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Diagnosing the Well-Being of Gig Workers in Malaysia:
A viable system model approach

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Abstract
This paper aims to assess the well-being of gig workers in Malaysia using the Viable System Model (VSM) approach. The qualitative methodology is employed through semi-structured online interviews with two gig workers and a focus group discussion with policymakers. The current gig system adheres to the five tenets of VSM, signifying the interconnection between policymakers. This represents the strength of VSM in emphasising the importance of flexibility and adaptability in complex systems. The emergent issues significantly call for government and policymakers to design the right policies to enhance the welfare of gig workers overall.

Keywords: Gig economy; Gig worker; Sustainable well-being; Viable system model.

1.0 Introduction

The word "gig" is regarded as a tiny, individual task or microtask that is the purpose for which an employee is hired (Aguinis & Lawal, 2013). Duggan et al. (2020) highlighted four elements for classifying gig work: a lack of commitment to long-term relationships, flexible working hours, project-based work, and piece-rate payments. The gig economy involves temporary, project-based and outcome-based work (Harun et al., 2020). The gig economy is an emerging labour ecosystem that has replaced the traditional full-time work style tied to office hours with flexible working hours (Caza, 2020). It is fuelled by technical advancements that showcase a person's capacity to satisfy client demands through computers, cell phones, numerous applications and online payments (Sinicki, 2019). According to Schmidt et al. (2022), the gig economy is a type of workplace that includes freelance work, independent contracting, temporary employment and contingent labour. According to Cropanzano et al. (2023), a gig worker is hired and paid temporarily by businesses or lone clients via an external labour market. It is widely used with applications that offer on-demand in-person consumer services, including food delivery, errands, home repairs or car-hailing (Kuhn & Galloway, 2019). Several definitions suggest that a gig is a work that must

be accessible through a digital platform. Harun et al. (2020) defined gig workers as individuals who either work through digital applications or as independent workers, freelancers or part-time employees with flexible work schedules and workspaces. Gig workers are also classified according to the occupation category. They can be freelancers (tutors, tuition teachers, photographers, videographers and tourist guides), have a technology-based occupation (such as web designers and software developers), drivers (Grab, MyCar, etc.) or riders (Grabfood, Foodpanda, etc).

The gig economy has become a norm for Malaysia's employment landscape. Due to the COVID-19 pandemic, many previously unemployed workers adopted gig jobs to earn short-term income. The trend to work in this sector mostly emerged among youngsters, particularly those who left school or university students who needed to earn additional income from part-time careers. Gig work also became popular among white-collar workers who switched from full-time employment to part-time since they could choose their work hours while managing their daily lives with family and friends. Their work is more towards on-demand jobs such as freelancers, independent contractors, project-based workers and part-timers. From September 2022, it was estimated that four million people (representing 26 percent of Malaysia's workforce) were in the gig economy and this number is expected to sharply increase in the next few years. Research by the University of Oxford and Zurich Insurance Group found that 38 percent of Malaysians are considering joining the gig economy in 2023 (Pang, 2022). Although this growing trend provides huge opportunities for Malaysians to earn income with flexible schedules, it does come with issues and challenges that must be addressed.

Therefore, this paper aims to assess the well-being of gig workers in Malaysia using the VSM approach. The gaps found in this study are employed to propose a model for improving the well-being of gig workers. It was found that very scarce research had assessed the extent of adverse effects on the well-being of gig workers, particularly in Malaysia, using the VSM approach. Therefore, this paper is unique since it significantly aids government and policymakers in designing the right policies for enhancing the general welfare of gig workers.

