THE INFLUENCE OF GAMIFICATION ON MOTIVATION AND PERFORMANCE: EVIDENCE FROM GRAB DRIVER PARTNERS

Dina Septiani[1]
Universitas Swadaya Gunung Jati, Cirebon, Indonesia
dinaseptiani76@gmail.com

Mia Sriwidiyani[2]
Universitas Swadaya Gunung Jati, Cirebon, Indonesia
miasriwidiyani28@gmail.com

Sandi Nasrudin Wibowo[3]
Universitas Swadaya Gunung Jati, Cirebon, Indonesia
sandi.nwibowo@ugj.ac.id

Abstract

This study aims to analyze the influence of gamification on Grab driver partner motivation and performance and to test the role of motivation as a mediating variable. This study complements the literature related to the influence of gamification in the context of the digital economy in Indonesia, especially in the transportation sector, which is still rarely studied. The research method used is quantitative by distributing questionnaires to 256 Grab driver partners selected by purposive sampling. Data analysis uses Structural Equation Modeling (SEM) on Smartpls 4 software to test the relationship between variables. The results of the study indicate that gamification has a positive and significant influence on driver partner motivation and performance. Motivation is also proven to have a significant influence on performance while mediating the relationship between gamification and performance, although the mediation influence is relatively weak. These findings enrich the discussion on gamification in the transportation service sector and show that the right implementation of gamification can be an influenceive strategy to improve Grab driver partner motivation and performance.

Keywords: Gamification, Motivation, Performance, Driver Partner, Grab

INTRODUCTION

The digital transformation of the gig economy has opened up new opportunities for workers in various sectors, including online transportation services. As the largest ride-hailing company in Indonesia, Grab continues to grow by leveraging technology to provide efficient and flexible transportation services to the public. Online transportation services in Indonesia have shown rapid growth, with Grab recording a 36% increase in mobility service revenue, reaching US$869 million in the fourth quarter of 2023. The largest contribution came from online taxi and online motorcycle taxi services, which saw an increase of up to 28% with a gross transaction value (GMV) of US$1.47 billion (Setyowati, 2024).

However, the flexibility offered often comes with challenges, such as dynamic targets and fluctuating work systems, which can affect driver partners motivation and performance (Wiener et al., 2023; Schou & Bucher, 2023). Additionally, incentive policies have also changed, with driver-partner bonuses in Indonesia decreasing by 15% to US$682 million (Setyowati, 2024). Given these dynamics, gamification offers a more sustainable alternative to monetary incentives, which often provide only a short-term boost. Unlike monetary incentives, gamification integrates game elements that can sustain motivation and performance in the long term, reducing reliance on volatile financial rewards.

Gamification is the application of game elements in non-game contexts, proven influenceive in enhancing motivation and engagement across various sectors, including education and marketing (Prasad et al., 2022; Lyons et al., 2023). Gamification elements such as points, badges, and leaderboards can be considered technological innovations that require acceptance and trust from driver partners to function influenceively (Musyaffi et al., 2024). Driver partners with higher levels of personal innovation and strong trust in technology tend to be more responsive to gamification systems, which can ultimately increase their motivation and performance. Therefore, Grab must ensure that driver partners clearly understand the gamification system and have sufficient trust in the technology to maximize its benefits. With this approach, the implementation of structured and relevant gamification elements can enhance the motivation and performance of Grab driver partners. Motivation triggered by gamification elements has been proven to be a mediator that strengthens the relationship between gamification implementation and performance improvement (Na & Han, 2023; Rahayu et al., 2022). These elements create a more competitive and engaging work environment while also fostering intrinsic motivation among driver partners to achieve their goals.

As the largest ride-hailing platform in Indonesia, Grab has developed a gamification strategy that emphasizes social engagement and the driver partner community. Unlike global practices that focus on individual performance based incentives, Grab in Indonesia prioritizes community achievement and group based rewards, in line with a collective work culture that emphasizes social relationships and solidarity between drivers. This approach strengthens the bond between drivers and motivates them to work harder as part of a community.

