

The Gig Economy Revolution: Evaluating Income Streams and Economic Contributions in Malaysia

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Abstract: There has been scant research about the gig economy revolution in Malaysia. Evaluating the exponential growth of the Malaysian gig economy is difficult as there is a lack of dependable data on digital platform revenues. This study fills this gap by examining administrative data from the principal agency propelling Malaysia's digital economy. Between 2016 and 2021, the proliferation of gig workers and digital platforms markedly increased, offering stable incomes and augmenting Malaysia's economic revenue. Significantly, earnings from digital gig employment have surpassed conventional physical gig employment. The growth of local digital platforms during the pandemic of COVID-19 is driven by an increased demand for online services. Regulatory oversight is crucial for safeguarding gig workers and ensuring fair income distribution within this sector.

Keywords: *Digital platforms; gig economy; gig workforce, income growth; independent workers*

1. Introduction

The gig economy has become a worldwide phenomenon, expanding swiftly across numerous industries, driven by technological progress and innovative business approaches (Roy & Shrivastava, 2020; Schwellnus et al., 2019). While some studies use "sharing economy" and "gig economy" interchangeably, the two concepts are distinct. The gig economy mainly involves service-based activities like food delivery and digital freelancing, whereas the sharing economy centers on asset-sharing, such as renting out underutilized properties for short-term use (OECD, 2019) and they connect with clients through digital platforms on a job or gig basis (Freudenstein & Duane, 2020; Heeks, 2017a; Lapanjuuri et al., 2018). As a result, gig workers, clients, and digital platforms were able to communicate much more directly and instantly.

The inception of the gig economy dates back to 1915 when musicians commenced performing individual shows termed "gigs," though the contemporary gig economy is significantly more expansive and organized (Friedman, 2014). Progress in information and communication technology (ICT), particularly the internet and smartphones, has been instrumental in the swift expansion of gig work, with digital platforms serving a pivotal function (Collins et al., 2019; Malik et al., 2021; Migai et al., 2019; Vallas & Schor, 2020). Recent statistics indicate that 67.1% of the global population possesses a smartphone, while 62.5% has internet access, thereby enhancing the accessibility of online gig work (Kemp, 2023). According to Raja (2018), online talent platforms are projected to generate millions of full-time equivalent positions worldwide by 2025, significantly influencing labor markets affected by elevated unemployment rates. The limitations of traditional offline labor markets and the growing unemployment rate are the main causes of the gig economy's explosive growth. Due to these factors, there is a greater demand for online marketplaces than there is supply. Although it may also bring instability, the gig economy has given those who are unemployed or not fully employed the chance to switch from traditional full-time jobs to a new kind of flexible online work (Faisal et al., 2019; Oyer, 2020).

In Malaysia, interest in the gig economy has increased as more workers seek flexible alternatives to conventional employment. A 2018 study by Zurich-Oxford University indicated that 38% of employed Malaysians showed a desire to shift to gig work within one year (Zurich, 2020). Furthermore, the Employees Provident Fund (EPF) (2019) anticipated that freelancers would soon constitute 40% of Malaysia's workforce, surpassing the global average of 20%. According to the Department of Statistics Malaysia (DOSM), around 26% of Malaysia's workforce, or approximately four million people, were engaged in full-time gig employment in 2020 (DOSM, 2020).

Still, the COVID-19 epidemic has raised awareness of gig workers as vital employees who perform a necessary function in society (Friedland & Balkin, 2022). Movement restrictions and the closing of public venues and stores during the COVID-19 epidemic in Malaysia have greatly raised online sales and service transactions. This scenario involves utilizing online platforms for grocery and food delivery services. These digital channels depend on casual and temporary workers to operate, offering income opportunities to individuals who have lost their jobs due to the recession (Sazali & Gen, 2019). An increasing number of these workers are expected to remain in the gig economy to fulfil the need for temporary specialized skills and scalable operations, although some might opt to return to traditional employment as economic conditions improve (Mahato et al., 2021).

