

VALUE CREATION, CONSUMERS' ACTIVE INTERVENTION AND WORKERS' WORKING CONDITIONS: A NEW CONCEPTUAL FRAMEWORK FOR THE GIG ECONOMY

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ABSTRACT Advances in technology and the increasing number of workers who are not constrained by traditional ways of working have fuelled gig economy activity, with several online platforms and gig workers springing up around the world. On the other hand, the problematic nature of value creation in the relationship between online platforms and gig workers has become an impediment to the sustainable growth of the gig economy. Although the gig economy business model is based on a triangular relationship consisting of platforms, gig workers and consumers, there has been limited discussion of the potential for customers to influence gig economy labour relations. Therefore, this paper identified the problematic nature of value creation in the relationship between online platforms and gig workers and theoretically integrated the possibility of active consumer intervention into this issue. This paper can highlight the hitherto unfocused relationship between gig workers and consumers and provide realistic sustainability options for existing gig economy business operations. Based on a systematic literature review, this paper proposed a conceptual framework that would incorporate four items in the consumer-worker interaction: rating systems/feedback, word of mouth, gig worker's working condition and consumers' moral awareness. As the result of interaction, there would be two possible outcomes: Pattern A suggests that the platform may be at risk of further deterioration, whilst Pattern B suggests that the platform's labour practices could be improved. Finally, this paper also planned a specific research design, data collection and data analysis procedures for future research. Although this paper focuses only on

on-demand (offline) through app services, which is the strongest link between customers and gig workers in the gig economy, it is one of the benchmark studies to focus on consumers in the gig economy triangular relationship. This proposed conceptual framework will contribute to the observation of the potential for consumers to improve the working conditions of gig workers in the gig economy.

Keywords: gig economy, gig worker, platform, value creation, feedback, working conditions.

INTRODUCTION

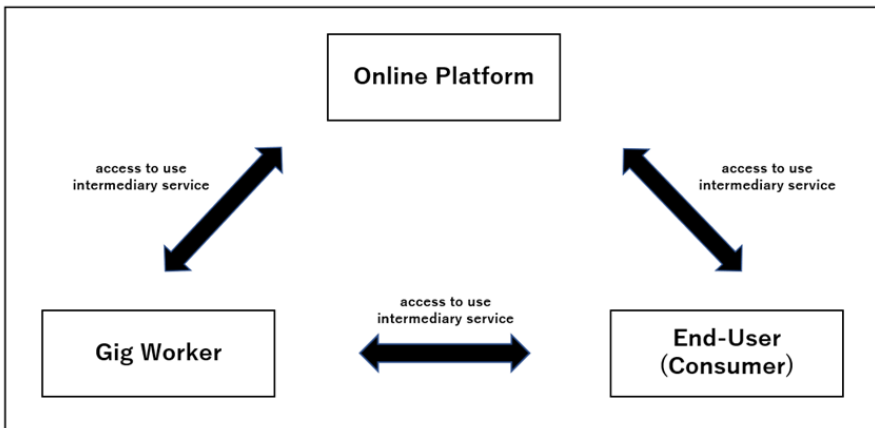
Rapid advances in technology and the emergence of new workers who are not attached to full-time employment have enabled the creation of innovative labour markets that connect workers and consumers on-demand (Donovan et al., 2016). This phenomenon is called the “gig economy” and those who work in this type of job are considered “gig workers”. The labour market in the gig economy is predominantly made up of labour on a gig (temporary) basis, which distinguishes it from traditional formal employment as an independent contractor (Gleim et al., 2019). The labour dimension of the gig economy consists of two types of work: crowdwork, where firms and individuals are engaged online through the internet, and on-demand work, where services are provided offline after an online match through an online app (De Stefano, 2015). Since these two share the same IT technology-based services, the crowdwork platform includes a competitive element where many tasks are quality-based, such as query selection or photo tagging, whereas the online platforms are an extension of traditional services such as cleaning services, food delivery, and taxi services, as well as professional services such as consulting (De Stefano, 2015).

Whilst the gig economy sees great opportunities for workers from flexibility in work, income supplementation, and job creation for the unemployed, students, and older workers (Chen et al., 2020; Gleim et al., 2019; Stewart & Stanford, 2017), participation in the gig economy creates certain risks due to the ambiguity of the definition of a gig worker. The

issue of the status and protection of gig workers is one of the main debates of researchers in the gig economy and is discussed in terms of the current system and labour laws (Minter, 2017). This debate includes issues related to gig workers' working conditions, such as their minimum wage and working hours. The notion of gig economy regulation is a grey area fraught with complexity (Jaehrling & Kalina, 2020) and their position currently hovers within its neoliberal economic boundaries. Roy-Mukherjee & Harrison (2020) highlights the fluidity of business models with changing employment practices complicates the understanding of gig workers with little knowledge of employment regulation, whilst platforms and policymakers present superficial benefits such as flexibility of gig work, the ambiguity of workers' rights arising from the lack of clear legislation encourages substantial exploitation (Roy-Mukherjee & Harrison, 2020)

The gig economy is not based on the traditional two-party relationship between employer and worker but a triangular relationship including the online platform, the gig worker and the end-user (consumer) (Barratt et al., 2020; Stewart & Stanford, 2017). The gig worker and the end-user (consumer) are both dependent on the online platform, as they mediate between the online platform and the end-user to order services on a task basis (Figure 1).

Figure 1 Gig Economy Triangular Relationship



Source: Stewart et al (2017) and Barratt et al (2020)

This triangular relationship is beyond the scope of mainstream theories of the labour market and industrial relations (Gandini, 2019). This is because traditional worker rights based on industrial relations do not apply to gig workers, there are no set standards, and even the government has failed to set uniform standards. Recent research has begun to suggest that consumers, as part of the triangle, have the potential to be the catalyst for improving gig workers' working conditions in the gig economy. This means that consumer actions may have a significant impact on other actors in the modern ethical consumer society, and consumer values and empathy may also have the potential to create better working conditions for gig workers (Healy et al., 2020). Smith et al (2020) also found that consumers had a very low understanding of gig workers' rights but were willing to pay more for food deliverers earning less than the minimum wage. The reality is that customers are only accessing the platform for its convenience and are unlikely to be interested in the condition of the gig workers. On the other hand, customer action may have an impact to improve the labour conditions of gig workers that goes beyond the decisions and regulations of policymakers.

