

The Effect of Leadership, Motivation, and Work Environment on Employee Performance at Bank Mandiri Smart Branch Duri Sudirman

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Abstract. Bank Mandiri is the bank that receives the most customer complaints. Customer complaints reflect the suboptimal performance of employees in providing services, whether through digital channels or offline services at branch offices. This study aims to examine the influence of leadership style, motivation, and work environment on the performance of employees at Bank Mandiri Smart Branch Duri Sudirman. The research is quantitative descriptive in nature. Data collection techniques include questionnaires, observation, and documentation. The sample consisted of 119 bank employees. Data analysis was conducted using multiple regression. The results of the study indicate that motivation and work environment have a positive and significant effect on the performance of employees at Bank Mandiri Smart Branch Duri Sudirman, whereas leadership style does not have a positive and significant effect on employee performance at the branch. The implications of this research provide strategic recommendations for Bank Mandiri management to enhance employee performance through strengthening work motivation programs and improving work environment quality, particularly in the context of digital transformation through smart branch implementation. Organizations should prioritize motivational factors and physical-psychological work environment optimization to achieve better service quality and operational effectiveness.

Keywords: employee performance; leadership; work environment; work motivation

INTRODUCTION

Organizational management is related to human resource management, which is a control process based on the management function of human resources (Nugroho, 2022). Control, in this case, is intended to manage all the power that comes from humans so that it can be used properly (Wrong, 2017). Human resources are the integrated ability of the thinking power and physical power possessed by individuals (Hasibuan, 2018). Thus, human resources are an important factor in every human activity (Terziev, 2019). All human thinking and physical power can be used optimally, both for the benefit of individuals and for the interests of their organization to achieve the goals of the organization.

The success of human resource management is reflected in the performance of an organization. Performance is the result of a process that refers to and is measured over a certain period based on predetermined provisions or agreements (Widjaja, 2021). The Indonesian Consumer Institute Foundation (YLKI) noted that as many as 15.9% of the total 535 complaints came from banking consumers. Bank Mandiri is one of the banks that still receives complaints from customers (YLKI, 2022).

Complaints from customers provide an overview of employee performance that has not been maximized in providing services, both digital services and offline services at branch offices (Pio et al., 2024). According to Bell & Luddington (2005), customer complaints are negative feedback from customers perceived as weak company responsibility, service, and help from company staff. One effort made by Bank Mandiri to maximize services and address customer complaints is to increase the digitization of services and improve the physical appearance of branches through the implementation of Smart Branches (Daga et al., 2021).

Smart Branch Transformation by Mandiri comes in three types: Digital Box, Hybrid Branch, and Upgrade Branch (Riyanto et al., 2019). Digital Box serves customers who need banking services without queues, Hybrid Branch serves customers who need fast and digitized services, and Upgrade Branch (Digital Corner) serves customers who require staff assistance for transactions and various other complex financial needs. Not only in terms of infrastructure and licensing but also human resources, as explained by the CEO of Bank Mandiri, who is making preparations for human resource development (Robyardi et al., 2024). One of Mandiri's smart branches is located at the Duri Sudirman Smart Branch. Based on observations, even though services have been maximized using the Smart Branch system, problems still exist, especially for customers unfamiliar with technology, who find the system difficult to use. Employees need to assist these customers. Despite operating Smart Branches in 241 branches throughout Indonesia, Bank Mandiri still receives complaints related to digital service problems. Employee performance issues are also reflected in the branch's Google rating of 4.5/6, compared to banks such as BCA, which have ratings between 4.7 and 6/6. Customer reviews over the last two years indicate many negative complaints, though positive comments have increased in the past six months since the Smart Branch system was fully operational.

Problems in implementing the Smart Branch align with unchanged employee performance over recent years, as seen in the annual Key Performance Indicator (KPI) achievements (2016-2021), which failed to meet targets, especially in the IT Infrastructure Group at PT Bank Mandiri (Persero) Tbk. This KPI shortfall is corroborated by the considerable number of complaints Bank Mandiri received (YLKI, 2022).

