

The Effect Of Employee Engagement And Work Flexibility On Employee Performance In Manufacturing Companies

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Abstract

This study aims to analyze the influence of employee involvement and work flexibility on employee performance in the EJIP Cikarang manufacturing industrial area. Using a quantitative approach, the study involved a number of respondents from various departments with a purposive sampling method. Data was collected through questionnaires and analyzed using Structural Equation Modeling with SmartPLS software. The research variables include employee engagement and work flexibility as independent variables, as well as employee performance as dependent variables. The results of the study show that employee engagement and work flexibility have a significant influence on employee performance. Respondents were dominated by women of early productive age with a majority secondary education background. The findings of the study indicate that manufacturing companies can improve employee performance through policies that support engagement and work flexibility. This research makes a theoretical and practical contribution in understanding the dynamics of human resources in the manufacturing sector.

Keywords: Employee Engagement, Work Flexibility, Employee Performance, Strategy, Manufactur.

Introduction

The success of employee performance depends on employee performance. In an increasingly competitive market, high-performing employees contribute greatly to the productivity, efficiency, and competitiveness of a business. factors, such as leadership, work motivation, competence, and influencing employee performance in Indonesia's manufacturing industry, according to research conducted by Suharto; J Nusantoro (2018) They found that manufacturing companies that successfully manage these factors tend to have employees with better levels of performance, which in turn benefits product quality and operational efficiency.

Efforts to improve employee performance in Indonesian manufacturing companies still face various challenges. The complexity of the production process, variations in the type of work, and differences in individual characteristics of employees are obstacles in optimizing performance. research conducted by Harwiki (2016) highlighting the importance of implementing an effective, equitable performance management system to motivate employees and identify areas for optimal improvement. The study also emphasizes that investments in human resource development, such as training and career development programs, can significantly improve employee performance in the long run. Manufacturing

companies in Indonesia need to continue to innovate in human resource management strategies to maximize the performance potential of their employees.

As competitive demands increase around the world, employee performance has become a critical issue in the manufacturing industry, where many companies face significant challenges related to employee productivity and performance. A large number of employees have difficulty achieving the set targets, which has a direct impact on the company's operational efficiency, lowers productivity, and increases the risk of absenteeism. This condition creates increasingly severe competitive pressure, where companies are required to continuously improve the capacity and quality of their human resources, considering that low employee performance not only affects production output, but also significantly reduces the company's competitiveness in an increasingly complex and dynamic global business landscape. (Pawirosumarto, Bachelor and Muchtar, 2017).

Work flexibility also plays a significant role in improving employee performance. By providing employees with the option to set their hours and work location, companies can help them achieve a better balance between work and personal life. Research shows that this flexibility not only increases job satisfaction, but also increases employee engagement and productivity. Employees who have flexibility are more likely to perform better because they feel more engaged and motivated (Bakker, A. B., & Demerouti, 2016).

Employee performance in manufacturing companies has become a major focus in human resource management research because of its significant impact on organizational productivity and competitiveness. One of the key challenges faced by manufacturing companies is how to effectively measure and improve employee performance in often complex and process-oriented environments. According to research conducted by Pawirosumarto, Bachelor and Gunawan, (2017) Factors such as leadership style, organizational culture, and work environment have a significant influence on employee performance in the manufacturing industry.

Technological developments and automation in the manufacturing sector are creating new challenges in assessing and improving employee performance. Employees are required to adapt quickly to changes in technology and production processes, while maintaining efficiency and for output quality. The study found that employee competency development through proper training, increased motivation through a fair reward system, and consistent implementation of work discipline can improve employee productivity and efficiency (Al Ahababi et al., 2019).

Strategically, employee engagement improves employee performance in manufacturing companies. This is supported by research Hanaysha,(2016) This study shows that employee engagement has a significant positive impact on organizational performance. Actively engaged employees show a higher level of commitment to their work, produce better quality products, and contribute to increased company productivity. In line with the findings of previous research, studies conducted by several human resource management experts show that employee engagement has a significant impact on organizational performance. Employee engagement can be improved through three key factors: effective leadership, transparent work communication, and efforts to create a work-life balance. Organizations that successfully build a work environment that encourages employee engagement will experience substantial improvements in productivity and profitability compared to organizations that pay less attention to employee engagement aspects. (Bedarkar and Pandita, 2014).