Although the relationship between customers and gig workers has been studied fragmentally, there is still a lack of research that addresses the impact of customers and specific processes for improving workers' working conditions in the gig economy from the customer's perspective. Therefore, the objective of this study is to develop a conceptual model that depicts the potential of consumer actions to improve the welfare of gig workers.

To achieve this objective, this paper sets out two research questions (RQ1): What is the nature of the relationship between platform firms and gig workers in the gig economy? (RQ2): What are the potential options for customers to improve the welfare of the gig workers?

This proposed conceptual model is expected to make two main contributions. Firstly, by approaching the triangular relationship in the gig economy, this study identifies the problematic nature of the relationship between online platforms and gig workers in terms of value creation and theoretically integrates the potential for positive consumer intervention in this issue. At the same time, this new triangular composition clarifies the

hitherto unfocused relationship between gig workers and consumers and will encourage further empirical research. The second contribution is that this research offers a practical sustainability alternative to existing gig economy business operations. Gig economy platforms are built on a balance between gig workers and customers beyond the existing regulatory framework, but currently, gig workers are taking on the burden of both. If the gig workers continue to be overloaded, this customer-worker relationship will become untenable. The customer potential referring to this study is likely to reduce the structural load on the gig worker and indirectly encourage the platform to rethink its business model. This conceptual model has been justified by qualitative research and then modified into a quantitative model, a benchmark study that encourages quantifying the structural burdens of gig workers and customer commitment in various gig applications.

The limitation of this study is that since crowdwork often involves only the platform and the gig worker in operation, and there are few opportunities to engage directly with end-users (customers), this research focuses on on-demand app platforms that provide opportunities to engage directly with customers offline.

This paper starts by explaining about theoretical perspective on value creation: the labour theory of value. Next, there is a literature review part on the overview of the gig economy, value creation in the gig economy, and customer-worker relationships in the gig economy. Then, this paper developed a conceptual framework in three steps based on the literature review. First, the underlying system of value creation in the gig economy is diagrammed. Second, the concepts depicted in the first step are applied to the context of the gig economy. Finally, a conceptual framework is proposed by merging the surplus value in the gig economy and the customer potential of the previous studies. In the final section, directions for future research and a conclusion are presented.

THEORETICAL PERSPECTIVE ON VALUE CREATION: LABOUR THEORY OF VALUE

This section reviews theoretical perspectives of the following three main schools of thought on value creation in the production process, namely classical economics, classic Marxism economics and neo-Marxism economics

a) Classical Economics

The first systematic theoretical model to understand the value creation system in the production process was introduced by the prominent classic economist Adam Smith in 1776, which is known as the labour theory of value. According to Adam Smith, workers are the only active agent to transform raw materials from nature to produce commodities. For him, the important factor of production, land, is abundant so the reward for the landowner (i.e., rent) is very low. Interestingly, he does not pay any attention to, another factor of production (i.e., capital). In this system of value creation, there is no reward for the capital owner or interest. Adam Smith believes the whole rewards from production should be paid as a wage to workers (Dooley, 2005; Smith, 1776).

On the other hand, another classic economist, David Ricardo agreed with Adam Smith's labour theory of values that would equate total exchangeable value with the total amount of labour which was used to produce them. However, he added an important twist to this theory of value creation by adding his perspective on income distribution between employer and employee. Ricardo pointed out that the value of a commodity would be proportional to the rewards for workers or employees (i.e., wages) as well as the rewards of capital owners or employers (i.e., interests). In other words, the price of the commodity would be determined by not only wages but also interests (Dooley, 2005; Ricardo, 1817).

b) Classical Marxism Economics

Karl Marx harshly criticised the classical economists' theoretical perspective by claiming the existence of "surplus value" in the value creation mechanism in the production process. Marx warned that the exploitation of labour-power is caused by "surplus labour", which is the worthless work of workers as value producers, and that capitalists try to extract more surplus value from

workers by extending working hours or increasing the rate of production. In *Capital: A Critique of Political Economy*. In volume I, Marx explains the concept of surplus value under the assumption that industrial capital uses the tools of labour-power to produce the value of commodities. According to Section 1: The Degree of Exploitation of Labour-Power in Chapter 9: The Rate of Surplus-Value, when a worker produces only the value of his means of livelihood and continuously reproduces it, it is called necessary “labour” (Marx, 1867).

On the other hand, when a worker produces value for himself from a state of worthlessness, which produces no value, it is called “surplus labour”. This is because capital depends on the continued existence of the worker, and surplus labour can only be extracted from the worker as a producer. On the assumption that the value of variable capital is equal to the value of the labour-power purchased based on that capital, the value of the labour-power determines the necessary part of the working day, whilst the surplus value is determined by the surplus part of the working day. Therefore, surplus value is the ratio of surplus labour to necessary labour in equal proportion to variable capital. Marx expressed this rate of surplus-value as $s/v = (\text{surplus labour}) / (\text{necessary labour})$. In other words, the surplus-value ratio accurately represents the extent of the exploitation of labour by capital and capitalists (Marx, 1867).

