

## INDEPENDENT WORKERS CONTINUOUS ENGAGEMENT IN THE GIG ECONOMY: A META-ANALYSIS

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**Abstract:** The development of information and communication technology (ICT) originates in a new nature of the working environment, explicitly the Gig economy, where the workers rely on apps or systems to conduct a job. The emergence of a new organisational setting provides the degree of freedom and flexibility that drives independent workers to decide on short-term jobs. This shows how important it is to understand how independent workers remain active in the gig economy. Thus, this research aims to systematise the available literature on the continuous engagement of independent workers. The meta-analysis is conducted to discover previous studies on the continuous engagement of independent workers in the gig economy platform from 2012 to 2022. The meta-analysis was undertaken using 12 papers instead of the preliminary phase 30 articles, which were thoroughly excluded. The result concluded that the continuous engagement of independent workers is crucial because they still need an answer to the motivation factors that drive them to engage continuously in the gig economy platform. The results of this paper are meant to help researchers in the future who want to study the continuous engagement of independent workers in the gig economy platform.

**Keywords:** Participation, Job involvement, Sharing Economy, Digital Economy, Short-term workers

### 1. Introduction

With the growth of technology and the rise of new ways to work, the traditional job market is being replaced by the gig economy. In this economy, people work without being in an office. The term "gig economy" refers to a labour market that showcases the availability of short-term workers having to complete a task at a particular time using different websites and mobile apps (Gandhi et al., 2018; Alif et al., 2020). Gig jobs include four sorts of platform work: high-skilled owned workers, consultants, and cloud-based independent freelancers. Aside from that, it includes freelancers who do things like courier work, and food delivery, as well as jobs that can be done online with little training or skill (Vallas & Schor, 2020). The gig concept is not new to society; in the past, it has been practiced, such as when an individual performs on stage in exchange for immediate payment (Limpin, 2018). As a result of the progression of technology, it has developed into an issue in the modern era of globalisation, where the buyer and the seller are united by the digital, namely Apps (Wood et al., 2019; Yeganeh, 2021). Hence, buyers and sellers are required to adapt to rapid technological

advances to succeed in business (Stoyanova, 2020). The gig economy is often understood as a transaction in which businesses collaborate to complete various tasks using digital platforms as middlemen (Anwar & Graham, 2020). Through mobile work-on-demand applications, online labour marketplaces match the supply and demand of short-term or task-based working activities (Kidd, 2020).

However, the independent workers are surveillance by the algorithm to spy on their performance with the "apps" for the quality control of the product or services provided to the clients, users, or customers (Wood et al., 2019). Nevertheless, not all independent workers are treated equally, and at the same time, there are different types of independent workers. The platform they are involved in and the pay rate will be different compared to the platform offered. However, the similarity can be that the employer and employee are connected throughout the apps or system (Sung-Hee et al., 2019). Here independent workers' skills and abilities played a vital role in setting their pay rate (Wulandari et al., 2019). The more highly skilled independent workers are entitled to get more pay rates when compared to workers with minimal skill (Wu et al., 2022).

Based on data from 98 countries, Dewan et al. (2022) report says that the number of digital labour platforms grew quickly from 2007 to 2021, going from 50 to 777 platforms. Also, almost half of the workers in many developing countries are independent workers, while workers in developed countries often do side jobs to make extra money (ILO, 2022). According to the Department of Statistics Malaysia [DOSM], 2020, 26% of the 15.3 million Malaysian workers being part of the gig economy is expanding. There are thirteen thousand food panda, ten thousand grab riders, and more than 160 drivers engaged in the gig economy. Eventually, the COVID-19 disaster affected decent employees who could not maintain financial stability; therefore, they were involved in the gig economy to maintain the status quo (Seha, 2021).

## 2. Research Background

The rise in the number of independent workers engaged in the gig economy context became a widespread debate among scholarly circles. Here it is crucial to study the continuous engagement of independent workers in the gig economy and whether they are willing to engage in the same platform for a long time (Staniškienė et al., 2018). Based on a thorough review of the academic literature, most studies focus on the engagement of customers, and stakeholders to use the gig economy and sharing economy (Nuramalina et al., 2021). Aligned with Oliveira et al. (2020), who studied the post-adoption of the sharing economy (e-hailing) by the user, the customer who keeps using the platform, the quantifiable analysis showed that external, and internal motivation factors played a more prominent role in continuous use of the sharing economy.