Work flexibility has an important role in improving employee performance in manufacturing companies. When employees are given the flexibility to manage their schedules and work locations, this can lower stress levels and improve a better work-life balance. Based on research Kattenbach, Demerouti and Nachreiner (2010) shows that flexibility of working hours has a positive impact on employee performance and reduces conflicts between work and personal life. The study revealed that employees with flexible working hours showed higher levels of performance compared to rigid work schedules. The implementation of the work flexibility policy has proven to be an effective strategy to increase the productivity and work efficiency of employees in the manufacturing sector. By implementing a more adaptive work system, companies can create a work environment that supports the individual needs of employees while maintaining a focus on achieving organizational goals. A carefully designed work flexibility approach is able to result in a win-win situation, where employees gain a better balance between work and personal life, while organizations gain improved performance, productivity, and employee loyalty. (Kossek, Thompson and Lautsch, 2015).

The selection of the ejip area as the research object is based on the high intensity of production activities and the complexity of human resource management involving thousands of employees from various levels. In addition, the region has also adopted various modern work systems, including the implementation of employee engagement and work flexibility policies, which are the focus of this study. These characteristics make the EJIP Cikarang area an ideal location to analyze how the influence of employee involvement and work flexibility on employee performance in the context of a dynamic and competitive manufacturing industry.

The region has been in operation for more than two decades, providing a long track record of its development, including how it has adapted to changes in technology, regulations, and global market demands. This makes EJIP an ideal location for research aimed at understanding the dynamics of the manufacturing industry and the factors that affect the sustainability of the company's operations in the industrial area. Despite its long-standing presence, limited studies have explored how employee engagement and work flexibility influence employee performance in this specific industrial setting, particularly in the face of evolving work environments post-pandemic. This research fills that gap by examining how flexible work arrangements and engagement strategies impact productivity, retention, and overall job satisfaction in a sector traditionally characterized by rigid work structures. By integrating contemporary organizational behavior theories with empirical data from a well-established industrial hub, this study provides fresh insights into optimizing workforce agility and resilience in manufacturing companies.

The purpose of this study is to analyze the influence of employee involvement and work flexibility on employee performance in manufacturing companies in the EJIP Cikarang area, so that it can provide strategic recommendations for companies in increasing employee productivity and welfare through effective policy implementation. Analyzing various parameters such as productivity, operational efficiency, and tenant satisfaction levels, this research is expected to produce concrete recommendations for the improvement and development of industrial estates in the future. The results of this research can later be a valuable reference for stakeholders in formulating a more sustainable and competitive industrial estate development strategy.

Methods

This study uses a quantitative approach to explore the influence of knowledge management and change management on workforce agility in manufacturing companies. The population in this study is employees who work in manufacturing companies, with sampling techniques using non-probability sampling through the purposive sampling method. The criteria for respondents in the study are workers located in the EJIP area with an age range of 18-25 years. The research sample was calculated using the formula Hair et al., which is 5–10 times the number of indicators, so that 66 respondents were obtained. The research instrument is in the form of a questionnaire designed based on variable indicators: the first independent variable is Work Engagement with indicators of mental focus, attention to work, and physical energy; the second independent variable is Work Flexibility with indicators of company policies, formal procedures, and written rules; and the third dependent variable is Employee Performance, indicators of work quality, work quantity, and punctuality. The data was measured using the Likert scale and analyzed by the Structural Equation Modeling (SEM) method using SmartPLS software to comprehensively test the relationship between variables.

