

# Gig Economy in the Digital Age: Task Clarity, Technology Access, Social Support, Motivation, and Impact on Worker Performance

Titis Sri Wulan\*, Putri Ayu Permata Devi, Bambang Purwanto, & Yulianti

Politeknik PGRI Banten, Jl. Raya Cilegon KM 03, Drangong, Serang 42116, Indonesia

## Abstract

The rapid growth of the gig economy in Indonesia has transformed the nature of digital work, offering flexibility yet creating challenges related to job security and performance. This study aims to analyze the influence of task clarity, technology access, social support, and motivation on the performance of gig workers in Indonesia. A quantitative descriptive approach was used by distributing online questionnaires to 300 digital platform workers across the Greater Jakarta area. Data were analyzed using multiple linear regression after meeting the requirements of validity, reliability, and classical assumption tests. The results show that social support and motivation have a significant positive effect on performance, while task clarity and technology access show a positive but insignificant relationship. The findings indicate that psychosocial factors contribute more strongly to gig workers' performance than structural or technical aspects. These results imply that maintaining social connections and intrinsic motivation is crucial for sustaining productivity in flexible digital work environments. This study is limited to respondents in urban areas and does not include qualitative insights from workers' lived experiences. Future research is suggested to expand the sample across regions and integrate qualitative analysis to better understand the dynamics of digital labor in Indonesia.

*Keywords:* gig economy; task clarity; technology access; social support; motivation; performance

## 1. Introduction

Over the past decade, the gig economy has become one of the most significant transformations in the global employment landscape. More than 435 million people worldwide are now engaged in this sector, contributing over USD 400 billion to global GDP (World Economic Forum 2023). The value of the flexible labor market is projected to rise from USD 582.2 billion in 2025 to more than USD 2 trillion by 2034, with an annual growth rate of 15.7% (Business Research Insights 2025). Nevertheless, the flexibility of digital work also presents new challenges, such as income instability and limited social protection (International Labour Organization 2022). Several studies have shown that platform-based work systems indeed expand access to global job opportunities but fail to ensure long-term stability and well-being (Healy, Nicholson, and Pekarek 2020; Manyika et al. 2021; Wood et al. 2019). This situation indicates that the ongoing transformation in global work structures requires an in-depth examination of the technical and psychological factors influencing digital workers' performance, particularly in developing countries such as Indonesia.

The rapid advancement of digital transformation in Indonesia has also accelerated the expansion of the gig economy across various sectors, ranging from online transportation to creative services. Approximately 27% of informal workers are now involved in platform-based digital employment (BPS, 2023). Indonesia's digital economy value is even projected to reach USD 124 billion by 2025, making it the largest in Southeast Asia (Google, Temasek & Bain, 2022). However, behind this growth lie several structural challenges, including unclear work contracts, limited access to social protection, and technological disparities between regions (Naufal 2022; Nugroho 2024; Nurhadi and Sari 2023; Pratama 2024). These phenomena suggest that the dynamics of the gig economy in Indonesia not only reflect global trends but also embody local complexities that require a multidimensional approach to understand digital workers' performance (ILO, 2022; WEF, 2023). Therefore, the Indonesian context is particularly relevant for examining how digital economic factors and social welfare interact within platform-based work environments.

\* Corresponding author.

E-mail address: [titis@politeknikpgribanten.ac.id](mailto:titis@politeknikpgribanten.ac.id)

In the context of digital work, task clarity serves as a fundamental aspect that enhances efficiency and reduces role ambiguity. Role ambiguity has been proven to increase work stress and lower productivity (Kahn et al. 1964). A well-structured work system enhances focus, efficiency, and employees' sense of responsibility toward their output (Grant and Parker 2009; Parker, Bindl, and Strauss 2017). Moreover, access to technology—including digital devices, stable internet connections, and sufficient digital literacy—is a prerequisite for success in online work systems (Davis 1989; De Stefano 2016; Venkatesh et al. 2003). Social support, whether from coworkers or online communities, also plays a crucial role in alleviating psychological stress and strengthening emotional well-being (Bakker and Demerouti 2007; House 1981; Wood et al. 2019). Meanwhile, work motivation—both intrinsic and extrinsic—has a significant impact on performance quality and sustainability (Deci and Ryan 2000; Gagné et al. 2015). Thus, these four factors highlight the importance of maintaining a balance between structural clarity, technological support, and psychosocial conditions in improving gig workers' performance in the digital era.

