Gig Workers, Social Protection and Labour Market Inequality: Lessons from Malaysia

(Pekerja Gig, Perlindungan Sosial dan Ketidaksamaan Pasaran Buruh: Pengajaran daripada Malaysia)

Yosuke Uchiyama

Faculty of Arts and Social Sciences, Universiti Malaya

Fumitaka Furuoka

Asia-Europe Institute, Universiti Malaya

Md Nasrudin Md Akhir

Faculty of Arts and Social Sciences, Universiti Malaya

ABSTRACT

The rise of the Gig Economy has created new concerns about inequality in rapidly digitising Asian economies. Whilst the emergence of the "on-demand economy" creates new opportunities for the youths and low-income groups, this has also created new policy challenges. As many use unofficial digital platforms and/or operate as unregistered self-run businesses, they remain outside the social protection system, leaving them especially vulnerable during times of crisis. This study therefore aims to provide new insights into this issue - social protection for gig workers – drawing upon the Malaysian experience. Using primary data collected through semi-structured interviews, we examine the working conditions of e-hailing drivers and online food delivery riders, two of the largest mainstream on-demand app-based gig workers' groups in the country. The collected data were examined based on thematic analysis employing 15 subtopics and 3 main themes: (i) performance-based short-term decent work; (ii) platform and customer-centricity operations, and (iii) ecosystem for gig worker sustainability. From the perspective of gig workers, the study narrates their actual working conditions and perceived inequalities. Based on the findings, we conclude by critically reflecting on the potential for developing a worker-centred policy for social protection in the Gig Economy in Malaysia and elsewhere in Asia.

Keywords: Gig economy, social protection, labour policy, inequality, Malaysia

JEL: J21, J40, J46

Received 14 July 2022; Revised 14 October 2022; Accepted 27 October 2022; Available online 31 October 2022

ABSTRAK

Kebangkitan Ekonomi Gig telah menimbulkan kebimbangan baharu tentang ketidaksamaan dalam mendigitalkan ekonomi Asia dengan pantas. Walaupun kemunculan "ekonomi atas permintaan" mewujudkan peluang baharu untuk golongan belia dan kumpulan berpendapatan rendah kepada peluang pasaran baharu, ini juga telah mewujudkan cabaran dasar baharu. Memandangkan ramai yang menggunakan platform digital tidak rasmi dan/atau beroperasi sebagai perniagaan yang dikendalikan sendiri tanpa berdaftar, mereka kekal di luar sistem perlindungan sosial, menyebabkan mereka terdedah terutamanya semasa krisis. Kajian ini bertujuan untuk memberikan pandangan baharu tentang isu ini -- perlindungan sosial untuk pekerja gig - menggunakan pengalaman Malaysia. Menggunakan data utama yang dikumpul melalui temu bual separa berstruktur, kami meneliti keadaan kerja pemandu e-hailing dan penunggang penghantaran makanan dalam talian, dua daripada kumpulan pekerja gig berasaskan aplikasi atas permintaan terbesar di negara ini. Data yang dikumpul telah diperiksa berdasarkan analisis tematik yang menggunakan 15 subtopik dan tiga tema utama: kerja pantas jangka pendek berasaskan prestasi, operasi platform dan mengutamakan pelanggan, dan ekosistem untuk kelestarian pekerja gig. Dari perspektif pekerja gig, kajian itu mengisahkan keadaan kerja sebenar mereka dan ketidakadilan yang dirasakan. Berdasarkan pengalaman Malaysia, kami membuat kesimpulan dengan menggambarkan secara kritis tentang potensi untuk membangunkan dasar berpusatkan pekerja untuk perlindungan sosial mereka.

Kata Kunci: Ekonomi gig; perlindungan sosial; dasar buruh; ketidaksamarataan; Malaysia

INTRODUCTION

Rapid digital transformation and the spread of information and communication technology and the continued stagnation of the manufacturing sector has combined to dramatically change the labour market and work patterns around the world (Donovan et al. 2016; Kassi & Lehdonvirta 2018; Stewart & Stanford 2017). Improved connectivity at a time of limited factory jobs has facilitated the rise and growth of the "gig economy" (Graham et al. 2017). According to the International Labour Organisation (ILO), the "gig economy", also known as the on-demand economy, generally comprises two types of work: crowdwork and on-demand-led work (Messenger 2018). Crowdwork is micro-tasks that can be completed online and organise end-users and workers on a global scale. On-demand-led work refers to a form of labour in which online firms connect users and workers online, including through mobile apps and on the web, whilst services are mainly carried out offline (De Stefano 2015). The ILO defined the criteria for being considered a gig worker as someone who is engaged in "work at least once a week" (Caro 2021).

The rise of the gig economy sector in part is also a reflection of rising unemployment rate and the limits of traditional off-line labour markets which has led to a bottom-up demand and supply in the online market. In the past, during recessionary periods, workers were predominantly either seeking new job opportunities or migrating in search of new jobs. Gig work has provided new options for the underemployed and unemployed to move from full-time employment to new online-based flexible though also a precarious form of employment (Huang et al. 2020). The spread of the internet around the world has enabled the organisation of the labour market through digital technologies. According to the International Telecommunication Union (ITU), the United Nations' specialised information and communications technology (ICT) body, some 4.9 billion people use the internet in 2021, meaning that 63% of the world's population was connected online regularly. The impact of global digitalisation and COVID-19 has certainly increased internet access rates, although there is some variation in the Americas (81%), Asia & Pacific (61%) and Africa (33%) as of 2021 (International Telecommunication Union 2021).

Although levels vary by region, thanks to the above factors, the gig economy sector offers potential attractiveness to participants in the form of easy entry and exit work (Donovan et al. 2016). Thus, gig work attracts individuals seeking an easy way into the international markets beyond local labour markets as long as they have an internet connection (Graham et al. 2017). However, the extreme flexibility of the gig economy business model is at contrast with the traditional employment when it comes to worker rights and job security (Kaine & Josserand 2019). Generally,

labour market norms are constructed through practices, laws and relationships (Barzilay 2018). In traditional employment relationships, workers are dependent on their employer and have no control over working time arrangements or leave. Instead, various rights such as salary and benefits are guaranteed by the employer (Donovan et al. 2016). On the other hand, platform firms regard participating gig workers as independent contractors in the gig labour market. Instead of giving them flexibility in their work and freedom to move in and out of the sector, they avoid the burden of financial security such as salary and benefits (Donovan et al. 2016; Friedman 2014). Moreover, gig workers must accept not only social protection but also the firm's right to "supervise, discipline and dismiss" workers (Stewart & Stanford 2017), as well as the costs and risks of their work (Vallas & Schor 2020). They are allowed to participate in the gig labour market by signing a contract with the firms under the above conditions. van Doorn and Badger (2020) call this a high-risk, high-gain model that values rapid growth and limited liability. Critically, platform capitalism can be seen as a means of corporate capital accumulation in a stratified capitalist economy, although on the surface it appears to create work opportunities for people in different circumstances (van Doorn & Badger 2020). Particularly, it allows them to exploit workers by working for less than the minimum wage and by circumventing regulatory holes such as labour laws (Pasquale 2016). Moreover, employers are willing to monitor workers to increase surplus value production using digital technologies (Spencer 2017). For instance, algorithmic labour efficiency and mutual rating systems with customers induce high-quality and long working hours. This undermines the labour flexibility of traditional gig work and increases the likelihood of losing a job for unclear reasons. In other words, the nature of the gig economy labour market allows companies to maximise the exploitation of profits by shifting key risks to workers, increasing the inequalities and vulnerabilities they face.

The ILO considers gig workers a vulnerable group in the labour market due to chronic precariousness and structural inequalities caused by the informalisation of work in employment (Heeks 2017). One of the notable aspects of the gig labour market is that it provides a rich discussion on the income inequality of gig workers. Inequality in the distribution of labour income generally leads to stagnant wages and a further widening of the workers' payment gap. Some gig work brings high incomes to workers and is protective for them. However, the income of most gig workers is always insecure, and they combine many small "gigs", increasing their isolation as they must compete with many other workers for tasks (Tran & Sokas 2017). This is a clear driver of growing wage inequality in gig economy labour markets. Inequality in the distribution of labour income generally leads to stagnant wages and

a further widening of the gap in worker pay. Stainbaum (2019) argues that besides traditional factors increasing inequality in the distribution of labour income, including increased employer power and weak antitrust laws, a decline in workers' bargaining power further increases inequality (Steinbaum 2019). Leonardi and Pirina (2020) highlight that gig platform workers fall into three categories in western countries. The first are those who do gig work alongside a full-time job as a new experience and networking opportunity; the second are those who diversify their sources of income through part-time gig work, and the third are unemployed people for whom gig work is their entire source of income and on which they rely the majority of the time. The second and third categories are closely related to the working poor brought about by the gig labour market (Leonardi & Pirina 2020). For example, 20% of Uber drivers in the USA have this job as their sole source of income as a fulltime gig worker (Hall & Krueger 2018), and between 3% (Austria and Germany) and 11% (Netherlands) of major European countries have crowd-working as their main source of income (Huws et al. 2016). The gig economy, with its low wages and vulnerability to social protection, is furthering the casualisation of workers in western and other developed countries. Moreover, inequality is even worse for workers in developing countries, where a smaller proportion of the gig labour market has the necessary skills and resources. From a macro-structural perspective, asymmetries underpin inequalities between countries, with wages in the North being higher than those in the South (Heeks 2017).

The rise of the gig economy has spread to Asia and its market size is growing tremendously. The Online

Labour Indicator (OLI), provided by the Oxford Internet Institute, University of Oxford, offers online gig economy economic indicators comparable to traditional labour market statistics. OLI statistics are mainly based on data tracking in six online gig economy projects and tasks: administrative and data entry, creative and multimedia, professional services, sales and marketing support, software development and technology, and writing and translation (Stephany et al. 2021). By tracking the number of projects and tasks across platforms, it is possible to measure trends in demand for online freelance labour across countries and occupations. Table 1 shows the online labour demand of each online gig economy sector in key Asian countries. From this table, the gig economy is prevalent in a wide range of Asian countries, from the population powerhouses of India and China to the developed countries of East Asia including Japan and South Korea, major ASEAN countries and developing countries in South Asia such as Pakistan, Bangladesh, and Sri Lanka. The strength of digital work in India and the development of online gig work in ASEAN countries, including Singapore, the Philippines, Malaysia, and Thailand, are particularly distinctive.

