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Research Articles

The Effect of Extrinsic Motivation and Gamification on Shopeefood Driver Performance in Demak Regency

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Abstract: The development of the gig economy in Indonesia has driven an increase in the number of app-based work partners, including ShopeeFood drivers in Demak Regency. However, previous studies have shown inconsistent results regarding the effect of extrinsic motivation and gamification on driver performance, particularly in mid-sized cities with lower order volumes. This study aims to analyze the effect of extrinsic motivation and gamification on the performance of ShopeeFood drivers in Demak Regency. The approach used was quantitative with a saturated sampling technique (census sampling) of 105 active drivers as of December 12, 2025. Data were collected through questionnaires and analyzed using multiple linear regression. The results showed that extrinsic motivation had a positive and significant effect on performance (β = 0.299; sig. 0.000), as did gamification (β = 0.266; sig. 0.000). Income, incentives, job security, and working conditions, as well as gamification systems such as points, rewards, leaderboards, and levels, have been shown to increase driver engagement and performance. It was concluded that both variables effectively improved performance, so companies need to design extrinsic motivation and gamification systems that are realistic and adaptive to the characteristics of medium-sized cities.

Keywords: Driver Performance; Extrinsic Motivation; Gamification; Gig Economy; ShopeeFood.

1. Introduction

The development of the digital economy has encouraged the emergence of application-based work patterns such as the ShopeeFood service. Drivers work as partners with income dependent on the number of orders completed. In Demak Regency, fluctuating order volumes cause unstable income, so driver performance becomes an important issue. Companies provide extrinsic motivation and gamification to maintain productivity. However, it is not yet known for certain whether this strategy is effective in areas with relatively lower demand for orders compared to big cities (Uddin & Das, 2023). Therefore, this research is important to provide empirical answers to this phenomenon.

Research on extrinsic motivation and gamification on online driver performance has shown inconsistent results. Some studies have found a positive effect on performance.(Hamdani et al., 2020), while other studies have shown insignificant results. Gamification is also considered capable of increasing engagement and work performance.(Wang & Zhao, 2023)However, most research has been conducted in large cities with high demand. Limited studies have examined both variables simultaneously in the context of a mid-sized city like Demak Regency. Therefore, the effectiveness of extrinsic motivation and gamification strategies in a volatile market remains under-explored.

This study aims to analyze the influence of extrinsic motivation and gamification on the performance of ShopeeFood drivers in Demak Regency. The main questions asked are how extrinsic motivation influences the performance of online drivers and how gamification also significantly impacts their performance. These questions are crucial for assessing the effectiveness of partner management strategies in an app-based work system.(Anggriyani, 2021)(Hamdani et al., 2020).

This research presents a relatively under-researched context in a mid-sized city. Theoretically, the results enrich the study of human resource management in the digital

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economy, particularly regarding extrinsic motivation, gamification, and performance.(Hamdani et al., 2020). Practically, this research can serve as evaluation material for ShopeeFood in providing extrinsic motivation and a gamification system that is more suited to the characteristics of drivers in middle-income areas such as Demak Regency.

2. Literature Review

Extrinsic Motivation

Extrinsic motivation is a work drive that originates from factors external to the individual. Motivation is divided into two types: intrinsic and extrinsic, with extrinsic motivation related to working conditions, salary, and organizational policies.(Basri et al., 2023). Extrinsic motivation comes from outside the self and influences work behavior through incentives, supervision, and the work environment.(Hamdani et al., 2020). Thus, extrinsic motivation is understood as an external stimulus that can increase individual effort and performance through a structured reward and compensation system.

In this study, extrinsic motivation is positioned as an independent variable (X1) that influences online driver performance. The dimensions of extrinsic motivation are grouped through company policies, supervision, interpersonal relationships, job security, and salary and wages.(Hamdani et al., 2020)In the context of modern organizations, this variable is relevant for explaining how incentive systems and working conditions can boost productivity. Previous research has shown that extrinsic motivation has a significant effect on improving performance.(Azhari & Riadi, 2022).