Research in Malaysia has delved into a range of topics, such as digital skills and accessibility (Tan & Gong, 2021), the effects of the gig economy on higher education (Kassim et al., 2020), sustainability of the gig economy (Abdul Rahim et al., 2021) and social protection and labor market inequalities (Uchiyama et al., 2022). There is currently an absence of comprehensive official data regarding the gig workforce in Malaysia, resulting in considerable uncertainty in accurately assessing this segment. The comprehensive labor force survey data from DOSM are available, but they are not precise measures of the current participants in the gig economy. In addition to the study by Harun et al. (2020), empirical research on the gig economy workforce in Malaysia remains insufficient. This paper seeks to 1) estimate the income generated by gig workers and digital platforms in Malaysia and 2) assess the contribution of the gig economy to the Malaysian economy.

2. Literature Review

Gig Economy and Its Classification

Many more people are participating in the gig economy now than in the past. The difficulty in precisely estimating the overall number of persons engaged in this sector is becoming an increasingly pressing issue as the gig economy continues to attract more and more participants. According to several sources (Freudenstein & Duane, 2020; Jeon et al., 2019; Lapanjuuri et al., 2018), this problem stems from the fact that the term "gig economy" is not both clear and consistently defined. Academics are having trouble defining the concept for no apparent reason due to the abundance of different terms used to describe it.

Generally speaking, the gig economy includes business ventures associated with people doing temporary, project-based, and outcome-driven labor. According to Lapanjuuri et al. (2018), the gig economy refers to the exchange of work for payment between individuals or organizations facilitated by online platforms that connect service providers with customers. Usually temporary, this arrangement is based on payment for predetermined tasks, such as the provision of services like food delivery (e.g. FoodPanda) and passenger transportation (e.g. Grab) that link consumers and workers via digital platforms (OECD, 2019).

Gig workers are typically identified as independent contractors (Nadler, 2018), and are commonly referred to as non-standard workers (Sazali & Gen, 2019). In addition, gig workers can be classified into four categories: (1) digital freelancers engaged in professional or specialized digital work, (2) gig workers performing tasks facilitated through digital platforms, (3) crowd-workers handling small-scale digital tasks or micro-jobs, and 4) gig workers engaged in home repair, food delivery, and care work (Deloitte, 2020; Manyika et al., 2016; Vallas & Schor, 2020). Platform professionals, entrepreneurial influencers, asset enablers, and taskers are the four new categories of gig workers that Ziegler et al. (2020) proposed. The degree to which gig workers are willing to use different types of capital, such as social, economic, and human capital, influenced the typologies.

Heeks (2017a, 2017b) and Schmidt (2017) categorize gig work into two main types: physical or location-based, where workers perform tasks that require being at a specific location through web-based applications, and digital or web-based, where workers complete tasks remotely via the internet from any location. The first type includes tasks like ride-sharing, food delivery, and logistics, which are location-specific and typically involve platform-based organization. These activities are widely recognized by the public and commonly adopted by individuals. On the other hand, digital or web-based labor, also known as online labor, refers to remote work done by individuals or groups through the Internet, often in the form of project-based work.

Table 1 presents a selection of global digital platforms categorized as previously outlined. There are six digital gig activities suggested by The Online Labour Indicator (OLI): 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). The classification of physical gig activities is contingent upon the economic activities present in the respective country (OECD, 2019).

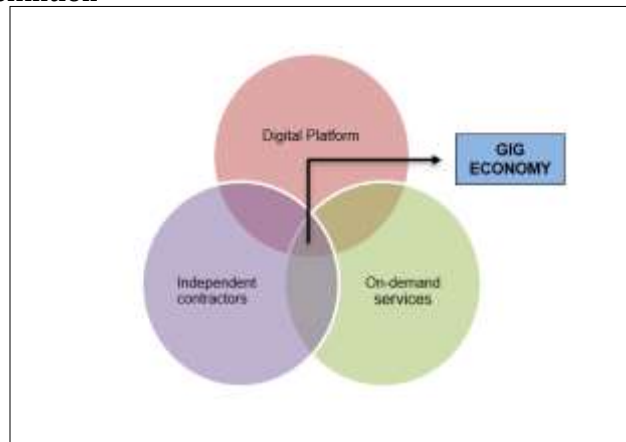
Table 1: Type of gig economy and examples