Marx also distinguishes between two types of surplus value in chapter 12, “The Concept of Relative Surplus-Value”. He names the surplus value generated by the extension of working hours as “absolute surplus value”, whereas the surplus value created by the reduction in the required working hours or the relative change in the two components of labour is called “relative surplus value”. Absolute surplus value is the relative extension of surplus labour by the reduction of the necessary labour of the worker under a fixed working day and working hours, which means that a part of the worker’s profit (necessary labour time) is converted into the profit of the capitalist (surplus labour time). Whereas “relative surplus value” is to boost productivity by focusing on labour’s technical processes and social construction. The final working time, which the worker reproduces, is determined by the value of labour-power (the labour time required to produce it). The hours of surplus

labour can be considered as the number of working days minus the hours of labour required, and surplus value can only be obtained by setting workers' wages lower than the value of their labour. However, the reduction in the value of labour forces an increase in the productivity of labour. To enhance productivity, a revolutionary change in the labour process must reduce the labour time required to produce goods. Marx said that by doubling the productivity of labour, labours halve the time it takes to produce a commodity, and the individual value of the commodity leads to a reduction in its social value. The real value is not based on the labour time it takes for workers to produce a commodity, but on the labour time, it takes to produce it socially. Therefore, by producing goods with a higher personal value and a lower social value, the capitalist can obtain more surplus value which is satisfied by greater demand and a larger market (Marx, 1867).

According to Marx, hourly wages are measured by the direct duration of labour, whilst piece rates are measured by the quantity of product embodied by labour in a given time. However, some of the irrationalities of this form of wage are what he calls "the most fruitful source of reductions of wages and capitalistic cheating". First of all, the quality of the labour, or in other words the average perfection of the product is essential to get paid in full under the piece-rate system. Furthermore, if the worker is not able to deliver the amount of output that should be achieved under the hourly system, he or she will be dismissed. Moreover, according to Marx, piece-rate wages give rise to a new "parasite", the middleman, which causes the problem of "subletting of labour". For instance, in the manufacturing industry, the middleman is the foreman, and the profits of these middlemen are based on the contractual agreement between the capitalist and the foreman, who gives the foreman a piece-rate wage and takes over the collection and payment of the auxiliary workers. The difference between this piece rate and the wages paid by the foreman to the workers creates actual exploitation. With traditional hourly wages, the same wages apply to essentially the same type of work, whereas, with piece-rate wages, the compensation for hours worked is based on the amount of product produced, but varies from worker to work on an individual basis. The compensation for the time worked is calculated from the average supply of the product of the whole workplace during the given working hours, which is the average wage for the industrial sector. This average wage may increase

the individual's income, but it may also do the opposite. On the other hand, the ratio between the wage and the surplus value does not change because the mass of surplus labour corresponds to the actual wage (Marx, 1867).

c) Neo-Marxism Economics

Neo-Marxism economists, such as Paul Baran and Paul Mattick, modified a Marx version of the value creation system by adding their theoretical perspective in line with new theoretical development in mainstream economics or Keynesian economics. According to Paul Baran, there are two types of surplus values, namely actual surplus value and potential surplus values. He claimed that mainstream economics would equate actual surplus value as a difference between national production and consumption. However, for Baran, the potential surplus value is more important than the actual one. He defined the potential surplus value as a difference between potential output and essential consumption. He has a critical view on wasteful consumption which Keynesian economists see as beneficial (Baran, 1957).

On the other hand, Paul Mattick claimed that there is little discrepancy between use-value and exchange-values in a “pure” capitalist economy with a weak state- intervention. The discrepancies would be diminished by a prolonged depression which would restore the “dynamic equilibrium”. However, he asserted that there would be a considerable discrepancy in use-value and exchange-value in a “mixed” economy with a strong state intervention which the Keynesian economist sees as a useful tool to stimulate a prolonged economic depression. In a mixed economy, there would be no restoration of the “dynamic equilibrium” because there is a growing trend of social production without taking into account profit (Mattick, 2020).

LITERATURE REVIEW

The literature review consists of three sub-sections. The first sub-section refers to the concept of the gig economy and recent research trends. The second sub-section reviews research on value creation in the context of the gig economy. The third sub-section discusses the relationship between gig workers and customers in the gig economy. Through the literature review,

it was found that there is very limited previous research that relates surplus value to the gig economy in the second sub-section and that focuses on the relationship between gig workers and customers in the third sub-section.

Overview of the Gig Economy

The gig economy refers to a market where firms use internet platforms and mobile apps to match service providers and consumers on a task basis (Donovan et al., 2016). That form of employment differs from the traditional long-term relationship between employer and worker, in which the worker is an independent contractor who only completes specific tasks at specific times under a flexible work contract (Friedman, 2014). The basic structure of the gig economy can be discussed from a triangular relationship consisting of the service provider (gig worker), the end-user receiving the service, and the platform that mediates between the two actors (Stewart & Stanford, 2017; Lao, 2017) (Figure 1). Gig workers provide efficient and flexible labour through online platform technology in line with the demands of end-users registered on the platform and receive task-based remuneration (Lao, 2017; Donovan et al., 2016). On the other hand, platform firms act as intermediaries between workers and customers, but shift responsibility for the customer experience to the worker (Roy-Mukherjee & Harrison, 2020). The specific interactions between gig workers and customers are discussed in a later section.

Contrary to the attention paid to the gig economy, its conceptual consensus is scattered as some scholars describe similar concepts as the same phenomena. However, it is necessary to capture the essence of the gig economy, as the mixture of several similar concepts often greatly complicates the discussion. Koutsimpogiorgos et al. (2020) classify the contentious issues of the gig economy from a narrow perspective into four dimensions: online and hybrid (online and offline service), employees or independent contractors, paid or unpaid, and goods or services. Görög (2018) finds a common denominator between the gig economy and the on-demand economy from a terminological perspective. It summarises the two economic concepts as flexible labour (gig economy) such as independent contractors and freelancers working on a task basis who undertake online platform-based immediate access goods and services needs (on-demand economy). The sharing economy is also regarded

as a mixed concept with the gig economy and on-demand economy (Tassinari, & Maccarrone, 2017). Although the sharing economy is similar to the gig economy and the on-demand economy as all rely on online platforms, it is characterised by surplus value through the sharing of intangible and tangible assets (Kumar et al., 2018) and peer-to-peer transactions (Schlagwein et al., 2020). In light of the above, it must be understood that the gig economy overlaps with the concept of the sharing economy when there is a temporary provision of intangible assets, specific services and skills by workers.

