based the results from VOS Viewer before, we can conclude that at least to reforming the gig economy, you need to solve the problem with multidimensional approaches. But before that, we must know about Indonesian demographic condition and many factor that could increased welfare of gig workers. We have gathered information based on online literature and get some working conditions for gig workers indonesia by several way.

Law No. 24 of 2011 concerning the Social Security Administering Body (BPJS) explains the implementation of social security in Indonesia. However, in practice, worker registration in the BPJS Employment program is not optimal because they are often not considered formal workers. They are also not paid leave, company-paid insurance, pensions, and other benefits that workers should receive. Its more likely said that, platforms usually prefer to make a contract as independent worker to deny their responsibility (Bajwa et al. 2018; Minter 2017).

In Indonesia, platform contracts are generally within the scope of applicable law, which suggests that platforms do not pose significant problems during contract negotiations (Putri, Darmawan, and Heeks 2023). However, profit sharing agreements between workers and platform operators can reach up to 20 percent, which, according to IDEAS, exceeds the maximum registration fee of 15 percent set out in the Minister of Transportation Regulation No. 667/2022 for online transport services. Ideally, these contracts should also cover basic worker rights, including access to work accident insurance, compliance with work safety standards, and guarantees of fair and timely payment. Furthermore, transparency should be ensured through mechanisms that clearly outline income calculations, performance evaluation criteria, and partnership termination policies. Standardization of contracts is essential to provide clear definitions of the rights and obligations of both parties, thereby offering basic protections for freelance workers and minimizing the risk of exploitation by digital platforms (Muhyiddin et al. 2024; Stevania and Hoesin 2024).

Table 1. Conditions of Gig Workers In Indonesia

Aspect	The Conditions	Source
Income	Many gig workers, especially in online transportation sectors, earn less than the regional minimum wage (UMK). However, some can earn up to IDR 10 million per month, depending on order volume and partner commission rates.	Sitorus and Kornitasari (2024), Rhogust (2023)
Social Security	Participation in programs like BPJS Ketenagakerjaan (workers' social security) is still low. Many are not enrolled due to low awareness, irregular working hours, and cost concerns.	Rhogust (2023), Sitorus and Kornitasari (2024)
Welfare Vulnerability	Without formal contracts, with unpredictable hours and lack of legal protection, gig workers are economically and socially vulnerable.	Annazah et al. (2023), Saputra, Rum Giyarsih,

		and Joko Pitoyo (2020)
Legal Protection	Laws like the Job Creation Law and the National Social Security System Law (SJSN) have yet to fully protect gig workers. There is still no effective specific regulation governing platform-based employment.	Izzati (2018), Albab, Hasan, and Sibarani (2023).
Demographic Profile	Most are in their productive age (under 30 years) and have a relatively high educational background (high school and above).	Permana, Izzati, and Askar (2023). Putri, Darmawan, and Heeks (2023)
Access to Technology, Literacy, and upgrading skill	Digital literacy influences wellbeing. Those with low digital skills are more vulnerable within the digital economy ecosystem. Gig worker also needs an improvement about skills and knowledge that makes them more valuable in a labor market	Muhyiddin et al. (2024), Yang et al. (2025)

As we know, the gig economy in Indonesia gets very bad marks from the Fairwork initiative because it is considered fair even though it has a lot of possibilities and promise. A study from Rhogust (2023) emphasizes that most gig workers earn varying incomes, with many earning between IDR 3,000,000 and IDR 5,000,000 per month. However, most of them earn less than IDR 3,000,000, indicating economic instability among gig workers. On average, gig workers work 30 to 40 hours per week, but 20% of respondents reported working more than 40 hours per week, indicating the possibility of overworking without proper compensation. Only 15% of respondents have access to social security benefits such as BPJS Health or BPJS Ketenagakerjaan, indicating that most gig workers do not have adequate protection.

In terms of legal protection, gig workers in Indonesia currently do not have a comprehensive legal framework that protects them from the vulnerabilities associated with platform-based work (Stevania and Hoesin 2024). Although the main employment law reference, namely the Job Creation Law (UU No. 11 of 2020), discusses the principles of work flexibility and freedom, it does not specifically regulate platform-based work arrangements. Furthermore, within the existing legal framework, currently there is no formal legal definition that explicitly recognizes the concept of the gig economy or freelance workers in Indonesia. These significant regulatory gaps highlight the urgent need for comprehensive reform that addresses all aspects of the gig economy, from major structural issues to more nuanced regulatory challenges, ensuring full protection and fair treatment for platform-based workers.