Classification	Digital platforms	Activities
Physical gig	Uber, Grab	e-hailing services
	Handy, TaskRabbit	Household services
	Deliveroo, Ubereats	Food delivery services
	LalaMove, Amazon Flex	Delivery and logistic services
Digital gig	AM Turk, CrowdFlower	Microtasking/crowd work
	Upwork, Fiverr	Content creation, digital marketing, professional works, programming

Source: Author’s compilation

As an economic system characterized by three key elements: digital platforms, independent workers, and on-demand services, the key characteristic of the gig economy is the presence of digital platforms that act as intermediaries between employers and workers. (Freudenstein & Duane, 2020). For this paper, the definition will specifically exclude individuals using digital platforms for asset-sharing services, such as Airbnb, or online transactions facilitated by a business’s digital platform, like Pizza Hut Delivery, as illustrated in Figure 1.

Figure 1: Gig economy definition



Source: Freudenstein and Duane (2020)

Gig Economy and Its Growth

While the gig economy offers flexible employment opportunities and the freedom to choose work, accurately measuring its rapid expansion remains challenging faced by many countries, especially the contribution to the national economy (Collins et al., 2019; Jackson et al., 2017; Jeon et al., 2019; Koustas, 2020). The gig economy's actual size is still unknown because of the wide range of characteristics and extent that result from different definitions used by each country, even though many studies have been done in developed nations to quantify the gig economy within their respective countries (Freudenstein & Duane, 2020; OECD, 2019). Moreover, because gig activities are constantly changing and marked by high turnover rates among workers, data collected from national or private surveys may be inaccurate and become outdated rapidly (Oei & Ring, 2020).

The BLS-funded Contingent Worker Survey (CWS) is the most comprehensive source of contingent and temporary workforce data in the US. The CWS reported in 2005 that 1.8% to 4.1% of employed people did contingent work (Donovan et al., 2016). CWS collection ended in 2005. The Bureau of Labour Statistics (BLS) began collecting data on mobile app and website users in 2017 to classify them as alternative workers. Thus, 1.6 million Americans work in non-traditional jobs using mobile apps and websites (BLS, 2018). Beyond the CS survey, administrative tax data showed a significant increase in gig workers and digital freelancer self-

employment (Jackson et al., 2017). Gig workers made up 11% of the US workforce in 2016 (Collins et al., 2019; Koustas, 2020). The household survey found little evidence that the gig economy has increased self-employment (Abraham et al., 2018).

In the United Kingdom (UK), the gig economy is expanding. Employment in the United Kingdom falls into three categories: 1) workers; 2) self-employed people or independent contractors; and 3) incorporated businesses, which are people who run and own their service businesses. Data from the LFS indicates that the increase in self-employment and sole proprietorships accounts for 40% of the employment growth since 2008. An interesting discovery from the LFS showed that individuals involved in gig work do so either as their primary income source or to supplement their earnings since the current LFS was not specifically designed to include many aspects of gig employment (Adam et al., 2017). Thus, Adam et al. (2017) suggested distinguishing independent contractors from managers and owners of businesses. Later, the government surveyed the citizens in the UK, through an agency (Department for Business, Energy, and Industrial Strategy (BEIS)). The findings indicated that 4.4% of the UK workforce is involved in the gig economy, with Uber being the most widely used digital platform and courier services being the predominant form of gig economy employment (Lepanjuuri et al., 2018).