Research on the gig economy tends to focus on the gig worker due to its unique and innovative labour characteristics. Supporters of the gig worker argue that there is an alignment of needs between both clients and workers for flexible working relationships, whilst sceptics are concerned about the low wages of gig workers and the lack of a social security system (Koutsimpogiorgos et al., 2020).

Value Creation in the Gig Economy

Although scholars discuss surplus value in the gig economy (Gandini, 2019), it is limitedly discussed in terms of the systematic applicability of the theory of value creation to the context of the gig economy and its fairness. According to Roy-Mukherjee et al (2020), surplus value in the gig economy is created by capitalists using the value created by the material production and services of gig workers as collateral to build platform structures, which are then used for the platform's profits. The problem of surplus value in the gig economy can be addressed through a critical analysis of the problems of salaries and guarantees created by a business model that moves within the boundaries of capitalism (Roy-Mukherjee et al., 2020). Furthermore, Roy-Mukherjee et al (2020) argue that there is a clear difference in the power relations between the gig workers and the platform that comprises the gig economy. Firstly, it is related to the change in traditional working hours. As flexible task-based working patterns have allowed for shorter working hours and 24-hour working, the platform allows for the simplified extension of working hours and maximises the appropriation of surplus value. In particular, gig workers lose their labour independence and flexibility when their gig work is their only source of income, and they voluntarily extend the

time they commit online, resulting in absolute surplus value to the platform (Wu et al., 2019). Furthermore, the incentive pay system associated with the platform's customer evaluation system is also indirectly included in the cycle of absolute surplus value for the platform (Wu et al, 2019). Secondly, there is a lack of employment relations and guarantee systems. Due to regulatory ambiguity in the gig economy, gig workers are not guaranteed a minimum wage (Prassl & Risak, 2016) or insurance coverage (Donovan et al., 2016), whilst platforms can impose restrictions on account creation and work for competitors. (Koutsimpogiorgos et al., 2020). In the gig economy, and in particular in the on-demand via app form of triangulation, the platform firm acts as an intermediary between the gig worker and the customer, but the actual service is performed by the offline operation between the gig worker and the customer. As gig workers have to provide and pay for the capital to perform the service themselves, they can be considered both workers and capitalists. From the value creation theory perspective, the capitalist receives a share of the profits or surplus value created. However, the existing laws of human capital do not apply to the gig economy, and instead, platform firms are free to control these regulations to extract further surplus value (exploitation). Thus, although the long working hours which constitute the traditional absolute surplus value have been transformed into flexible working hours in the gig economy, the importance of the reproduction of the labour force to the same workers seems to be decreasing with the continuous supply of labour. On the other hand, relative surplus value in the gig economy is created by strategies to reduce transaction costs and market segmentation through effective algorithmic techniques of platforms to match gig workers with consumers (Wu et al., 2019).

Concerning addressing the issue of platform-side exploitation, Frenken et al (2020) consider it in the context of the legal status of gig workers. They argue that based on the traditional employment relationship, wages are decided by collective bargaining and the gig worker is freed from the control of the labour force by the platform. After that, they would be regarded as a protected platform employee under labour law and entitled to social protection. Frenken et al (2020) highlighted that the Danish household cleaning platform, Hilfr has a union agreement that changes the status to employee protected by labour law (from freelance to employee status after more than 100 hours of work

in the new workforce) and introduces social protection schemes including “pension contributions, holiday pay and sickness benefits”. However, most platforms would not be able to agree on the establishment of these schemes, as such collective agreements would lead to gig workers gaining surplus value, whilst the total surplus value rate of the platform would be reduced (Frenken et al., 2020). At the same time, this trend will harm platform firms that have grown by passing on economic burdens such as wages and labour costs to their workers (Friedman, 2014).

Customer-Worker Relationships in the Gig Economy

In the gig economy, especially in the case of app-based services, platform firms are only responsible for connecting workers and customers online, with appropriate service quality and pricing as the actual service takes place offline (Stewart & Stanford et al., 2017; De Stefano, 2015), the time of direct engagement between workers and customers is longer than in crowdwork. These offline transactions and app-based services create several ways for customers to engage directly and indirectly with gig workers.

It is important to emphasise here that consumers have the potential to orientate themselves towards better working conditions for gig workers (Healy et al., 2020). In fact, whilst consumers are positive about the non-monetary benefits of gig workers, such as flexibility and labour market benefits, the mechanisms through which these sentiments emerge are not often considered. This is because these mechanisms are obscured by consumers’ deliberate ignorance of gig workers’ working conditions (Healy et al., 2020; Smith et al., 2020). However, as the main actors in the gig economy, customers could contribute to the empowerment of gig workers directly and indirectly in several ways. This paper has identified four actions that can be taken by customers accessing the four gig economy platforms below.

(a) Rating Systems/Feedback

Since many gig economy platforms employ a feedback evaluation system between workers and consumers, this system may add an element of emotional labour to the service and increases the likelihood of greater mutual awareness (Gandini, 2019). As the traditional managerial prerogative of supervision is

partially delegated to the customer as the five-star rating system taken by e-hailing firms such as Uber and Lyft, the worker's service quality is constantly tracked, monitored and evaluated as customer satisfaction (Aloisi, 2015; Witt et al., 2015). It can be said that customer is directly related to keeping the quality of the gig worker because the platform can stop that gig worker's access to the platform if the customer's service falls below a certain level (Aloisi, 2015). Therefore, person-to-person feedback from customers and gig workers, especially through apps based on peer-to-peer operations, can motivate and improve gig workers and may have a positive impact on the service (Kost et al., 2020). Customer online ratings are suitable for providing feedback reliably and efficiently, and it is useful for customers to have a visual representation of the service experience of previous users during the comparison phase before using the app (Alalwan, 2020). On the other hand, Witt et al. (2015) highlighted that the simplicity of the system that both consumers and drivers rate each other lacks transparency. As a result, this has provoked frustration from both sides, as it is unclear how fair the rating system is and how much manual involvement apps have in the system (Witt et al., 2015).