The study outcomes indicate that the VSM approach is suitable for measuring the sustainable well-being of gig workers in Malaysia. The existing system of gig workers fits the VSM model, although there are some gaps to be filled which requires improvement. An existing limitation in the gig work system is that gig workers typically do not receive the same benefits as full-time employees (such as health insurance, retirement plans or paid leave) even though some policies have been formulated to ensure that their protection is upheld. The lack of benefits can make it difficult for gig workers to maintain financial stability which may also affect their overall well-being. Another challenging aspect is delivering non-halal products. This issue can be considered as potential future research.
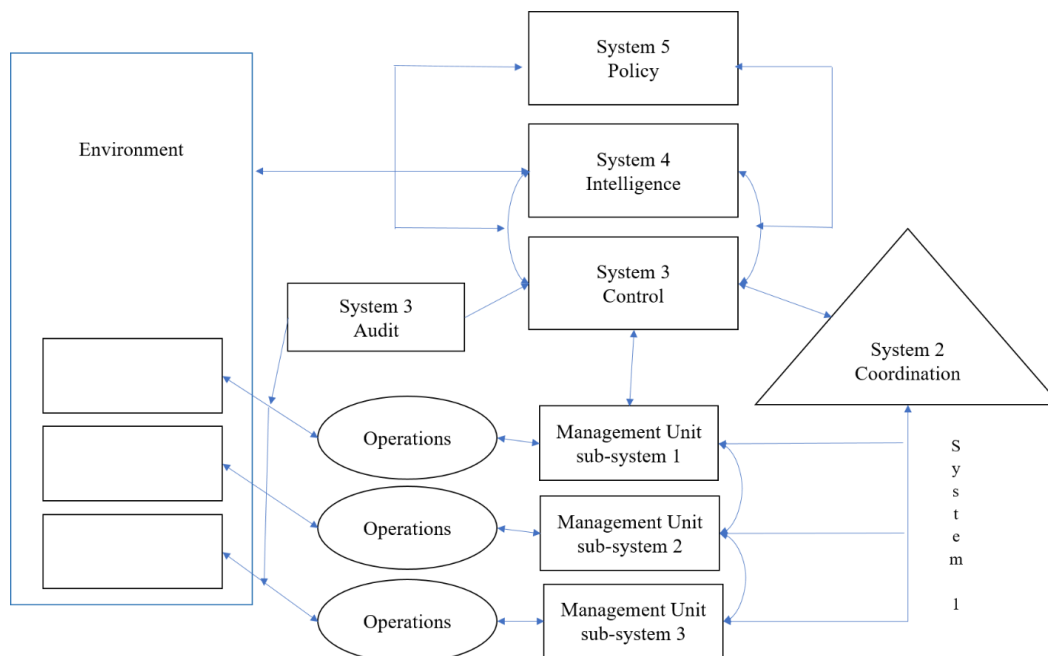
2.0 Literature Review

Fig. 1: Viable System Model framework (Espejo & Gill,1997)

The viable system model (VSM) is a system that can exist and sustain its operation in the environment (Beers, 1984; Espejo & Gill, 1997). The VSM was first introduced by Beer (1984) as functional framework to understand organizational systems model focused on three key concepts, 1. viability (keep the organization going and alive), 2. requisite variety (managing the complexity and challenges faced by the organization in its environment), and 3. hierarchical recursion. The Beer's VSM has some shortcomings since the model's ideas are not easy to understand at first glance, and the logical explanation follows the traditional hierarchical institutions that work with a top-down command structure. Whereas Espejo and Gill (1997) structured the VSM that taking into consideration of the idea integrated

new technologies, more networked type of organization where data is spread out more widely and reaches all the people who do the work in real time. Hence, we follow Espejo and Gill (1997) VSM since our gig worker networks are complexion of the emergent work environment that is independent and unadhered to the traditional employee-employer contract binding.

This systemic approach allows several studies in different fields such as the halal industry (Adham et al., 2020), Islamic banking (Lodhi et al., 2005), software projects (Puche-Regaliza & Jiménez, 2020), smart city ecosystem (Caputo et al., 2019) and much more to develop a comprehensive evaluation of the chosen field. In the case of the gig economy, the ability to self-exist is measured not only by the system's capacity to sustain an effective domestic operation, but also by its ability to sustain a synergetic and sensible relationship with its global environment in the long term.

Figure 1 presents the basic functions and information flows among these functions in the VSM framework. The policymaking function is responsible for establishing the purpose of the system and is directly connected to the intelligence function. The intelligence function immediately collects information from the external environment and disseminates relevant system information into the environment to external parties in the organisation's environment (shown by the arrow lines coming out of the intelligence function [System 4] into the environment). This function then delivers the gathered information to the policymaking function (shown by the arrow coming out of the environment function to the intelligence function [System 4], and the arrow coming out of System 4 to System 5). In turn, the policymaking function will use this information to support strategic decision-making in the system. The decisions that are made by the policymaking function will be communicated to the intelligence function (through which they will be internally disseminated within the system through the control function (shown by the arrow coming out of the intelligence function to the control function [System 3]).