In the context of ShopeeFood driver partners, extrinsic motivation indicators focus on income, incentives, job security, and working conditions. Income and incentives are the primary drivers because they are directly related to the number of orders and daily bonuses. Job security reflects protection while working on the road. Working conditions include flexible hours and supportive app features. This indicator is based on a synthesis of Herzberg and Robbins' theory, which emphasizes compensation and the work environment as the primary determinants of external motivation.

Gamification

Gamification is the application of game elements and mechanics in non-game contexts to increase motivation and engagement(Shalsabilla Shafira, Ritha F. Dalimunthe, 2025). Gamification includes points, levels, leaderboards, and badges that are designed to resemble a game system.(Wang & Zhao, 2023). In performance management, gamification serves as an innovative strategy to create a more engaging and competitive work experience(Uddin & Das, 2023).

Gamification in this study is positioned as an independent variable (X2). The concept of Gameful Experience includes the dimensions of enjoyment (hedonic), immersion, creativity, and experience dominance.(Wang & Zhao, 2023)This variable explains how game elements can influence work behavior through reward mechanisms, competition, and real-time feedback. The study found that gamification positively impacted online driver performance.(Honorata. et al., 2024).

For ShopeeFood driver partners, gamification indicators include points, rewards, leaderboards, and levels. Points are awarded based on the number of completed orders. Rewards come in the form of bonuses or achievement badges. The leaderboard displays driver performance. Levels indicate work progress stages that influence the number of incoming orders. These elements foster healthy competition and increase app-based work motivation.

Online Driver Performance

Performance is the result or achievement obtained by a worker in completing the tasks given to him within a certain period of time in a company or field in which he works.(Pratama & Asmadi, 2025). Performance is the work results achieved by individuals in accordance with organizational responsibilities and standards.(Merlina Anggriyani, 2021). Performance reflects the quantity, quality, and timeliness of work.(Hernanda Diva Auliya & Suhana, 2024)In the context of online drivers, performance relates to the effectiveness of application-based services and the achievement of operational targets.

Online driver performance is positioned as the dependent variable (Y). Performance indicators include the number of jobs, the quality of the jobs, punctuality, and attendance.(Merlina Anggriyani, 2021). This variable is used to measure the extent to which extrinsic motivation and gamification are able to increase productivity and work discipline in digital platform systems.

In a study of ShopeeFood driver partners, performance indicators included service quality, quantity of work, punctuality, and work discipline. Service quality is reflected in customer ratings. Work quantity is measured by the number of completed daily orders. Punctuality is measured by delivery duration. Work discipline relates to compliance with ShopeeFood regulations. These indicators reflect the driver's actual performance within the app-based work system.

3. Method

Research Design

This research uses a quantitative approach to examine the influence of extrinsic motivation and gamification on online driver performance in an objective and measurable manner. A quantitative approach is used to test hypotheses through numerical and statistical data analysis(Sugiyono, 2020)This design allows researchers to identify relationships between variables objectively and measurably so that research results can be generalized according to population characteristics.

Unit of Analysis

The unit of analysis used was all 105 ShopeeFood driver partners operating in Demak Regency. The population is a generalized area with specific characteristics to be studied.(Sugiyono, 2020). The saturated sampling technique is used because all members of the population are sampled, so the data obtained is more representative and comprehensive.

Data and Information Sources

The data used is primary data, namely data obtained directly from the first source.(Sugiyono, 2020). Data was collected through a questionnaire distributed to all research respondents via the ShopeeFood Demak driver WhatsApp group. The use of primary data aims to obtain actual information regarding extrinsic motivation, gamification and driver performance directly from research subjects.