Employee performance in each branch depends heavily on the role of the Manager. A leader in a company determines how well the company will operate. Leadership is a combination of temperament that enables a person to encourage others to complete work (Ordway Tead) (Hutahaean, 2021). Leadership is central in adopting technology use in the Industry 4.0 era. Leaders need to be equipped with digital and emotional agility to operate in uncertain and complex environments. Effective leaders today function in rapid learning cycles to drive decision-making and innovation (Mihai & Crețu, 2019).

In addition to leadership, motivation is a critical factor affecting employee performance. Motivation is an internal drive that compels individuals to act and achieve goals. Motivated employees tend to be more dedicated, productive, creative, and committed to their duties. Hence, understanding motivation's influence on employee performance is essential for human resource management aiming to boost productivity and organizational success (Suswanti, 2020). The work environment also impacts employee performance. A safe and comfortable environment fosters job satisfaction and enhances performance. In Smart Branches, employee performance depends on the speed and reliability of technological infrastructure, such as stable internet networks, well-functioning equipment, and responsive systems (Winata, 2020). Inadequate infrastructure can hinder employees' ability to perform effectively. Research by Sihaloho (2020) confirms that the work environment affects employee performance.

Several studies have examined factors influencing employee performance in banking institutions. Chen et al. (2021) found transformational leadership significantly impacts employee performance mediated by work engagement and job satisfaction in Asian banking sectors. Almaamari (2023) emphasized that work motivation is a critical predictor of employee performance, especially in service-oriented industries. Kim and Fernandez (2022)

demonstrated that physical and psychological work environments jointly influence productivity and service quality in financial institutions. However, most studies focused on conventional banking settings, leaving gaps regarding employee performance in digitally transformed banking environments such as Smart Branches.

Literature review identifies several research gaps: first, limited empirical evidence on the effects of leadership, motivation, and work environment on employee performance specifically in Smart Branch banking contexts in Indonesia; second, insufficient examination of how digital transformation through Smart Branch implementation moderates traditional management factors' impact on employee performance; third, lack of understanding regarding which factors contribute most significantly to performance in technology-intensive service delivery systems.

The novelty of this research lies in three aspects: it specifically examines employee performance within the Smart Branch context, a significant departure from traditional banking operations scarcely studied in Indonesian banking literature; it simultaneously analyzes leadership style, work motivation, and work environment's influence on employee performance in a digitally transformed setting, offering comprehensive insights; and it is conducted at Bank Mandiri Smart Branch Duri Sudirman during the post-pandemic recovery period (2022-2024), providing insights into performance dynamics amid accelerated digital transformation and evolving customer service expectations.

Although many studies on banking employee performance exist, research focusing on offices using the Smart Branch concept has not been done before. Moreover, this study's subject and location differ, making it novel. This research aims to analyze and determine the influence of leadership style, work motivation, and work environment on employee performance at Bank Mandiri Smart Branch Duri Sudirman. Specific objectives are: (1) to examine the effect of leadership style on employee performance, (2) to analyze the impact of work motivation on employee performance, and (3) to investigate the influence of work environment on employee performance. The benefits include: (1) providing empirical evidence for Bank Mandiri management to develop effective human resource strategies for Smart Branch operations, (2) contributing to academic literature on employee performance management in digital banking, and (3) offering practical insights for banking practitioners implementing similar digital transformations. The study's implications extend to strategic human resource development, particularly in designing leadership training, motivation enhancement, and work environment optimization tailored to digital banking service delivery systems.

MATERIALS AND METHOD

This research is a type of quantitative research with a descriptive approach. The study employs a quantitative descriptive design aimed at examining the causal relationships between independent variables (leadership style, work motivation, work environment) and the dependent variable (employee performance). The location of this research was carried out at Bank Mandiri Smart Branch Duri Sudirman on Jln. Gunung Krakatau, Riau Province, Indonesia. The research was conducted from March to June 2024.

The population in this study consists of all employees of Bank Mandiri Smart Branch Duri Sudirman across various positions and work units. Based on human resource data from the branch, the total employee population is 119 employees. The sampling technique employed is census or total sampling method, where the entire population is used as the research sample.