Previous research has also shown that gamification can influenceively enhance motivation on digital economy platforms (Zaman et al., 2020; Vasudevan & Chan, 2022). Although gamification has been widely applied in large corporate sectors, its application in the context of the digital economy, particularly in online transportation in Indonesia, remains limited (Cini & Goldmann, 2021; Zaman et al., 2020). A study by Prasad et al. (2022)

demonstrates the positive impact of gamification on motivation in education and marketing, but empirical research in the context of ride-hailing remains scarce. With increasing competition in Indonesia's online transportation industry and changes in incentive policies, the role of gamification elements as a non-monetary strategy becomes increasingly important to explore further.

Additionally, Grab driver partners face challenges in maintaining motivation and performance due to work flexibility and dynamic targets set by the platform (Wiener et al., 2023; Schou & Bucher, 2023). Incentive systems dominated by monetary rewards are less influenceive in sustaining long-term motivation (Swirsky et al., 2021; Gaus et al., 2022). To address this issue, gamification is proposed as an alternative solution by incorporating game elements such as points, badges, and leaderboards to enhance intrinsic motivation and performance among driver partners (Prasad et al., 2022; Zaman et al., 2020). This approach is expected to create a more engaging and competitive work environment, thereby improving driver partners motivation and performance (Na & Han, 2023; Rahayu et al., 2022).

In the workplace context, gamification elements can shape an organizational culture that supports driver partners motivation and performance (Solahudin et al., 2024). Additionally, these elements can trigger intrinsic motivation by recognizing achievements, fostering healthy competition, and encouraging active participation (Na & Han, 2023; Suwandani & Sunyono, 2024). Therefore, it is important to understand how motivation can function as a mediating variable between the implementation of gamification and performance improvement so that efforts made can be more influenceive in this industry (Zaman et al., 2020; Vasudevan & Chan, 2022).

A Study by Zaman et al. (2020) shows that gamification can activate workers intrinsic motivation by utilizing challenge and reward mechanisms that are relevant to individual goals. This is relevant for Grab driver partners, where the integration of gamification elements such as points, badges, and leaderboards can increase work enthusiasm and productivity (Ranganathan & Benson, 2020). Additionally, the implementation of gamification must also consider the social context and demographic characteristics of driver partners in Indonesia. Vasudevan and Chan (2022) emphasize the importance of understanding the local context when designing an influenceive gamification system, as cultural factors and individual preferences influence how workers respond to such elements. Adjusting gamification strategies to the characteristics of driver partners, such as age, work experience, and working hours, is expected to optimize their impact on motivation and performance (Lin et al., 2023; Harlim & Narundana, 2024).

Previous research shows that monetary incentives are often used in performance management, but their influenceiveness in motivating workers in the long term is still questionable (Swirsky et al., 2021; Gaus et al., 2022). The provision of bonuses or financial compensation can improve performance in the short term, but it is insufficient to sustain motivation over the long term (Maharvi, 2022; Liu, 2022). Conversely, non-monetary incentives such as gamification are beginning to be recognized as an influenceive strategy for increasing intrinsic motivation and employee engagement in the education and marketing sectors (Prasad et al., 2022; Lyons et al., 2023). However, the application of gamification in the digital economy sector, particularly in the online transportation industry in Indonesia, remains under-researched (Cini & Goldmann, 2021; Zaman et al., 2020). This represents an important research gap, given the challenges of motivation and performance among digital

economy workers with flexible work characteristics and dynamic targets (Wiener et al., 2023; Dedema & Rosenbaum, 2024).

Studies specifically examining the application of gamification among ride-hailing driver partners in Indonesia remain limited. Previous research has primarily focused on large corporations and office workers, while digital economy workers, including Grab drivers, face unique challenges related to management algorithms and income uncertainty (Schou & Bucher, 2023; Wiener et al., 2023). Additionally, research on the most influenceive gamification elements for enhancing motivation and performance in this sector remains inadequate (Na & Han, 2023; Rahayu et al., 2022). This gap highlights the need for in-depth empirical research to understand how gamification elements such as points, badges, and leaderboards can be influenceively adapted to enhance the motivation and performance of Grab driver partners in Indonesia (Vasudevan & Chan, 2022; Ranganathan & Benson, 2020).