Although the OLI provides an indicator of demand for online workers for online gig work represented by crowdworking and freelancing, it does not include the market share of on-demand app gig work, including online-to-offline (O2O) services, and the exact total value of the gig economy industry are not available. Especially, the on-demand app gig works such as ridehailing and online delivery, are more major forms of work in Asia. Figure 1 in the appendix shows the

TABLE 1. Online Labour Demand of the Online Gig Economy in Asia in 2020

		Online Labour Demand in Six Online Gig Economy Sectors (%)							
Country	Clerical and Data Entry	Creative and Multimedia	Professional Services	Sales and Marketing Support	Software Development and Technology	Writing and Translation	Total		
India	0.5	0.9	0.1	0.6	3.5	0.7	6.3		
Singapore	0.2	0.3	0	0.2	0.5	0.2	1.4		
Pakistan	0.2	0.2	0	0.1	0.5	0.1	1.1		
Hong Kong	0.2	0.1	0	0.1	0.3	0.2	0.9		
Philippines	0.2	0.1	0	0.1	0.2	0.2	0.8		
China	0.1	0.1	0	0.1	0.2	0.2	0.7		
Malaysia	0.1	0.1	0	0	0.2	0.1	0.5		
Japan	0.1	0	0	0	0.1	0.1	0.3		
Thailand	0	0.1	0	0	0.1	0.1	0.3		
Bangladesh	0	0.1	0	0	0.1	0	0.2		
Vietnam	0	0	0	0	0.1	0.1	0.2		
Indonesia	0	0	0	0	0.1	0	0.1		
South Korea	0	0	0	0	0.1	0	0.1		
Sri Lanka	0	0	0	0	0.1	0	0.1		

*Source: The Online Labour Index 2020

Gross Merchandise Value (GMV) in the transport and food sectors, including ride-hailing and online food delivery, which are representative of the gig economy in major ASEAN countries, divided into three time periods: pre-COVID-19, during COVID-19 and post-COVID-19 GMV scale trends. Through the figure, it is possible to see growth tendencies in GMV with different trends of change in different countries before and after the COVID-19 pandemic. For instance, different ASEAN countries show different rates of growth in GMV depending on how much demand in the ridehailing sector decreased and how much demand in the online food delivery sector increased due to the travel restrictions suffered during the pandemic. Furthermore, from 2020 onwards, the entry of many people into the gig economy labour market and their active use of online apps are expected to drive further GMV growth

Despite the gig economy sector's potential, labour market imperfections in Asia, which vary from country to country, increase inequality among workers. The duality between formal and informal labour is a significant problem in East Asian countries, including Japan and South Korea, whilst rigid hiring and firing laws in South Asian developing countries such as India limit workers' flexibility. Rapid digitalisation is further driving labour inequality in South-East Asia, where rapid digitalisation is leading to productivity gains and changing rates of return on assets (Huang & Wan 2019). Specifically, Specifically, Malaysia has a special trajectory in terms of Asia's unique inequality-generating features and the rapid domestic development of the gig economy and government policies to manage it.

In the case of Malaysia, around 18 percent of the country's workforce is categorised as gig workers. In other words, there are around 4 million gig workers who generated MYR 254 million in 2020 (Furuoka 2022). Specifically, in Malaysia, on-demand app gig work is widely recognised by a wide range of people. Much of gig work in Malaysia is supported by e-hailing services such as Grab and MyCar (GOJO) and online food delivery services such as Foodpanda and Grab Food (Lim 2021). For e-hailing services, 42 platforms are officially recognised whilst there are around eight online food delivery platforms as of 2019 (Choong & Lai 2019; Lau & ng 2019). According to Ng et al. (2017), the factors driving the increase in job changes and gig-workers in Malaysia are (1) the accelerating cycle of obsolescence and renewal of industries and job descriptions due to rapid technological progress and (2) changes in the traditional employer-employee relationship, which has led to increased worker independence and decreased stability in traditional formal employment (Ng et al. 2017). Another factor that contributed to the gig economy spreading within Malaysia was the COVID-19 pandemic, which hit most sectors and caused unemployment to skyrocket.

Appendix 2 shows the evolution of unemployment rates in ASEAN countries over the last five years from 2017 to 2021.

Before the COVID-19 pandemic, most ASEAN member states, except for Brunei Darussalam, had unemployment rates ranging from around 0% to just over 4%. Whilst all countries recorded an increase in the unemployment rate throughout the year 2019-2020, Malaysia recorded the highest unemployment rate among ASEAN member states, ranging from 3.3% in 2019 to 4.5% in 2020 (The World Bank 2022). Since then, hundreds of thousands of Malaysians remain adversely affected by the pandemic. Since the COVID-19 pandemic starts to spread across Malaysia, the Malaysian government has locked down all or part of its borders to counter the spread of the infection (Jamaluddin et al. 2021). The lockdowns changed national habits such as refraining from going out and working from home, whereas the number of people working in the gig economy sector increased rapidly (Jamaluddin et al. 2021; Nga et al. 2021). However, the current state of the gig economy from a micro perspective is very different from the growth of the gig economy sector on the surface in the country. Currently, there is no clear legal definition of a gig worker in Malaysia, but it is broadly defined as someone who works freelance and independent contractor (Radzi et al. 2022; Zakaria 2020). From a legal perspective, gig workers in Malaysia are not included in the Employment Act 1955 (Act 265), the Labour Ordinance (Chapter 67, Sabah) and the Labour Ordinance (Chapter 76, Sarawak) (Malay Mail 2021). This is based on the recognition that in these national laws, a worker is regarded as an independent contractor bound by a service contract with an employer. This legal ambiguity induces inequalities for gig economy markets with a platform capitalist regime, in terms of profit production on the part of the platform firms and distribution to gig workers. To address these situations, the Malaysian government has implemented a wide range of policies such as the Malaysia Digital Economy Blueprint, the MYR 75 million grant for the "Penjana gig", the Social Security Organisation (SOCSO) scheme for workers, and the Employee and Retirement Incentives (i-Sarran) Employee Provident Fund (EPF). However, only 7% of the more than four million gig workers are registered with the self-employment social security scheme, and the regulatory and protective environment for gig workers in Malaysia is not yet in place (Habibullah et al. 2021; Zakaria 2020). On 5 August 2022, food delivery riders went on strike in Kuala Lumpur and Selangor areas dubbed the "Food Delivery Blackout" to protest low delivery rates and inequality in rights. The online food delivery sector in Malaysia can no longer be framed as part of the gig workforce due to its size (Shah & Lee 2022). In other words, the riders have been requesting the recognition of their rights as legitimate employees

from the government, as well as legitimate protection from the companies. However, the strike could not produce a sufficient effect as many riders did not participate in the strike and customers and vendors did not fully support the strike (Fong 2022). Subsequently, the Ministry of Human Resources Malaysia announced plans to introduce a social security scheme to improve the welfare of workers in the p-hailing including online food delivery and e-hailing sectors in response to the strike, but the specifics of the scheme are still in the discussion stage and its sustainability may be unclear to the workers (Malay Mail 2022a). In fact, labour supply shocks in such inter-industry labour disruptions may also have a significant impact on profit output and final demand (Hamzah et al. 2022).

Previous studies and policymakers have pointed out piecemeal regulatory problems such as the employment status of gig workers (Aloisi & De Stefano 2018; Koutsimpogiorgos et al. 2020; Prassl & Risak 2016), the platform constraints on gig workers (Hawley 2018; Minter 2017; Todolí-Signes 2017), worker protection issues for gig workers (De Stefano 2015; Donovan et al. 2016; Harpur & Blanck 2020) and interactions between gig workers and consumers (Healy et al. 2017; Smith et al. 2021) but the real voices of gig workers' lively opinions on this issue and their suggestions for improvement have not been reflected. In other words, these pioneer studies are based on systematic descriptive analysis which points main issues and challenges of the gig workers and their social protection. To the best of our knowledge, there are no empirical studies on this significant topic that systematically approach inequalities in gig workers' working conditions from an Asian context. To fill this gap, this article aims to provide new insights into the working conditions of gig workers from Malaysia's experience, including social protection, using semi-structured interview-based thematic analysis.

Specifically, this article examines the working conditions faced by e-hailing drivers working for Grab and online food delivery riders working for Food Panda, a mainstream on-demand app gig worker in Malaysia, and their actual views on redressing inequality. In addition to its novelty, this study is expected to make some contribution to the existing literature on the gig economy. Academically, it generalises the inequalities in social security and regulation of gig worker status by drawing from actual workers' views on the issues faced by gig workers in Malaysia. Based on the Malaysian experience, it critically investigates the academic debate on the rise of the gig economy in Asia and its impact on the sector and inequality in the COVID-19 era. It also provides new suggestions to existing research on the possibility of formulating worker-centred policies for the social protection of gig workers. As a practical contribution, this article provides useful insights for gig workers, platforms, and policymakers

respectively by identifying the status, regulation, and scope of social protection for gig workers as perceived by Malaysian gig workers. The Malaysian experience has the potential to provide important insights for the Asian region, particularly ASEAN countries, due to its legal and institutional ambiguity-induced inequalities for gig workers, the growing need for gig work in the increased unemployment brought about by COVID-19, and the urgency of the policy debate. The real voices of Malaysian gig workers also provide a basis for rethinking regulations so that gig platforms can operate with their social protection and sustainable growth. It will also indirectly facilitate the participation of a wider range of people in the gig economy, including the unemployed, youth, fresh graduates, and women. The remainder of this article is structured as follows. The next section is a literature review, followed by a description of the data collection and analysis methodology. Section 5 describes the empirical findings and section 6 is the discussion section based on the results. Finally, section 7 is the conclusion section.

LITERATURE REVIEW

The complexity of the scope of policy adaptation arises as online platform gig labour is difficult to apply traditional labour standards and regulations. Whilst gig workers undertake an increasing proportion of task-based work, several gaps have emerged in the employment conditions of gig workers in terms of labour law and the current system (Donovan et al. 2016; Minter 2017). This gap allows platform firms to avoid the responsibilities and costs of employment by taking a stance as an intermediary platform. Since the current legislation, including employment law and tax law, does not cover the clear classification of gig workers, it results in legal discrepancies among courts and regulators (Adams et al. 2018). According to an empirical study of the Chinese gig economy industry by Xiao (2019), the current Employment Law does not set uniform employment standards for gig workers, which has led to diverse decisions in similar cases in courts (Xiao 2019). Various researchers have a common understanding of regulatory issues related to their social protection, albeit in somewhat different contexts. In this study, the main regulatory concerns in the previous literature are summarised below.