Notably, the gig economy is growing widely in Australia as well. New South Wales (NSW) saw a 68% increase in revenue from the collaborative economy between 2015 and 2016, according to a report. Also, during that time, half a percent of the state's GDP came from this economy, and the number of users who made money through it doubled (Black, 2020). The Actuaries Institute commissioned a study that found 250,000 gig workers in 2019 using big data analytics. The majority of these people found employment in the food delivery and e-hailing industries. Additionally, the Australian gig economy grew substantially, increasing by more than nine times between 2015 and 2019. Consequently, in 2019, consumers spent a substantial \$6.3 billion on gig economy services. Compared to other major industries like information, media, and communication, the gig economy's contribution to consumer spending in Australia is relatively modest, despite its significant growth (Freudenstein & Duane, 2020). Many Canadians have lost their jobs to automation and are now working as freelancers. The percentage of Canadians who worked as gig workers increased from 5.5% in 2005 to 8.2% in 2016, according to research by Jeon et al. (2019) that used statistics from Statistics Canada.

The growth of the gig economy in many countries is closely linked to the rise of online platform companies. A report by the International Labour Organisation (ILO) shows a significant surge in digital labor platforms, growing from 50 to 707 between 2007 and 2021 across 98 countries. While gig work is often a side job in wealthy nations, in many developing countries, around half of the workforce is self-employed (ILO, 2020). According to the Online Labour Index (OLI) at Oxford University, the number of gig workers grew by 37.50% between August 2016 and November 2017. The expansion was primarily driven by five countries: Canada, the United States, the United Kingdom, Australia, and India (Kässi & Lehdonvirta, 2018). In 2021, despite being a developing country with a high unemployment rate, India surprisingly accounted for one-third of the global digital freelancer population (Kässi et al., 2021).

In Malaysia, gig workers are defined as self-employed people or part-timers (DOSM, 2020). In 2018, the Department of Statistics Malaysia (DOSM) estimated that 559,000 individuals were employed as gig workers. According to the latest LFS, there are about 3 million own-account workers and part-time employees, with gig workers making up 18.4% of this total. The estimate was based on the workers' job status and occupation (Harun et al, 2020). Likewise, the current nationwide survey didn't set out to quantify gig work in its exact form. About a quarter of respondents were self-employed or freelancers, and 38% ran their businesses, according to a survey (Zurich, 2020). According to a recent study (Ahamad Nawawi et al., 2023), the number of people who earn money through gigs increased from 29,200 in 2016 to 1,033,940 in 2021. Harun et al. (2020) highlighted that private surveys still demand considerable time and financial investment to enhance their inclusivity. This paper aims to contribute to the existing body of knowledge by offering a detailed analysis of Malaysia's gig economy.

3. Methodology

Using a descriptive methodology, this study examined the effects of digital platforms, gig workers, and their income generation on Malaysia's gross domestic product. The relevant Malaysian agency promoting the digital economy provided the secondary data sets used in the analysis. Using the available data, we were able to determine how digital platforms and gig workers have grown and how much money they have made. In addition, this paper used the GDP growth rate to explain how the gig economy has affected Malaysia's economy.

The data presented in this paper was obtained from the Malaysian Digital Economy Corporation (MDEC) database, specifically focusing on the e-Rezeki and GLOW programs over six years, from 2016 to 2021. These two databases were chosen due to the objectives of the e-Rezeki and GLOW programs, which aim to enhance employment and income opportunities for Malaysians participating in the gig economy. Additionally, the databases include data on the number of gig workers and digital platforms officially registered with MDEC, as well as the income generated by both gig workers and digital platforms. However, it should be noted that the revenue data for digital platforms does not account for entities without a business presence in Malaysia. It is also important to recognize that these databases may not fully represent the Malaysian labor force or the gig economy job market, as not all gig workers are registered with MDEC. Despite this, the databases remain the most comprehensive and reliable sources of information on digital platforms and gig workers within Malaysia's economy.