This study aims to analyze the influence of gamification on the motivation and performance of Grab driver partners. Specifically, this study aims to: (1) identify the significant influence of gamification on driver partner motivation (Prasad et al., 2022; Zaman et al., 2020); (2) identify the significant influence of gamification on improving driver partner performance (Rahayu et al., 2022; Na & Han, 2023); and (3) test the role of motivation as a mediating variable linking the influence of gamification on driver partner performance (Zaman et al., 2020; Vasudevan & Chan, 2022). Additionally, this study provides strategic recommendations for Grab in optimizing the application of gamification to improve driver partner motivation and performance.

REVIEW OF LITERATURE

Gamification

Gamification is the application of game elements in non-game contexts to increase individual engagement and motivation in various sectors, including education and marketing (Prasad et al., 2022; Lyons et al., 2023). Werbach and Hunter (2012), in their book For the Win: How Game Thinking Can Revolutionise Your Business, explain the use of gamification elements such as points, badges, and leaderboards in the business world. They emphasize the importance of understanding gamification theory and frameworks that can be applied in various business situations. This aims to provide added value to organizations. Points are used to measure progress and achievements, badges serve as symbolic rewards for specific achievements that enhance pride, while leaderboards encourage healthy competition and rivalry. However, it is important to consider that improper gamification design can lead to excessive work pressure and reduce job satisfaction (Ikhide et al., 2023). Therefore, influential gamification strategies must balance competition and social support to maintain positive impacts (Wilmans & Rashied, 2021).

Motivation

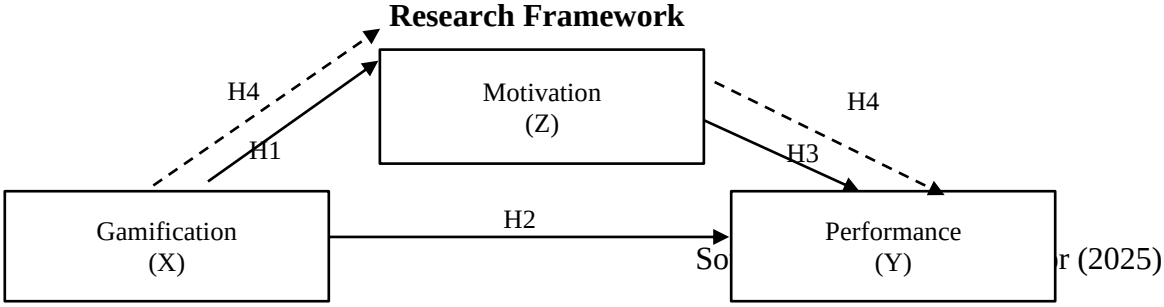
Motivation is an internal drive that motivates a person to take action to achieve a specific goal. This drive can come from within (intrinsic) or from external influences (extrinsic) (Maharvi, 2022). Motivation can also be viewed as a process that aims to influence individuals to carry out desired tasks based on specific goals (Wahyuni et al., 2019). Robbins and Judge (2016) explain that motivation is a process that determines how strongly a person strives to achieve a goal, directs them toward a predetermined goal, and influences their

consistency. One approach often used to understand motivation is Maslow's hierarchy of needs theory, which categorizes human needs into five levels: physiological needs, safety needs, social needs, esteem needs, and self-actualization needs.

Performance

Performance is the result of work activities. Performance reflects the value obtained from employee behavior, which can have a positive or negative impact on the achievement of organizational goals (Riwukore et al., 2021). According to Mathis and Jackson (2011), performance encompasses the achievement of results expected by the company from its employees in carrying out their duties and responsibilities. Performance is important in assessing employee contributions to company goals and forms the basis for decision-making. Performance is measured based on several factors, including quantity, quality, timeliness, attendance, and work ability.

Figure 1
Research Framework



So r (2025)

H1: Gamification has a Positive and Significant Influence on Motivation
H2: Gamification has a Positive and Significant Influence on Performance
H3: Motivation has a Positive and Significant Influence on Performance
H4: Motivation as a Mediator Has a Positive and Significant Influence on Gamification and Performance

RESEARCH METHOD

This study uses quantitative methods to answer research problems. With the help of questionnaires, the data is processed and interpreted to explain the facts in the field. Questionnaires via Google Forms are distributed online to Grab driver partners in Indonesia, especially in the Cirebon, Indramayu, Majalengka, and Kuningan areas. This study uses a purposive sampling technique to obtain a sample size of 256 people, where the selected samples follow the established criteria. The reason is that the population in this study is all Grab driver partners using the Grab platform's gamification feature.