Data Collection Techniques

Data collection used a questionnaire with a five-point Likert scale (strongly disagree, disagree, somewhat agree, agree, strongly agree) to measure respondents' attitudes and perceptions.(Pranatawijaya et al., 2019). Validity test is carried out with correlation r count > r table(Ghozali, 2021). Reliability test using Cronbach's Alpha with criteria > 0.70 is declared reliable(Ghozali, 2021). All items are declared valid and reliable and therefore suitable for use.

Data Analysis

The analysis was conducted using multiple linear regression with the help of IBM SPSS Statistics 25. Multiple linear regression is used to test the influence of more than one independent variable on the dependent variable.(Ghozali, 2021)Hypothesis testing was conducted using the t-test (partial) and F-test (simultaneous) to determine the influence between variables. Prior to hypothesis testing, classical assumption tests were conducted, including normality, multicollinearity, and heteroscedasticity, to ensure the model met the analytical feasibility requirements.(Mardiatmoko, 2020).

4. Results and Discussion

Description of Research Results

Based on the results of a study of 105 ShopeeFood drivers in Demak Regency, the majority of respondents gave positive responses to extrinsic motivation, gamification, and online driver performance. All respondents (100%) were male, predominantly aged 25–34 years (56.2%), and had worked for 1–2 years (30.5%). For the extrinsic motivation and gamification variables, there were no disagreements for most indicators. For the online driver performance variable, all respondents stated that they quite agreed to strongly agreed with

aspects of service quality, order quantity, punctuality, and discipline. These data indicate relatively stable and productive work practices.

These results confirm that drivers are of productive age with sufficient work experience. The majority of respondents perceived the benefits of the incentive system, job protection, and app features that support their work. Furthermore, gamification elements such as points, rewards, leaderboards, and levels were deemed effective in boosting work morale. In terms of performance, drivers demonstrated a high commitment to service and compliance with platform regulations. Overall, this reflects effective operational practices and a positive reception from driver partners.

Driver work practices demonstrate a pattern of relationship between platform system support and individual performance. Financial incentives, social security, and ease of use create a sense of security and job satisfaction. Gamification fosters healthy competition that increases motivation and productivity. Good performance is reflected in consistent service and punctuality. Thus, driver work practices in Demak Regency demonstrate that a combination of external factors and the platform's digital system play a role in maintaining stable partner performance.

Analysis of Research Results

The results of the regression analysis show that extrinsic motivation has a coefficient of 0.299 (t=4.895; sig=0.000) and gamification of 0.266 (t=3.661; sig=0.000) on ShopeeFood driver performance. The Adjusted R Square value of 0.324 indicates that both variables explain 32.4% of the performance variation. The F test shows significance (0.000 <0.05), so the model is declared fit. All classical assumptions are met, including normality, multicollinearity, and heteroscedasticity.

The data indicates that extrinsic motivation and gamification, both partially and simultaneously, have a positive and significant effect on online driver performance. This means that providing incentives, job protection, and in-app gaming systems will improve driver performance. However, the 32.4% contribution indicates that other factors outside the model influence performance, such as job satisfaction, regional competition, or personal factors.

The influence of extrinsic motivation is more dominant than gamification, as evidenced by the higher beta value. This indicates that economic factors and job security remain the primary drivers. Gamification serves as a motivational enhancer through competition and reward mechanisms. However, the limited determination value indicates the need to explore additional variables to make the performance prediction model more comprehensive and contextual.

Discussion

The results of this study indicate that the combination of extrinsic motivation and gamification simultaneously improves the performance of ShopeeFood drivers in Demak Regency. Empirical evidence, in the form of a significance value of 0.000 <0.05 in the t-test and F-test, confirms the strength of this relationship. Theoretically, this aligns with the concept that work behavior is influenced by external reward systems and digital reinforcement mechanisms. However, the determination value of 32.4% indicates that this influence is not yet fully comprehensive. The significance of this finding lies in understanding that the digital platform work model requires a balance between economic incentives and application system design.