In reality, platforms can control the hierarchy of gig workers at a low cost by giving customers the right to monitor and discipline them with the customer rating system behind them to maintain a high quality of service (Wu et al., 2019). If gig workers receive low ratings or are disciplined, their dissatisfaction will be directed at the customer. Therefore, the reality of the information asymmetry of customers, who are forced by platforms to evaluate workers and do not understand the reality of workers should be considered. As offline services in the gig economy are complex, further research is needed to explore these mechanisms.

(b) Word of Mouth

Various studies have shown that Word of mouth (WOM) is more likely to positively or negatively influence people's attitudes, perceptions, attitudes, behavioural intentions and actions than other sources of information or report that marketers have (Buttle, 1998). In relation to the word-of-mouth process, Arndt (1967) states that favourable word-of-mouth increases the probability of purchase, whilst unfavourable comments decrease it. Furthermore, the word-of-mouth process among prospective users can be seen as a risk-reducing

collective action that seeks social support for the use or non-use of a service. Engel et al (1969) also emphasised that most users first became aware of the service through articles and mass media stories, but that actual use of the service was often based on the experiences of friends and relatives. In the current electronic age, WOM does not have to be face-to-face, direct, or verbal (Buttle, 1998), and word of mouth on platform services such as the gig economy has also incorporated ephemeral elements such as electronic word of mouth (eWOM) (King et al., 2014).

Alongside rating system/feedback, word of mouth (WOM) from consumers is an important factor in filtering contracts on platforms and gig workers (Sutherland & Jarrahi, 2017). In gig economy firms, word of mouth is seen as a form of branding, along with accessibility to technology (Chappa et al., 2017). However, there is limited empirical research on the relationship between word of mouth and consumers in gig economy firms. Lee & Wong (2021) studied the antecedents influencing word of mouth in the context of e-hailing. Their results showed that price consciousness, perceived usefulness, ease of use, safety risk, and customer value had a significant effect on word-of-mouth WOM, whilst personal innovativeness, subjective norms, and perceived privacy security had a marginal effect on WOM, and environmental consciousness had a negative effect on WOM. From the worker's perspective, Liu & Wayne Xu (2019) mentioned word-of-mouth can see as a social influential factor that directly can influence traditional taxi drivers to the adoption of e-hailing driver apps.

(c) Gig Workers' Working Conditions

Due to the nature of the gig economy, the focus has always been on industrial relations, so there is still a limited amount of previous research looking at the relationship between gig workers and customers. On the other hand, Healy et al. (2017) highlighted the need for a proper theorisation of the power relations between employers, gig workers, and consumers. According to them, as platform firms tend to accept requests with a fair voice, gig workers may be able to bring consumer solidarity into discussions about industrial relations. Particularly, platforms may be influenced by the naming of firms by customers (Healy et al., 2017). The fact that customers who use the gig economy platform are interested in social issues in gig workers can be seen in

the study by Belanche et al. (2021). Their study revealed that customers are aware of the unfair working conditions of gig workers (deliverers on online food delivery services) and that this awareness affected their preference to use the platform. Furthermore, the online platforms that are committed to improving the working conditions of their employees were more likely to encourage customers to use and recommend their food delivery services. This result clearly shows that the presence or absence of consumer use has the potential to make a certain contribution to the improvement of industrial relations on gig platforms. However, Smith et al. (2020) found that consumers of online food delivery had limited and inaccurate perceptions of workers' rights in gig work. Consumers were willing to pay more to improve gig workers' low wages, but this was unlikely to lead to sustained improvements in working conditions or the promotion of decent work. This study shows the limits of raising awareness for ethical consumption among consumers to solve a kind of social problem.

(d) Moral Awareness

Reynolds (2006) defines moral awareness as “the judgment by a person that a situation contains moral content and can legitimately be considered from a moral perspective”. This definition is based on two aspects to consider: the individual's initial perception of a moral issue, and whether the issue conflicts with one or more ethical issues (Reynolds, 2006). Butterfield et al. (2000) explained that problem-related factors and social context-related factors influence individuals' moral awareness. As a result, a lack of moral awareness inhibits the moral intentions and actions of normal consumers (Nielsen & McGregor, 2013). However, almost no research has addressed moral issues related to labour relations in the context of customers participating in the gig economy. Smith et al. (2020) show the limitations of consumers' ethical consumption as an actor in solving the social problems of the gig economy. According to their research on online food delivery services, customers' main moral motivation for using services is the quality and price of the service, and most consumers do not understand the rights of the delivery person and the wage issue properly. They are willing to pay more for a driver who understands this issue, but the social change brought about by the customer is small, as it has to start with spreading this moral awareness. As shown by the work of Gino et al. (2011), the depletion of resources for self-control undermines

moral awareness and reduces an individual's ability to recognize moral problems. Critically, in the gig economy, the lack of moral awareness of the customer worker's situation naturally leads to unethical choices, highlighting gig workers' working conditions.

CONCEPTUAL FRAMEWORK

Based on the previous sections, three processes were used to build a conceptual framework. First, the value creation process in a capitalist economy is depicted with two main surplus value creation means absolute surplus value creation and relative surplus value. Second, based on the first process, this study adopts the two surplus value processes to the concept of the gig economy (work-on-demand via app). Finally, the customer's potential effect to influence the industrial relations of the gig economy is presented as an analytical conceptual framework.

Step 1: Value Creation Process in the Capitalist Economy

i) Absolute Surplus Value: Extending Working Hours

The original purpose of capitalists is to generate and maximise absolute surplus value to extend as many labours' working hours as possible and finally receive benefits. It starts with the creation of absolute surplus value^① (ASV) from the workers' working time, which is labour not directly related to their wages. This value goes directly into their pockets as the profits of capital. In addition, the capitalist tries to extract the maximum surplus value by extending the working hours (WH) of the workers (Absolute Surplus Value^②). Therefore, the sum of ASV^① and ASV^② is the total amount exploited by the capitalists, and the exploitation rate can be calculated as $(ASV^{①} + ASV^{②}) / (\text{Necessary Labour})$. Figure 2 shows the entire mechanism of the absolute surplus value.