Although flexible work systems offer numerous opportunities, most gig workers in Indonesia still face various structural and psychological barriers. Uncertainty in workload and limited access to technology have become common sources of stress among digital workers (Heeks 2021). In addition, limited social support and fluctuating motivation levels affect their stability and productivity (Rahmawati 2023; Yuliani 2019). These conditions emphasize that gig workers' performance is influenced not only by technical factors—such as task clarity and technology access—but also by psychological aspects related to social support and motivation (Bakker and Demerouti 2007; Davis 1989; Deci and Ryan 2000; House 1981; Venkatesh et al. 2003). Therefore, this study aims to simultaneously analyze the effects of task clarity, technology access, social support, and motivation on gig workers' performance in Indonesia, while underscoring the importance of balancing digital efficiency and human well-being in the future work ecosystem.

## 2. Literature Review

### 2.1. Gig Economy and Digital Jobs

The gig economy is a short-term project-based economic system mediated by digital technology, where workers offer services flexibly without the attachment of long-term contracts. This work model is characterized by time flexibility, individual independence, and dependence on digital platforms such as Gojek, Grab, Upwork, and Fiverr that mediate between service providers and consumers (Sundararajan 2016). The rapid growth of the gig economy is driven by advances in information technology and internet penetration that allow for disintermediation in the job market (Vallas and Schor 2020). On the other hand, while this system creates new economic opportunities, research shows that digital workers often face income uncertainty, lack of social protection, and algorithmic pressure in work management (Healy et al. 2020; Wood et al. 2019). In the context of developing countries like Indonesia, the gig economy is growing rapidly as the digital economy reaches a value of USD 124 billion by 2025 (Google, Temasek & Bain, 2022). Therefore, understanding the dynamics of digital work is important as a basis for examining the factors that influence the performance of gig workers in the era of technological transformation (De Stefano, 2016; ILO, 2022).

### 2.2. Task Clarity and Role Ambiguity Theory

Task clarity is an important aspect in determining work effectiveness and individual satisfaction. Based on Role Theory developed by (Kahn et al. 1964), role clarity refers to the extent to which individuals understand their responsibilities, procedures, and expectations. Role ambiguity can cause job stress, reduce commitment, and hinder organizational performance (Parker et al., 2017). In the context of digital work, task clarity helps workers understand instructions given through algorithmic systems that are often impersonal (Gray et al., 2019). Empirical studies show that increased task structure and clear feedback can reduce cognitive load and increase productivity (Grant & Parker, 2009; Bakker & Demerouti, 2007). Thus, task clarity not only strengthens work effectiveness but also acts as an important variable in maintaining the psychological balance of gig workers (House, 1981; Kahn et al., 1964).

### 2.3. Technology Access and Performance

Access to technology is one of the key determinants of successful digital work. Based on the Technology Acceptance Model (TAM) developed by (Davis 1989), acceptance of technology is influenced by two main factors: perceived ease of use and perceived usefulness. When workers have access to devices, stable internet networks, and good digital literacy skills, efficiency and performance tend to increase (Venkatesh et al., 2003). Recent research also shows that limited digital infrastructure in some regions hinders productivity and widens the digital economy gap (De Stefano,

2016; Heeks, 2021). In the context of the gig economy, adequate access to technology enables workers to interact effectively with algorithmic systems, manage tasks independently and maintain service quality (Nugroho & Yudhistira, 2021; Pratama, 2024). Therefore, improving digital infrastructure is key in strengthening the performance and sustainability of jobs in this sector (BPS, 2023).