All participants were given clear information about the purpose and procedures of the study, as well as their right to withdraw at any time without consequences. Prior to participation, each participant provided informed consent. To protect privacy, any information that could identify participants was removed and anonymized. The data collected was stored securely and is only accessible to researchers involved in the study.

Each statement in this study was adapted from books and previous research for the research problem. The distributed questionnaires were closed. A total of 19 statements were distributed to driver partners. Each statement consists of 5 responses, ranging from "strongly

disagree" (score 1) to "strongly agree" (score 5). Each construction item is taken from books and previous research according to the research problem. The gamification construction consists of 9 statements adapted from Werbach and Hunter (2012). The motivational construction consists of 5 statements adapted from Robbins and Judge (2016). Furthermore, the performance construction consists of 5 statements adapted from Mathis and Jackson (2011).

Researchers used SEM-PLS analysis with Smartpls 4 software to answer the hypothesis. Researchers used the PLS method because it can predict the model built (Hair & Alamer, 2022). This is so that researchers can understand how much the construction forms a model. The SEM-PLS stage consists of two main analyses: evaluating the measurement model using the validity (outer loading and AVE) and construction constraints (CA and CR). After that, HTMT and Fornell-Lacker were tested to ensure no multicollinearity. Researchers evaluated the Smartpls 4 output on structural modelling in the second stage through the determinant coefficient (R^2) and predictive relevance (Q^2) taken from blindfolding. Researchers evaluated the proposed hypothesis in the final stage with the Smartpls 4 output.

RESULTS AND DISCUSSION

Table 1
Descriptive Statistics

Respondents	Category	Frequency	Percent
Age	Under 25 years	61	24%
	25-35 years	80	31%
	36-45 years	67	26%
	More than 45 years	48	19%
Experience	Under 1 year	52	20%
	1-3 years	97	38%
	More than 3 years	107	42%
Working hours	Under 6 hours	63	25%
	6-8 hours	73	29%
	9-12 hours	68	27%
	More than 12 hours	52	20%

Source: Data processing (2025)

Based on Table 1, most respondents are in the productive age category, with the highest percentage being in the 25-35 years range (31%), followed by the 36-45 age group (26%). Meanwhile, respondents under 25 reached 24% of respondents, and those over 45 were only 19%. Regarding length of service, 42% of respondents had more than 3 years of experience, while 38% had 1-3 years of experience. Only 20% had less than 1 year of work experience. Regarding the duration of working hours, 29% of respondents worked 6-8 hours per day, while 27% worked 9-12 hours. As many as 25% worked less than 6 hours, and around 20% worked more than 12 hours daily. In general, most respondents were dominated by young people aged 25-35 years, had more than 3 years of work experience, and moderate working hours, namely 6-8 hours per day.

Measurement Model

The first stage is to evaluate the measurement model, consisting of outer loading, which must be higher than 0.7 and AVE, which must be more than 0.5. After that, reliability is evaluated through Cronbach's Alpha (CA) and Composite Reliability (CR) with a value higher than 0.7 (Hair & Alamer, 2022).

Table 2
Measurement Model

Measurement Items	Outer Loading	VIF	CA	CR	AVE
Gamification			0.930	0.942	0.643
GA1	0.829	2,520			
GA2	0.792	2.207			
GA3	0.801	2.253			
GA4	0.817	2,461			
GA5	0.773	2,078			
GA6	0.831	2,590			
GA7	0.810	2.386			
GA8	0.772	2,066			
GA9	0.790	2.256			
Motivation			0.906	0.930	0.728
MO1	0.846	2,984			
MO2	0.837	2,728			
MO3	0.872	3,728			
MO4	0.873	3,662			
MO5	0.837	2,672			
Performance			0.879	0.912	0.675
PF1	0.799	2.277			
PF2	0.833	2,721			
PF3	0.843	2,744			
PF4	0.824	2,669			
PF5	0.807	2.289			

Source: Data processing (2025)

The outer loading value in this study ranges from 0.772 - 0.873, indicating that all items have good validity, because the smallest value is 0.772, it has meets the standard of above 0.7. Meanwhile, the AVE value is between 0.643 - 0.728 and has met the standard above 0.5. Regarding reliability, the CA value ranges from 0.879 - 0.930 and the CR between 0.912 - 0.942. These two values also indicate that the research data is reliable, because the CA and CR values are above 0.7.