Based on Bank Indonesia data as of July 2023, the majority of freelance workers in Indonesia are in the productive age category, especially those under 30 years old. However, a survey conducted by IDEAS involving 225 online motorcycle taxi drivers in the Jabodetabek area revealed that the largest age group for freelance workers was the 31–40 year age group (38.2%), followed by the 21–30 year age group (36.4%). Furthermore, additional surveys show that the majority of freelance workers in Indonesia have achieved at least a high school or university education. This demographic trend suggests that participation in the

freelance economy increasingly requires a higher level of education, particularly in digital literacy. Therefore, there is a strong need for targeted digital literacy training programs to equip gig workers not only with technical skills relevant to their work but also with critical knowledge about their rights, social justice, and the ability to safeguard their well-being in the long term.

Best Practices and Lessons for Indonesia

The legal classification of gig workers varies greatly between the UK, Spain and Indonesia, reflecting wider differences in employment governance models. In the UK, gig workers are usually referred to as independent contractors, employing them across the full spectrum of employment rights afforded to employees. However, a series of court decisions most notably *Uber BV v Aslam* have led to the recognition of certain employment rights for platform workers, setting a precedent for limited protection (De Stefano and Aloisi 2018). Indonesia has a similar starting point, where most gig workers are treated as independent workers, lacking formal protection under national labor laws (Murdani and Wijayati 2023). In contrast, Spain has implemented a “Riders Law” (Ley Riders) in 2021, which treats platform delivery workers as employees rather than independent contractors, giving them access to a broader range of employment rights (Todolí-Signes 2021). This legislative intervention represents a paradigm shift in the restricted way of digital working in Europe.

Interventionist policies in each country show varying degrees of regulatory commitment and ideological orientation. The UK continues to prioritise the labour market, largely favouring a non-interventionist strategy. Although some reports, such as the Taylor Review, have acknowledged the need for better protections, concrete legislative changes have remained modest, reinforcing a deregulatory stance that prioritizes platform growth over worker safety (Matsaganis 2020). Similarly, Indonesia’s regulatory approach is marred by informality and fragmentation. Instead of comprehensive labor reform, the Indonesian government has issued non-binding guidelines and ministerial advisories, indicating hesitation to regulate platforms within a binding legal framework (Putri, Darmawan, and Heeks 2023). In contrast, Spain has adopted a more interventionist approach, with its government actively legislating to close down casual employment areas. The Rider Act is a clear example of state-led reform aimed at redefining labor relations in the digital economy (Garben 2021).

Table 2. Comparative Analysis (Spain, UK, and Indonesia)

Aspect	Spain	United Kingdom	Indonesia
Legal Status of Gig Workers	Employee (after the Rider Law)	“Worker” (intermediate category)	Partner (non-employee)
Type of Intervention	Strong and regulatory state	Judicial + gradual policy	Partial and unintegrated
Social Security	Mandatory (state social security)	Minimum (wage, leave)	Optional via self-enrolled BPJS
Algorithm Transparency	Legally regulated	Recommended / limited	Not yet regulated
Trade Unions	Very active & legal	Active (IWGB, GMB)	Emerging (Garda, etc.)

Role of The State	Strong and proactive	Neutral with limited intervention	Slow and sectoral
-------------------	----------------------	-----------------------------------	-------------------

Source: Muhyiddin et al. (2024)

Access to social security systems also varies widely and is closely tied to employment classification. In both the UK and Indonesia, gig workers' status as independent contractors typically excludes them from automatic enrollment in pension schemes, unemployment insurance, and health coverage. Although some platforms have introduced voluntary schemes, these remain ad hoc and lack systemic integration. Spain again represents a more proactive model, attempting to include gig workers in the formal social security system. However, despite the legal reforms, practical enforcement remains inconsistent, and platform resistance has undermined full compliance (Garben 2021). This highlights the critical role not only of legislation but also of enforcement mechanisms in translating legal reforms into tangible benefits for workers.

A common challenge across all three countries is the use of algorithmic management systems that control labor processes through opaque decision-making structures. In the UK, gig platforms like Uber and Deliveroo rely on automated systems to assign tasks, evaluate performance, and administer penalties, with little transparency afforded to workers (Wood et al. 2019). Indonesia exhibits similar trends, where ride-hailing platforms use algorithmic systems to track driver behavior and impose performance-based sanctions, often without clear explanation (Albab, Hasan, and Sibarani 2023). Spanish platforms also use algorithmic management extensively, though the introduction of the Rider Law has sparked legal debates about the need for transparency and worker access to algorithmic logic (Todolí-Signes 2021). In all three contexts, algorithmic opacity exacerbates the power imbalance between workers and platforms, limiting opportunities for redress and contributing to a sense of alienation among workers.