#### 2.4. *Social Support in the Work Context*

Social support refers to the emotional, informational, and instrumental assistance that individuals receive from their social environment. Based on the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007), social support serves as an important resource that can reduce job stress and increase work engagement. In the context of digital work, which tends to be individualistic, social support acts as a balancing mechanism against psychological distress due to isolation and income uncertainty (Wood et al., 2019). (House 1981) study shows that individuals with high social support have better levels of job satisfaction and commitment. In addition, the existence of online worker communities such as "Garda" in Indonesia shows that social solidarity can strengthen the resilience and well-being of gig workers (Rahmawati, 2023; Yuliani, 2024). As such, social support can be considered a protective factor that contributes to improved job performance in a dynamic digital work environment (Anwarudin et al. 2022).

#### 2.5. *Motivation and Self-Determination Theory*

Work motivation is a psychological factor that determines the extent to which individuals strive to achieve goals and sustain performance over the long term. Based on Self-Determination Theory (SDT), motivation can be divided into two main forms, namely intrinsic motivation derived from personal satisfaction, and extrinsic motivation derived from external incentives (Deci & Ryan, 2000). Gig workers with high intrinsic motivation tend to show better initiative, creativity and resilience in the face of work challenges (Gagné et al., 2015). In contrast, extrinsic motivation such as bonuses or customer ratings are also important drivers in algorithm-based work systems (Parker et al., 2017; Venkatesh et al., 2003). Research shows that a combination of intrinsic and extrinsic motivation can increase work engagement and long-term commitment (Bakker & Demerouti, 2007; Rahmawati, 2023). Therefore, understanding the dynamics of motivation is important in optimizing the potential of gig workers in a competitive digital ecosystem (Yuliani, 2024; Deci & Ryan, 2000).

#### 2.6. *Gig Worker Performance*

Kinerja pekerja gig (job performance) mencerminkan kemampuan individu dalam menyelesaikan tugas sesuai standar yang ditetapkan oleh platform. Indikator utama kinerja dalam konteks digital mencakup ketepatan waktu, kualitas penyelesaian tugas, kepuasan pelanggan, serta peringkat (rating) dari pengguna layanan (Wood et al., 2019). Pekerja dengan tingkat kinerja tinggi cenderung mendapatkan peluang kerja lebih besar dan stabilitas pendapatan yang lebih baik (Healy et al., 2020; De Stefano, 2016). Penelitian menunjukkan bahwa faktor seperti kejelasan tugas, akses teknologi, dukungan sosial, dan motivasi saling berkaitan dalam memengaruhi produktivitas pekerja gig (Vallas & Schor, 2020; Naufal, 2022; Pratama, 2024). Dengan demikian, kinerja dalam konteks pekerjaan digital tidak hanya diukur dari hasil akhir, tetapi juga dari kemampuan pekerja beradaptasi dengan sistem kerja berbasis teknologi dan algoritma (ILO, 2022; WEF, 2023).

#### 2.7. *Hypotheses*

Although various studies have addressed the factors that influence performance in the gig economy, most studies still focus on one or two separate variables. Not many studies in Indonesia have comprehensively integrated task clarity, technology access, social support and motivation in one empirical model. In fact, these four factors have an interrelated role in shaping the performance of digital workers amid platform-based work dynamics (Heeks 2021; Naufal 2022; Nurhadi and Sari 2023; Pratama 2024; Yuliani 2019). Therefore, this research seeks to fill this gap by formulating the following hypothesis:

H1: Task clarity has a positive effect on gig workers' performance.

H2: Technology access has a positive effect on gig workers' performance.

H3: Social support has a positive effect on gig workers' performance.

H4: Work motivation has a positive effect on gig workers’ performance.