Next, to ensure that there is no multicollinearity, a VIF evaluation is carried out. The recommended VIF value should not exceed 5 (Hair & Alamer, 2022). Based on the table above, the VIF value for all items ranges from 2.066 to 3.728, below 5. Therefore, the items in this study do not experience multicollinearity.

The HTMT evaluation aims to ensure no high correlation between the items in the study. HTMT evaluation compares the resulting values, where the recommended HTMT

value should be below 0.9 (Hair & Alamer, 2022). Overall, the details of the HTMT value results obtained from Smartpls 4 are presented as follows:

Table 3
Discriminant Validity With HTMT

	Gamification	Motivation	Performance
Gamification			
Motivation	0.664		
Performance	0.812	0.759	

Source: Data processing (2025)

The HTMT value on the motivation item with gamification is 0.664. Meanwhile, the HTMT values between performance and gamification (0.812) and performance and motivation (0.759) are below 0.9. Based on the results of this HTMT evaluation, it can be concluded that all items meet the discriminant validity criteria in the HTMT aspect.

After evaluating the HTMT value, the next step is to test the discriminant validity using Fornell-Larcker, where the AVE root value of each construct must be greater than the correlation value between the construct and other constructs. For example, the gamification item with gamification has an AVE root value of 0.802, greater than the correlation between motivation (0.611) and performance (0.736). Furthermore, the motivation item with motivation has an AVE root value of 0.853, greater than the correlation between performance and motivation (0.679). Likewise, with the performance construct, the performance value with performance is 0.821. Based on this evaluation, all constructs show higher values to meet the discriminant validity criteria using Fornell-Larcker.

Table 4
Discriminant Validity With Fornell-Lacker

	Gamification	Motivation	Performance
Gamification	0.802		
Motivation	0.611	0.853	
Performance	0.736	0.679	0.821

Source: Data processing (2025)

Structural Model

Analyse R square (R^2) and predictive relevance (Q^2) to test the model fit. The results of R^2 and Q^2 based on Smartpls output are as follows:

Table 5
R Square (R^2)

	R Square	R Square Adjusted
Motivation	0.374	0.371
Performance	0.625	0.622

Source: Data processing (2025)

As shown by the results in Table 5, the motivation variable has an R^2 value of 0.374, which means that 37.4% of motivation is influenced by the independent variables studied. In comparison, the rest (62.6%) is influenced by other factors not studied. Meanwhile, the R^2 value for performance is 0.625, which states that 62.5% of performance is influenced by the independent variables studied, while 37.5% is determined by other factors not studied. These findings indicate that the variables analysed in this study significantly influence motivation and performance.

Hypothesis Testing

Hypothesis testing evaluates the Smartpls results, the proposed hypotheses, and the specified error rates. The table below classifies each hypothesis as significant.

Table 6
Direct Influence Hypothesis Test

Hypothesis	Path Coefficient	P-Value	F Square	Results
H1. Gamification --> Motivation	0.611	0.000	0.596	Accepted
H2. Gamification --> Performance	0.512	0.000	0.437	Accepted
H3. Motivation --> Performance	0.366	0.000	0.225	Accepted

Source: Data processing (2025)

Hypothesis testing between variables by looking at the p-value. If the p-value of the test result is less than 0.05, then there is a significant influence between the variables. In addition, how big the influence is can be seen from the f-square value, namely the influence of the direct variable at the structural level with the f-square criteria (0.02) low, (0.15) moderate, and (0.35) high (Henseler et al., 2009).

H1 The Influence of Gamification on Motivation

The results of the hypothesis test show that the influence of gamification on motivation has a path coefficient value of 0.611 with a p-value (0.000 <0.05), which indicates a positive and significant influence of gamification on motivation. The F-squared value of 0.596 shows that its influence is quite high. This shows that gamification can increase motivation, and the hypothesis (H1) is accepted. Gamification acts as a non-monetary incentive that can increase the motivation of driver partners. They are motivated and challenged because they have clear goals and immediate feedback after completing the task, so they feel appreciated and their contribution is recognised. Based on the statement above, the study results are supported by Zaman et al. (2020), stating that gamification can increase worker motivation by utilising challenge and reward mechanisms relevant to individual goals.