Results and Discussion

Respondent Profile

Table 1. Respondent Profile Results

Characteristic	Category	Frequency	Percentage
Gender	Man	2	45%
	Woman	73	55%
Age	18-25 Years	91	100%
Last Education	High School/Vocational High School Equivalent	66	88%
	Diploma	1	1,33%
	S1	7	9,33%
	S2	1	1,33%
Department	Production	54	72%
	TBSP	10	13,33%
	Finance	6	8%
	Marketing	2	2,67%
Position	Staff	73	97,33%
	Supervisor	1	1,33%
	Manager	1	1,33%

Source: Smartpls Data Processing (2024)

The profile of the respondents in this study describes the characteristics of the young workforce in the manufacturing sector with a very specific composition. Demographically, respondents were dominated by women (97.33%) aged 18-25 years, the majority of whom had a high school/vocational education (88%), with the smallest distribution having a S1 (9.33%) and S2 (1.33%) educational background. The organizational structure of respondents was centered in the production department (72%), followed by human resources (13.33%),

finance (8%), and marketing (2.67%), with the composition of positions almost entirely at the staff level (97.33%). This picture shows a homogeneous profile of the young workforce, with the majority of women in early productive age, having secondary education, and concentrated in operational functions in the production sector, reflecting contemporary employment dynamics in the context of the manufacturing industry.

Validity Test

Table 2. Outer Loading Results

	FB	KK	PK	KET
FB10	0,862			VALID
FB3	0,724			VALID
FB4	0,795			VALID
FB5	0,735			VALID
FB6	0,866			VALID
FB7	0,844			VALID
FB8	0,853			VALID
FB9	0,866			VALID
KK1		0,892		VALID
KK10		0,795		VALID
KK2		0,901		VALID
KK3		0,906		VALID
KK4		0,802		VALID
KK5		0,901		VALID
KK6		0,869		VALID
KK7		0,870		VALID
KK8		0,905		VALID
KK9		0,907		VALID
PK10			0,856	VALID
PK2			0,835	VALID
PK3			0,850	VALID
PK4			0,845	VALID
PK5			0,890	VALID
PK6			0,883	VALID
PK7			0,871	VALID
PK8			0,849	VALID
PK9			0,873	VALID
PK1			0,835	VALID

Source: SmartPLS Data Processing (2024)

The results of the Validity Test Using the data provided included three categories: FB, KK, and PK, with values ranging from 0.724 to 0.907. All values in these three categories are declared "VALID", indicating that the data is valid and acceptable. These values are quite high, with most being above 0.8, which indicates good performance in each category. Overall, this data is valid and ready to be used for further analysis.

Reliability Test

Table 2. Reliability Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
FB	0,930	0,939	0,942	0,672
KK	0,966	0,968	0,970	0,767
PK	0,960	0,962	0,966	0,738

Source: SmartPLS Data Processing (2024)

The Reliability Test The value given shows that the tested construct has excellent reliability and validity. Cronbach's Alpha ranges from 0.930 to 0.966, indicating very high internal consistency, while rho_A is between 0.939 and 0.968, indicating the reliability of the alternative which is also very good. The Composite Reliability (CR) which ranges from 0.942 to 0.970 indicates strong consistency between items, and the Average Variance Extracted (AVE) between 0.672 to 0.767 indicates that the construct is able to explain the variance of its items well. Overall, this data reflects that the constructed under test is reliable and valid

R Square Test

Table 3. R Square Results

	R Square	R Square Adjusted
FB	0,779	0,771

Source: SmartPLS Data Processing (2024)

The results of the R Square Test The R Square value of 0.779 shows that the regression model used is able to explain about 77.9% of the variance in the dependent variables, which indicates a fairly good explanatory power. Meanwhile, a slightly lower R Square Adjusted of 0.771 corrected the R Square value by taking into account the number of independent variables, giving an indication that the model was not overfitting. Overall, these two values indicate that the regression model tested has a solid ability to account for data variability, with little potential for error due to the complexity of the model.