H5: Task clarity, technology access, social support, and work motivation simultaneously have a positive effect on gig workers’ performance.

### 3. Research Method

#### 3.1. Research Type and Approach

This study uses a descriptive quantitative approach with a survey method to analyze the effect of task clarity, technology access, social support, and motivation on gig worker performance. This approach was chosen because it is able to describe the relationship between variables objectively through numerical measurements. Primary data was collected using an online questionnaire, which allowed researchers to reach a population of gig workers spread across various digital platforms such as Gojek, Grab, Shopee, Upwork, and Fiverr. This survey design aligns with the research objective to test hypotheses through empirical data-based inferential analysis.

#### 3.2. Population and Sample

The population in this study is all gig workers in the Jabodetabek area, who have been active on digital platforms for at least the past year. Based on the estimated population of digital workers in the metropolitan area, a sample size of 300 respondents was determined to ensure the strength of statistical analysis. The sampling technique used was purposive sampling, with the following criteria:

- (1) active workers on digital platforms,
- (2) have a minimum of six months of work experience, and
- (3) have received at least 10 projects or orders in the online system.

This technique was chosen because it can ensure the relevance of respondents to the research context, as well as avoid

#### 3.3. Instruments and Data Collection

The research instrument was a closed questionnaire with a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) developed based on theory and indicators from previous research.

**Table 1. Research variables**

Variables	Operational Definition	Indicators	Source	Scale
Task Clarity (X1)	The level of clarity regarding roles, responsibilities and work expectations within the digital platform.	- Understanding work instructions- Role clarity- Performance evaluation	Kahn et al. (1964); Parker et al. (2017)	Likert 1–5
Technology Access (X2)	The ease with which workers can use digital tools and platforms to perform tasks.	- Digital device access- Internet connection- Digital literacy	Davis (1989); Venkatesh et al. (2003)	Likert 1–5
Social Support (X3)	Emotional, informational or instrumental support from colleagues and the work community.	- Peer support- Community support- Organizational support	House (1981); Bakker & Demerouti (2007)	Likert 1–5
Motivation (X4)	Internal and external encouragement in performing gig work.	- Intrinsic motivation- Extrinsic motivation- Job satisfaction	Deci & Ryan (2000); Gagné et al. (2015)	Likert 1–5
Performance (Y)	Gig workers' work outcomes based on effectiveness and efficiency of task completion.	- Timeliness- Customer satisfaction- Task completion	Wood et al. (2019); Healy et al. (2020)	Likert 1–5

Data were collected online through Google Form, with validity and reliability tests using SPSS version 25. The questionnaire was declared valid if the Corrected Item-Total Correlation value was > 0.30 and reliable if the Cronbach's Alpha value was > 0.70, according to the standards of empirical social instruments.

### 3.4. Data Analysis Technique

Data were analyzed using descriptive and inferential statistical approaches. Descriptive analysis was used to describe the characteristics of respondents and data distribution. Prior to regression analysis, a classical assumption test was conducted which included normality, multicollinearity, and heteroscedasticity tests.

Furthermore, to test the hypothesis, multiple linear regression analysis is used with the following equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Description:

- Y = Gig worker performance
- X<sub>1</sub> = Task clarity
- X<sub>2</sub> = Access to technology
- X<sub>3</sub> = Social support
- X<sub>4</sub> = Motivation
- β<sub>0</sub> = Constant
- β<sub>1</sub>-β<sub>4</sub> = Regression coefficient
- e = Error term

The t test is used to determine the partial effect of each independent variable on performance, while the F test is used to test the simultaneous effect of all independent variables. The R<sup>2</sup> value is used to see how large a proportion of the variation in gig worker performance can be explained by task clarity, access to technology, social support, and motivation.