Independent workers desire to be involved in the gig economy because the platforms allocate freedom and flexibility (Chen et al., 2017). However, it is essential to digest that not all gig economies platform provide the same flexibility, earning, freedom, and autonomy (Heeks, 2017). According to Keith et al. (2019), they argue that, as an example, Mechanical Turk (MTurk) freelancers who engage in digitalisation tasks spend much time completing a

single task for lower pay. Jabagi et al. (2019) report that the earnings of independent workers are determined by the platform they are involved in. For instance, employees in physical gigs (transportation, delivery services, helping households, and personal services) and virtual (clerical, data entry, click worker, and microwork) tend to earn lower wages with low skills. In contrast, people with high skills, such as teachers, work physically, and high-skill worker technically works as web developers or IT consultants virtually (Freund & Hssaine, 2021; Heeks, 2017; Jabagi et al., 2019).

Conversely, Gandhi et al. (2018) argued that the gig worker's primary intention to become a platform-based gig worker is autonomy, a free arrangement schedule, and economic motivation to hold a good financial position. The cultures and cognitive processes of the groups function differently. However, the previous study on independent workers, gig workers, freelancers, short-term employee engagement in the gig economy has been studied but still lacks the continuous engagement of independent workers in the gig economy. Pre-engagement of independent workers' behaviour will not be the same as continuously engaged in the same platform (Miao et al., 2020). Therefore, the meta-analysis presented in this paper is needed to observe and analyse independent workers' continuous engagement in the gig economy platform. This meta analysis rises pertinent questions that remain to be answered surrounding gig platform, population, subject group, and method used to solve the research problem as follows:-

1. Which gig economy platforms are independent workers continuously engaged in?
2. What is the population and sample involved in the study?
3. What method has been used to study the continuous engagement of independent workers in the gig economy?

### 3. Literature Review

According to Khan (1990), the definition given to work engagement refers to the use and expression of people's physical, intellectual, and dynamic characteristics in their professional responsibilities. The surveys observed that employee engagement levels vary and recommended three psychological factors. A good and rewarding mental state is tied to one's job and is characterised by enthusiasm, devotion, and engagement in the task (Salanova, 2005). Catteeuw et al. (2007) argued that employees are more likely to stay in the organisation for a longer time if they are intrinsically motivated and have a healthy working environment.

The external and internal factors play a vital role in employee retention in the same platform, organisation, and company (Huigang et al., 2018). Ni (2020) investigates how total reward components, including monetary and non-monetary benefits, impact workers' decisions to remain in Chinese firms through work engagement. The results indicated that both "financial" and "non-financial factors" are essential for understanding turnover intentions. Hence, money is the external factor that drives an employee's cognitive process by involving money continuously in the organisation or company. In contradiction, Extremera

et al. (2018) argue that continuous engagement in job and job motivation is determined by internal factors such as personal values.

#### 4. Methodology

This study adopted the meta-analysis approach for identifying, screening, and reviewing the secondary data for analysis, interpreting, and summarising the finding for the specific research objective (Webster & Watson, 2002). The researcher used several keywords to acquire the extensive related previous studies. The keywords such as "Gig Economy", "Sharing Economy", "Digital Economy", "Independent workers", "Short-term workers", "Job involvement", "Participation", "Engagement", and "Continuous Engagement". The researcher obtained the related independent sample of the study from the databases such as Google scholar ([www.scholar.google.com](http://www.scholar.google.com)) and Emerald Insight ([www.emerald.com](http://www.emerald.com)). The two databases were chosen to increase the chances of getting more relevant articles related to the continuous engagement of independent workers in the gig economy. The researcher utilised the two significant databases because of their easy and minimal cost for acquiring the independent sample. The keywords have been used to get the niche articles in the database. The keywords are "Gig Economy", "Independent workers", "Freelancer", "Short-term employees", "Continuous Engagement", and "Continuous Participation."

The researcher discovered the independent samples from 2012-2022 to understand better the emergence of the gig economy and the current issue of independent workers' engagement in the gig economy. The independent sample of N=30 articles was found according to the nature of the study. N=16 samples were discovered from the google scholar search engine, and 14 samples were acquired from the emerald insight. Inclusion criteria are traits prospective research participants must possess to be included. Exclusion criteria are those traits that reject potential participants from the research. In this study, the researcher used inclusion criteria to filter the most related to the continuous engagement of independent workers in the gig economy. The exclusion was used to avoid the previous studies that are not relevant to the continuous engagement context. The process enables the researcher to filter the articles that discuss continuous engagement in the gig economy. From the total N=30 samples, N=12 articles met the relevant and somewhat relevant criteria, and N=18 articles were excluded due to irrelevant context. Table 1 will demonstrate the article finding in table form.