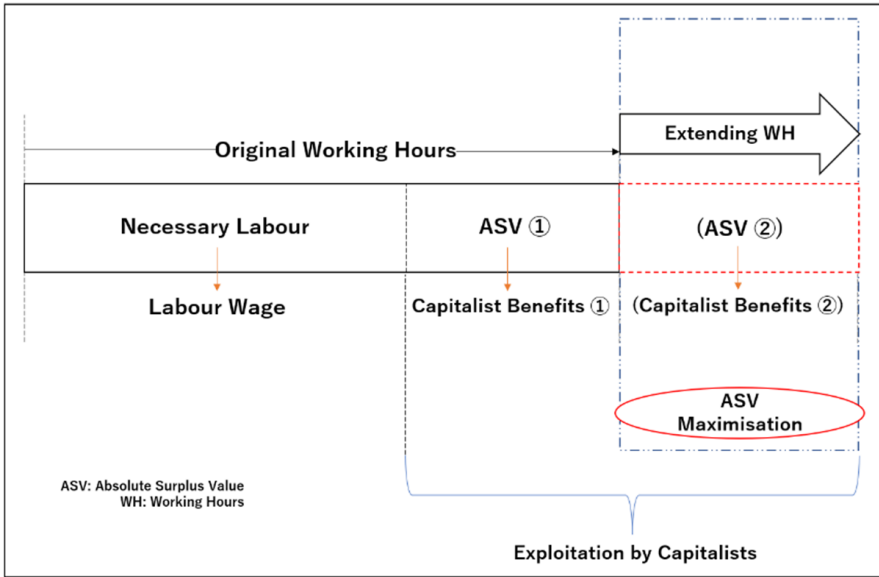


Figure 2 Absolute Surplus Value Creation Process

ii) Relative Surplus Value: Enhancing the Productivity of Goods

The increase in productivity such as the introduction of machinery reduces the required working hours and leads to the creation of surplus value (relative surplus value). In addition to the normal surplus value (RSV ①), the capitalist aims to maximise the RSV based on the priority of productivity improvement (RSV ②) and receives the sum of these as profit. Whilst the productivity of a product increases, the social value of the product decreases and then the amount of labour wage received by the worker is relatively reduced. Thus, the total amount of exploitation by the capitalist is expressed as $(RSV\textcircled{1}+RSV\textcircled{2})$ and the rate of exploitation can be calculated as $(RSV\textcircled{1}+RSV\textcircled{2})/(\text{Necessary Labour})$. Figure 3 explains the process of relative surplus value.

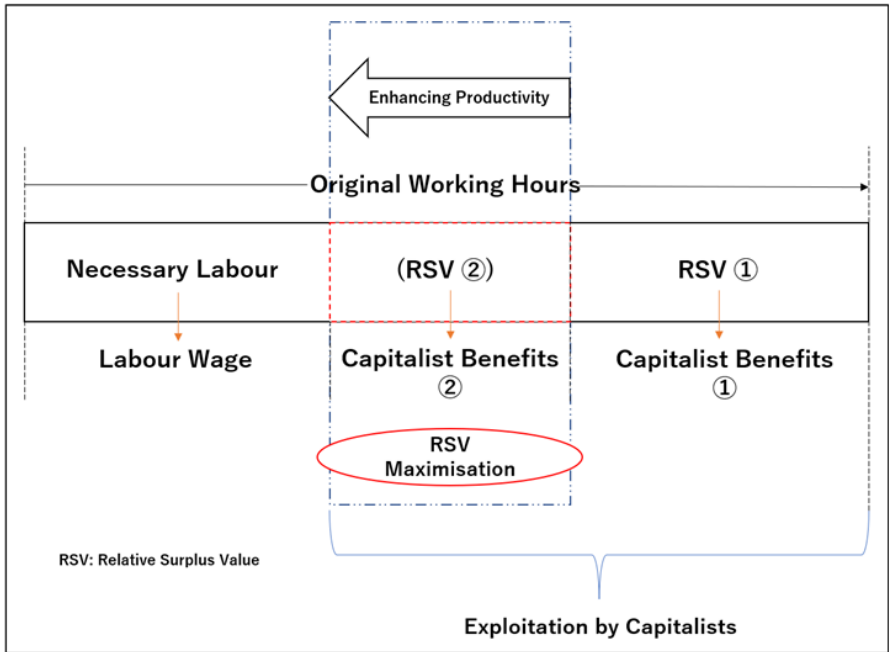


Figure 3 Relative Surplus Value Creation Process

Step 2: Surplus Value Creation Process in Gig Economy (Work On-Demand via app)

iii) Absolute Surplus Value: Extending Flexible Working Hours

The players in industrial relations in the gig economy have changed from capitalists to platforms and from workers to gig workers respectively. The purpose of the gig platform is to encourage gig workers to voluntarily extend their working hours in the context of flexible and free working hours. In other words, the platform system itself allows for a simple extension of working hours within unrestricted opening hours. The result is an increase in commissions, which is the platform's benefits ① and further benefits ② by maximising ASV. Furthermore, the platform indirectly induces the extension of working hours by setting up an incentive reward system for gig workers based on the customer evaluation system, which leads to the acquisition of ASV. On the other hand, the gig worker completes the task-based work within the working hours set by him/herself and earns the gig worker wage

②). The sum of that gig worker wage ① and the additional income from incentives (wage ②) will be their income. Since gig workers are mostly treated as independent workers because of the lack of social protection from the platform, they are in principle responsible for paying for the capital they use for their services. Therefore, the final wage is calculated by wage ① + wage ② - Offline Maintenance. In addition, if it considers that the platform commission plays the same role as the ASV, which aims to extend the working hours of gig workers, the surplus value ratio can be calculated by (Platform Commission + ASV) / (Gig Worker Wage ① + Gig Worker Wage ② - Offline Maintenance). Figure 4 illustrates the absolute surplus value in the gig economy.