## 4. Results and Discussions

### 4.1. Results

The study involved 300 gig workers operating in the Greater Jakarta area, consisting of 167 women (55.7%) and 133 men (44.3%). Most respondents were aged 17-25 years old (21.3%), indicating the dominance of the younger generation in digital work. Based on education level, 31.3% are S1 graduates, while the rest are dominated by high school and D3 graduates.

**Table 2.** Characteristics of respondents

Characteristics	Dominant Category	Percentage (%)
Gender	Female	55.7
Age	17-25 years old	21.3
Education	S1	31.3
Length of Service	> 2 years	38.0
Platform	Fiverr	13.0
Working Days	3-4 days/week	27.0
Income	Rp500,000-Rp999,999	15.3

In terms of work experience, 38% of respondents have worked for more than two years, indicating a high level of adaptation to the digital work system. The most frequently used platform is Fiverr (13%), followed by Upwork (11.7%) and ShopeeFood (9.7%), with an average working time of 3-4 days per week (27%). Most workers earn Rp500,000-Rp999,999 per month (15.3%), and the majority reside in South Tangerang (20%).

Descriptive analysis was used to understand respondents' perceptions of the five research variables: task clarity (X<sub>1</sub>), technology access (X<sub>2</sub>), social support (X<sub>3</sub>), motivation (X<sub>4</sub>), and performance (Y).

The analysis showed that all variables had an average score above 3.5, indicating a positive perception of each aspect. The highest score was for motivation (4.03) and the lowest score was for social support (3.77).

**Table 3.** Descriptive Statistics of Research Variables

Variable	Average	Category
Task Clarity (X <sub>1</sub> )	3.99	Good
Technology Access (X <sub>2</sub> )	3.86	Good
Social Support (X <sub>3</sub> )	3.77	Good
Motivation (X <sub>4</sub> )	4.03	Very good
Performance (Y)	3.86	Good

These results indicate that gig workers have a clear understanding of their roles and responsibilities, supported by adequate access to technology. However, relatively lower social support indicates limitations in social interaction due to the individualistic and project-based nature of the work. This provides an important basis for understanding how psychosocial aspects play a role in supporting digital workers' performance.

**Table 4.** Validity and Reliability Test Results

Variable	Cronbach's Alpha	Description
Task Clarity (X <sub>1</sub> )	0.951	Reliable
Technology Access (X <sub>2</sub> )	0.951	Reliable
Social Support (X <sub>3</sub> )	0.950	Reliable
Motivation (X <sub>4</sub> )	0.950	Reliable
Performance (Y)	0.953	Reliable

Based on table 4 above, all question items show the value of  $r_{count} > r_{table}$  (0.112), so they are declared valid. The reliability test results in a Cronbach's Alpha value between 0.950-0.953, indicating that all instruments have high internal consistency and are reliable. These results indicate that the questionnaire used in the study has a very good level of reliability, so further analysis can be carried out with the confidence that the data represents the actual conditions in the field.

The normality test using Kolmogorov-Smirnov resulted in a significance value of 0.054 ( $> 0.05$ ), which means that the data is normally distributed. The multicollinearity test shows  $VIF < 10$  and  $Tolerance > 0.10$ , while the heteroscedasticity test shows a random dot pattern on the scatterplot, indicating no symptoms of heteroscedasticity. Thus, the regression model fulfills all classical assumptions and is suitable for use in multiple regression analysis.

Multiple linear regression tests were conducted to determine the effect of task clarity, technology access, social support, and motivation on gig worker performance.

**Table 5.** Multiple Linear Regression Test Results

Independent Variables	Coefficient (B)	t-count	Sig.	Description
Task Clarity (X <sub>1</sub> )	0.060	0.770	0.442	Not Significant
Technology Access (X <sub>2</sub> )	0.142	1.633	0.103	Not Significant
Social Support (X <sub>3</sub> )	0.233	3.067	0.002	Significant
Motivation (X <sub>4</sub> )	0.194	2.730	0.007	Significant

The regression equation is obtained as follows:

$$Y = 14.176 + 0.060X_1 + 0.142X_2 + 0.233X_3 + 0.194X_4 + e$$

The coefficient of determination ( $R^2 = 0.414$ ) indicates that the four independent variables simultaneously explain 41.4% of the variation in gig worker performance, while the remaining 58.6% is influenced by other factors outside the model, such as time flexibility, platform policies, or customer rating algorithms.