H2 The Influence of Gamification on Performance

The results of the hypothesis test show that the influence of gamification on performance has a path coefficient value of 0.512 with a p-value (0.000 <0.05), which indicates a positive and significant influence of gamification on performance. While the F-square value of 0.437 shows that its influence is quite high. This shows that gamification can improve performance, and the hypothesis (H2) is accepted. Gamification motivates individuals and improves their performance, as measured by indicators set by the company. The application of gamification can create a more enjoyable and interactive work environment through elements such as points, badges and leaderboards, so that it can increase motivation and engagement, which ultimately impacts performance. This is supported by Kusuma and Larasati (2025), who state that gamification significantly influence performance.

H3 The Influence of Motivation on Performance

The results of the hypothesis test show that the influence of motivation on performance has a path coefficient value of 0.366 with a p-value (0.000 <0.05), which indicates a positive and significant influence of motivation on performance. While the F-square value of 0.225 shows that the influence is moderate. This shows that motivation can

improve performance, or the hypothesis (H3) is accepted. Motivation plays an important role in improving performance. Individuals with high motivation tend to work harder, complete more tasks, and provide better service. Based on the statement above, this is supported by Rahayu et al. (2022), state that motivation influences performance.

The next step is to test the possible indirect influence through the role of mediating variables, namely motivation in mediating the relationship between gamification and driver partner performance. According to Hair & Amulet (2022), F Square mediation in research can be measured by the Upsilon v statistic, which is calculated by squaring the path coefficient. In this case, Lachowicz et al. (2018), which is further explained in the research of Ogbeibu et al. (2021), provide criteria for low mediation influence (0.02), medium mediation influence (0.075), and high mediation influence (0.175).

Upsilon mediation size influence (v) $= \beta^2MX\beta^2YM.X$

Table 7
Indirect Influence Hypothesis Test

Hypothesis	Path Coefficient	P-Value	Upsilon V	Results
H4. Gamification --> Motivation --> Performance	0.224	0.000	0.050	Accepted

Source: Data processing (2025)

H4 The Influence of Motivation as a Mediator between Gamification and Performance

The results of the hypothesis test show that the influence of motivation as a mediator between gamification and performance has a path coefficient value of 0.224 with a p-value (0.000 <0.05), which indicates a positive and significant influence of motivation on performance. While the upsilon v value of 0.050 indicates its influence is relatively low. This indicates that motivation as a mediator influences gamification and performance, or the hypothesis (H4) is accepted. The existence of other external factors that are more dominant in influencing performance directly, such as work target pressure, platform algorithm systems, or monetary incentives, that remain the main determinants in the digital work environment, such as for online transportation driver partners, causes the influence of motivation as a mediator to be relatively low. This happens because intrinsic motivation triggered by gamification is long-term, and its impact is not immediately visible. At the same time, performance in the context of platform work often depends on more direct and measurable situational factors. These findings indicate that although motivation can improve performance, its influence as a mediator in the relationship between gamification and performance still needs to be considered carefully.

CONCLUSION

This study shows that gamification has a significant positive influence on the motivation and performance of Grab driver partners in Indonesia. While gamification successfully increased motivation and performance, the findings also highlight the importance of considering demographic variables, especially age group and driving experience, in designing gamification systems. Driver partners aged 25–35 years old, with more than three years of experience, were more responsive to certain gamification elements, such as achievement-based challenges and rewards, compared to younger or older drivers.

Therefore, platform managers need to design gamification that is more personalized and in line with local preferences and adapt gamification elements to age characteristics to ensure that the system is influenceive and well received by all age groups.

In practical terms, these findings encourage Grab to optimize the gamification system by considering the work habits and social conditions that are typical in Indonesia. Challenges and rewards can be personalized based on age group, driving experience, or working hours to increase driver engagement. However, the gamification system must also be balanced with fair, transparent, and realistic incentives so as not to lead to excessive competition but rather to collaboration that supports the achievement of common goals. This study provides important insights for platform managers in designing more sustainable and locally specific gamification. However, there are still limitations in terms of the scope of the study and the expansion of the analysis to other factors, such as perceptions of fairness and job satisfaction, that can provide a complete picture of the influence of gamification on driver partner performance in Indonesia.