3.0 Methodology

This study aims to diagnose the well-being of gig workers in Malaysia through the Viable System Model (VSM) approach. The study was conducted using the qualitative method through semi-structured online interviews with two gig workers and focus group discussions with policymakers. The purpose of interviewing officials was to learn about the facilities, training and services offered to gig workers. Purposive sampling was employed; mainly, the gig workers are the representatives of the gig workers association called PENGHANTAR to validate and comprehend their experiences, operations and coordination implemented within the current environment. This interpersonal method makes it possible to compile comprehensive data on the well-being of gig workers. The interview was accomplished in August and September 2022. The interview questions were organized based on VSM and had five structures: operation, coordination, control, intelligence, and policymaking.

Merriam and Tisdell (2016) reconfirmed that using the qualitative design is a practical method for ensuring a better understanding of certain occurrences from the aspect of relevant parties who are personally experiencing such events. Its architecture has made it possible to organise and direct the data collection and analysis processes. We began by determining the necessity of diagnosing the current environment of gig workers' well-being based on secondary materials available online such as websites, journals, newspapers and chapters in books. Second, we created a diagnostic framework based on VSM in mapping the well-being of gig workers. Third, we created two interview procedures: one for the officials in charge of policymaking and intelligence, and one for other respondents chosen among the representatives of the gig workers association. The purpose of interviewing officials was to learn about the facilities, training and services offered to gig workers. The purpose of interviewing the representatives of gig workers was to validate and comprehend their experiences, operations and coordination implemented within the current environment. This interpersonal method makes it possible to compile comprehensive data on the well-being of gig workers.

Fourth, we performed in-person interviews with identified individuals. These conversations were recorded and transcripts of the audio were made. The primary dataset for this study is the interview transcripts. Six officials participated in the focus group. This was crucial in designing the policies and implementations for improving the well-being of gig workers. Four were officials responsible for policies, while the other two were mandated to provide the syllabus and training for gig workers. An average of two hours was spent to gain insight. On the other hand, two representatives from associations were interviewed; one from the Malaysian P-Hailing Riders Association (Penghantar) and one from the Malaysian Food Delivery Association (MFDA). An average of three hours was spent for both through online interviews.

Then, we analysed, cross-examined and mapped the information from the interview transcripts and subjected them to the VSM framework's functions and guiding principles. This was accomplished by comparing the emergent themes produced from the interview transcripts with the features and tenets of the VSM framework. New findings pertinent to gig workers were also discovered through our investigation. The procedure was repeatedly conducted until a point of saturation was reached, known as the threshold, when no new data was anticipated to emerge which is concluded as the finishing line. Hence, the eight respondents interviewed were believed to provide enough evidence suitable to reach the threshold line. Finally, the completed information mapped onto the VSM framework was validated by the respondents to ensure its plausibility.

4.0 Findings and Discussion

The aim of this study is to analyse the current phenomenon of the sustainable well-being of gig workers in Malaysia. The analysis is mapped using the VSM framework design based on the five tenets. Our analysis of the gig work environment indicates that all five viable components are present for a functioning system: policymaking, intelligence, control, coordination and implementation. The current support system allows the fulfilment of the four requirements for business competitiveness and advocate the tenets of a viable system, which are recursiveness and cohesiveness, across all functions. It satisfies all four prerequisites for competitiveness and has access to

all VSM functions. However, gaps are present in some areas which must be addressed to ensure the sustainable well-being of gig workers.