#### 4.2. Discussions

The results of this study show that social support and motivation have a positive and significant influence on gig workers' performance, while task clarity and technology access, although positive, are not statistically significant. These findings provide new insights into the dynamics of work in the gig economy ecosystem in Indonesia, where psychosocial factors appear to determine performance more than technical factors. This confirms that the success of gig workers is not solely determined by the extent to which they understand tasks or master technology, but rather by their social and psychological ability to adapt to a flexible digital work system.

The insignificant effect of task clarity on performance suggests that gig workers have become accustomed to operating in working conditions full of ambiguity and without a rigid organizational structure. In project-based work systems, role ambiguity is often not considered an obstacle, but rather a space for autonomy and creativity. These results differ from the predictions of Role Ambiguity theory (Kahn et al., 1964), but are consistent with the findings of Wood et al. (2019) and Heeks (2021) which explain that digital workers tend to adjust to role uncertainty because they have greater control over time and how to work. Therefore, in the context of the gig economy, task clarity is not the main determinant of performance, but rather an individual's ability to manage role ambiguity and interpret instructions independently.

Similarly, access to technology was found to have no significant effect on performance. This finding contradicts the assumptions of the Technology Acceptance Model (Davis, 1989; Venkatesh et al., 2003) which predicts that ease of use and access to technology increases productivity. However, this result can be explained by the level of homogeneity of technology access among gig workers. Most respondents already have digital devices and adequate connectivity, so technology access is no longer a performance differentiator. At this stage of digital economy maturity in Indonesia, technology has become a basic infrastructure, no longer the main productivity driver. Similar results were also found in the research of (Adisa, Gbadamosi, and Osabutey 2022) which shows that when technology adoption has been evenly distributed, performance differences are mostly determined by human factors, not the devices used.

In contrast, social support was shown to have a significant influence on gig workers' performance. These results reinforce the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007), which emphasizes that social resources can reduce psychological distress and increase work commitment. In the context of the gig economy, which is often characterized by social isolation and job uncertainty, the existence of online work communities, family support, and peer networks play a major role in maintaining emotional balance and morale. This research is in line with Wood et al. (2019) and Li & Hsieh (2021) who assert that positive interpersonal relationships and social support contribute directly to increasing digital workers' satisfaction and productivity. Thus, in work systems without formal organizational structures, social support becomes an important substitute for traditional supervisory functions.

In addition to social support, motivation also has a significant effect on gig workers' performance. This result is consistent with the Self-Determination Theory (SDT) proposed by (Deci and Ryan 2000), which explains that intrinsic (such as a sense of achievement and autonomy) and extrinsic (such as incentives and recognition) motivations are the main drivers of work productivity. In a flexible and minimally supervised work environment, gig workers rely on personal motivation to maintain discipline and quality of work output. Research by Gagné et al. (2015) and Pratama (2024) also show that intrinsic motivation has long-term effects on individual satisfaction and performance in the context of digital work. Thus, it can be concluded that in the gig economy, motivation serves as an internal energy that ensures the sustainability of productivity in the midst of an autonomous work system.

Simultaneous tests show that all four variables - task clarity, technology access, social support and motivation - together have a significant effect on performance. This suggests that although not all variables are partially significant, the combination of technical and psychosocial aspects has a strong impact on gig worker performance. This finding supports the results of (Parker et al. 2017) and Gajendran & Harrison (2022), which emphasize that optimal productivity emerges when the work environment is able to integrate technology, task structure, social

support, and individual motivation. In the context of this study, such integration reflects the need for a balance between digital efficiency and human well-being in the era of platform-based work.