Trade union activity and the broader role of the state also reflect differing political economies. In the UK, traditional unions have been supplemented by new forms of labor activism, such as the Independent Workers Union of Great Britain (IWGB), which has organized gig workers through grassroots campaigns and legal challenges (Woodcock and Cant 2022). Spain combines traditional union engagement with judicial activism, with major unions playing a central role in advocating for legislative reforms and filing collective lawsuits against non-compliant platforms (Prass 2018). In Indonesia, formal unionization remains limited among gig workers, but informal worker collectives and digital advocacy networks have emerged as alternative forms of representation (Panimbang 2021). The state's involvement reflects these dynamics: while the UK and Indonesia often prioritize platform-led innovation and economic liberalization, Spain demonstrates that an assertive state can play a pivotal role in transforming labor relations in the platform economy.

Based on several differences between Indonesia, the UK and Spain, we can actually see several points that Indonesia can learn regarding the goals of reforming gig workers' welfare. These points can be seen in the following table:

Table 3. The Lessons From Spain and UK for Indonesia Gig Economy Reformation

Aspect	Lessons for Indonesia
--------	-----------------------

Worker Classification	Create a flexible worker classification that grants partial protections (inspired by the UK) while moving toward stronger employee rights for certain gig roles (following Spain's example).
Legal/Judicial Approach	Strengthen both judicial and legislative pathways: encourage court rulings to set precedents and also introduce targeted laws to protect gig workers.
Labor Organization	Support the development of grassroots labor unions and formal worker associations, combining UK-style activism with Spain's traditional union engagement.
Social Security Access	Gradually mandate social security enrollment for gig workers, starting with high-risk sectors, ensuring that access is not just optional but progressively compulsory.
Algorithmic Management	Introduce regulations to improve transparency in algorithmic management, requiring platforms to explain how algorithms affect worker assignments and evaluations.
Enforcement Mechanisms	Build strong enforcement systems with active monitoring and meaningful penalties to ensure legal reforms are effectively implemented.

After examining the current conditions in Indonesia, comparing various policies and characteristics of best-practice countries, and identifying lessons that could be adapted to the Indonesian context, the next logical step is to propose concrete recommendations aimed at improving not only the welfare of gig workers but also enhancing their skills and promoting more equitable economic growth. To this end, we have developed a policy model presented within a logical framework to guide Indonesia's efforts in reforming its gig economy.

As a foundational step toward sustainable policy reform in Indonesia's gig economy, the establishment of a clear legal framework and a strong political commitment is indispensable. As previously discussed, Indonesia currently lacks an adequate legal definition of gig work, necessitating the immediate development of a comprehensive legal framework. The Ministry of Manpower, the Social Security Agency (BPJS), the Ministry of Communications and Information (Kominfo), and the Ministry of Cooperatives and SMEs (KemenkopUKM) must collaborate to draft a specialized bill on the gig economy. This draft legislation should be deliberated thoroughly with the national legislature (DPR) and the President. A dedicated law governing the gig economy is essential, considering the sector's substantial contribution to the national GDP—approximately US\$7 billion—and its role in employing more than 2.3 million workers.

In addition to a dedicated law, a Government Regulation on Worker Classification should be introduced, adopting best practices from Spain's Rider Law and the United Kingdom's employment classification tests, to provide clear distinctions among employment types, including platform workers. A Ministerial Regulation issued by the Ministry of Manpower should also establish minimum standards for platform worker protection and create a specialized dispute resolution mechanism. Moreover, several existing regulations require urgent revision. Law No. 13/2003 on Manpower must be updated to recognize non-traditional employment relationships, while Government Regulation No. 35/2021, particularly Articles 5(1) and 8–9, should be amended to allow greater flexibility suited to the nature of platform work. Furthermore, Law No. 19/2016

on Electronic Information and Transactions needs to be revised to mandate algorithm transparency and to reinforce data protection measures for platform workers.