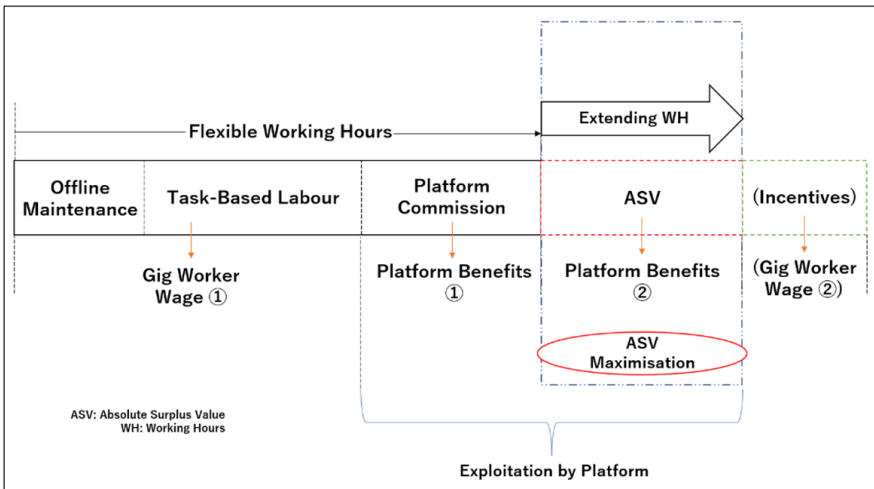


Figure 4 Absolute Surplus Value Creation Process in the Gig Economy

iv) *Relative Surplus Value: Enhancing Service Productivity and Efficiency*
 The creation of relative surplus value in the gig economy is maximised by minimising the costs incurred by the platform by increasing productivity through the efficient matching of gig workers and customers within flexible working hours based on the platform’s algorithmic technology. Although not mentioned in the previous study, the rating of gig workers by customers may create incentives, so that drivers may indirectly increase productivity through efficient service. Therefore, as also shown in Figure 3, the total wage of a gig worker is the task-based wage (wage ①) and the incentive (wage ②)

minus the off-line maintenance. On the other hand, platform benefits are the sum of commission (platform benefit ①) and platform benefits ② extracted from ASV. Furthermore, the relative surplus value ratio is determined by $(\text{Platform Commission} + \text{RSV}) / (\text{Gig Worker Wage } ① + \text{Gig Worker Wage } ② - \text{Offline Maintenance})$. Figure 5 describes the flow of relative surplus value in the gig economy.

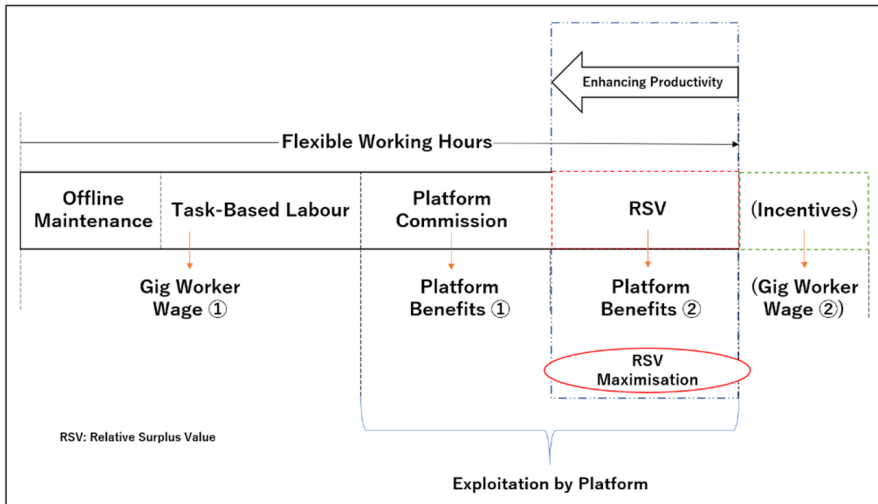


Figure 5 Relative Surplus Value Creation Process in the Gig Economy

CONCEPTUAL FRAMEWORK: CONSUMER POTENTIAL EFFECT TO INFLUENCE GIG ECONOMY LABOUR RELATIONSHIP

Based on the two steps above and the literature review, this conceptual framework describes the consumer potential to influence the gig economy labour relations between platform and gig worker from a customer-centric perspective (Figure 6). This framework will be justified by qualitative analysis and then modified into a quantitative framework in the later process. (See the methodology section). Customers have four items to consider about the gig worker in receiving offline service: rating systems/feedback, word of mouth, gig worker's condition, and moral awareness. Rating systems/Feedback is to evaluate customers and gig workers each other after the service completes. If the gig worker receives a high rating or positive feedback, it may lead to

the continuation of the service and incentives. Word of Mouth (WOM) is an important source of information for potential customers to choose to use a specific platform service based on consumer experiences and reviews of its service. The gig worker's condition is a measure of how well customers understand the gig worker's labour practices such as exploitation from the platform and social security issues. Moral awareness refers to the consumer's awareness that the situation of the gig worker is taken into account, rather than only pursuing self-interest (Smith et al., 2020). Furthermore, since offline services can be considered emotional labour, these four items can be promoted by gig workers.

Next, based on the literature review, this research classified the behaviour of potential customers against surplus value, in which consumers have the right to decide the platform (capitalist), into pattern A and pattern B. Pattern A is whether the customer is willing to pay more for the gig worker considering the four items, and finally whether the customer pays. Whilst this appears to complement the traditional wage as an additional fee or incentive for the gig worker on the surface, the risk of further exploitation of the platform (profit-sharing issues) may also need to be taken into account. On the other hand, pattern B suggests the possibility of choosing the proper platform to be used for ethical consumption. Customers may choose platforms that fulfil appropriate labour practices whereas they may not choose platforms that impose inappropriate forms of work on their workers. Realistically, the increased digital engagement power of customers due to lifestyle changes created by technological advances is making individuals more open to ethical choices (Ching et al., 2018). The four-item digital influence of the digital generation, especially the younger generation, will create a flow of civic engagement that will boost workers' empowerment without third-party intervention (Samsuddin et al., 2019). Thus, those platforms that are no longer used may be forced to change the labour practices of their gig workers to survive and may even further improve their labour practices. As a result, it will lead to a virtuous circle to stabilise the original gig economy triangular relationship.