Conceptually, the results of this study expand the understanding of the application of JD-R and SDT theories in the context of the gig economy in developing countries such as Indonesia. Psychosocial factors are shown to play a more prominent role than technical factors, confirming that digital workers' performance is not only the result of technological capabilities, but also of social support and motivational forces that sustain their mental well-being. From a practical perspective, this research provides implications for digital platform managers to not only focus on improving technology and work algorithms, but also build ecosystems that strengthen community solidarity, provide spaces for social interaction, and create reward mechanisms capable of maintaining long-term work motivation.

Nevertheless, this study has some limitations. The scope of the study only covers the Jabodetabek area, so the results cannot be generalized nationally. This study also used a cross-sectional design that does not capture the dynamics of changes in motivation or social support over time. In addition, the use of perception-based questionnaires may lead to subjective bias from respondents. However, this study has the advantage of integrating technical and psychological dimensions in one empirical model with a representative sample size, making a theoretical contribution to the study of digital human resource management in Indonesia.

Overall, the results of this study confirm that psychosocial factors have a dominant role in shaping gig workers' performance, while technical factors serve as supporting elements. An important implication of these findings is the need for management strategies that balance digital efficiency with the strengthening of workers' psychological well-being. Thus, this research contributes to efforts to build a gig economy ecosystem that is not only productive, but also humane and sustainable.

## 5. Conclusion

This study shows that in the context of the gig economy in Indonesia, psychosocial factors are more influential on worker performance than technical factors. Social support and motivation were found to have positive and significant effects, while task clarity and technology access, although positive, were not significant. Simultaneously, all four variables contributed to improved performance, emphasizing the importance of balancing digital efficiency and psychological well-being. The success of the gig economy is not only determined by technological sophistication, but also by the ability of the digital ecosystem to strengthen social support and maintain worker motivation. Therefore, the management of gig workers needs to be directed towards creating an adaptive, inclusive and human well-being-oriented work environment to achieve sustainable productivity in the digital economy era.

## Acknowledgements

The authors would like to express their deepest gratitude to all gig workers who willingly participated and devoted their time to this research. Special thanks are extended to the research assistants who contributed to the data collection and statistical analysis processes, ensuring the successful completion of this study. The authors also wish to convey sincere appreciation to academic mentors and colleagues for their constructive feedback that significantly improved the quality of this manuscript. Heartfelt gratitude is also directed to the Directorate of Research and Community Service (DPPM), Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, for the support and facilitation provided during the implementation of this research. Finally, the authors would like to thank their families and all individuals who, in various ways, offered encouragement, motivation, and moral support throughout the completion of this scholarly work.

## References

- Adisa, T. A., G. Gbadamosi, and E. L. C. Osabutey. 2022. "Remote Working and Employee Performance in the Digital Economy: A Moderated Mediation Model." *Journal of Business Research* 145:573–84.
- Anwarudin, Anwarudin, Widyastuti Andriyani, Bambang Purnomosidi Dp, and Dommy Kristomo. 2022. "The Prediction on the Students' Graduation Timeliness Using Naive Bayes Classification and K-Nearest Neighbor." *Journal of Intelligent Software Systems* 1(1):75. doi:10.26798/jiss.v1i1.597.