REFERENCES

Cini, L., & Goldmann, B. (2021). The Worker Capabilities Approach: Insights from Worker Mobilizations in Italian Logistics and Food Delivery. *Work, Employment and Society*, *35*(5), 948–967. https://doi.org/10.1177/0950017020952670

Dedema, M., & Rosenbaum, H. (2024). Socio-technical issues in the platform-mediated gig economy: A systematic literature review: An Annual Review of Information Science and Technology (ARIST) paper. *Journal of the Association for Information Science and Technology*, *75*(3), 344–374. https://doi.org/10.1002/asi.24868

Gaus, N., Jasruddin, Saleh, A., Resnawaty, R., Paramma, M. A., & Tanjung, Y. (2022). Trading-off monetary rewards as reinforcers to enhance task motivation and performance of publication in academia. *Higher Education Quarterly*, *76*(4), 800–814. https://doi.org/10.1111/hequ.12350

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3), 100027. https://doi.org/10.1016/j.rmal.2022.100027

Harlim, T., & Narundana, V. T. (2024). Improving Human Resource Performance Through Discipline and Work Environment and Motivation as a Moderating Variable (Case Study of Gojek Drivers in Bandar Lampung). *International Journal of Research and Review*, *11*(1), 630–635. https://doi.org/10.52403/ijrr.20240171

Henseler, J., Ringle, C., & Sinkovics, R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In *Advances in International Marketing* (Vol. 20, pp. 277–319). https://doi.org/10.1108/S1474-7979(2009)0000020014

Ikhide, J. E., Timur, A. T., & Ogunmokun, O. A. (2023). A balanced perspective on the affordance of a gamified HRM system for employees' creative performance. *Personnel Review*, *52*(3), 631–648. https://doi.org/10.1108/PR-01-2021-0062

Kusuma, D. W., & Larasati, L. (2025). MENINGKATKAN MOTIVASI DAN KEPUASAN KERJA KARYAWAN MELALUI PENGGUNAAN PLATFORM GAMIFIKASI. *Kohesi: Jurnal Multidisiplin Saintek*, *6*, 1–10.

https://doi.org/https://doi.org/10.3785/kohesi.v6i10.10598
Lachowicz, M. J., Preacher, K. J., & Kelley, K. (2018). A novel measure of influence size for mediation analysis. *Psychological Methods*, *23*(2), 244–261. https://doi.org/10.1037/met0000165
Lin, X., Huang, Z., Ye, Y., Dong, J., Feng, H., & Zheng, P. (2023). influences of Aging on Taxi Service Performance: A Comparative Study Based on Different Age Groups. *Sustainability (Switzerland)*, *15*(22), 16096. https://doi.org/10.3390/su152216096
Liu, H. (2022). A Preliminary Research on Monetary Reward as Extrinsic Motivation in Long Term Task-based Learning. *Advances in Education, Humanities and Social Science Research*, *2*(1), 47. https://doi.org/10.56028/aehssr.2.1.47
Lyons, R. M., Fox, G., & Stephens, S. (2023). Gamification to enhance engagement and higher order learning in entrepreneurial education. *Education and Training*, *65*(3), 416–432. https://doi.org/10.1108/ET-05-2022-0204
Maharvi, W. (2022). Investigate the Role of Non-Financial Rewards on Employee Performance: Mediating Role of Motivation. *Journal of Development and Social Sciences*, *3*(III). https://doi.org/10.47205/jdss.2022(3-iii)49
Mathis, R. L., & Jackson, J. H. (2011). *Human Resource Management* (13th Edition). MA: West-South.
Musyaffi, A. M., Baxtishodovich, B. S., Afriadi, B., Hafeez, M., Adha, M. A., & Wibowo, S. N. (2024). New Challenges of Learning Accounting With Artificial Intelligence: The Role of Innovation and Trust in Technology. *European Journal of Educational Research*, *13*(1), 183–195. https://doi.org/10.12973/eu-jer.13.1.183
Na, K., & Han, K. (2023). How leaderboard positions shape our motivation: the impact of competence satisfaction and competence frustration on motivation in a gamified crowdsourcing task. *Internet Research*, *33*(7), 1–18. https://doi.org/10.1108/INTR-12-2021-0897
Ogbeibu, S., Jabbour, C. J. C., Gaskin, J., Senadjki, A., & Hughes, M. (2021). Leveraging STARA competencies and green creativity to boost green organisational innovative evidence: A praxis for sustainable development. *Business Strategy and the Environment*, *30*(5), 2421–2440. https://doi.org/10.1002/bse.2754
Prasad, K. D. V., Mangipudi, M. R., & Vaidya, R. (2022). Gamification Framework With Reference To Business Perspective. *International Journal of Professional Business Review*, *7*(5), e0702. https://doi.org/10.26668/businessreview/2022.v7i5.702
Rahayu, F. S., Nugroho, L. E., Ferdiana, R., & Setyohadi, D. B. (2022). Motivation and Engagement of Final-Year Students When Using E-learning: A Qualitative Study of Gamification in Pandemic Situation. *Sustainability (Switzerland)*, *14*(14), 8906. https://doi.org/10.3390/su14148906
Ranganathan, A., & Benson, A. (2020). A Numbers Game: Quantification of Work, Auto-Gamification, and Worker Productivity. *American Sociological Review*, *85*(4), 573–609. https://doi.org/10.1177/0003122420936665
Riwukore, J., Susanto, Y., Pilkandis, J., & Habaora, F. (2021). Analysis of Employee Performance in The Department of Education and Culture, Lubuklinggau City. *Asia Pacific Journal of Management and Education*, *4*, 95–109. https://doi.org/10.32535/apjme.v4i2.1149
Robbins, S. P., & Judge, T. A. (2016). *Organizational Behavior* (16th Edition). Pearson