**Table 1.** List of articles relevant to the Continuous Engagement of Independent Workers in the Gig Economy

No.	Researcher/Year	Journal Name	Target Group	Sample Size
1	Silva et al. (2022)	Revista de Gestão	Working conditions and labour relations from the perspective of app-based drivers	54

2	Oliveira et al. (2022)	Information Technology and People	Sharing economy (S.E.) continuance intention of the user	256
3	Wu et al. (2022)	New Technology, Work and Employment	socio-psychological factors affect the mental well-being of platform workers	500
4	Lee et al. (2022)	International Journal of Contemporary Hospitality Management	Crowdsourced delivery workers' job performance and intent to continue working	267
5	Shroff et al. (2022)	International Journal of Contemporary Hospitality Management	Trends in OFD and potential future research themes	43 Articles
6	Behl et al. (2022)	Aslib Journal of Information Management	Barriers to the entry of gig workers on gig platforms	-
7	Ruiner & Klumpp (2022)	Employee Relations the International Journal	Worker autonomy and emerging mechanisms of control in digital work	127
8	Ramos (2022)	British Food Journal	factors that influenced customer's continuance usage intention of food delivery apps	295
9	Jiang et al. (2021)	Sustainability (Switzerland)	motivational and trust-based providers' continuance intention of participation in the peer-to-peer ride	
10	Piasna & Drahokoupil (2021)	Socio-Economic Review	worker's perspective as a means toward increased autonomy and control	-
11	Kuan-Ming et al. (2021)	SSRN Electronic Journal	Experiment at Uber to create exogenous variation in expected market wages	333172
12	Seghezzi et al. (2021)	International Journal of Logistics Management	Extant academic literature on on-demand food delivery	59 Articles
13	Yeganeh (2021)	World Journal of Entrepreneurship, Management and Sustainable Development	Factors and conditions contribute to the rise of the sharing economy	-
14	Schor et al. (2020)	Theory and Society	Focuses on employment classification and insecure labour, and technological control via algorithms	112
15	Sutherland et al. (2020)	Work, Employment and Society	Challenges of gig working in the context of the online freelancing	20
16	Alif et al. (2020)	2020 International Conference on Advanced Computer Science and Information Systems, ICACIS 2020	Determinant factors that motivate people to become gig workers	187
17	Keith et al. (2019)	Journal of Managerial Psychology	Gig worker's engagement in the gig economy.	1190

18	Yong & Yongmei (2019)	Internet Research	Worker's determinates drive continuous participation crowdsourcing market	304
19	Urbonavicius & Sezer (2019)	International Journal of Culture, Tourism, and Hospitality Research	Sharing economy -motivation influence the intention to provide accommodation	396
20	Allon et al. (2019)		E-Hailing workers Motivation to involve in the platform	-
21	Mathisen (2019)	Journalism Practice	Today's freelance journalist's job as a Freelancer	15
22	Damian & Capatina (2019)	Proceedings of the International Conference on Business Excellence	Explores Indonesian eLancers' motivations for using the online freelancer marketplace.	20
23	Bellesia et al. (2019)	Journal of Managerial Psychology	Gig workers in online labour markets develop their work identities.	46
24	Valente et al. (2019)	Revista de Gestão	This research analyses why people in a developing nation have become Uber drivers.	20
25	Jabagi et al. (2019)	Journal of Managerial Psychology	This research examines how technology may motivate gig workers	-
26	Brodeur & Nield (2018)	Journal of Economic Behavior and Organization	How does the rain affect Uber, Taxi and Lyft affect their job	-
27	Abubakar & Shneikat (2017)	Online Information Review	eLancing applications, better understand why people participate.	48
28	Jenkins (2017)	IPSE	Are freelancers happier than employees?	1053
29	Robles & McGee (2016)	Finance and Economics Discussion Series	Explore freelancer motivation for alternative employment arrangements.	2483
30	van der Born & van Witteloostuijn (2013)	Journal of Organizational Behavior	Career success of professional freelancers	1600

## 5. Findings

The findings of the study are summarised in three sections that align with the research question. The first section explains the types of gig economy platforms in which independent workers are continuously engaged. Subsequently, the population and sample size were determined to conduct the study. The final objective is the methodology used to gather empirical data and evidence to tackle the research problem.