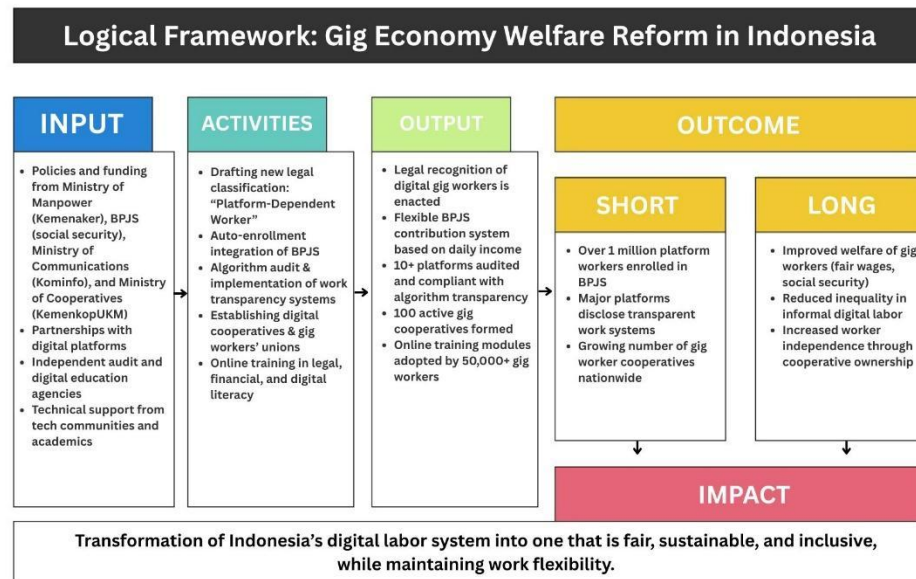


Figure 3. Logical Framework for Gig Economy Welfare Reform in Indonesia

Source: Developed by the Author, 2024.

Beyond regulatory measures, fostering strategic partnerships between the government and digital labor platforms is very important, especially regarding the integration of social security, transparency of work systems and development of worker capacity. A key focus of the reform agenda should be to address potential exploitation in platform work arrangements, where there is often a mismatch between working hours, income, and job security. The government must take a proactive role as a mediator between corporate interests and workers' rights. Transparent and regular algorithm audit mechanisms should be instituted, inspired by the UK's Fairwork Report, allowing for ongoing evaluation of platforms' compliance and fairness.

Workers and community associations must also be strengthened to function as channels for complaints and collective bargaining, especially taking into account the findings of Kurniawan (2020) which highlights that 76.9% of motorcycle taxi drivers' interactions with operator platforms occur unilaterally via digital means. Academic institutions are equally important in guiding program development skills, ensuring responsiveness to the evolving needs of the labor market. Initiatives such as the Ministry of Manpower's Skill Hub can be leveraged and packaged to specifically serve gig workers, particularly those driving information in the creative industries and technology sectors. In addition, Indonesia's current economic transition under the new government presents opportunities for synergistic initiatives.

One important program is the Koperasi Merah Putih initiative that aims to reduce rural poverty through the establishment of 80,000 cooperatives. This agenda can be aligned with the establishment of specialized cooperatives for gig workers, providing collective support for drivers, freelancers, and other digital workers. The literature also emphasizes the importance of encouraging

partnerships between the public and private sectors. Stewart and Stanford (2017) argue that governments can provide incentives to platforms, such as tax breaks or priority access to certain programs, if they comply with labor standards and are integrated in social security systems. Wood et al. (2019) highlighted the need for algorithm audits to ensure fair and non-discriminatory distribution of jobs, while Ansell and Gash (2018) emphasized the importance of joint training between platforms and the government. By adopting a collaborative rather than a purely regulatory approach, platforms can become active partners in building a fair, sustainable and inclusive digital labor ecosystem in Indonesia.

Welfare in Indonesia's economic reforms focus on four transformative outcomes that together form a comprehensive protection system. Legal recognition of gig workers establishes their formal status within the labor framework, while the flexible BPJS contribution system adapts social security to income fluctuations through daily rather than fixed monthly contributions. These outcomes reflect realistic and achievable targets, based on several key factors. *First*, the proposed classification of “Platform-dependent Work” is based on existing labor categories in the Indonesian system, so that its implementation can be done through adjustments rather than a complete overhaul. The flexible BPJS contribution system mirrors successful models such as the auto-enrolment pension scheme in the UK and social security for gig workers in Spain, demonstrating that such mechanisms can work in practice. The audit target of 10+ platforms is quite reasonable considering that the Indonesian digital market is dominated by several large players such as Gojek and Grab.