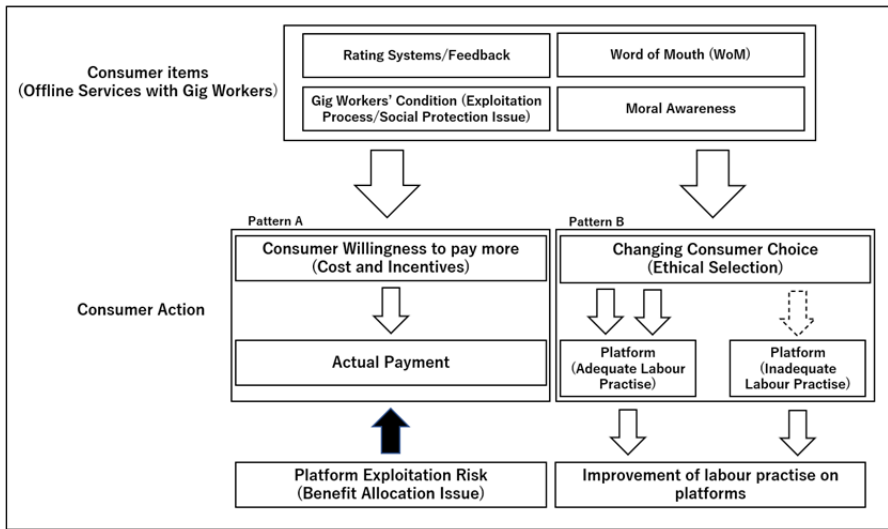


Figure 6 Conceptual Framework

FUTURE RESEARCH AGENDA

In order to operationalise this framework, further justification is essential. For future research, this section described the future research agenda. In future research, a mixed methods-case studies research design will be adopted. Guetterman & Fetters (2018) define it as an integrated design of mixed methods and the use of case studies for the qualitative component.

For the mixed method part, the sequential exploratory mixed method study is adopted. As described by Creswell et al. (2003), Sequential Exploratory Design consists of two phases: qualitative data collection and analysis (1) quantitative data collection and analysis (2) quantitative data collection and analysis, where the qualitative aspect is given priority. The quantitative research in this study is regarded as a follow-up phase to evaluate the elements of the framework that have been reconstructed through qualitative research and to generalise the results (Morgan, 1998). Creswell et al. (2003) emphasise that the advantages of this design are that it allows the development of new quantitative research tools through initial qualitative research in the exploration of the phenomenon, facilitates test administration, and simplifies subsequent description and reporting. This study will begin

with an investigation of the validity of the framework construction in terms of industrial relations and the degree to which the customer influences it, adapting the theory of value creation to the case of work-on-demand via app in the gig economy, based on the triangular relationships that constitute the gig economy (qualitative aspect). Once that justification will be validated, it will quantitatively analyse the degree to which customers influence industrial relations in the gig economy (quantitative aspect).

In the qualitative phase, considering the need to examine the practical adaptability of this research framework, this study will incorporate a multi-case study method examining multiple online platforms into the qualitative methodological process. The conceptual framework proposed by previous studies needs to be augmented with practical cases, as there is a clear lack of customer-centred discussion in terms of the gig economy (on-demand work via app). Once selecting the case firms, data will be collected through the in-depth interview and analysed by thematic analysis. The findings of this multi-case study can be used to refine the framework and lead to an efficient quantitative phase. In the quantitative phase, an online questionnaire survey will be conducted for the data collection and structural equation modelling (SEM) analysis will be used to test the questionnaire items. This assumes that the proposed conceptual framework will produce greater value and fuller understanding through the integration of the two forms of research (Guetterman et al., 2018).

In summary, the qualitative phase consists of theory building of a hypothetical hypothesis framework from case studies, followed by the translation of the assumptions and theoretical propositions into quantifiable measures, and then ensuring the validity and reliability of the framework through theory testing (Morse et al., 2006).

CONCLUSION

Based on the systematic literature review on the theory of value creation, this paper applies the concept of surplus value to the customer-worker relationship in the gig economy. The absolute surplus value created by the extension of working hours allowed the gig worker's flexible and free working hours to

naturally stay in the platform work in the gig economy. On the other hand, the relative surplus value generated by the quality and efficiency of the service is created by the platform's clever algorithmic manipulation and technology to allocate the maximum amount of work within flexible working hours. In addition, the incentives offered to drivers appear to be related to the creation of both types of surplus value. Next, this paper categorised the role of the customer to improve workers' working conditions in the customer-worker relationship in the gig economy into Pattern A and Pattern B and develops a conceptual framework with practical flows. Throughout the literature referring to customer-worker relations in the gig economy, this paper has identified four items from the customer perspective that may indirectly or directly influence industrial relations: rating systems/feedback, word of mouth, gig workers' condition, and moral awareness. These four items may lead to more costs being paid to gig workers, but at the same time, this increased cost may also lead to further exploitation of the platform (Plan A). On the other hand, the four factors may influence the choice of platform as an ethical choice for the customer. Specifically, consumers triggered by the four items may choose a firm that strives for proper labour relations with gig workers over a platform that promotes inappropriate treatment of gig workers (Plan B). Lifestyle changes created by technological advances have made customer digital engagement essential. The participation of the digital generation, especially young people, in the empowerment of workers may help to make the four items more efficient. The power of individual consumers would spontaneously generate local flows of civic action without the intervention of third parties (Samsuddin et al., 2019). As a result, this trend may potentially have a ripple effect that causes the entire industry to consider the proper treatment of gig workers. This framework is a benchmark study based on previous research to observe the potential of consumer actions under the gig economy triangular relationship. However, further research is necessary under the future research agenda to operationalise this conceptual framework.

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