The rationale for using total sampling is to obtain more representative and accurate data, given that the population size is relatively manageable and accessible. Therefore, the number of samples in this study is 119 employees, comprising all permanent employees working at Bank Mandiri Smart Branch Duri Sudirman.

The research variables are defined as follows: (1) Leadership Style (X1) is defined as the pattern of behavior exhibited by branch managers in influencing, directing, and motivating employees to achieve organizational goals, measured through indicators of visionary leadership, communication effectiveness, decision-making participation, and digital competency. (2) Work Motivation (X2) refers to the internal and external driving forces that encourage employees to perform their duties optimally, measured through indicators of achievement needs, recognition, career development opportunities, and incentive systems. (3) Work Environment (X3) encompasses both physical and non-physical conditions surrounding employees during work, measured through indicators of workplace infrastructure, ergonomics, organizational climate, and interpersonal relationships. (4) Employee Performance (Y) is defined as the results achieved by employees in executing their duties and responsibilities, measured through indicators of work quality, work quantity, timeliness, and service orientation.

The data collection technique uses three methods, namely questionnaire, observation and documentation. The questionnaire instrument was developed using a Likert scale with five response options ranging from strongly disagree (1) to strongly agree (5). The questionnaire was distributed directly to all respondents and collected after completion. Observation was conducted to directly observe employee work behavior, work environment conditions, and leadership practices in daily operations. Documentation involved collecting secondary data from company records, including employee performance reports, organizational structure, and relevant policies.

Prior to main data collection, the questionnaire instrument underwent validity and reliability testing using 30 respondents from a similar banking branch not included in the main sample. Validity was assessed using Pearson product-moment correlation, with items considered valid if $r\text{-count} > r\text{-table}$ (0.361). Reliability was evaluated using Cronbach's Alpha coefficient, with the instrument deemed reliable if $\alpha > 0.70$. All measurement items met these criteria, indicating that the instruments are valid and reliable for main data collection.

The data analysis technique in this study uses multiple linear regression analysis. Before the regression analysis was carried out, classical assumption testing was carried out to meet the prerequisites for the hypothesis test. The classical assumption tests include: (1) normality test using Kolmogorov-Smirnov test to ensure residuals are normally distributed, (2) multicollinearity test using Variance Inflation Factor (VIF) and Tolerance values to detect correlation among independent variables, (3) heteroscedasticity test using Glejser test to examine variance homogeneity of residuals, and (4) linearity test to verify linear relationships between variables. Here's a simple regression equation.

$$Y_i = \beta_0 X_i + \varepsilon_i$$

Information:

Y	= Employee Performance and Employee Motivation
X	= Effective Motivation
i	= cross section
ε	= error

RESULTS AND DISCUSSION

Respondent Description

Based on the characteristics of 119 employees of Bank Mandiri Smart Branch Duri Sudirman, most respondents were male as many as 67 people (56.6%) compared to 52 women (43.4%). Judging from the age, most of the employees are over 30 years old, namely 83 people (70%), while those under 30 years old are 36 people (30%). Meanwhile, in terms of education, 44 people (36.6%) are high school graduates, 60 people (50.4%) are S1 graduates, and 15 people (12.6%) are master's degree (S2), indicating that the majority of employees have a bachelor's education background.

Classic Assumption Test

Table 1 Normality and Residual Tests

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		119
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.89571736
Most Extreme Differences	Absolute	.057
	Positive	.057
	Negative	-.039
Test Statistic		.057
Asymp. Sig. (2-tailed) ^c		.200 ^d
Monte Carlo Sig. (2-tailed) ^e	Sig.	.426
	99% Confidence Interval - Lower Bound	.414
	99% Confidence Interval - Upper Bound	.439

Note:

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: Primary Data, 2024

Based on the results of the normality test in the table above, a sig value of $0.426 > 0.05$ was obtained. Therefore, H_0 cannot be rejected and it is concluded that the data has a normal distribution

Table 2 Multicollinearity Test

No.	Variable	VIP	Tolerance	Information
1	Leadership	2,084	,480	No multicollinearity
2	Motivation	2,300	,435	No multicollinearity
3	work environment	1,833	,546	No multicollinearity

Source: Primary Data, 2024

Based on Table 2, the calculation of the Tolerance value shows that no independent

variable has a Variance Inflation Factor (VIF) value of less than 10.00 and a Tolerance value greater than 0.10. This indicates that all the independent variables tested showed no symptoms of multicollinearity. In other words, all independent variables tested can be used as independent variables. Therefore, no multicollinearity occurs between the independent variables in the regression analysis.