**Research Question 1:** Which gig economy platforms that independent workers continuously engaged in?

According to the analysis, there are major gig economy platforms that independent workers continuously work in, such as Sharing Economy (S.E.) incorporated with E-hailing and

accommodation, crowdsourcing deals with the micro worker, and delivery services such as food and courier. The gig economy involves freelancers in multi manifolds, such as professional freelancers and short-term workers engaged in temporary work. Table 2 illustrates the platform domain by the independent workers and the types of gigs.

**Table 2.** The Platform Domain and Types of Gig

Platform Domain	Types of Gig	N	Sources
Sharing Economy (S.E.)	E-Hailing/Accommodation	4	Jiang et al. (2021); Oliveira et al. (2021); Urbonavicius & Sezer (2019); Valente et al. (2019)
Crowdsourcing	Micro worker / Delivery services	3	Lee et al. (2022); Yong & Yongmei (2019); Ramos (2022)
Gig Economy	Freelancer	5	Abubakar & Shneikat (2017); Alif et al. (2020); Damian & Capatina (2019); Keith et al., 2019; Robles & McGee, 2016

**Research Question 2:** What is the population and sample involved in the study?

Based on the finding, what is the population and sample involved in the study? Table 3 displays the population and sample of the study. Most of the previous studies focus on the Freelancer sample to study the participation of the freelancer in the online freelancer platform. The sharing economy has become the second domain that the previous study focused on the independent worker's participation in the sharing economy platform. The sharing economy platform involved two types of samples: users and workers. Lastly, crowdsourcing platforms also studied the job involvement of independent workers in the platform.

**Table 3.** The Population and The Sample Size of the finding

Population	Sample Size	Sources
Peer-to-peer Drivers	202 E-Hailing drivers In China	Jiang et al. (2021)
Sharing Economy User	256 SE User in Portugal	Oliveira et al. (2021)
Sharing Economy Accommodation Provider	396 Provider Lithuania and Turkey	Urbonavicius & Sezer (2019)
Sharing Economy Drivers	20 Brazilian Uber Driver	Valente et al. (2019)
Food Delivery Workers	267 Food delivery workers in South Korea	Lee et al. (2022)
Crowdsourcing Worker	304 online participants in Zhubajie	Yong & Yongmei (2019)
Food Delivery Apps Users	295 Users in Mexico	Ramos (2022)

Freelancer Platform	48 Turkish Freelancer	Abubakar & Shneikat (2017)
Gig Workers Online Teaching Professional	187 Online teaching Professional in Indonesia	Alif et al. (2020)
Freelancer from Srbulancer.com	200 Freelancer from Indonesia	Damian & Capatina, (2019)
Mechanical Turk Freelancer	1190 Freelancer from MTruk	Keith et al. (2019)
Online and Offline Freelancer	2483 Freelancer in the U.S	Robles & McGee (2016)

**Research Question 3:** What method has been used to determine the continuous engagement of independent workers in the gig economy?

Based on the existing compressive literature finding, the researcher has adopted the well-known quantitative and qualitative methods. In the total of 12 independent samples of the study, nine studies employed a quantitative method, and three studies employed a qualitative approach. Moreover, data collection was conducted with an online survey and semi-structural interviews with the data collected from targeted respondents. Table 4 display the methodology and strategy used for the data collection.

**Table 4.** The Types of Methodology and Strategy from the previous studies

Methodology	Strategy for Data Collection	N	Sources
Quantitative	Survey	9	Alif et al. (2020); Jiang et al. (2021); Keith et al. (2019); Lee et al. (2022); Yong & Yongmei (2019); Oliveira et al. (2021); Ramos (2022); Robles & McGee (2016); Urbonavicius & Sezer (2019)
Qualitative	Semi-Structure	3	Abubakar & Shneikat (2017); Damian & Capatina (2019); Valente et al. (2019)