EMPLOYMENT STATUS

The specific legal classification of gig workers is at the centre of debate for many researchers, as it affects the entire labour process, from contracting labour, to pay and protection. Specifically, it is whether gig workers are considered independent workers or employees on online platforms. The urgency of this worker

classification is supported by the fact that recognition as an employee has the potential to significantly extend the scope of protection for gig workers. From a labour law perspective, status as an employee entitles the employee to collective bargaining rights, the adaptation of various laws (Labour Standards Act, Minimum Wage Act, Family Law, Disability Protection Act, overtime pay, etc.) and benefits (medical insurance, pension) (Halliday 2021; Oei 2018). However, the majority of gig workers sign service contracts with platform firms as independent contractors, not employees (Harpur & Blanck 2020). Critically, platforms avoid employment obligations by classifying workers as independent contractors (Cunningham-Parmeter 2019). Furthermore, they cleverly utilise the employment classification gimmick of an independent contractor, which takes into account the legal flexibility of gig workers whilst reducing the employer's obligations. Previous scholars have argued that this binary categorisation has allowed for the misclassification of gig workers (Dubal 2017; Halliday 2021; Pinsof 2015). The gig economy has moved from the traditional two-party (client and independent contractor) labour relationship to a threeparty labour contract mediated by the platform (Figure 1). This means that even during a transaction between a client and a gig worker, a contract must be concluded with the platform (Barratt et al. 2020). This triangular mechanism blurs the boundaries of the traditional definition of independent contractors and employees, whilst the platform legitimises its role as an intermediary between gig workers and clients (Prassl & Risak 2016). Sprague (2015) states that the difference between independent contractors and employees depends on the extent to which the online platform's business model relies on gig workers (Sprague 2015). On the other hand, Chen et al. (2019) state that platform workers such as e-hailing drivers (gig workers) should be included as employees for social protection, whilst platform firms tend to regard them as contractors to avoid legal liability regarding labour (Chen et al. 2019).

GIG WORKER BEHAVIOUR

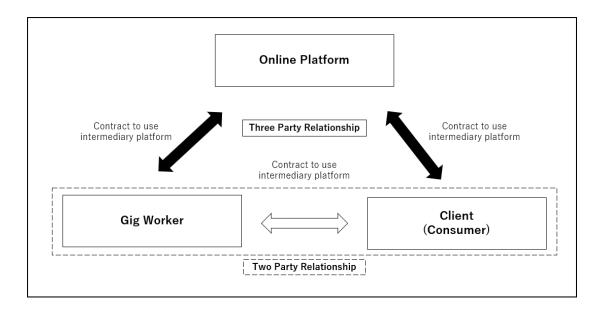
The fundamentals of gig work incorporate neoliberal thinking of individual freedom symbolised by freedom and flexibility (Anwar & Graham 2020). However, gig work against the backdrop of current platform capitalism has resulted in workers being encouraged to become unstable and vulnerable (Anwar & Graham 2020; Vallas & Schor 2020). Profit-based platform firms, which have been enabled by ICT technology to expand globally, enable the dominant surveillance and super-exploitation of workers (Frenken 2017; Vallas & Schor 2020). To distribute and digest work more efficiently, some platform firms have adopted algorithms, especially for on-demand app-based work characterised by Online to Offline (O2O) (Gregory 2021). This platform algorithm

creates physical risks such as a lack of security and economic risks such as maximising the surplus value of the firms (Gregory 2021). Therefore, gig workers are forced to work longer hours and lose time for their reproduction by being manipulated by the algorithm (Sun 2019). Furthermore, many platforms tend to restrict gaining the economic and contractual benefits of expanding a gig worker's business by restricting the number of gig worker accounts and the creation of competitor accounts (Koutsimpogiorgos et al. 2020). Moreover, the publication of negative opinions about the platform by gig workers restricts future job applications and facilitates the dismissal of workers at the discretion of the platform (Minter 2017). Once dismissed, workers are blacklisted and may find it difficult to work on a gig basis in the same field. Several platforms set minimum requirements for tasks to be completed by gig workers, and non-achievement of conditions or refusal of certain demands can result in task assignments being suspended (Christie & Ward 2019). An empirical study by Chen et al. (2020) found that 82.1% of the 323 respondent platform workers worked six days or more each week. This result stems from their financial concerns and invisible rating system (Chen et al. 2020).

Although gig workers may take collective action to improve existing treatment (Vallas & Schor 2020), gig economy platforms have been successful in using their characteristics to prevent workers from forming labour unions or refusing collective bargaining (Bulian 2021). One reason is that through individualisation and decentralisation to platforms, workers have become more attached to them and more dependent on them (Bulian 2021). Moreover, collective bargaining by gig workers and trade unions employed as independent contractors forms an advantage for platform firms (Uchiyama et al. 2022). Therefore, even if they demonstrate, it makes direct collective bargaining difficult as long as the platform does not recognise them as employees (Montgomery & Baglioni 2021).

WORKER PROTECTION

Whilst traditional worker protection is established under a proper employment contract between the employee and the employer, workers in the gig economy may be affected by different aspects of worker protection depending on their situation (Donovan et al. 2016). Since current worker protection systems are designed based on traditional employment relationships, the new types of work, such as gig work do not receive social security and are constantly at risk of social exclusion (Aranguiz & Bednarowicz 2018). One of the main debates on specific social protection relates to the issue of wages. In gig work, the availability of guaranteed wages is a cost for gig platforms, as gig workers can choose their working hours (Todolí-Signes 2017). Even though platforms must guarantee a minimum wage for



*FIGURE 1. Gig economy platform business model *Source: Barratt et al (2020) and Stewart & Stanford (2017)

their work, it should be difficult to apply the concept of a uniform national minimum wage per hour to gig workers, whose working hours are flexible and who may work on multiple platforms (Hawley 2018). This varies depending on the type of platform and type of gig work, with some gig workers starting their successful businesses, whilst others work monotonous and long hours for less than minimum wage remuneration (Prassl & Risak 2016). Scholars have also mentioned that most gig workers who are considered self-employed in the gig economy may not have access to social insurance and social welfare, including overtime payment, unemployment and sickness benefits (De Stefano 2015; Donovan et al. 2016; Harpur & Blanck 2020). Platform firms also do not consider implementing specific systems because the burden of social insurance contributions leads to higher prices and labour costs. According to Joyce et al (2019), online platform gig workers may have different levels of worker protection coverage in terms of whether they are full-time or parttime. Part-time gig workers and gig workers' dependents perceive a more pronounced lack of social protection than full-time gig workers. This is because non-standard employment contracts, such as gig work, do not have specific reference values for measuring working hours, earnings and contributions (Bogliacino et al. 2019).

INTERACTION WITH CUSTOMERS

Whilst the focus has been on issues of industrial relations between gig workers and platform firms, consideration of the potential for interaction between employers and gig workers has also been noted by certain scholars. Healy et al. (2017) argue that gig workers may be able to bring consumer solidarity into the discussion of regulatory issues. Especially, consumers may influence the direction and speed of change in gig work conditions since they also have a common interest (Healy et al. 2020). At the same time, platforms tend to be more receptive to fairvoiced demands (Healy et al. 2017). Essentially, this dual relationship between gig workers and consumers is supported by the introduction of a mutual evaluation system (Scully-Russ & Torraco 2020) and actual offline service. Belanche et al (2021) found that customers perceived the working conditions of gig workers (delivery persons in online food delivery services) to be unfair and that this perception directly influenced their intention to use the platform. Customers are also more likely to choose platforms that were working to improve the working conditions of gig workers, suggesting that customer use may contribute to improving traditional labour relations (Belanche et al. 2021). However, as this relies on consumer understanding, the reality may be different. The gig economy platforms do not promote real-life industrial relations to consumers by cleverly manipulating impressions (Healy et al. 2017; Healy et al. 2020). As the findings of Smith et al (2020), consumers who use online food delivery services are essentially limited and have inaccurate perceptions of the rights of gig workers. On the other hand, customers are willing to pay more to improve their income and conditions (Smith et al. 2021). However, further research has not been conducted on the extent to which gig workers are aware of this potential for emotional labour and the potential for customer interactions to change their working conditions.

PREVIOUS RESEARCH IN MALAYSIA

There is a lack of systematic research on gig workers and social protection in Malaysia, notable exceptions are three pioneer research (Abdul Rahim et al. 2021; Bidin et al. 2021; Radzi et al. 2022). Radzi et al. (2022) claimed gig workers are considered independent contractors under the gig economy and this work status challenged a conventional full-time employment model. Under Malaysia's employment laws, employees who have a formal employment agreement or a contract of service with employers would enjoy rights and benefits which are stipulated in Malaysian laws. In other words, gig workers without a formal employment agreement would not be able to receive any rights and benefits, such as minimum wages, rights to join the trade union, acceptable working hours, paid holidays and so on. Instead, they suggested that gig workers should register an association to strengthen their rights and protect their interests. Bidin et al. (2021) also claimed that service providers would employ independent workers to perform tasks in the gig economy which could be considered to provide cheaper and more efficient services to customers. Under Malaysian employment laws, there are three types of workers, employees who have a formal agreement with firms, independent contractors who have agreements to perform a specific task with firms and self-employed workers who have worked for themselves, such as farmers or fishermen. The gig workers are categorised as the second group of workers or independent contractors. Thus, the main problem of gig workers is that they are not recognised as employees, and they could not enjoy any benefits and legal protection which are provided for the first categories of workers or employees. For example, gig workers are not legally protected under the Social Security Organisation (SOCSO), but the Self-Employment Social Security (SESSS). The employers would not contribute to the Employment Provident Fund (EPF). They need to contribute to the Voluntary Contribution with Retirement Incentive (i-Saraan). Furthermore, Abdul Rahim et al (2021) pointed out that there is a negative association between the level of social protection and the level of independency in the work. If workers would earn more income as independent contractors or self-employed workers, they would receive less social protection under the employment legislation. They claim that there is an increase in the case where gig workers voiced against platform providers around the world. In the case of Malaysia, the Food Panda riders voiced complaints about low payment and lack of social security nets such as the EPF or the SOCSO. The Malaysian government has taken several measures to lessen gig workers' suffering and grievances. For example, the government allocated MYR 50 million (around USD 11 million) to create a retirement fund

named i-Saraan for gig workers. Besides the special retirement fund, it also created special social insurance named SKSPS for gig workers. They suggested three social protection mechanisms for gig workers, namely adopting social insurance for all workers, including gig workers, simplifying the contribution and benefit mechanism for social protection, and strengthening the tax-financed social protection mechanisms.