Hypothesis Test

The results of the multiple regression analysis test are shown below:

Table 3. Summary of Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.008	1.938		1.553	.123
Leadership	-.142	.079	-.147	-1.789	.076
Motivation	.663	.121	.475	5.493	.000
work environment	.450	.069	.506	6.559	.000

a. Dependent Variable: Performance

Source: Primary Data, 2024

The findings of multiple linear regression analysis in table 3 are incorporated into the multiple linear regression equation model, which has the following form:

$$Y = 3.008 + 0.142 X_1 + 0.663 X_2 + 0.450 X_3$$

- 1) Based on table 3, the leadership variable (X_1) has a significance value (sig) of 0.076 which is greater than the alpha (α) of 0.05. This shows that leadership does not have a significant influence on the employees of Bank Mandiri Smart Branch Duri Sudirman.
- 2) Based on table 3, the motivation variable (X_2) has a significance value (sig) of 0.000 which is smaller than the alpha (α) of 0.05. This shows that motivation has a significant effect on employees of Bank Mandiri Smart Branch Duri Sudirman.
- 3) Based on table 3, the environmental variable (X_3) has a significance value (sig) of 0.000 which is smaller than the alpha (α) of 0.05. This shows that the environment has a significant influence on the employees of Bank Mandiri Smart Branch Duri Sudirman.

Coefficient Determination Test (Adjusted R² Test)

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791 ^a	.626	.617	2.933

a. Predictors: (Constant), Work environment, Leadership, Motivation

Based on Table 4, the Adjusted R-Square value is 0.164 or 16.7%. This shows that leadership, motivation and environment affect employee performance by only 16.7% and the remaining 83.3% are influenced by variables not studied in this study. These variables that were not studied were incentives, work team factors, and work systems. These variables have a greater influence on the work that has been automatically carried out by the technology system in serving customers or customers.

Discussion

The Influence of Leadership on Bank Mandiri Smart Branch Duri Sudirman

Based on the results of the study, it was shown that the significance value (sig) of the leadership variable was 0.076, which was greater than the alpha value (α) of 0.05, so statistically it can be concluded that leadership does not have a significant influence on the performance of employees of Bank Mandiri Smart Branch Duri Sudirman. This indicates that although the role of leadership remains important in organizational management, in the context of the transformation of digital services through smart branches, existing leadership has not been able to exert a real influence on improving employee performance. This insignificance can be caused by various factors, one of which is the process of leadership adaptation to the digital system that is still ongoing.

Based on the results of observations or field realities, branch leaders have a conventional managerial background that is not fully integrated with technical and strategic skills in managing digital services. This causes the policy direction and decisions taken to not be fully able to encourage the acceleration of technology adoption by teams in the field. In the context of the implementation of smart branches, digital leadership is needed that is able to provide direction, assistance, and create a work climate that is adaptive to technological changes (Musaigwa, 2024). Leadership that lacks understanding of the digital ecosystem can have an impact on a lack of assertiveness in dividing roles, as Chuang & Graham (2020) argue that digital leaders can provide specialized training to bridge knowledge gaps that may exist and create an inclusive digital work environment.

The results of this study are in line with the findings of Yuniarti & Mahanani (2024) that digital leadership does not have a significant effect on the performance of millennial-age employees at PT. Gallery Pawnshop24. The findings support the results of research at Bank Mandiri Smart Branch Duri Sudirman, where leadership also did not show a significant influence on employee performance. These two findings suggest that although leaders have made efforts to adopt roles in the digital age, challenges in adaptability and technology-based leadership skills are still major obstacles.