- Bakker, A. B., and E. Demerouti. 2007. "The Job Demands–Resources Model: State of the Art." *Journal of Managerial Psychology* 22(3):309–28.
- Business Research Insights. 2025. *Global Gig Economy Market Size Report 2025–2034*. Business Research Insights.
- Davis, F. D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." *MIS Quarterly* 13(3):319–40.
- De Stefano, V. 2016. "The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowdfork, and Labor Protection in the Gig Economy." *Comparative Labor Law & Policy Journal* 37(3):471–504.
- Deci, E. L., and R. M. Ryan. 2000. "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior." *Psychological Inquiry* 11(4):227–68.
- Gagné, M., J. Forest, M. Vansteenkiste, L. Crevier-Braud, A. Van den Broeck, A. K. Aspel, and J. Bellerose. 2015. "The Multidimensional Work Motivation Scale: Validation Evidence in Seven Languages and Nine Countries." *European Journal of Work and Organizational Psychology* 24(2):178–96.
- Grant, A. M., and S. K. Parker. 2009. "Redesigning Work Design Theories: The Rise of Relational and Proactive Perspectives." *Academy of Management Annals* 3(1):317–75.
- Healy, J., D. Nicholson, and A. Pekarek. 2020. "Platform Capitalism and the Gig Economy: Dimensions of Contested Work Relations." *Economic and Industrial Democracy* 41(3):785–806.
- Heeks, R. 2021. *Digital Economies and Development: The New Digital Transformation Agenda*. Abingdon: Routledge.
- House, J. S. 1981. *Work Stress and Social Support*. Reading, MA: Addison-Wesley.
- International Labour Organization. 2022. *Digital Labour Platforms and the Future of Work: Towards Decent Work in the Online World*. Geneva: ILO.
- Kahn, R. L., D. M. Wolfe, R. P. Quinn, J. D. Snoek, and R. A. Rosenthal. 1964. *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: Wiley.
- Manyika, J., S. Lund, J. Bughin, K. Robinson, J. Mischke, and D. Mahajan. 2021. *Independent Work: Choice, Necessity, and the Gig Economy*. McKinsey Global Institute Report.
- Naufal, A. 2022. "Tantangan Dan Peluang Pekerja Gig Di Indonesia: Analisis Ketenagakerjaan Berbasis Platform." *Jurnal Ekonomi Dan Ketenagakerjaan Digital* 5(2):55–67.
- Nugroho, Listyanto Aji. 2024. "Exploring Research Trends of ChatGPT in Education Through Bibliometric Analysis." *Scholaria: Jurnal Pendidikan Dan Kebudayaan* 14(2):98–106. doi:10.24246/j.js.2024.v14.i2.p98-106.
- Nurhadi, A., and N. F. Sari. 2023. "Digital Inequality and Social Protection Gaps among Gig Workers in Indonesia." *Jurnal Sosial Dan Ekonomi Digital* 7(2):101–17.
- Parker, S. K., U. K. Bindl, and K. Strauss. 2017. "Making Things Happen: A Model of Proactive Motivation." *Journal of Management* 43(5):1348–78.
- Pratama, R. 2024. "Intrinsic Motivation and Work Performance among Indonesian Freelancers: A Self-Determination Perspective." *Indonesian Journal of Digital Work Studies* 3(1):21–35.
- Rahmawati, S. 2023. "Burnout and Job Satisfaction among Online Platform Workers in Indonesia." *Jurnal Psikologi Industri Dan Organisasi* 9(3):123–34.
- Sundararajan, A. 2016. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. Cambridge, MA: MIT Press.
- Vallas, S., and J. B. Schor. 2020. "What Do Platforms Do? Understanding the Gig Economy." *Annual Review of Sociology* 46:273–94.
- Venkatesh, V., M. G. Morris, G. B. Davis, and F. D. Davis. 2003. "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly* 27(3):425–78.

- Wood, A. J., M. Graham, V. Lehdonvirta, and I. Hjorth. 2019. “Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy.” *Work, Employment and Society* 33(1):56–75.
- World Economic Forum. 2023. *The Future of Jobs Report 2023*. Geneva: World Economic Forum.
- Yuliani, Yuliani. 2019. “The Effect of Financial Knowledge on Financial Literacy With Mediated by Financial Behavior in Society of Palembang City South Sumatera.” *Mix Jurnal Ilmiah Manajemen* 9(3):421. doi:10.22441/mix.2019.v9i3.003.