4. Results and Discussion

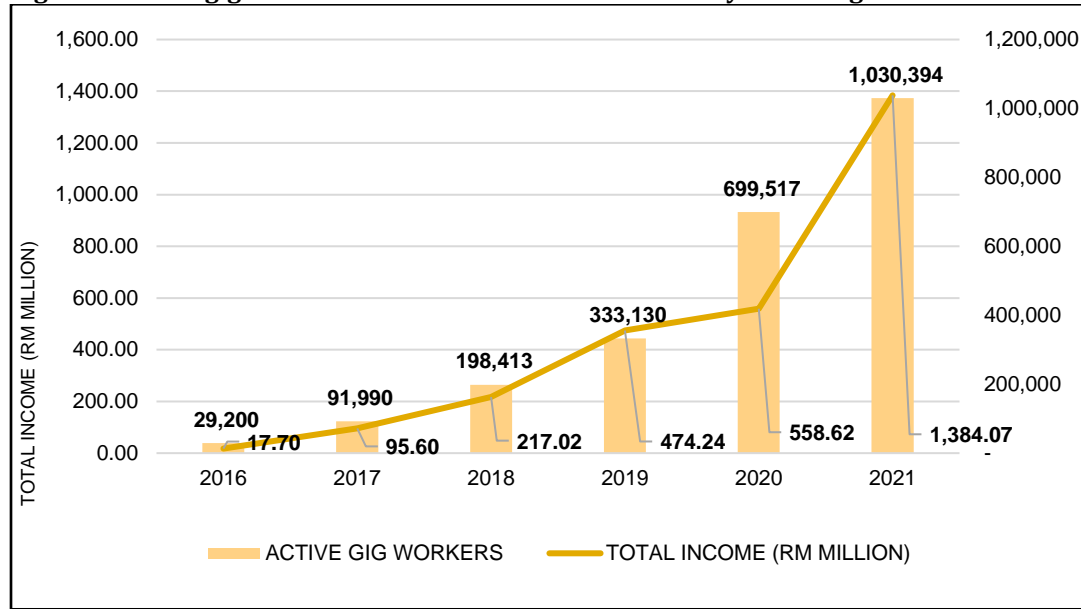
Income generated by gig workers through digital platforms in Malaysia

Figure 2 demonstrates a notable increase of 35 times in the number of active gig workers when compared to the year 2016. Active gig workers refer to individuals who are presently involved in gig employment and have earned income in the last year. The active gig worker population rose significantly from 29,200 in 2016 to 1,033,940 in 2021. The overall figure reflects the aggregate total of participants engaged in both the eRezeki and GLOW initiatives. Of the participants, 80 percent are active in the physical gig economy, whereas the remaining 20 percent participate in the digital gig economy. Gig workers are often referred to as independent contractors, freelancers, and digital freelancers.

The total earnings of gig workers currently engaged in work rose from RM17.7 million in 2016 to RM1.384 billion in 2021. The figure reflects considerable yearly growth, suggesting the ongoing expansion of the gig economy in Malaysia. The period from 2016 to 2019 saw considerable expansion, but the notable acceleration in income growth starting in 2018 is especially striking. The revenue experienced a significant increase from 2017 to 2018, nearly doubling, and has shown consistent growth in the subsequent years. The increase in gig work enabled by digital platforms, coupled with changes in labor market dynamics resulting from the COVID-19 pandemic, has led individuals to engage in gig work (Mahato et al., 2021; Rahul et al., 2020; Thayer, 2020; Webb et al., 2020).

Despite the doubling of gig workers in 2020, the income growth for active gig workers was limited to 85% relative to the previous year. The government's implementation of the movement control order (MCO) restricted in-person interactions (Tan & Gong, 2021) and resulted in a notable rise in online services (OECD, 2021). The GLOW-PENJANA program, implemented by MDEC through a government initiative, aims to support individuals affected by the financial instability and job insecurity caused by the COVID-19 pandemic. The initiative provides participants with the skills needed to thrive as digital freelancers, allowing them to deliver high-quality projects to global clients and create a stable primary income. Gig workers currently engaged in work have seen their earnings increase by more than 150% compared to 2020. This demonstrates a clear and positive correlation between the number of gig workers employed and the growth in their total income over time. The rise in the number of active gig workers is directly associated with an increase in the total income generated by these workers.