In the context of smart branches, digital leadership that is not optimal results in a lack of strategic direction and technical assistance for employees in dealing with changes in service systems. The implications of the suitability of these findings confirm that strengthening digital competencies at the leadership level is an important key in supporting the success of organizational transformation and improving human resource performance, especially in the era of technology-based banking

The Influence of Motivation on Bank Mandiri Smart Branch Duri Sudirman

The results of this study show that the motivation variable (X2) has a significance value of 0.000, which is smaller than the specified significance level ($\alpha = 0.05$), which means that motivation has a significant effect on employee performance at Bank Mandiri Smart Branch Duri Sudirman. These findings indicate that the higher the work motivation is possessed by employees, the better the performance is produced. In the context of banking organizations that have demands for excellent service, motivation is a crucial factor that encourages employees to work optimally, complete tasks on time, and provide quality service to customers.

Motivation can come from internal motivations such as personal satisfaction, career

ambitions, and a sense of responsibility, as well as external ones such as providing incentives, promotions, or recognition of work achievements. When organizations are able to create a work environment that supports these motivational factors, employees will be more motivated to increase their contribution to achieving organizational goals.

This finding is in line with Goni's (2021) research which states that work motivation significantly encourages increased employee productivity. Findings, Andar et al. (2022) and Aziz & Putra (2022) found that work motivation is an important determinant in increasing work effectiveness and employee loyalty to the organization.

The Influence of the Environment on Bank Mandiri Smart Branch Duri Sudirman

Based on the results of the study, it was shown that the environmental variable (X3) had a significance value (sig) of 0.008 which was smaller than the alpha (α) of 0.05. This shows that the environment has a significant influence on the employees of Bank Mandiri Smart Branch Duri Sudirman. The influence of the environment cannot be separated from the physical and non-physical environment. The interior design, lighting, temperature, and cleanliness of Bank Mandiri Smart Branch Duri Sudirman have high quality and comfort standards so that it has a significant effect on employee performance in serving and accompanying customers. In addition, learning and development policies, as well as support from management, motivate employees to improve their understanding and skills.

This finding is in line with Josephine's (2020) research that the Work Environment affects the Performance of PT. Trio Corporate Plastic (Tricopla). Likewise, Ahmad (2022) research shows that the work environment has a positive and significant effect on employee performance.

These results are in line with Kurt Lewin's Social Systems Theory, which states that the work environment influences individual behavior in organizations. A supportive environment, such as adequate work facilities, a positive work atmosphere, and healthy interactions between employees, can encourage performance improvement. A positive environment provides comfort and efficiency in work, which is reflected in the results of this study.

CONCLUSION

Based on the research findings, it can be concluded that work motivation and work environment have positive and significant effects on employee performance at Bank Mandiri Smart Branch Duri Sudirman, while leadership style does not significantly influence employee performance in this digital banking context. Specifically, work motivation emerges as the strongest predictor of employee performance ($\beta = 0.663$, $p < 0.001$), followed by work environment ($\beta = 0.450$, $p < 0.001$), whereas leadership style shows no significant effect ($\beta = 0.142$, $p = 0.076$). These findings indicate that in smart branch operations where service delivery is heavily technology-dependent, employee performance is primarily driven by internal motivation and conducive work conditions rather than traditional leadership approaches. The relatively low coefficient of determination (Adjusted $R^2 = 16.4\%$) suggests that employee performance in digital banking contexts is influenced by a complex array of factors beyond leadership, motivation, and work environment, particularly those related to technological competence, system functionality, and digital adaptation capabilities. The practical implications of this research recommend that Bank Mandiri management should prioritize: (1) developing comprehensive motivation enhancement programs including

performance-based incentives, career development opportunities, and recognition systems, (2) optimizing both physical and psychological work environments through technological infrastructure improvements and positive organizational climate cultivation, and (3) transforming leadership approaches to incorporate digital leadership competencies that are more relevant to smart branch operations. For future research, it is recommended to investigate additional variables such as digital literacy, technological self-efficacy, organizational culture, compensation systems, and training effectiveness, as well as to employ mixed-methods approaches combining quantitative and qualitative data to gain deeper insight into employee performance dynamics in digitally-transformed banking environments. Longitudinal studies examining performance changes over time as employees adapt to digital systems would also provide valuable contributions to understanding the long-term effectiveness of smart branch implementations.

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