Output targets also reflect Indonesia's institutional capacity and ongoing digital transformation. The goal of establishing 100+ freelance cooperative workers is in line with the strong tradition of the cooperative movement in the country, particularly in the agricultural and SME sectors, which represents a model that can be adapted to worker platforms. Likewise, the target of training 50,000+ workers can be achieved by considering Indonesia's rapidly growing digital literacy program and the scalability of the brave education platform. These numerical benchmarks are not arbitrary but are based on enrollment rates at the initiation of similar vocational training and the proven capacity of Indonesian labor organizations to mobilize members. The output is designed to be ambitious enough to drive meaningful change while remaining grounded in the realities of Indonesia's workforce ecosystem and digital infrastructure. The results of Indonesia's loose economic reform framework are the tangible improvements expected from successful policy implementation. By establishing a “Platform Dependent Worker” classification and integrating flexible BPJS contributions, more than 1 million freelance workers will gain access to social security – an important step in formalizing Indonesia's massive informal workforce. The reforms will also mandate algorithmic transparency for major platforms, reducing unfair labor practices such as arbitrary pay cuts and abrupt terminations, while the creation of freelancer cooperatives will strengthen collective bargaining power. Together, these changes will begin to address the unsupportive nature of job platforms while maintaining their commonality.

Best practice international benchmarks are the starting point for the expected results but have been tailored to suit Indonesia. The broadening of social security stems from the Spanish case of successfully incorporating freelancers into

the welfare system, while the other requirements focus on the accountability model from the UK. Nevertheless, innovation is brought to Indonesia's system from these elements through the strong ethos of the cooperative movement. The balance of worker and platform protections in a digital job market to be realized in the long-term vision is postulated as the sustainable freelance economy orients towards businesses and workers alike.

The Indonesia gig economy welfare reform in framework form was envisioned as an integrated approach to regulatory change, partnership models, and bottom-up mobilization. In this blend of partnerships, legislative recognition of platform workers as dependents, social security BPJS deregulated entry points, algorithmic openness, and strengthening gig cooperatives are included. The fragment of benefits-bounded losses shaping these output is meant to be pragmatic, drawing on the socio-political realities and the digital development ecosystem, and the strong coope.

The aim is to integrate gig work more deeply into the Indonesian economy through a holistic strategy that includes social policy system interventions, such the updating of Law No. 13/2003 and the issuance of ministerial regulations, with collaboration between the government, platforms, and worker organizations. Over the short term, it is anticipated that these measures will increase social protection coverage to over one million gig economy workers, improve the availability of work opportunities, as well as foster the growth of collective bargaining frameworks. The long-term goals of the reforms are to address the unequal distribution of opportunities within the informal digital workforce sector, support enhanced income equality, and develop a nurtured digital workforce that is flexibly and inclusively resilient to future employment landscapes. In summary, Indonesia's welfare reforms for the gig economy encapsulate the unique interplay between rapid technological development and workers' rights, strategically positioned within a sustainable digital work environment and thorough systemic change.

CONCLUSION

Indonesia's rapid economic growth presents both opportunities and challenges in reshaping the national labor landscape. Despite contributing significantly to the dynamism of the economy, workers remain in a vulnerable position due to the lack of clear legal recognition, minimal social security, and limited protection from exploitative work practices. Learning from international best practices, particularly from Spain and the UK, Indonesia needs to adopt a comprehensive reform strategy that balances the principles of fairness and partnership. The development of a specialized legal framework, increased transparency of algorithms, mandatory social security membership, and the strengthening of worker cooperatives are important steps to improve the welfare of workers.

Implementing the proposed logistics framework would not only formalize and protect millions of workers, but also contribute to broader national goals of inclusive growth, social equity, and economic resilience. In the short term, it would expand social security coverage and encourage collective bargaining, while in the long term, it would reduce inequalities in the informal labor market and

support the transition to a more sustainable and equitable digital economy. Future research should continue to explore adaptive policy mechanisms and measure the impact of such reforms to ensure that Indonesia's digital labor system evolves in a way that benefits workers and economic development.

To support the successful transformation of Indonesia's gig economy, several strategic recommendations are proposed. First, the government should prioritize the drafting and enactment of a specific Gig Economy Law that clearly defines platform-based employment relationships and safeguards minimum labor standards, including social protection, occupational safety, and access to settlement mechanisms. This law must be complemented by amendments to existing labor and digital economy regulations to ensure consistency and effectiveness of law enforcement.

Second, there is a critical need to mandate flexible but mandatory social security schemes that are tailored to workers' unique income patterns. Daily or task-based contribution models should be developed in collaboration with BPJS to encourage wider participation without unduly burdening workers or platforms.

Third, transparency in management algorithms should be institutionalized through regular audits and clear disclosure requirements to protect workers from arbitrary decision-making and ensure fair treatment in task allocation and performance evaluation.