4.1 Modelling the Gig Economy as a Viable System
The concept of gig economy is depicted in Figure 2. Based on the VSM framework, the gig system requires five main functions to operate as a viable system and identify the viability of the current gig work system. The first function is policymaking, which is responsible for formulating the purpose and policies of the gig system. The second function is intelligence, which requires gathering information to support policymaking decisions, such as the database, although it is relatively scarce and will be further discussed. A viable gig system also operates under the control function (the third function); a mechanism that collects and distributes data to and from the implementation subsystems and allocates resources to them to ensure successful operation within the large system. Gig systems require a coordinating mechanism to enable synergy between implementation subsystems. The implementation subsystem (the fourth function) controls the business units that provide services to the system's end users and other stakeholders. The monitoring function (the fifth function) links each operating unit to the control function. The viable gig worker framework identifies its purpose by recognising the five functions within the gig worker system. The system's approach allows systemic thinking and detects functions and their links by underlining the importance of each player's need.
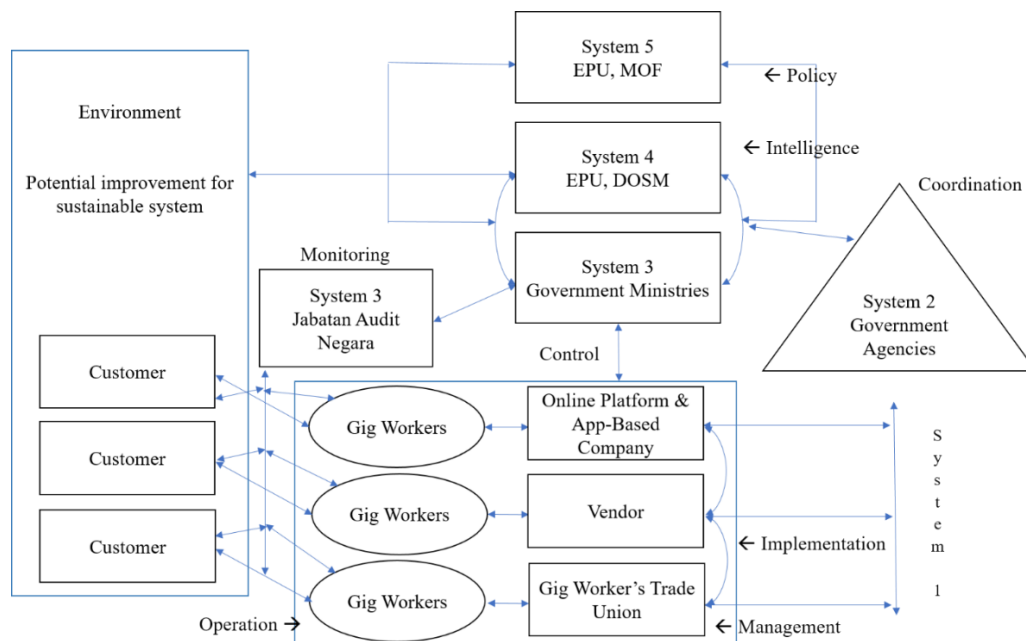

Fig. 2: Current gig system in Malaysia

Regarding VSM, the policy's primary tasks are to offer clarity about the general direction, values and purpose of the organisational unit, as well as to build the foundations for organisational effectiveness at the highest level (Espejo & Gill, 1997; Adham et al., 2015). As shown in Figure 2, the policy function in a viable gig economy model involves deciding policies, implementing as well as monitoring digital economic strategies and initiatives. This is the system which possesses overall control, though not necessarily directly and thus, dictates policy decisions that control all below systems. Corresponding to the respondents' feedback, the gig economy's policymakers include the Economic Planning Unit (EPU) and the Ministry of Finance (MOF). Both entities are responsible for the preparation of development plans or initiatives for the gig economy. Several initiatives have been introduced since the growth of the gig economy, which is recognised by the government.

One of the government's initiatives is the introduction of MyDIGITAL. MyDIGITAL symbolises the government's aspiration to transform Malaysia into a digitally-enabled and technology-driven high-income nation, a regional leader in the digital economy (Economic Planning Unit, 2021). To realise the aspirations of MyDIGITAL, the Malaysia Digital Economy Blueprint was formulated and launched in 2021 by EPU to set the direction and outline the strategies and initiatives. Its target is to build a foundation and drive the growth of the digital economy, including bridging the digital divide. The blueprint outlines 22 strategies, comprising 48 national initiatives and 28 sectoral initiatives. It will be implemented over 10 years, starting from 2021 to 2030, and divided into three phases. The first phase, from 2021 to 2022, involves reinforcing the foundations and accelerating digitalisation. The second phase, from 2023 to 2025, will focus on driving inclusive digital transformation. In the final phase, from 2026 to 2030, Malaysia is envisioned to become a regional market for digital products and digital solution providers. The MOF is also responsible for overseeing economic and fiscal policy related to the gig economy. Since one of the roles of MOF is handling the national budget, this ministry also oversees the allocated budget for a sustainable gig economy (Economic Planning Unit, 2021).