Path Coefficiens

Table 4. Path Coefficiens Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
KK -> FB	0,543	0,563	0,139	3,906	0,000
PK -> FB	0,370	0,57	0,130	2,841	0,005

Source: SmartPLS Data Processing (2024)

The results of Path Coefficiens show that the relationship between KK and FB has a path coefficient (Original Sample) of 0.543 with a T Statistics value of 3.906 and a P Value of 0.000, which indicates a statistically significant relationship, because the P Value is far below 0.05. This shows that KK has a strong positive influence on FB. Similarly, the relationship between PK and FB showed a path coefficient of 0.370 with a T Statistics of 2.841 and a P Value of 0.005, which was also significant, indicating that PK had a positive effect on FB

even though it had a lower influence than KK. Overall, both relationships are significant and support the hypothesis proposed.

This research is one of the important references in understanding the relationship between employee engagement and performance. In the Job Demands-Resources (JD-R) theory, Bakker and Demerouti explain how employee engagement can improve their job performance, emphasizing the importance of balancing job demands and available resources. Work flexibility is often seen as one of the resources that allows employees to be more engaged in their work, thus improving their performance. This research provides a strong theoretical foundation for linking work flexibility with improved employee performance. (Bakker, A. B., & Demerouti, 2016).

This study examines the impact of flexible working hours on employee fatigue, conflicts between work and personal life, and work performance. The results of the study show that the flexibility of working hours can reduce the level of burnout and conflict between work and personal life, which in turn can improve employee performance. Therefore, this study is very relevant in showing the positive influence of work flexibility on employee performance, which supports the hypothesis that work flexibility plays an important role in improving performance. (Kattenbach, Demerouti and Nachreiner, 2010).

This study examines the influence of leadership style on employee performance in several companies. Although it is expected that there is a positive relationship between good leadership style and improved performance, the results of the study show that the influence of leadership style on employee performance is not significant in the context of the companies studied. This suggests that other factors, such as work flexibility, may be more influential in improving performance, or that leadership style is not always a determining factor in employee performance. (Mathews et al., 2015). This research provides important theoretical implications in developing an understanding of the relationship between work flexibility and employee performance. Based on the findings of the study, work flexibility is proven to have a positive impact on employee performance through stress reduction and improved work-life balance. Another theoretical implication is the importance of broadening the perspective of work flexibility in human resource management theories, taking into account various dimensions of flexibility, such as time and workplace, as well as how employee demographic characteristics affect the perception and acceptance of such policies.

Organizations can consider flexibility as a strategy to improve employee performance and well-being, especially by tailoring policies based on individual characteristics such as age, gender, and work experience. The implementation of this policy will not only improve performance, but also have the potential to reduce turnover rates and increase employee satisfaction and loyalty. Organizations are also advised to provide time management training for employees to maximize their work flexibility potential, ensuring that they can manage their work and personal lives more effectively.

Conclusion

This study explores the complex dynamics between employee engagement, work flexibility, and performance in manufacturing industrial estates. Key findings show that employee engagement has a crucial role in improving organizational performance. Actively engaged employees display higher commitment, produce quality products, and contribute significantly to the company's productivity. Work flexibility has proven to be an effective strategy in improving employee performance. By providing flexibility in time and work

location, companies can lower stress levels, improve work-life balance, and encourage employee focus and productivity. The context of research in the EJIP Cikarang industrial estate reveals that the modern work environment requires a dynamic approach in human resource management. The demographic characteristics of the majority of young female respondents with secondary education backgrounds reflect the transformation of the contemporary workforce in the manufacturing sector. The limitation of this research lies in its scope, which only includes workers in the EJIP Cikarang area, so the research results may not be generalizable to the entire manufacturing sector in Indonesia or other industrial regions with different characteristics.

Suggestions for further research include efforts to expand the scope of the investigation by adding psychological variables, conducting comparative studies across industries, developing a mixed quantitative-qualitative research methodology, exploring moderation variables, and designing an integrative theoretical framework. Researchers are expected to develop a more comprehensive understanding of employee performance dynamics by investigating the interaction of individual, organizational, and contextual factors. A focus on intrinsic motivation, resilience, emotional intelligence, as well as specific demographic characteristics can provide deep insights into employee engagement mechanisms. Future studies need to design a holistic approach that allows for a more nuanced understanding of the factors that affect employee productivity and performance in the context of the ever-evolving manufacturing industry.

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