Fourth, the development of freelancer cooperatives and the strengthening of worker associations are essential to enhance collective bargaining power and promote financial resilience. Public private Partnerships should also be enriched, allowing platforms to jointly develop skills improvement programs that are aligned with evolving market needs. Finally, ongoing academic research and policy experimentation are critical to integrating the impact of these reforms, enabling evidence-based adjustments, and ensuring that Indonesia's digital economy develops in an inclusive, equitable and sustainable manner.

REFERENCES

- Albab, Ulil, Azhar Muhammad Hasan, and Kevin Sibarani. 2023. "LEGAL PROTECTION OF GIG WORKERS IN INDONESIA: REVIEWING LEGAL JUSTICE, CERTAINTY AND EXPEDIENCY." *Journal of Interdisciplinary Legal Issues* 1(1): 1–24.
- Annazah, Nur Siti, Henriko Tobing, Faizal Amir Parlindungan Nasution, Muhyiddin Muhyiddin, and Nugroho Habibi. 2023. *Kondisi Kerja Dalam Relasi Kemitraan: Studi Kasus Pada Mitra Perusahaan Transportasi Online*. doi:10.47198/pwp.v1i2-03.
- Bajwa, Uttam, Denise Gastaldo, Erica Di Ruggiero, and Lilian Knorr. 2018. "The Health of Workers in The Global Gig Economy." *Globalization and Health* 14(1): 124. doi:10.1186/s12992-018-0444-8.
- Barr, Nicholas Adrian. 2020. *The Economics of the Welfare State*. Oxford university press.
- Behrendt, Christina, Quynh Anh Nguyen, and Uma Rani. 2019. "Social Protection Systems and the Future of Work: Ensuring Social Security for Digital Platform Workers." *International Social Security Review* 72(3): 17–41. doi:10.1111/issr.12212.
- Bornstein, Josh. 2015. "The Great Uber Fairness Fallacy: As a Driver, How Do You Bargain with an App?" *theguardian.com*. <https://www.theguardian.com/technology/2015/aug/24/uber-fairness-independent-contractors-employees-rights> (February 14, 2025).
- Chen, Bin, Tao Liu, Lin Guo, and Zhenglin Xie. 2020. "The Disembedded Digital Economy: Social Protection for New Economy Employment in China." *Social Policy & Administration* 54(7): 1246–60. doi:10.1111/spol.12603.
- Cheng, Mingming, and Amy Wei Tian. 2023. "Independent Working and the Gig Economy." In *Elgar Companion to Managing People Across the Asia-Pacific*, Edward Elgar Publishing, 63–76. doi:10.4337/9781802202250.00010.
- Fabo, Brian, Jovana Karanovic, and Katerina Dukova. 2017. "In Search of an Adequate European Policy Response to the Platform Economy." *Transfer: European Review of Labour and Research* 23(2): 163–75.
- Fos, Vyacheslav, Naser Hamdi, Ankit Kalda, and Jordan Nickerson. 2019. "Gig-Labor: Trading Safety Nets for Steering Wheels." *SSRN Electronic Journal*. doi:10.2139/ssrn.3414041.
- Garben, Sacha. 2021. "The Regulation of Platform Work in the European Union: Mapping the Challenges." In *A Modern Guide To Labour and the Platform Economy*, Edward Elgar Publishing. doi:10.4337/9781788975100.00019.