In a workable gig economy model, the intelligence function is in charge of both collecting and disseminating data on the external environment and the internal gig workers. The intelligence player is performed by the Department of Statistics Malaysia (DOSM) and

EPU (Ministry of Economy, 2020; DOSM, 2021). DOSM is specifically responsible for collecting, interpreting and disseminating the latest statistics on environmental conditions, technology changes and all external factors that are likely to be relevant to it in future (DOSM, 2021). The feedback is then passed on to EPU as input in the implementation, evaluation and re-evaluation of policies related to the gig economy. Respondents from various policymakers confirmed the procedure. EPU is then responsible for preparing and providing briefings on the planning and development processes related to the gig economy and projecting the identity and messages to other government agencies and private sectors involved (Ministry of Economy, 2020). The intelligence function is strongly future-focused. It is concerned with planning the way in light of external environmental changes and internal policies so that the outcome is followed exactly as the will of the government (Espejo & Gill, 1997; Adham et al., 2015). These two-way links between entities and government ministries at the control system are crucial to allow EPU and DOSM to formulate a clear model containing both the gig economy and the environment. This forms the basis of adaptive strategies.

The overall control function in the viable gig economy model represents the structures and controls that are put into place to establish the rules, resources, rights and responsibilities of the implementation function. This consists of operations and management to provide an interface with the intelligence and policy functions. This function also receives feedback from the implementation function in the form of accountability reports to keep the management in touch with the workflow. A reasonable 'exception reporting' system reduces the use of direct commands by the management in running operations (Espejo & Gill, 1997; Adham et al., 2015). In a viable gig economy model, the control function is performed by specific government ministries. The government ministries involved in this function include the Ministry of Finance (MOF), Ministry of Human Resources (MOHR), Ministry of Transportation (MOT), Ministry of Higher Education (MOHE) and Ministry of Communication & Digital (MOCD). These ministries have their designated roles by the government for a sustainable gig economy. The roles of government ministries are shown in Table 1. One of the important policies issued is Self-Employment Social Security Scheme (SESSS). The SESSS is a social security scheme that protects self-employed workers, including gig workers, in the event of work-related accidents or disabilities. Under this scheme, gig workers are eligible for medical coverage, disability aids, and education benefits.

Another important channel used as an adjunct to direct control is the monitoring channel. The control function requires an assurance that the accountability reports it receives are indeed an accurate reflection of the status of primary activities. The information provided in accountability reports often tends to reflect personal biases and other natural communication problems. Therefore, there is a need to corroborate this information with an alternative source. This is achieved by developing a monitoring channel that runs directly between the control and operations, bypassing management (Espejo & Gill, 1997; Adham et al., 2015). This function is performed by Jabatan Audit Negara (JAN). JAN conducts three main audits every year (the auditing of financial statements, financial management and performance) as part of the accountability reports presented to Ministries (Jabatan Audit Negara, 2023).