Figure 2: Active gig workers vs total income earned in Malaysia during 2016-2021



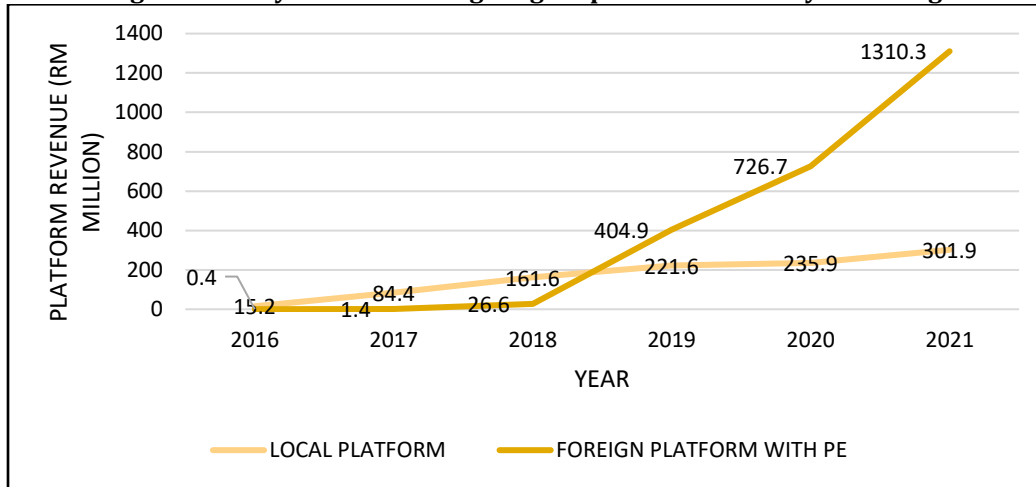
Source: MDEC (2022)

Figure 3 illustrates the revenue produced by digital platforms from 2016 to 2021. The data were classified according to the revenue generation of digital platforms, whether they are domestic or foreign while maintaining a local presence in Malaysia. It is important to note that Figure 2 excludes the revenue generated by GRAB, Airbnb, and various other foreign-owned digital platforms that do not have a local business entity (PE) in Malaysia. The digital platforms in Malaysia have shown a notable increase in total revenue over the years. The figure increased from RM15.6 million in 2016 to RM1,612.2 million in 2021. This figure represents a significant expansion of the digital platform involved in the gig economy in Malaysia.

Both local and foreign platforms contributed to the growth; however, foreign platforms with a permanent establishment (PE) demonstrated more substantial revenue growth over time. Between 2016 and 2018, domestic digital platforms consistently surpassed foreign digital platforms in revenue generation, accounting for more than 90 percent of the total revenue. Since 2019, foreign digital platforms have experienced a significant increase in revenue. The COVID-19 pandemic has resulted in increased internet usage, changes in consumer behaviors, and the expansion of e-commerce and digital services (Freudenstein & Duane, 2020; Friedland & Balkin, 2022; Sazali & Gen, 2019; Webb et al., 2020).

There was a 65% revenue gap in 2019 between local and foreign digital platforms. In 2020, the disparity widened to 75% and in 2021, it shot up to 81.1%. More foreign digital platforms registered with MDEC, and more digital freelancers participated in digital and professional work after the Malaysian government endorsed GLOW-PENJANA. These digital nomads do things like web development and translation from the comfort of their own homes.

Figure 3: Revenue generated by local and foreign digital platforms in Malaysia during 2016-2021



Source: MDEC (2022)

Gig Economy and its Contribution to Malaysia

This paper further examines the influence of the gig economy on the Malaysian economy by analyzing the growth rate of the Gross Domestic Product (GDP). Figure 4 presents an estimation of the gig economy's influence on the Malaysian economy, derived from the revenue reported by digital platforms to MDEC. The computation was based on the cumulative increase in the Gross Domestic Product (GDP) (refer to Table 2). The annual rise in gig workers and digital platforms suggests that the gig economy was anticipated to be recognized as a new avenue for economic growth in the 12th Malaysia Plan 2021-2025 (Lim, 2021). However, it is noteworthy that Malaysia's GDP growth rate for 2020 was recorded at -5.53 percent, marking a significant decline of 9.95 percent compared to 2019.