METHODOLOGY

This study focuses on e-hailing and the OFD food delivery sector, two of Malaysia's leading online app gig-works. Specifically, semi-structured interviews were conducted with a total of 12 gig workers: seven Grab taxi drivers and five Food Panda riders, respectively. The data was collected in Klang Valley and Sabah. With reference to ethical guidance, this interview was conducted between 1 May and 10 July in 2022. Semi-structured interviews allow one interviewer elicits ample information from the other person through open-ended questions on a specific topic, allowing a small sample size to identify issues that participants feel are important (Francis et al. 2010; Longhurst 2003). Furthermore, it allows freedom for follow-up questions and the provision of explanations from the interviewer to gain appropriate information (McIntosh & Morse 2015). In this study, there may be resistance to speaking openly under focus group discussions, which approach individual gig workers from a variety of backgrounds. In addition, the highly designed and detailed questions that result from conducting in-depth interviews may provide participants with the interviewer's intentional bias (Boyce & Neale 2006). Moreover, in-depth interviews, which require detailed questions and answers, not only require respondents to spend a lot of time but also require a certain amount of time for the recruitment process. Therefore, the semi-structured interview method is the most suitable interview method for the target of this study as it allows for the establishment of a mutual relationship between interviewer and participant and creates certain flexibility in the interview (Irvine et al. 2013; Kallio et al. 2016). The criterion for respondents is that they must be active on one of the two platforms, either Grab Malaysia or Food Panda Malaysia and be at least 18 years old. However, respondents must have already passed the training mandated by the platform and have already started actual work. They had to be currently working as a gig worker for Grab or Food Panda and did not include those who had worked for them in the past. Workers who are still in training are also excluded. Interviews were conducted both online and offline and the language used was English or Malay. All interviews were recorded with the respondents' permission for the data analysis stage.

DATA COLLECTION PROCEDURE

DATA ANALYSIS PROCEDURE

To disambiguate and refine the interview script, an online pre-test was conducted with real Grab drivers and Food Panda Delivery riders to remove unnecessary questions. The final interview script was divided into five sections (Table 2). In this study, the gig workers interviewed specifically refer to Grab taxi drivers and Food Panda delivery riders. To ensure respondents' status including age and working period (month/year), working hours (per day), earnings (monthly), and part-time or full-time, the first section of the interview was performed by both structured and open-ended interview styles whilst from section 2 to section 5, the open-ended interview style was adopted.

Further details on the content of the interviews are provided below. Section 1 refers to the employment status of gig workers. It specifically asks about their position on whether they are independent contractors or employees. Section 2 is about the degree of freedom and flexibility of gig workers. Particularly, it includes aspects such as freedom of working hours and acceptance of gig work requests, minimum work performance, restrictions on account creation and working for competitors, prohibition on business expansion, freedom to disseminate information, freedom to discuss with trade unions, freedom of sharing information among other drivers and delivery workers. Section 3 asks them about the social protection of gig workers in terms of appropriate standards for minimum wages and working hours, application of benefits such as overtime pay, unemployment and sickness benefits, insurance, and awareness of minimum working standards. Section 4 explores gig workers' views on the interaction between gig workers and consumers. It includes customer behaviour towards gig workers, communication with consumers, gig workers' perspectives on the extent to which consumers understand their situation, financial incentives such as tips, and mutual appreciation. Section 5 asks for gig workers' views on future challenges and prospects and the need for action from the Malaysian government, gig workers, platforms, and potential customer contributions.

The semi-structured interview data on open-ended responses were analysed in four phases based on a thematic analysis approach (Basukie et al. 2020; Braun & Clarke 2006; Cheng et al. 2018). Thematic analysis is an analytical method that provides a detailed description of small amounts of data through the identification and analysis of patterns in the data (Braun & Clarke 2006; Douglas et al. 2009). This study especially adopts a thematic analysis to highlight practical policy recommendations in line with their position by identifying the working conditions and inequalities of gig workers through an analysis of five sections set out at the time of data collection (Maguire & Delahunt 2017). The first stage involves manually transcribing the recorded interviews into text. In addition, notes are taken during the interviews as appropriate to highlight any areas that need to be emphasised. To further facilitate the identification of interview content, interview codes were used G-(k) for Grab drivers and F-(k) for Food Panda riders (k is assigned a specific number to the interviewee). The second phase is open coding to mark all keywords and phrases related to the working conditions of the gig workers. After this step, key codes and quotes are generated for the next phase. Keywords and sentences extracted from the qualitative text would remain as original as possible to reflect the views of respondents. The third phase is axial coding. Axial coding is used to combine key raw codes and generate quality constructs to identify positive or negative relationships between Grab taxi drivers and Food Panda riders. The fourth stage is selective coding and mapping. Through selective coding, the main themes and their associated subthemes are finalised. Then, the final segments are summarised and mapped. Table 3 describes the demographic of the basic information of the participants in this interview. This demographic includes their working mode, working hours, working duration, interview mode, interview duration and monthly income.

TABLE 2. Interview structure and description

Section	Title	Description	Type of interview	
1	Employment Status	Gig workers' status, Contract details	structured and open-ended	
2	Gig Worker Behaviour	The degree of flexibility and freedom in terms of their operations	open-ended	
3	Social Protection	Differences between gig workers and employees in terms of social protection and social welfare	open-ended	
4	Interaction with Customers	Customer behaviour toward gig workers, Communication with consumers, Consumers' potential contribution	open-ended	
5	Gig Workers Prospect	Needs of actions from the Malaysian government, gig workers, platforms, and customer potential contribution	open-ended	

TABLE 3.	Demograp	hics of	the res	pondents

Code (G: Grab / F: Food Panda)	Gender	Age	Full time / Part-time	Working Hours (daily)	Working Period	Venue	Interview Time	Monthly Earning
G-1	Male	31	Part-time	7 hours	1.5 years	Online	45 mins	1000RM
G-2	Male	19	Full time	8 hours	5 months	Online	40 mins	2000RM
G-3	Male	35	Full time	8 hours	1 year	Online	35 mins	2000RM
G-4	Male	29	Full time	7-8 hours	2 years	Offline	20 mins	1500-2000RM
G-5	Male	55	Full time	7 hours	4 years	Offline	20 mins	2000RM
G-6	Male	35	Full time	12 hours	2 years	Offline	30 mins	2500RM
G-7	Female	30	Part-time	6 hours	2 years	Online	30 mins	1000RM
F-1	Male	24	Part-time	10 hours	3 years	Offline	20 mins	3000RM
F-2	Male	31	Full time	10 hours	2 years	Offline	20 mins	1500RM
F-3	Male	27	Full time	10 hours	2 years	Offline	20 mins	1500RM
F-4	Male	30	Part-time	10 hours	1.8 years	Offline	20 mins	2000RM
F-5	Male	23	Full time	12 hours	3 years	Offline	30 mins	1500RM

*Source: Authors

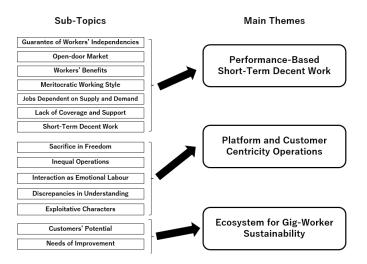


FIGURE 2. Concept map by the data analysis

RESULTS

Thematic analysis of the collected interview data identified 15 subtopics from the five sections, which were summarised into three main themes (Figure 2).

PERFORMANCE-BASED SHORT-TERM DECENT WORK

All respondents recognised their status as "independent contractors" and stated that the platforms also treat them as such. Many respondents view this work classification positively and feel that they are guaranteed some independence. For instance, their recognition of independence can be seen in their words such as control over their own time, deviation from rules and regulations (G-1), work that is not burdensome (G-7), free from joining and leaving (G-3), the simplest way

to earn income (G-2), etc. G-1, G-2 and G-3 describe the simplicity of entry for this type of platform work as follows:

"The contract with Grab itself is not paper, it is paperless, so it is online". (G-2)

"When you want to join them, it's up to you. When you want to leave, it is okay. But if you are not in three months like that, Grab automatically going to remove you from the list, so you will have to re-apply. So, it's up to you when you want to start your work". (G-3)

Whilst jobs such as e-hailing and online food delivery are open markets with low barriers to entry, platform firms take the stance that they do not interfere with their employment status. In other words, they do not have to be bound by task requirements, at least if they are active. Furthermore, as both e-hailing and online

food delivery allow them to work for competitors, some drivers and riders register on several platforms and change the app they operate on according to supply and demand. Since the online food delivery app Food Panda operates on a shift system, it requires a certain level of commitment and a certain level of commitment when operating. On the other hand, Grab Food, the biggest competitor does not have a shift system. Thus, some riders do double work, working for Grab Food after their shift on Food Panda.

"If Food Panda gives us more orders to deliver, then we choose Food Panda. If suddenly Grab Food gives us more orders, then we will change from Food Panda to Grab Food". (F-2)

"Foodpanda follows the shift from 7 am to 9 pm or 12 pm. There are many shifts such as 7 am to 2 pm, and 2 pm to 9 pm. So, my schedule is quite bounded by the rules". (F-4)

The financial benefits of their being independent contractors include a performance-based element. A piece-rate system, where the more they work, the more they are paid, is the main motivation for drivers and riders. Therefore, overtime and paid holidays given to employees are not taken into account, and the platform is solely a merit-performance-based system in exchange for freedom.

"If we get more than MYR 80 or 90 per day, Grab will give us an incentive". (G-3)

In addition, incentives set by the platforms and tips from customers also contribute to a greater or lesser extent to their income. G-2 and F-3 told that festive seasons such as Hari Raya are a chance to receive a lot of tips. Additionally, G-3 mentioned regarding tips, passengers tend to provide the driver with the change from their basic cash payment as a tip. However, this income is largely dependent on the balance between supply and demand. Specifically, Grab drivers claim that during the COVID-19 pandemic, consumer demand fell sharply, and was unable to generate sufficient income. Instead, the G-1 states that the government provided drivers with a short-term supplement of financial income.