Table 1. Roles of government ministries in the control function

Government Ministry	Roles	Agencies Involved	Source
Ministry of Finance (MOF)	Responsible for the financial management of ministries and agencies that receive allocations according to the budget as well as financial well-being of gig workers.	• Employee Provident Fund (EPF)	• (Employee Provident Fund, 2020) • (Economic Planning Unit, 2021) • (Aziz, 2023)
Ministry of Human Resources (MOHR)	Responsible for the affairs of gig workers, especially occupational safety and health for p-hailing, trade unions, industrial relations, industrial court and social security.	• Social Security (SOCSO) • Department of Occupational Safety & Health (DOSH) • Human Resources Development Fund (HRDF) • Jabatan Tenaga Manusia (JTM)	• (Human Resources Development Fund, 2019) • (Astro Awani, 2020) • (Jemon et al., 2021) • (Economic Planning Unit, 2021) • (Department of Occupational Safety & Health, 2021) • (The Star, 2022a) • (Berita Harian, 2022)
Ministry of Transportation (MOT)	Responsible for regulating road transport, license and permit registration and road safety, especially for p-hailing gig workers.	Malaysian Institute of Road Safety Research (MIROS) Jabatan Keselamatan Jalan Raya (JKJR) Jabatan Pengangkutan Jalan (JPJ) Agensi Pengangkutan Awam Darat (APAD)	• (Ministry of Transportation, 2021) • (Agensi Pengangkutan Awam Darat, 2021) • (The Star, 2022b) • (Ministry of Transportation, 2022) • (TERAJU, 2022)
Ministry of Higher Education (MOHE)	Responsible for educating the public about entrepreneurship, how to participate and theory-to-practice of securing gig jobs in gig economy.	Jabatan Pengajian Tinggi (JPT)	• (Kassim et al., 2020) • (Ghazali & Muhammad, 2021)
Ministry of Communication & Digital (MOCD)	Responsible for regulation and validation of online platform and app-based platforms as well as skills development for skill-based gig workers	Malaysian Digital Economy Corporation (MDEC)	• (Rahim et al., 2021) • (Olsen, 2019)

Figure 3 shows that the gig economy has three implementation subsystems: 1) two-way workflow between gig workers and online platforms and app-based companies; 2) two-way workflow between gig workers and gig workers' trade union; and 3) two-way workflow between gig workers and vendors. The first workflow represents the working contract between gig workers and online platforms and app-based companies where part-time or full-time gig workers and freelancers work on a contractual or ad-hoc basis, creating an income from short-term tasks. Companies such as Grab, Foodpanda, Lalamove, and Maxim are examples of app-based companies, while Freelancer, Upwork, and Fiverr are examples of online platform companies that are associated with gig workers. The second workflow represents the working contract between gig workers and vendors where transactions and exchanges of products are done. The type of vendor depends on the type of service they offer, whether food, groceries, creative services or home-related services. There are even vendors that provide accommodation and professional services. Nonetheless, both relationships are essential to ensure that the gig economy runs smoothly (TERAJU, 2022).

The final workflow represents the supporting relationships between gig workers and gig workers' trade unions. The trade union's role in this relationship is to look after the welfare of gig workers and bring up their concerns to the Gig Company, government agencies and ministries (Radzi et al., 2022; Harian Metro, 2022; Malaysiakini, 2022). One trade union representing gig workers is Persatuan Penghantar P-Hailing Malaysia (PENGHANTAR). To explore the roles of PENGHANTAR in the gig economy, the researchers conducted an interview session with PENGHANTAR representatives. From the interview session, PENGHANTAR mentioned that the main concerns they fought for were an unreasonable decrease in fare trips and halal and non-halal issues. PENGHANTAR also became the middleman for government agencies in conveying any programmes, incentives or wishes expressed by gig workers.

The environment served by the operating unit consists of customers who use the service provided by online platforms and app-based companies and vendors with the help of gig workers. Based on the literature, the gig economy is defined as the demand and supply of short-term or task-based working activities that are matched through online and local app-based platforms (Huang et al., 2020). Respondents from PENGHANTAR asserted that the gig system (referring to the e-hailing market), consists of customers who demand goods and services, the vendor who is the supplier of goods and services, the p-hailing rider who delivers the goods and services as well as the operator who provides the platform that connects the three mentioned components, as depicted in Figure 3. Consistent with the literature, three leading essential players in the gig economy ecosystem are present: (1) freelancers or on-demand employees who are paid based on specific tasks; (2) customers who want a particular service; and (3) companies that connect gig employees with jobs available through digital platforms (such as Freelancer, TheKedua and Fiverr) as well as e-hailing services like Grab, Foodpanda and InDriver (Harun et al., 2020). Customers are also responsible for the feedback sent to both online platforms and app-based companies and vendors regarding the quality of services overall.
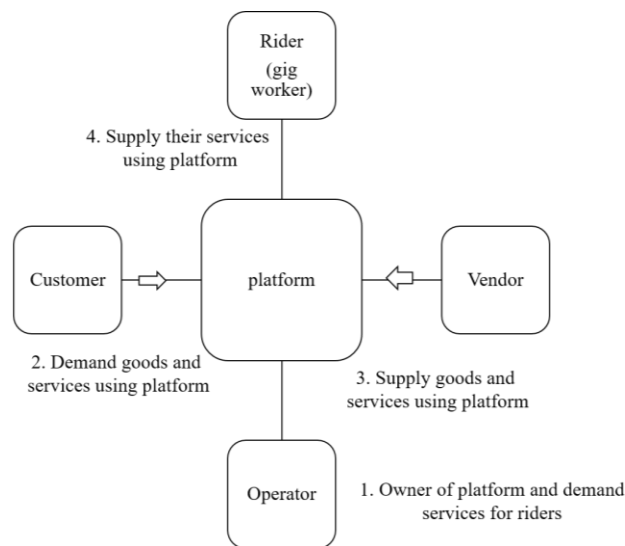