- González-Rozada, Martín, and Hernán Ruffo. 2023. "The Welfare Effects of Unemployment Insurance in Argentina: New Estimates Using Changes in the Schedule of Transfers." *Journal of Human Resources*.
- Healy, Joshua, Daniel Nicholson, and Andreas Pekarek. 2017. "Should We Take the Gig Economy Seriously?" *Labour & Industry: a journal of the social and economic relations of work* 27(3): 232–48. doi:10.1080/10301763.2017.1377048.
- Izzati, Nabiyla Risfa. 2018. "Exploring Legal Landscape of Indonesia's On-Demand Transportation: Case of Go-Jek and The Workers Social Protection." *SSRN Electronic Journal*. doi:10.2139/ssrn.4146661.
- Kässi, Otto, and Vili Lehdonvirta. 2018. "Online Labour Index: Measuring the Online Gig Economy for Policy and Research." *Technological Forecasting and Social Change* 137: 241–48. doi:10.1016/j.techfore.2018.07.056.
- Koutsimpogiorgos, Nikos, Jaap van Slageren, Andrea M. Herrmann, and Koen Frenken. 2020. "Conceptualizing the Gig Economy and Its Regulatory Problems." *Policy & Internet* 12(4): 525–45. doi:10.1002/poi3.237.
- Kuek, Siou Chew, Cecilia Paradi-Guilford, Toks Fayomi, Saori Imaizumi, Panos Ipeirotis, Patricia Pina, and Manpreet Singh. 2015. "The Global Opportunity in Online Outsourcing."
- Kurin, Jaclyn. 2016. "A Third Way for Applying US Labor Laws to the Online Gig Economy: Using the Franchise Business Model to Regulate Gig Workers." *J. Bus. & Tech. L.* 12: 193.
- Matsaganis, Manos. 2020. *History and Politics of the Minimum Wage*. DASTU Working Paper Series,(LPS. 09) February.
- Minter, Kate. 2017. "Negotiating Labour Standards in the Gig Economy: Airtasker and Unions New South Wales." *The Economic and Labour Relations Review* 28(3): 438–54. doi:10.1177/1035304617724305.
- Montgomery, Tom, and Simone Baglioni. 2021. "Defining the Gig Economy: Platform Capitalism and the Reinvention of Precarious Work." *International Journal of Sociology and Social Policy* 41(9/10): 1012–25. doi:10.1108/IJSSP-08-2020-0400.
- Muhyiddin, Nur Siti Annazah, Henriko Tobing, Nugroho Habibi, Fahimah Fauziyah, and Riesa Istiqamah Putri Harsiwi. 2024. "Perlindungan Hukum Dan Sosial Bagi Pekerja Gig: Membangun Kerangka Regulasi Yang Inklusif Bagi Pekerja Ojek Online Di Indonesia ." *Kementerian Ketenagakerjaan*.
- Murdani, Andika Drajat, and Hasna Wijayati. 2023. "Measuring the Political Policy Development of the Gig Economy in Indonesia." *The International Journal of Politics and Sociology Research* 11(3): 327–38.

- OECD. 2019. *Social Protection System Review of Indonesia*. OECD. doi:10.1787/788e9d71-en.
- Okunkova, Elena A., Irina V. Kosorukova, Tatyana G. Lazareva, Elena V. Korolyuk, and Alla V. Bogomolova. 2023. "Global Gig Economy: Prospects and Key Growth Threats for Developing Countries." *International Journal of Work Innovation* 3(4): 403. doi:10.1504/IJWI.2023.128862.
- Panimbang, Fahmi. 2021. "Solidarity across Boundaries: A New Practice of Collectivity among Workers in the App-Based Transport Sector in Indonesia." *Globalizations* 18(8): 1377–91. doi:10.1080/14747731.2021.1884789.
- Permana, Muhammad Yorga, Nabiyla Risfa Izzati, and Media Wahyudi Askar. 2023. "Measuring the Gig Economy in Indonesia: Typology, Characteristics, and Distribution." *SSRN Electronic Journal*. doi:10.2139/ssrn.4349942.
- Potter, Christina, Rachel Pechey, Michael Clark, Kerstin Frie, Paul A. Bateman, Brian Cook, Cristina Stewart, et al. 2024. "Effects of Environmental Impact Labels on the Sustainability of Food Purchases: A Randomised Controlled Trial in an Experimental Online Supermarket." *PLOS ONE* 19(9): e0309386. doi:10.1371/journal.pone.0309386.
- Prass, Jeremias. 2018. "Collective Voice in the Platform Economy: Challenges, Opportunities, Solutions."
- Putri, Treviliana Eka, Paska Darmawan, and Richard Heeks. 2023. "What Is Fair? The Experience of Indonesian Gig Workers." *Digital Geography and Society* 5: 100072. doi:10.1016/j.diggeo.2023.100072.
- Raphelson, Samantha. 2017. "As The Gig Economy Grows, Advocates Raise Concerns About Workers' Safety." *NPR.Org*.
- Ray, Shubhadip, Norbert Herman, and Indrajit Sen. 2021. "Disruptive Transformation Fueling Gig Economies." In *2021 IEEE Technology & Engineering Management Conference-Europe (TEMSCON-EUR)*, IEEE, 1–7.
- Resosudarmo, Budy P., and Abdurohman. 2018. "Is Being Stuck with a Five Percent Growth Rate a New Normal for Indonesia?" *Bulletin of Indonesian Economic Studies* 54(2): 141–64. doi:10.1080/00074918.2018.1521776.
- Rhogust, Muhammad. 2023. "Labor Law Reform in the Gig Economy Era: Analysis of the Impact of Regulatory Changes on Gig workers in Indonesia." *Journal of Law, Social Science and Humanities* 1(1): 48–60.
- Saputra, Wahyu, Sri Rum Giyarsih, and Agus Joko Pitoyo. 2020. "Online Transportation Workers in Palembang City: Context and Characteristics." *IOP Conference Series: Earth and Environmental Science* 451(1): 012100. doi:10.1088/1755-1315/451/1/012100.