Table 2: GDP growth rate in Malaysia during 2016-2021

Year	GDP (in USD) (Million)	GDP (in RM) (Million)*	Growth rate (percentage)
2016	310,260.00	72,108.00	4.4 %
2017	319,110.00	76,380.48	5.8 %
2018	358,790.00	85,878.07	4.8 %
2019	365,180.00	87,407.55	4.4 %
2020	337,340.00	80,743.91	-5.5 %
2021	372,980.00	89,274.52	3.1 %

Note*: The GDP amount in Ringgit Malaysia (RM) was based on the exchange rate as of 16 September 2022.
 Source: World Bank Open Data (World Bank, 2023)

The author estimates that the gig economy contributed a negligible 0.02% to GDP in 2016, rendering it largely irrelevant. On the other hand, the gig economy grew substantially between 2016 and 2017, contributing 0.11 percent more to GDP. In addition, the gig economy continued to expand in 2018, adding 0.22 percent to the GDP, a somewhat larger contribution than in 2017. Nevertheless, in 2019, the gig economy experienced significant growth, contributing a notable 0.72 percent to the GDP. Despite a decline in GDP, the gig economy maintained its impressive revenue growth in 2020, adding 1.12% to the GDP, an even more remarkable contribution. On the flip side, the gig economy continued to grow in 2021, contributing a far larger portion of the GDP (1.81 percent). According to Kolmar (2023), this proportion falls short of 5.7% of the US GDP. Unfortunately, the gig economy still only accounts for a small fraction of the world's workforce, around 1-3 percent, according to an OECD report (Schwellnus et al., 2019).

5. Conclusion and Recommendations

This study employs descriptive analysis to assess the exponential growth of the gig economy in Malaysia. It specifically examines the development of gig workers and digital platforms, their earnings, and their impact on the Malaysian economy. The data for this analysis was provided by MDEC, the government agency responsible for promoting Malaysia's digital economy. Information was collected from the eRezeki and GLOW databases, covering the period from 2016 to 2021. The growth of digital platforms has positioned them as key contributors in both the domestic and international labor markets (Vallas & Schor, 2020).

The number of gig workers has grown by a factor of 35 since 2016, resulting in a total income of RM1,384.07 billion in 2021. Empirical data demonstrates that Malaysia's gig economy has a substantial and diverse economic impact, boosting consumer spending, producing possible tax income, and creating jobs, all of which contribute to an increase in overall economic activity. The estimated revenue from digital platforms was 1.81 percent of GDP in 2021, a substantial increase of 116.6 percent from 2016. Therefore, globalization has made it easier for companies to grow internationally and for people to work and travel abroad (Batmunkh et al., 2022). To guarantee fair competition, consumer protection, and the taxation of digital platforms, lawmakers and regulators may need to examine and amend current laws. Additionally, the growth of the gig economy might force legislators to consider laws, worker rights, and taxes related to gig labor. It highlights how important it is to adapt to changing labor market conditions.

There are two limitations to this paper. Initially, because MDEC did not release this information, the data that was available did not include demographic information about the gig economy workers. Additionally, the administrative record only contained information about registered digital platforms that offer employment opportunities online. Self-employed individuals who work informally on the digital platform might therefore be under-represented. To compare the data from various sources for the same individual, future research should focus on developing methods to create assessments using labor force survey (LFS), household survey, and administrative data assembled at the individual level, such as tax and business data. There is a lot of promise in this integration for comprehending how work arrangements are evolving. It is feasible to obtain information about a worker's monthly earnings and demographic characteristics by combining tax data with the LFS.

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