This research confirms that in the context of the gig economy, economic factors still take precedence over digital gaming aspects. This is because driver employment is highly dependent on the number of daily orders. Evidence of the dominance of extrinsic motivation coefficients suggests that income security and job protection are fundamental to improved performance. Thus, gamification systems serve as a support system for improving driver performance.

These results imply the importance of continuous innovation in extrinsic motivation and gamification systems. Platforms need to ensure realistic targets, tailored to the characteristics of regions like Demak Regency, to maintain positive motivation. Optimizing the balance between financial and symbolic rewards can be a long-term performance improvement strategy. With this approach, digital systems not only monitor performance but also empower drivers as productive and professional partners.

5. Comparison

This study found that extrinsic motivation and gamification had a positive and significant effect on the performance of ShopeeFood drivers in Demak Regency. The regression coefficient showed that extrinsic motivation (β=0.299) was more dominant than gamification (β=0.266), with a significance level of 0.000. The Adjusted R^2 value of 0.324 indicated that both variables explained 32.4% of the performance variation. This finding confirms that providing extrinsic motivation and a gamification system plays a role in improving driver performance. Thus, the research hypothesis was empirically proven.

In the context of Demak Regency, which has a lower order volume, the incentive system remains a key driver of performance. This is relevant because order volume is not as high as in larger cities, making income stability a key driver concern. Gamification serves as a motivational booster, particularly through the points and level system. Therefore, the results of this study are contextualized to the conditions in this region with its fluctuating order volume.

These results indicate that drivers' work behavior is more responsive to concrete external stimuli such as incentives and bonuses. Gamification enhances competitiveness, but remains dependent on financial rewards. This means that the combination of economic rewards and game systems creates a more stable work motivation. This interpretation reinforces the view that digital platforms need to balance psychological and economic aspects.

This research demonstrates that extrinsic motivation theory and gamification concepts complement each other in app-based work systems. Extrinsic motivation fulfills economic needs, while gamification fulfills the need for recognition and achievement. This understanding explains why both variables work together to improve performance. In other words, the driver is not only working for income, but also for status and achievement within the system.

The results of this study align with those of Putranti et al. (2024) and Wang & Zhao (2023), who found that gamification positively impacts performance. Furthermore, research by Hamdani et al. (2020) also showed that extrinsic motivation significantly impacts work performance. However, this study provides a new context, focusing on districts rather than large cities, thus enriching the literature on digital platforms in mid-sized regions.

The implication is that ShopeeFood needs to strengthen its reward system to be more adaptive to local conditions, such as additional bonuses on major holidays or extreme weather. Furthermore, gamification innovation needs to be developed through varied missions and realistic rewards tailored to the characteristics of Demak Regency. A combination of financial strategies and sustainable digital innovation can improve driver performance and loyalty to the company in the long term.

6. Conclusion

This study demonstrates that extrinsic motivation and gamification have a positive and significant impact on ShopeeFood driver performance in Demak Regency. Extrinsic motivation is the most dominant factor, driven by income, incentives, job security, and working conditions, while gamification increases engagement through points, rewards, leaderboards, and levels. Its scientific contribution lies in testing both variables in the context of a mid-sized city, thus enriching studies of digital HR management in the platform economy, which previously focused on large cities.

This study confirms that the combination of extrinsic motivation and a gamification system effectively improves online driver performance. Methodologically, the use of saturated sampling of 105 active drivers and multiple linear regression analysis yielded representative and empirical results. Its limitations lie in the single-region coverage and the lack of inclusion of mediating or moderating variables in the research model.

These results can serve as a basis for ShopeeFood to adapt its extrinsic motivation and gamification system to the characteristics of mid-sized regions like Demak Regency, ensuring they remain realistic and don't burden drivers. Future research is recommended to expand the research area, add variables like job satisfaction or loyalty, and employ more comprehensive analysis methods like SEM.

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