Education, Inc.

Schou, P. K., & Bucher, E. (2023). Divided we fall: The breakdown of gig worker solidarity in online communities. *New Technology, Work and Employment*, *38*(3), 472–492. https://doi.org/10.1111/ntwe.12260

Setyowati, D. (2024). *Grab Expands Online Taxi and Motorcycle Taxi Fleet While Cutting Bonuses*. Katadata.Co.Id. https://katadata.co.id/digital/teknologi/65dc4174d002c/grab-tambah-jumlah-pengemudi-taksi-online-dan-ojol-bonus-dikurangi

Solahudin, A., Fatimah, S. E., & Sulistiowati, L. H. (2024). Factors affecting affective commitment. *Edelweiss Applied Science and Technology*, *8*(6), 3475–3483. https://doi.org/10.55214/25768484.v8i6.2738

Suwandani, L., & Sunyono. (2024). Analysis of the Role of Gamification in Education: Its Impact on Student Motivation. *Proceedings of International Conference on Education*, *2*(1), 153–159. https://doi.org/10.32672/pice.v2i1.1332

Swirsky, L. T., Shulman, A., & Spaniol, J. (2021). The Interaction of Curiosity and Reward on Long-Term Memory in Younger and Older Adults. *Psychology and Aging*, *36*(5), 584–603. https://doi.org/10.1037/pag0000623

Vasudevan, K., & Chan, N. K. (2022). Gamification and work games: Examining consent and resistance among Uber drivers. *New Media and Society*, *24*(4), 866–886. https://doi.org/10.1177/14614448221079028

Wahyuni, Ni Putu Diah Purwandari, D. A., & Syah, T. Y. R. (2019). Transactional Leadership, Motivation and Employee Performance. *Journal of Multidisciplinary Academic*, *3*, 156–161.

Werbach, K., & Hunter. (2012). For the Win: How Game Thinking Can Revolutionize Your Business. In *Wharton Digital Press*.

Wiener, M., Cram, W. A., & Benlian, A. (2023). Algorithmic control and gig workers: a legitimacy perspective of Uber drivers. *European Journal of Information Systems*, *32*(3), 485–507. https://doi.org/10.1080/0960085X.2021.1977729

Wilmans, G., & Rashied, N. (2021). Self-employment through ride-hailing: Drivers' experiences in johannesburg, south africa. *Acta Commercii*, *21*(1). https://doi.org/10.4102/ac.v21i1.926

Zaman, U., Nawaz, S., Javed, A., & Rasul, T. (2020). Having a whale of a time: Linking self-determination theory (SDT), job characteristics model (JCM) and motivation to the joy of gig work. *Cogent Business and Management*, *7*(1), 1807707. https://doi.org/10.1080/23311975.2020.1807707