"The Malaysian government gave incentives to drivers because of the recent COVID-19. Because most of Malaysia was not opening, so we got down getting orders. The government has given us a few incentives and payments". (G-1)

Meanwhile, Food Panda riders stated there are currently fewer orders than during the MCO time although they could get enough orders during the MCO time.

"There are a lot of riders now but after COVID there are not many orders we can get per day". (F-2)

Regarding social protection for gig workers, all respondents pointed out differences in treatment compared to employees, with particular emphasis on the availability of insurance. E-hailing and OFD workers are required to have some form of insurance, and insurance fees are essentially paid by the workers themselves. According to G-3, Grab requires them to upload their insurance status on their profile, and they can even check their insurance status by the presence of a sticker on the street. Respondents are covered by various social security schemes at their own expense, including SOCSO, i-sarran and EPF. Since drivers and riders are obliged to join SOCSO, Grab provides vouchers of 10-15% for the purchase of insurance (G-7). Some Grab drivers point out real situations on how to deal with their illnesses.

"For the sick benefit, there is only a panel clinic. We can go to the panel clinic, and then we can get a discount". (G-1)

"Grab does not provide enough medical check-ups. If I am sick, I just have to take time off, but I do not need any medical check-ups". (G-3)

Respondents recognised that most Malaysians who lost their jobs or reduced their income during the COVID-19 pandemic chose Grab and Food Panda as a source of income. F-3 stated that it was not a decent job but not a bad job. G-7 stated that the Grab job is productive since I could make friends, gain experience, and earn money at the same time. Furthermore, a new full-time driver who had been a driver for five months said he had no difficulties and was enjoying life (G-2). Temporarily, this gig work shows that it is chosen as a productive job with high priority and low barriers to entry. F-1s stated that this job offers better financial treatment than other same-levelled jobs as follows:

"This job helps me earn more money other than any same-level workers out there. It also depends on the rider itself. If they want to make this job profitable or not, depends on how long you work a day and how many orders you get per day". (F-1)

On the other hand, even if it is seen as productive work or decent work for workers in the short term, it does not seem to be considered a long-term means of work. Especially, delivery riders are willing to switch if they get a full-time job offer but consider this job as the only means of work. G-2 also considers driver work as the only accessible job at this stage, but currently enjoys the job. Furthermore, G-6 claims that he started working as a Grab driver to get away from the stress of his full-time job.

"I used to work in Singapore in a full-time job, but I left the company because of stress and have been working as a Grab driver for four years. I start work after dropping my son off at school in the morning and drive for the rest of the day until I pick him up from school". (G-6)

PLATFORM AND CUSTOMER CENTRICITY OPERATIONS

As mentioned above, gig workers engaged in e-hailing and food delivery feel a certain degree of flexibility and freedom in their work, but also a certain amount of inequality in the actual operation and service. The issue most highlighted by respondents was the issue of passenger acceptance. As for e-hailing, when the Grab driver app is opened, there is an auto-accept system where an algorithmic system automatically allocates passengers, as well as commands that allow the driver to choose passengers. Some drivers claim that cancelling an order once received affects their rating. In other words, once an order has been accepted, the contractual rules for completing it need to be followed; G-7 and G-1 describe this current situation as follows.

"It is up to the driver if he/she wants to accept the passenger or not because once the booking is accepted, you must follow the rules -- customer is always right". (G-7)

"We drivers want to get a high rating, so we just need to follow...keep receiving the order, minimise cancelling the order, and keep our work ethic. If we get just one negative feedback from the customer, it will be affected our rating". (G-1)

The platform uses a mutual evaluation system between workers and drivers to keep the quality of transactions constantly. Although customers can provide a 5-star rating and feedback, workers can only provide a 5-star rating. This creates an asymmetry in that customers cannot provide feedback on the quality of their use. Given that cancellations from customers have little impact on the driver's reputation, G-3 has devised the following measures for service facilitation.

"Grab give us orders. Then, I just automatically accept. If the passengers came far from us, such as maybe 10 minutes to 20 minutes like that, we still have to accept them. But I'm going to call the customers if they are willing to wait for me. If they do not want to wait, tell them to cancel. So, there's no need for any cancellations". (G-3)

Online food delivery riders tend to check whether customers' orders are correct or not. According to them, since mistakes in delivery locations occur frequently, if they see something unusual at a dropped point, they will try to call to check for mistakes. The reason they persist in asking customers is to prevent conflict with them. F-5 states the reasons for this as follows:

"Since some customers do not understand us, they complain to us due to late of delivery. But the blame is

not on us and the food preparation by the restaurant is late. That's why we sent it late, but the customers did not understand it they complained to Food Panda then which causes our rating to decrease". (F-5)

Furthermore, as delivery times are affected by distance, weather, and traffic congestion, they also have to reconfirm with customers ordering from distant locations to prevent cancellations (F-1). Riders are actively addressing information asymmetries between customers and riders that are not covered by these apps.

"I give more information to the customer, like confirming the pinned location and telling them to wait because sometimes they order from another city. It is far from my place, but the customer asks me where my food is. That is why I will tell them first if I might be late due to the restaurant location being far, or raining, or bad traffic". (F-1)

The above responses of drivers and riders to customers show that gig workers can be seen as engaged in emotional labour, comparable to professional taxi drivers and regular delivery personnel. Some respondents attempted to engage in active conversations with passengers in their vehicles. G-7 claimed to be less in-depth and more conscious of general business conversations, whilst G-4 enjoyed in-depth conversations with passengers, such as about politics and lifestyle. In a striking example of emotional labour, G-3 said they decide whether to talk based on whether the customer is sociable and friendly or not.

Despite the constant efforts of drivers and riders, there are still discrepancies in the customers' understanding of their working conditions. Many respondents stated that the understanding of this varies among customers. G-3 mentioned that few of them who check the news and politics tend to see the current workers' situations as customers are using the service to fulfil their wants. G-3 and G-4 highlighted a certain number of passengers do not understand that the recent fare spike in e-hailing is due to an apparent lack of supply of drivers during peak hours. Furthermore, this respondent also provided the following key insight on the difficulties of remaining an e-hailing driver.

"If you continue with Grab driving, you have to maintain your car every three or four months, as the meter runs very fast, and the car is easier to damage. The cost of maintenance is very high, but Grab does not bear this cost". (G-3)

Regarding the operational power balance between platforms and gig workers, it was also revealed that platform firms such as Grab, and Food Panda closely monitor. In some cases, they restrict various aspects of workers' behaviour. For instance, Grab and Food Panda imposes restrictions on information disclosure on workers. Specifically, information in the app and the

personal information of passengers must not be shared. If the platform becomes aware of this, the account will be suspended (G-1, G-3). In addition, if a passenger gives a driver a bad review, the driver will be penalised by Grab. However, as the recording of in-car activities is regulated (G-6), the criteria for this regulation are black-boxed (G-3). According to G-7, Grab and Food Panda usually deal with complaints received from drivers and riders in advance and restrict their accounts if they disclose irrelevant issues that could damage the platforms' reputation. However, since the sharing of experiences between drivers and riders is not restricted, they use WhatsApp to exchange information. G-4 uses highly public tools such as Facebook accounts to share their personal experiences as Grab drivers for their friends but claims that "my account is not regulated now". Furthermore, several respondents stated that they belong to trade unions and associations and that there is a system of sharing about operations and rule changes within these groups.

ECOSYSTEM FOR GIG WORKER SUSTAINABILITY

This interview found that gig workers in e-hailing and online food delivery sectors perceived it as not a long-term job. However, they have several opinions on maximising their sustainability as labours in this unbalanced business model under platform capitalism. One biggest serious issue highlighted by four-third of the riders interviewed is their loans. Even if they have sufficient income, they cannot get various loans because the companies do not provide valid documentation as they are independent contractors.

"Gig workers can buy a lot of things with their income but the problem here is we do not have official bank slips to apply for a loan, even buying a house is difficult although our income could reach the same as a public worker, so it would be good if they can provide us with valid documentation of our work and our income". (G-1)

"The problem right now for me is the loan. I can't take up a loan if I don't provide the bank slip for my salary. But the problem itself was from the company. Even if I complained about the company policy itself, they are not supportive of it. Because we are gig workers under the temporary work system, right? So, I decided to only work here for a while and if I get a new job then I will leave this industry". (G-2)

Moreover, retirement saving schemes such as the Employees Provident Fund (EPF) (Malay name: Kumpulan Wang Simpanan Pekerja, KWSP) have also been informed by Grab and Food Panda that they can be obtained, but the workers have not been informed about the procedures in detail (G-6, F-1). On the other hand, G-7 suggests firm-sponsored training classes for drivers and riders on how to provide and maintain good service towards the customer. At the same time, drivers expect to have knowledge opportunities such as tips to earn more. Such training classes would be beneficial in having multiple earning gigs, especially as side businesses are allowed in Grab cars.

Regarding the Malaysian Government, respondents ask for positive responses. G-1 states that measures should be taken against their profit-driven business models by harmonising rules and regulations for platform firms. G-7 proposes that governments establish rules to protect drivers and riders from potential threats from traffic rules and customers. Specifically, G-6 mentioned that mandatory installation of in-house audio recorders and cameras could protect drivers from traffic accidents and threats from customers. In addition, governmentled wage increases and increased incentives for gig workers are seen as important factors in improving their working conditions. G-1 and F-4 mention that service providers are beginning to reduce incentives for drivers and riders. According to G-1, once one firm has started lowering incentive rates, the other platforms will also be banded together. Furthermore, F-3 highlights that "there is a wage gap among riders between Borneo (Sabah, Sarawak) and West Malaysia". As a different angle on this financial issue, F-1 describes the government's stimulation of consumer purchasing power will lead to riders' benefits. Their demands of the government are realistic and live opinions based on an understanding of the exploitative nature of the platform. To manage the gig economy industry ecosystem, the government is required to respond carefully and proactively.

Additionally, gig workers also mentioned the potential for customers to also influence the working conditions of gig workers positively. The first concerns the smoothness of the service. Both e-hailing and online food delivery services can increase their work productivity by correctly entering the ride or delivery address on the app, respectively (G-1, G-2, F-1, F-3). During the ride, they comply with the rules (e.g., wearing a mask) (G-4) and provide appropriate feedback after the ride or delivery (G-3). Customers tipping them based on their performance also certainly would motivate them. Furthermore, G-4 encourages customer reporting to improve driver service. G-2 also argues that customers can also sort out common problems of gig workers through interaction with drivers and riders and then pass reports to the government.