## 6. Discussion

Based on the meta-analysis findings, continuous engagement in the gig economy platform has its main domains. It consists of sharing economy (sharing their assets for earning) and a crowdsourcing platform (looking for microwork). The finding provides two viewpoints, user and provider (gig workers) intention to participate continuously in the gig economy. According to Ramos (2022), the user remains to use the food delivery apps during COVID-19 in movement control order; 295 users agreed that economic motivation and effort expectancy is the main factor contributing to continuous usage of the food delivery apps during COVID-19. Thus, the user is extrinsically motivated to use food delivery apps continuously. Align with Oliveira et al. (2021) investigate the use and people's intentions to stay in the sharing economy (S.E.), as well as how use affects the link between people's motivations and their intentions to remain in the S.E. The respondents were characterised by adopting digital platforms in different segments such as E-hailing, Airbnb, and Professional Services and re-selling their owned assets. The number of respondents, 256 from Portugal, stated that extrinsic motivation factors (monetary reason, social influence, mobile capability) are more important than intrinsic motivation when using sharing economy services. Based on the above discussion, the previous study covered the user's motivation factor that drives the



user's continuous use intention of sharing economy. However, the study could not generalise for the all continuous engagement of independent workers in the gig economy context.

Urbonavicius and Sezer (2019) intended to compare the reasons and moderating factors that make people want to rent their homes in two countries with different cultures and I.T. infrastructures. The study was done in Turkey and Lithuania, and a survey of 396 people showed that national conditions affect differences when the same model is used in two countries. In Urbonavicius and Sezer's study, the population was focused on the accommodation provider. However, the study is incapable because the population is not represented as the whole sharing economy. The sharing economy involves different role players (Trenz et al., 2018). The result is inevitable for the developing country because the culture and I.T. infrastructure will diverge when contrasting developed and developing countries.

Lee et al. (2022) intend to utilise the sociotechnical systems theory to examine ways to improve job performance and the desire to continue working with crowdsourced delivery employees. Based on the 267 food delivery workers from South Korea, the study showed strong links between crowdsourcing risks and workers who do not even care much about their jobs and technical systems, leading to lower job performance and less desire to keep working. Based on the above study, the research intended to focus on the food delivery worker's retention by predicting the job performance for fluctuation of current technology. The retention concepts should measure the worker's motivation that facilitates them to sustain in the same platform supported by Pang and Chin-Shan (2018). Thus, the employee's motivation indirectly contributes to long-term business sustainability.

Alif et al. (2020) investigate factors influencing people's decision to become gig workers in Indonesia. The outcomes showed that this study identified the variables as determining factors that had a positive relationship: subjective norms, benefit elements, self-interest, and socioeconomic value. In contrast, the perceived risk was a detriment to the enterprise. The targeted population of the above study is online course professionals, which brings significant differences in motivation compared to other gig workers because the different platforms of the gig economy determine the motivation to become gig workers. As Valente et al. (2019) aimed to figure out why Uber drivers in a developing country have become part of the sharing economy by adopting a qualitative method and semi-structural interview as the data collection approach, 20 Brazilian drivers were involved in the study. The empirical data suggests that being an Uber driver is more of a question of permanently addressing unemployment than searching for transitory and flexible work to augment one's income. Whereas Jiang et al. (2021) look into why people use peer-to-peer ride-sharing services and how much trust they have in each other. The findings show that economic advantages, social-hedonic value, and sustainability significantly influence providers' engagement continuation intention. Hence, the provider is willing to share their assets continuously with the public for earning. Based on the above discussion about how the provider's motivation affects their engagement in the sharing economy platform. The empirical data could not be generalised to the entire population of independent workers

willing to provide services continuously on that platform because the subject matter of intention and continuously engaged concept were not the same issues.

## 7. Conclusion

Since the engagement of independent workers is increasing daily, it is crucial to understand their continuous engagement in the gig economy platform. The current study emphasises which gig economy platform independent workers are continuously engaged in, the population and samples involved in studying the continuous engagement of independent workers, and what methodology has been used for the continuous engagement of independent workers. Based on the finding, the researcher concludes that most of the studies investigated the continuous engagement of independent workers in the sharing economy platform, crowdsourcing, and digital economy. However, the population and sample were freelancers, online workers, food delivery riders, accommodation providers, and E-hailing drivers. Nevertheless, the methods employed to study the continuous engagements in the gig economy platform were quantitative and qualitative approaches. Most studies concentrated on the intention of the independent worker's participation in the gig economy; however, the behaviour before participation after participation varies. Therefore, more researcher worker needs to extend this Meta-Analysis worker to empirical study. The future researcher needs to identify the motivational factors driving independent workers' continuous participation in the gig economy.

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