- Sargeant, Malcolm. 2017. "The Gig Economy and the Future of Work." *E-Journal of International and Comparative Labour Studies*.
- Scheele, Laura, Zhen Jie Im, and Janine Leschke. 2023. "Unpredictable and Non-Transparent Working Conditions?: Riders in the Food-Delivery Sector in Six EU Countries."
- Semuels, Alana. 2020. "'It's a Race to the Bottom.' The Coronavirus Is Cutting Into Gig Worker Incomes as the Newly Jobless Flood Apps." *Time*.
- Sitorus, Aurelia Ananda, and Yenny Kornitasari. 2024. "Analisis Tingkat Kesejahteraan Pekerja Gig Di Indonesia." *Journal of Development Economic and Social Studies* 3(2): 537–51. doi:10.21776/jdess.2024.03.2.16.
- Sprague, Robert. 2015. "Worker (Mis) Classification in the Sharing Economy: Trying to Fit Square Pegs into Round Holes." *ABA Journal of Labor & Employment Law* 31(1): 53–76.
- De Stefano, Valerio. 2015. "The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowd Work and Labour Protection in the 'Gig-Economy.'" *SSRN Electronic Journal*. doi:10.2139/ssrn.2682602.
- De Stefano, Valerio, and Antonio Aloisi. 2018. "Fundamental Labour Rights, Platform Work and Human-Rights Protection of Non-Standard Workers." *SSRN Electronic Journal*. doi:10.2139/ssrn.3125866.
- Stevania, Maudy, and Siti Hajati Hoesin. 2024. "Analisis Kepastian Hukum Jaminan Sosial Ketenagakerjaan Bagi Gig Worker Pada Era Gig Economy Di Indonesia." *Jurnal Ilmiah Penegakan Hukum* 11(2): 268–77. doi:10.31289/jiph.v11i2.11968.
- Tan, Zhi Ming, Nikita Aggarwal, Josh Cows, Jessica Morley, Mariarosaria Taddeo, and Luciano Floridi. 2021. "The Ethical Debate about the Gig Economy: A Review and Critical Analysis." *Technology in Society* 65: 101594. doi:10.1016/j.techsoc.2021.101594.
- Titmuss, Richard M. 1975. "Social Policy: An Introduction."
- Todaro, Michael P, and Stephen C Smith. 2006. *PEMBANGUNAN EKONOMI, Edisi 9, Jilid 1*. Erlangga.
- Todolí-Signes, Adrián. 2021. "Spanish Riders Law and the Right to Be Informed about the Algorithm." *European Labour Law Journal* 12(3): 399–402. doi:10.1177/20319525211038327.
- Udaah, Isaiah Iortyom, Abdulganiyu Sabo Abubakar, and Paul, Joseph. 2024. "Welfare Effect of Gig Economy on Urban Households in Nigeria." *African Journal of Economics and Sustainable Development* 7(4): 203–18. doi:10.52589/AJESD-SX6XOOMB.

- Wood, Alex J, Mark Graham, Vili Lehdonvirta, and Isis Hjorth. 2019. "Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy." *Work, Employment and Society* 33(1): 56–75. doi:10.1177/0950017018785616.
- Woodcock, Jamie, and Callum Cant. 2022. "Platform Worker Organising at Deliveroo in the UK: From Wildcat Strikes to Building Power." *Journal of Labor and Society* 25(2): 220–36. doi:<https://doi.org/10.1163/24714607-bja10050>.
- Yang, Jing, Qianyu Shen, Xi Tong, and Pundarik Mukhopadhaya. 2025. "The Impact of Digital Literacy in Enhancing Individuals' Health in China." *BMC Public Health* 25(1): 364. doi:10.1186/s12889-025-21454-8.
- Zaman, Umer, Shahid Nawaz, Areesha Javed, and Tareq Rasul. 2020. "Having a Whale of a Time: Linking Self-Determination Theory (SDT), Job Characteristics Model (JCM) and Motivation to the Joy of Gig Work." *Cogent Business & Management* 7(1): 1807707. doi:10.1080/23311975.2020.1807707.