DISCUSSION

LESSONS FROM MALAYSIA FOR OTHER ASIAN COUNTRIES

Rapid digitalisation and changing working styles have brought about the rise of the gig economy in the Asian region (Tan et al. 2021). On the other hand, this new form of the labour market continues to produce economic and social inequalities that are specific to Asia and different from traditional labour markets. Our analysis a number of insights into the inequalities prevailing in the Asian gig economy markets and existing academic debates on market inequalities during COVID-19 by examining the working conditions faced by Malaysian gig workers and their views on redressing inequalities. Our analysis adds new insights to previous research on two specific aspects regarding (i) improving social protection toward gig economy workers, and (ii) implications for postpandemic inequality given gaps in current provisions for gig workers by examining their views on working conditions and redressing inequality faced by gig workers in Malaysia.

IMPROVING SOCIAL PROTECTIONS TOWARDS GIG ECONOMY WORKERS

Our data suggests that Malaysian gig workers perceived themselves as independent contractors and viewed this labour category positively. They seek flexibility and independence from being tied to platform firms. In other words, platform firms do not interfere with employment status in return for creating an open labour market with low barriers to entry for workers. This corporate non-interventionism policy may be translated into an ultimate performance-based approach to gig workers. The gig labour market leaves the preparation of the foundations and responsibilities at work to the labour, whilst creating the possibility for them to earn more money the more they work. Furthermore, the impact of COVID-19 has seriously affected several formal sectors, creating a situation where the unemployed and vulnerable people have to engage in the informal sector from the traditional sector. This is why the gig labour market has succeeded in attracting a certain segment of the developing countries of Asia, especially ASEAN countries. Gig work is prevalent in Asian countries as a receptacle for the abundant labour force that the formal sector is unable to absorb (Yasih 2022). In addition, the entry of unemployed and new workers into the sector affected by COVID-19 has led to an exponential rise in the gig work required in the market (Mukhopadhyay & Chatwin, 2020). On the other hand, this new form of the labour market continues to produce economic and social inequalities that are specific to Asia and different from traditional labour markets. During a pandemic recession, labour markets become more competitive due to increased reliance on gig workers to reduce the operational costs of firms in Asian countries (Tan et al. 2021). However, this increases the likelihood of imposing social dumping in working conditions on them. As a result, further gig economy market power structures may amplify vulnerabilities for unemployed people of low economic status, young people and women in the region. Therefore, a proper exploration

of inequalities in the digital economy, including the gig economy, requires understanding and addressing the complexity of individual vulnerabilities positioned relative to each other within the social power structure in Asian countries (Zheng & Walsham 2021).

In Malaysia, ride-hailing drivers and online food delivery riders are the productivity jobs of choice with low barriers to entry. However, bold performancebased policies and the expansion of the labour market during COVID-19 have generated important debates on social protection and inequality. One is the issue of income among gig workers. The income of gig workers depends on the balance between consumer demand and worker supply. Ride-hailing drivers saw their income fall during the pandemic due to a sharp drop in user demand, whereas there was sufficient demand for online food delivery workers. To compensate for this supply-demand balance, the Malaysian Government offered short-term incentives to ride-hailing drivers. Although this incentive has served as a safety net for workers in the event of short-term disasters, it has not sufficiently approached the long-term stability of gigwork income. With Malaysian online food delivery riders striking against low Food Panda and Grab wages, it is clear that firms are not providing sufficient income to accompany their labour (Malay Mail 2022a). The second is a discussion on insurance coverage. Ridehailing and online food delivery workers are required to take out insurance, and workers must bear the costs themselves. This is a burden for Asian gig workers who tend to work full time due to unemployment or as their only source of income. According to interview G-3, Grab Malaysia states that it provides a voucher of 10-15% for insurance coverage, but most of the cost is borne by the workers themselves. This is particularly the case for those who work all day on the streets, where the risk of illness and accidents is higher. At the same time, the sickness and accident benefits are left to their insurance plan. For full-time gig workers, illness or accident means a complete stop to their daily source of income. Therefore, platform firms and governments should consider providing a different safety net to cloud workers and other on-demand app workers. The third is about the balance of power of gig workers in the gig economy business model. Workers in the ride-hailing and online food delivery sectors in Malaysia perceive a certain inequality in operations and services. They are monitored by the platform under "customer centricity" and engage in emotional labour. As customer ratings have a significant impact on their work orders, workers strive to keep taking orders, minimise cancellations and raise the quality of their service. On the other hand, the criteria for penalties imposed by firms on workers are black-boxed and the feedback system from workers to customers is limited compared to that from customers to workers. The consideration of worker protection issues in such information asymmetries will

be an important topic for other Asian countries. To approach the information asymmetry in this business model, this article refers to the sharing of experience and information between workers and the positive impact of customers on working conditions. Malaysian drivers and riders reduce information asymmetry by sharing experiences through public social media such as WhatsApp and Facebook and by sharing about operations and rule changes through membership in labour unions and associations. Regarding customerworker interaction, workers encourage appropriate feedback from customers. Customers provide incentives and report to help centres based on the quality of service, which would motivate workers and improve service.

IMPLICATIONS FOR POST-PANDEMIC INEQUALITY GIVEN GAPS IN CURRENT PROVISIONS FOR GIG WORKERS

Contrary to the growth of the gig economy sector during the pandemic, the sustainability of the workforce is questionable. Our interviews revealed that many delivery riders would like to change jobs if they get a permanent job offer, or, like G-2, consider a job as a driver to be the only job they can do nowadays. For these people, gig work is only a temporary means of connecting their own lives and is not seen as a long-term means of work. The interview revealed that many delivery riders would like to change jobs if they receive a permanent job offer. As G-2 stated, a driver is currently the only job they can do. This implies that, gig work is viewed by many as a form of "Performance-Based Short-Term Decent Work"

A further important finding that adds impetus to this debate on vulnerability is that four-third of the online food delivery riders interviewed claimed that they were unable to obtain a loan. To obtain a loan, they need to be issued with valid documentation from the firm. In the case of gig workers, the platform does not accept the provision of valid documentation due to their worker classification as independent contractors, even if they have sufficient income. Furthermore, retirement schemes such as the EPF are also available to gig workers, but firms do not support them for specific procedures. Whilst lockdowns and movement restrictions under COVID-19 created an oversupply of workers for gig economy services including ride-hailing (Tan et al. 2021), under post-COVID-19, people's return to full-time work and improved unemployment rates may create a shortage of workers. In urban Malaysia, ride-hailing drivers are in short supply and excessive customer demand has recorded an abnormal price hike (up to 200% of the normal fare, but up to 300%-400%) leading to government intervention (Malay Mail 2022b).

Given the extremely low collective bargaining power of gig workers in Asia, as noted in previous studies, it is expected that government agencies will play a pivotal role in improving inequalities in worker protection as the pandemic converges. In Malaysia, the wage gap between West Malaysia and Borneo island (Sabah and Sarawak) and sector-wide reductions in incentive rates make gig-worker sustainability vulnerable. For instance, one-third of states in the USA provided financial bonuses to workers, including gig workers, as part of the COVID-19 relief grant special programme, and a temporary hourly wage increase of USD 3 for workers earning less than USD 20 per hour (Friedland & Balkin 2022). The benefits to workers in such government flexibility in the event of a disaster can give them peace of mind in continuing their work after a disaster such as a pandemic. However, given the corporate monopoly in the gig labour market in Asia, including Malaysia, it is unlikely in the short term to intervene in platform capitalism using government flexibility.

The gig workers interviewed suggest that their views are pragmatic, considering the relationship between the stimulus to the platform's profit-oriented business model and worker co-existence, which is adaptable to the different socio-economic circumstances of Asian countries in the post-pandemic era. Of course, governments must not neglect the management of the labour-based ecosystem against exploitative labour markets in the gig economy.

The views of Malaysian gig workers, as summarized in this study, could potentially inform public policy in other Asian countries. Specifically, the idea is to provide a minimum level of protection for workers who engage in or enter gig work. For example, drivers and riders could be required to install in-house audio recorders and cameras to protect them from road accidents and customer threats. Although this would require further discussion from a privacy perspective, would serve as a means of protecting workers from the inequalities in the balance of power caused by customer centricity. Apart from the recognition in firms of gig workers in legal classifications, firms may be able to offer classes to workers on firm-sponsored gig work. This intends that teaching gig workers tips on how to earn more money and how to do side work within Grab. Considering that Grab ride-hailing services are deployed in eight ASEAN countries except Brunei and Laos, the provision of teaching opportunities could be a pioneering initiative to help people understand the nature of gig work and at the same time raise the sustainable productivity of ondemand app workers in Asia.

CONCLUSION

By exploring the working conditions of gig workers in the Malaysian e-hailing and online food delivery sectors, this article provided new insights into the inequalities and social protection faced by gig workers. The semistructured interviews and thematic analysis resulted in three main themes underpinned by 15 subtopics: performance-based short-term decent work, platform and customer-centricity operations, and ecosystem for gig worker sustainability. The Malaysian experience has academic and practical implications for other Asian countries. At first glance, gig workers accept that they are independent contractors, and platform firms seem on the surface to have a win-win relationship by giving them flexibility and independence. However, instead of creating an open labour market with low barriers to entry for workers, platform firms have constructed a non-interventionist system that does not neither interfere with their employment status nor fully formalizes it. In other words, by imposing the ultimate performance-based approach to gig workers, the gig labour market leaves all responsibility and risk for work to the worker. On the positive, the COVID-19 opened the gig labour market to millions of unemployed and young people, fresh graduates, and women throughout Asia. However, this new labour market expansion has paradoxically also exposed the lack of social protection and hidden inequality suffered by Gig workers. By way of understanding the nature of inequalities regarding the social protection inadequacy among gig workers, this article offers an intimate account of the actual experience of the workers which can inform public policy on economic inequality.

Gig workers' incomes depend on the balance between consumer demand and labour supply. The pandemic lockdown therefore had a differential effect depending on the nature of work. The travel restrictions during the pandemic led to an extreme drop in demand in the ride-hailing sector whilst the lifting of travel restrictions depressed demand in the online food delivery sector, which otherwise prospered during the pandemic. Therefore, government support is required with a view to the long-term stability of gig workers. Regarding mandatory insurance for gig workers, the cost burden on workers is also a financial burden for gig sector workers and full-time gig workers who must work on the road all the time. Governments should consider creating a new safety net of burdens to minimise their risks, especially in ASEAN countries, India and China where on-demand app gigs are thriving.