Fig. 3: The flow of gig system operations

4.2 VSM: Potential Dimension for the Sustainable Well-being of Gig Workers
Several obstacles confronting contract workers in Malaysia have been identified, encompassing external concerns that gig workers encounter. These concerns are classified as "environment" within the VSM framework based on the feedback provided by the participants. First, it is related to maintaining the financial security of gig workers, including retirement programmes, health insurance, and compensated time off. Their earnings are to live from hand to mouth. Secondly, there is the issue of high exposure to road accidents and health issues since there is no basic protection. Gig workers have the option to subscribe to health protection, but it is impossible with lower earnings. The final issue is related to halal certification, which, if the gig workers choose the halal mode within the platform, limits their services and hence shortens their incomes.

5.0 Conclusion& Recommendations

This paper aimed to diagnose the well-being of gig workers in Malaysia using the Viable System Model (VSM) approach. The conducted study applied the qualitative design since data was obtained through secondary materials and interviews with qualified officials involved in policymaking and representatives among gig workers. Mapping data onto the VSM framework was relevant for discovering the complex design of the current well-being status of gig workers in Malaysia. Based on the Viable System Model (VSM), the current gig system adheres to five tenets of VSM. VSM highlights the importance of feedback loops, communication channels and decision-making processes that can enable gig workers and other stakeholders to respond quickly and effectively to changing circumstances. However, VSM also revealed several potential weaknesses and challenges in the gig economy, particularly in terms of regulatory and legal frameworks that govern gig work in Malaysia. There may be a need for greater clarity and consistency in the policies and regulations that apply to gig workers, as well as more robust mechanisms for ensuring compliance with labour and employment standards. The support system, weaknesses or gaps found from this study are vital for proposing a model that improves the well-being of gig workers. The operational part of gig work is consistent with the operational definition of gig workers, which indicates the strength of VSM's emphasis on the importance of flexibility and adaptability in complex systems. This is particularly relevant to the gig economy, which is characterised by a high degree of uncertainty and variability. In establishing a sustainable gig system, some concerns must be addressed so that the well-being of gig workers can be secured at a sustainable pace, such as income security, life protection, legal framework, halal issues and retirement plans.

Several promising ideas for future policymaking can be derived from the challenges and issues identified in the Viable System Model (VSM) analysis of Malaysia's gig economy. First, to present a comprehensive collection of regulations that delineate the entitlements and obligations of gig workers, managers, and other key individuals regarding equitable remuneration, working conditions, and social safeguards. Second, gig workers can pave the way for career development to enhance their incomes. So, policymakers could consider implementing training and support programmes that help gig workers acquire new skills, establish new connections, and access essential resources such as healthcare and banking services. The third policy recommendation to overcome the halal issue is to facilitate the certification of vendors by providing them with relevant information and guidance and simplifying as well as reducing the cost of the certification procedure..

Overall, VSM provides a useful tool for understanding and analysing the gig economy in Malaysia and for identifying potential areas for improvement in the interests of gig workers, employers, and other stakeholders. Policymakers and industry stakeholders must consider these external issues in addition to the internal factors captured in VSM when designing policies and strategies for the gig industry. This can help ensure the gig industry is sustainable and beneficial for all stakeholders involved, including gig workers, customers and the broader community.

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