In addition, gig workers need to continue to engage in high-quality emotional labour to accommodate customer centricity. This is because they protect themselves from information asymmetries such as black-boxed customer feedback and punitive standards. The difficulties of collective bargaining have established that this system-building and the demands on platform parties as profit beneficiaries are not effective in addressing this unbalanced balance of power (Uchiyama et al., 2022). For the gig economy sector to grow further in the future, it would be necessary to establish labour-centred policies to change the profit-oriented nature of the gig labour market. Future research should further explore the importance of various actors working in tandem to

protect the social protection of workers abandoned by the exploitative business models and laissez-faire of platform firms.

ACKNOWLEDGEMENT

The authors gratefully acknowledge financial support from the Fundamental Research Grant Scheme (FRGS) from the Ministry of Higher Education, Malaysia (Project No. FP026-2021: Project code: FRGS/1/2021/SS0/UM/02/12). We also thank constructive feedback from the SI editor and an anonymous review which greatly improved the quality of our paper.

REFERENCES

- Abdul Rahim, A.F., Yaacob, N.A., Mohd Noor, R., Najid, N.A. & Zulkifli, N. 2021. Strengthening the gig economy: Future of digital labor workforce platform post-covid-19. *Gading Journal for Social Sciences* 24(4): 17-26.
- Adams, A., Freedman, J. & Prassl, J. 2018. Rethinking legal taxonomies for the gig economy. Oxford Review of Economic Policy 34(3): 475-494.
- Aloisi, A. & De Stefano, V. 2018. European legal framework for "digital labour platforms". Publications Office.
- Anwar, M.A. & Graham, M. 2020. Hidden transcripts of the gig economy: labour agency and the new art of resistance among African gig workers. *Environment and Planning a-Economy and Space* 52(7): 1269-1291.
- Aranguiz, A. & Bednarowicz, B. 2018. Adapt or perish: Recent developments on social protection in the EU under a gig deal of pressure. *European Labour Law Journal* 9(4): 329-345.
- Barratt, T., Goods, C. & Veen, A. 2020. 'I'm my own boss...': Active intermediation and 'entrepreneurial' worker agency in the Australian gig-economy. *Environment and Planning A: Economy and Space 52*(8): 1643-1661.
- Barzilay, A.R. 2018. Discrimination without discriminating: learned gender inequality in the labor market and gig economy. *Cornell JL & Pub. Pol'y 28*: 545.
- Basukie, J., Wang, Y. & Li, S. 2020. Big data governance and algorithmic management in sharing economy platforms: A case of ridesharing in emerging markets. *Technological Forecasting and Social Change 161*: 120310.
- Belanche, D., Casalo, L.V., Flavian, C. & Perez-Rueda, A. 2021. The role of customers in the gig economy: how perceptions of working conditions and service quality influence the use and recommendation of food delivery services. *Service Business* 15(1): 45-75.
- Bidin, A., Radzi, M.S.N.M., Harun, N., Salleh, K. & Hamid, N.A. 2021. Legal Protections of Gig Workers in Employment. LAW, POLITICS & SOCIETY: The Unravelling of Malaysia and Indonesia Potentiality 103.
- Bogliacino, F., Cirillo, V., Codagnone, C., Fana, M., Lupiáñez-Villanueva, F. & Veltri, G.A. (2019). Shaping individual preferences for social protection: the case of platform workers.
- Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2): 77-101.

- Bulian, L. 2021. The gig is up: who does gig economy actually benefit? *Interdisciplinary Description of Complex Systems 19*: 106-119.
- Caro, L.P., O'Higgins, N. & Berg, J. 2021. Young people and the gig economy. https://www.ilo.org/wcmsp5/groups/ public/---ed_emp/documents/publication/wcms_790117. pdf
- Chen, A., Yuan, C.W., Ma, N.F., Hsu, C.Y., Hanrahan, B.V. & Assoc Comp, M. 2019. Navigating Ride-Sharing Regulations: How Regulations Changed the 'Gig' of Ride-Sharing for Drivers in Taiwan. [Chi 2019: Proceedings of the 2019 chi conference on human factors in computing systems]. CHI Conference on Human Factors in Computing Systems (CHI), Glasgow, SCOTLAND.
- Chen, B., Liu, T., Guo, L. & Xie, Z. 2020. The disembedded digital economy: social protection for new economy employment in China. Social Policy & Administration 54(7): 1246-1260.
- Cheng, X., Fu, S. & de Vreede, G.-J. 2018. A mixed method investigation of sharing economy driven car-hailing services: Online and offline perspectives. *International Journal of Information Management* 41: 57-64.
- Choong, M., Y. & Lai, A. 2019, October 5. 42 e-hailing firms licensed to operate. *The Star.* https://www.thestar.com.my/news/nation/2019/10/05/41-e-hailing-firms-licensed-to-operate
- Christie, N. & Ward, H. 2019. The health and safety risks for people who drive for work in the gig economy. *Journal* of *Transport & Health 13*: 115-127.
- Cunningham-Parmeter, K. 2019. Gig-Dependence: Finding the Real Independent Contractors of Platform Work. LSN: Labor & Employment Contracts (Topic).
- De Stefano, V. 2015. The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowd Work and Labour Protection in the 'Gig-Economy'. *Bocconi Legal Studies Research Paper on SSRN*.
- Donovan, S.A., Bradley, D.H. & Shimabukuro, J.O. 2016. What Does the Gig Economy Mean for Workers.
- Douglas, H.A., Hamilton, R.J. & Grubs, R.E. 2009. The effect of BRCA gene testing on family relationships: A thematic analysis of qualitative interviews. *J Genet Couns* 18(5): 418-435.
- Dubal, V. 2017. Winning the Battle, Losing the War?: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy. GeographyRN: Transportation Geography (Sub-Topic).
- Fong, F. 2022, August 6. Food Delivery Boycott Fails, Riders Continue To Work. *The Rakyat Post.* https://www.therakyatpost.com/news/malaysia/2022/08/06/food-delivery-boycott-fails-riders-continue-to-work/
- Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P. & Grimshaw, J.M. 2010. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychol Health* 25(10): 1229-1245.
- Frenken, K. 2017. Political economies and environmental futures for the sharing economy. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 375(2095): 20160367.
- Friedland, J. & Balkin, D.B. 2022. When gig workers become essential: Leveraging customer moral self-awareness beyond COVID-19. *Business Horizons*.

- Friedman, G. 2014. Workers without employers: shadow corporations and the rise of the gig economy. *Review of Keynesian Economics* 2: 171-188.
- Furuoka, F., Uchiyama, Y., Lim, B., Pazim, K.H., Aruchunan,
 M.E., Paidi, R., Nikitina, L., Jingyi, L. & Omar, S. 2022.
 A effect of the COVID-19 pandemic on gig economy in
 Malaysia: An application of "Tragedy of Commons".
 Istanbul International Modern Scientific Research
 Congress -III,
- Graham, M., Hjorth, I. & Lehdonvirta, V. 2017. Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research* 23(2): 135-162.
- Gregory, K. 2021. 'My life is more valuable than this': understanding risk among on-demand food couriers in Edinburgh. *Work, Employment and Society 35*(2): 316-331.
- Habibullah, M.S., Saari, M.Y., Din, B.H., Safuan, S. & Utit, C. 2021. Labour market reactions to lockdown measures during the covid-19 pandemic in Malaysia: an empirical note. *Jurnal Ekonomi Malaysia* 55(1): 39-49.
- Hall, J.V. & Krueger, A.B. 2018. An Analysis of the Labor Market for Uber's Driver-Partners in the United States. *ILR Review* 71(3): 705-732.
- Halliday, D. 2021. On the (mis)classification of paid labor: When should gig workers have employee status? *Politics, Philosophy & Economics* 20(3): 229-250.
- Hamzah, H.A., Saari, M.Y., Rahman, M.D.A. & Utit, C. 2022. The economic impact of workforce disruptions on the output during COVID-19 pandemic. *Jurnal Ekonomi Malaysia* 56(2): 65-75.
- Harpur, P. & Blanck, P. 2020. Gig workers with disabilities: opportunities, challenges, and regulatory response. *Journal of Occupational Rehabilitation* 30(4): 511-520.
- Hawley, A.J. 2018. Regulating labour platforms, the data deficit. *European Journal of Government and Economics* 7(1): 5-23.
- Healy, J., Nicholson, D. & Pekarek, A. 2017. Should we take the gig economy seriously? *Labour and Industry* 27(3): 232-248
- Healy, J., Pekarek, A. & Vromen, A. 2020. Sceptics or supporters? Consumers' views of work in the gig economy. *New Technology, Work and Employment 35*(1): 1-19.
- Heeks, R. 2017. Decent work and the digital gig economy: a developing country perspective on employment impacts and standards in online outsourcing, crowdwork, etc. Development Informatics Working Paper(71).
- Huang, B. & Wan, G. 2019. Overview of income inequality in Asia: profile, drivers and consequences. *Demystifying Rising Inequality in Asia*: 6-16.
- Huang, N., Burtch, G., Hong, Y. & Pavlou, P.A. 2020. Unemployment and Worker Participation in the Gig Economy: Evidence from an Online Labor Market. Information Systems Research 31(2): 431-448.
- Huws, U., Spencer, N. & Joyce, S. 2016. Crowd work in Europe: Preliminary results from a survey in the UK, Sweden, Germany, Austria and the Netherlands.
- International Telecommunication Union. 2021. Measuring digital development Facts and figures 2021. https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf

- Irvine, A., Drew, P. & Sainsbury, R. 2013. 'Am I not answering your questions properly?' Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qualitative Research* 13(1): 87-106.
- Jamaluddin, S.Z., Yuen Wah, F. & Abu Taher, M. 2021. Covid-19: a preliminary assessment on the social security framework for an aged Malaysia. *Commonwealth Law Bulletin* 47(1): 55-71.
- Kaine, S. & Josserand, E. 2019. The organisation and experience of work in the gig economy. *Journal of Industrial Relations* 61(4): 479-501.
- Kallio, H., Pietilä, A.M., Johnson, M. & Kangasniemi, M. 2016. Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing* 72(12): 2954-2965.
- Kassi, O. & Lehdonvirta, V. 2018. Online labour index: Measuring the online gig economy for policy and research. *Technological Forecasting and Social Change* 137: 241-248.
- Koutsimpogiorgos, N., van Slageren, J., Herrmann, A.M., & Frenken, K. 2020. Conceptualizing the gig economy and its regulatory problems. *Policy and Internet* 12(4): 525-545
- Lau, T.-C. & ng, D. 2019. Online Food Delivery Services: Making Food Delivery the New Normal. 1, 62-77.
- Leonardi, E. & Pirina, G. 2020. Uber in the Portuguese gig economy: a laboratory for platform capitalism. *Work Organisation, Labour & Globalisation* 14(2): 46-63.
- Lim, I. 2021, March 31. Protect Malaysia's gig workers and ensure no monopolies possible through legal loopholes, PKR Youth chief tells govt. . *Malay Mail*. https://www.malaymail.com/news/malaysia/2021/03/31/protect-malaysias-gig-workers-and-ensure-no-monopolies-possible-through-leg/1962618
- Longhurst, R. 2003. Semi-structured Interviews and Focus Groups. In (pp. 117-132).
- Maguire, M. & Delahunt, B. 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars.
- Malay Mail. (2022a, August 10). HR Ministry mulls scheme to better ensure welfare of p-hailing, e-hailing workers, says Saravanan. https://www.malaymail.com/news/malaysia/2022/08/12/hr-ministry-mulls-scheme-to-better-ensure-welfare-of-p-hailing-e-hailing-workers-says-saravanan/22492
- Malay Mail. 2022b, May 22. Transport minister: E-hailing service providers to explain alleged fare hikes. *Malay Mail*. https://www.malaymail.com/news/malaysia/2022/05/22/transport-minister-e-hailing-service-providers-to-explain-alleged-fare-hikes/8236#:~:text=Transport%20 minister%3A%20E-hailing%20service%20 providers%20to%20explain%20alleged,and%20 clarification%20on%20the%20alleged%20increase%20 in%20fares.
- McIntosh, M.J. & Morse, J.M. 2015. Situating and Constructing Diversity in Semi-Structured Interviews. *Glob Qual Nurs Res, 2*, 2333393615597674.
- Messenger, J. 2018. Working time and the future of work. *ILO* future of work research paper series 6(8).
- Minter, K. 2017. Negotiating labour standards in the gig economy: Airtasker and Unions New South Wales. *Economic and Labour Relations Review 28*(3): 438-454.

- Montgomery, T. & Baglioni, S. 2021. Defining the gig economy: platform capitalism and the reinvention of precarious work. *International Journal of Sociology and Social Policy* 41(9/10): 1012-1025.
- Mukhopadhyay, B.R. & Chatwin, C.R. 2020. The significance of Herzberg and taylor for the gig economy of China: Evaluating gigger incentives for Meituan and Ele. Me. *International Journal of Applied Behavioral Economics* (*IJABE*) 9(4): 1-17.
- Ng, A., Tan, Z.G. & Mahadeva, M. 2017. *An Uneven Future?*An Exploration of the Future of Work in Malaysia [Discussion Paper].
- Nga, J., Ramlan, W. & Naim, S. 2021. Covid-19 Pandemic and its relation to the Unemployment situation in Malaysia: A Case Study from Sabah. *Cosmopolitan Civil Societies: An Interdisciplinary Journal 13*.
- Oei, S.-Y. 2018. The Trouble with Gig Talk: Choice of Narrative and the Worker Classification Fights. *ERPN: Regulation (Topic)*.
- Pasquale, F. 2016. Two narratives of platform capitalism. *Yale L. & Pol'y Rev.*, 35, 309.
- Pinsof, J. 2015. A new take on an old problem: employee misclassification in the modern gig-economy. *Mich. Telecomm. & Tech. L. Rev.*, 22, 341.
- Prassl, J. & Risak, M.E. 2016. Uber, Taskrabbit & Co: Platforms as Employers? Rethinking the Legal Analysis of Crowdwork. Comparative Labor Law and Policy Journal 37: 604-619.
- Radzi, M.S.N.M., Bidin, A., Musa, M.K. & Hamid, N.A. 2022. Protecting gig workers'interests in Malaysia through registered association under societies act 1966. *IIUM Law Journal* 30(S1): 157-179.
- Scully-Russ, E. & Torraco, R. 2020. The changing nature and organization of work: an integrative review of the literature. *Human Resource Development Review 19*(1): 66-93.
- Shah, A. & Lee, B. 2022, August 5. Don't gig up on us, baby: P-hailing riders want full worker rights and benefits. *The Star.* https://www.thestar.com.my/news/nation/2022/08/05/don039t-gig-up-on-us-baby-p-hailing-riders-want-full-worker-rights-and-benefits
- Smith, B., Goods, C., Barratt, T. & Veen, A. 2021. Consumer 'app-etite' for workers' rights in the Australian 'gig' economy. *Journal of Choice Modelling* 38: 100254.
- Spencer, D. 2017. Work in and beyond the Second Machine Age: the politics of production and digital technologies. *Work Employment and Society 31*(1): 142-152.
- Sprague, R. 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.
- Steinbaum, M. 2019. Antitrust, the gig economy, and labor market power. *Law & Contemp. Probs.* 82: 45.
- Stephany, F., Kässi, O., Rani, U. & Lehdonvirta, V. 2021. Online Labour Index 2020: New ways to measure the world's remote freelancing market. *Big Data & Society* 8(2): 20539517211043240.
- Stewart, A. & Stanford, J. 2017. Regulating work in the gig economy: What are the options? *Economic and Labour Relations Review 28*(3) 420-437.
- Sun, P. 2019. Your order, their labor: An exploration of algorithms and laboring on food delivery platforms in China. Chinese Journal of Communication 12(3): 308-323.

- Tan, Z.M., Aggarwal, N., Cowls, J., Morley, J., Taddeo, M. & Floridi, L. 2021. The ethical debate about the gig economy: A review and critical analysis. *Technology in Society* 65: 101594.
- The World Bank. 2022. Unemployment, total (% of total labor force) (national estimate) Malaysia, Singapore, Brunei Darussalam, Thailand, Vietnam, Cambodia, Indonesia, Philippines, Lao PDR, Myanmar. https://data.worldbank.org/indicator/SL.UEM.TOTL. NE.ZS?end=2021&locations=MY-SG-BN-TH-VN-KH-ID-PH-LA-MM&name desc=false&start=2017
- Todolí-Signes, A. 2017. The 'gig economy': employee, self-employed or the need for a special employment regulation? *Transfer: European Review of Labour and Research* 23(2): 193-205.
- Tran, M. & Sokas, R.K. 2017. The gig economy and contingent work: an occupational health assessment. *Journal of Occupational and Environmental Medicine* 59: e63 e66.
- Uchiyama, Y., Furuoka, F., Md Akhir, M.N., Li, J., Lim, B. & Pazim, K.H. (2022). Labour Union's challenges for improving for gig work conditions on food delivery in Japan: a lesson for Malaysia. WILAYAH: The International Journal of East Asian Studies 11(1): 83-111.
- Vallas, S. & Schor, J.B. 2020. What do platforms do? understanding the gig economy. Annual Review of Sociology 46(1): 273-294.
- van Doorn, N. & Badger, A. 2020. Platform capitalism's hidden abode: producing data assets in the gig economy. *Antipode* 52(5): 1475-1495.
- Xiao, S.Y. 2019. Understanding the employment status of gig-workers in china's sharing economy era-an empirical legal study. *Asian Journal of Law and Economics* 10(3) Article 20190019.

- Yasih, D.W.P. 2022. Normalizing and resisting the new precarity: a case study of the Indonesian gig economy. *Critical Sociology* 0(0): 08969205221087130.
- Zakaria, I. 2020, November 16. Making 'gig work' work in Malaysia. *Malay Mail*. https://www.malaymail.com/news/what-you-think/2020/11/16/making-gig-work-work-in-malaysia-izwan-zakaria/1922956
- Zheng, Y. & Walsham, G. 2021. Inequality of what? An intersectional approach to digital inequality under Covid-19. *Information and Organization* 31(1):100341.

Yosuke Uchiyama
Department of East Asian Studies
Faculty of Arts and Social Sciences
University of Malaya
50603 Kuala Lumpur, MALAYSIA.
Email: yosukeuchiyama.0715@gmail.com

Fumitaka Furuoka*
Asia-Europe Institute
University of Malaya
50603 Kuala Lumpur, MALAYSIA.
Email: fumitaka@um.edu.my

Md. Nasrudin Md. Akhir*
Department of East Asian Studies
Faculty of Arts and Social Sciences
University of Malaya
50603 Kuala Lumpur, MALAYSIA.
Email: mnasrudi@um.edu.my

* Corresponding author

APPENDIX

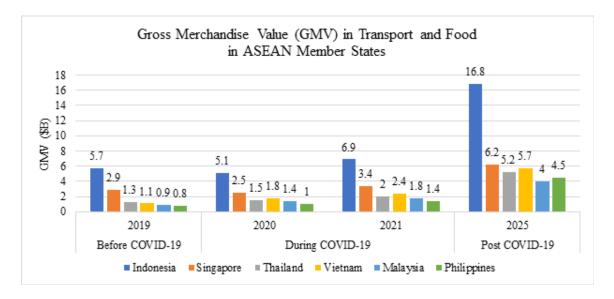


FIGURE 1. Gross merchandise value (GMV) in Transport and Food in the ASEAN Member States *Source: Google, Temasek and Bain, e-Conomy SEA 2021 and Author's modification

APPENDIX 2. Unemployment rate in ASEAN countries from 2017 to 2021

ASEAN Member States/Year	2017	2018	2019	2020	2021
Malaysia	3.4	3.3	3.3	4.5	4.6
Singapore	4.2	4.4	3.6	4.1	3.5
Thailand	0.8	0.8	0.7	1.1	1.4
Indonesia	3.8	4.4	3.6	4.3	3.8
Philippines	2.5	2.3	2.2	2.5	2.4
Vietnam	1.9	1.2	1.7	2.1	2.4
Brunei Darussalam	9.7	8.3	6.9	7.4	7.6
Lao PDR	0.8	0.8	0.9	1.0	1.3
Cambodia	0.1	0.1	0.1	0.3	0.6
Myanmar	1.6	0.9	0.5	1.1	2.2

^{*}Source: The World Bank (2022)